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# Low-Voltage Power Distribution and Electrical Installation Technology

## Protection, Switching, Measuring and Monitoring Devices, Switchboards and Distribution Systems

siemens.com/lowvoltage



Catalog
LV 10

Edition
2025

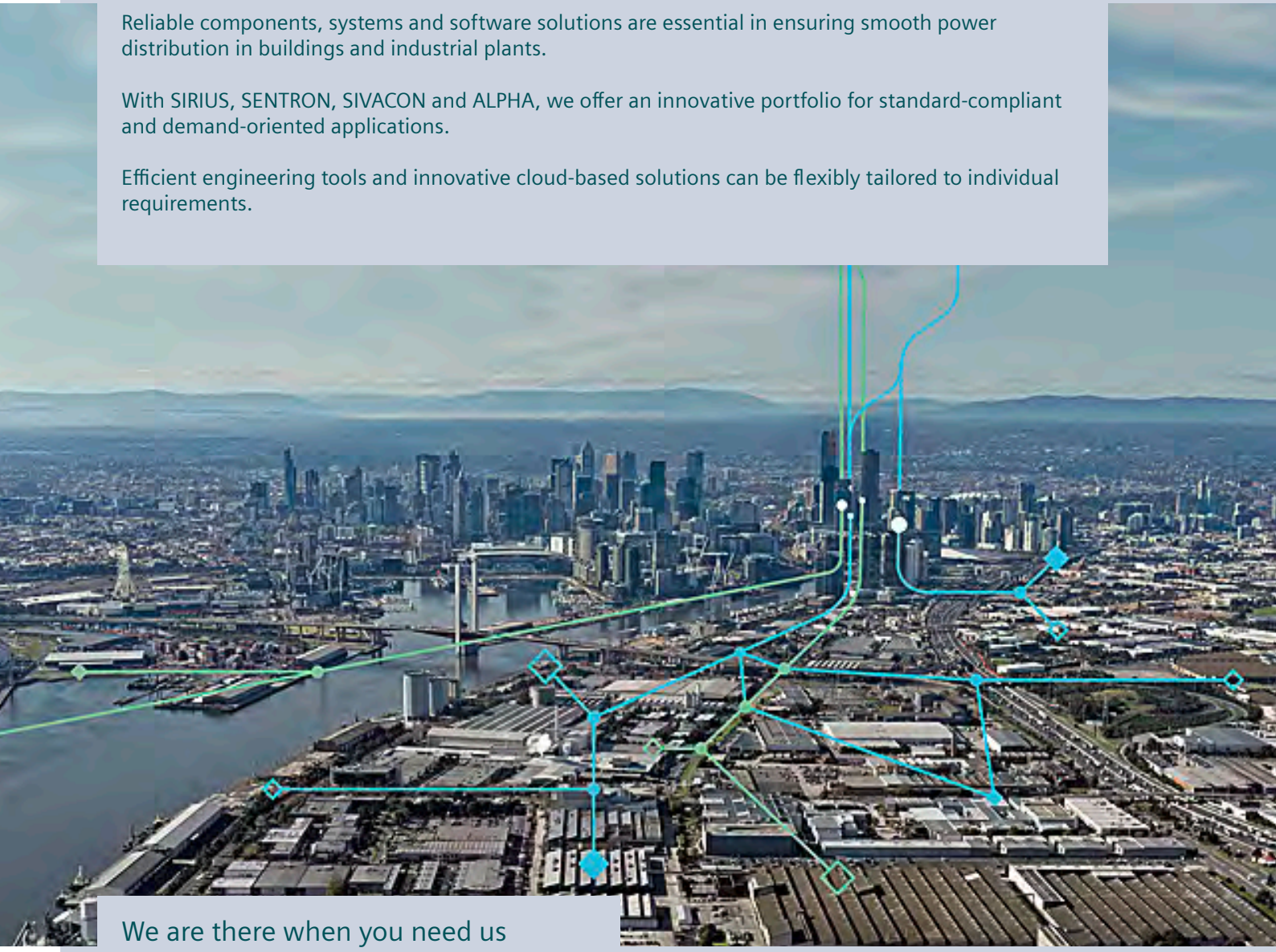
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# Innovative solutions for industrial controls and power distribution

Reliable components, systems and software solutions are essential in ensuring smooth power distribution in buildings and industrial plants.

With SIRIUS, SENTRON, SIVACON and ALPHA, we offer an innovative portfolio for standard-compliant and demand-oriented applications.

Efficient engineering tools and innovative cloud-based solutions can be flexibly tailored to individual requirements.



## We are there when you need us

Your personal contact can be found at
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## Catalog LV 10 · 2025

You will find the latest edition and all future editions in SiePortal at **www.siemens.com/lowvoltage/catalogs**

You can find the current prices in SiePortal at
**www.siemens.com/lowvoltage/product-catalog**

The products and systems described in this catalog are manufactured/distributed under application of a certified quality management system in accordance with EN ISO 9001 (for the Certified Registration Nos., see **www.siemens.com/system-certificates/ep**).
The certificate is recognized by all IQNet countries.

Technical specifications
The technical specifications are for general information purposes only.
Always heed the operating instructions and notices on individual products during assembly, operation and maintenance.

All illustrations are not binding.

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# Low-Voltage Power Distribution and Electrical Installation Technology


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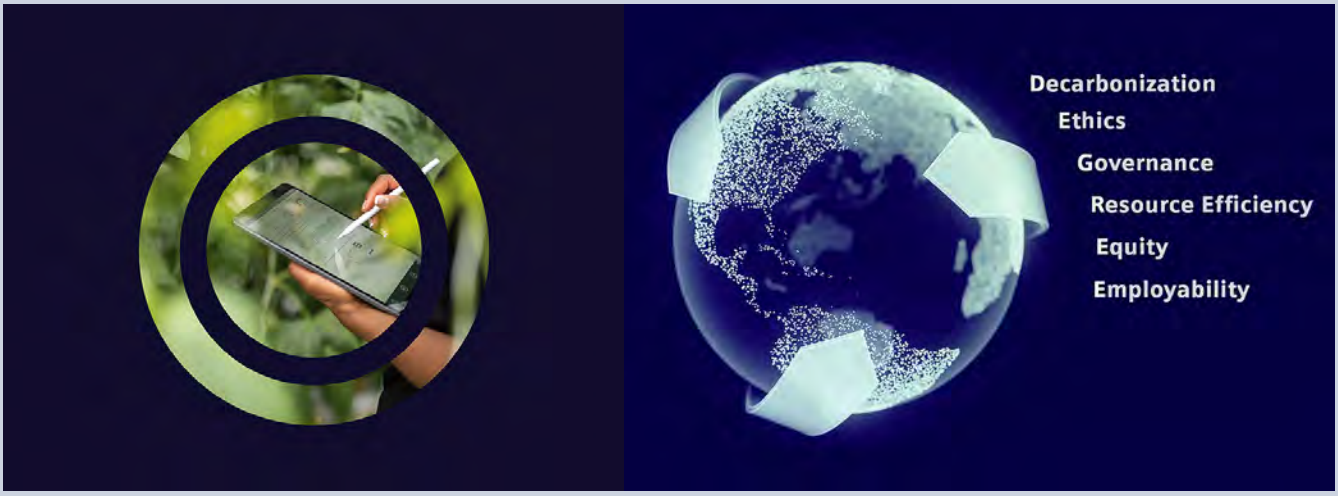
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# Sustainability@Siemens

## Transforming the everyday to create a better tomorrow.

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Siemens as a company takes an all-round view of environmental, social and governance criteria (ESG) with its DEGREE rulebook (decarbonization, ethics, governance, resource efficiency, equity and employability). Not only are we committed to reducing the carbon footprint in our own plants to net zero by 2030, but also to helping our customers achieve their decarbonization and sustainability objectives.

### Mission & strategy

As a focused technology company, Siemens is committed to tackling the world's most profound challenges by leveraging the synergies of digitalization and sustainability.

### Technology with a purpose

We develop technologies that interconnect the real world and the digital world and enable our customers to make positive changes to their industries, which form the backbone of our economy: industry, infrastructure, transportation and healthcare.

### Our contribution

Siemens makes a difference every single day by providing innovative solutions for challenges in environmental protection, decarbonization, health and safety. Innovative solutions that have a clear purpose: to make the world more sustainable, more integrative and a better place to live.

### Facts about sustainability

For almost 175 years, Siemens has been driven by the desire to improve the lives of people around the world with our technologies.

Siemens EcoTech

Siemens EcoTech is an environment label for products that promotes the sustainable transformation of industry and infrastructure. The label offers transparency about the performance of our certified products in relation to criteria relevant to the environment so that you can make well-founded decisions in order to achieve your sustainability objectives: **www.siemens.com/SiemensEcoTech**

**Further information at:**
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# New products



## *SENTRON 3WA air circuit breakers – New delivery stage*



- New frame size 1 breaking capacity H with 100 kA $I_{cu} = I_{cs}$ at 500 V AC
- Option of selecting N pole on the right in 4-pole devices
- New connection technology:
  - Frame size 2 breaking capacity C withdrawable circuit breaker with flange connection up to 3200 A
  - Frame size 2 breaking capacity S/M/H/E withdrawable circuit breaker with flange connection up to 3600 A
  - Frame size 2 breaking capacity S/M/H/E horizontal connection for 4000 A
  - Frame size 3 flange connection breaking capacity C/E for 4000 A
- Improved measuring accuracy for active power and active energy to 1% according to IEC 61557-12
- Advanced license for software-supported testing
- Measurement function for connection of external voltage transformers
- Improved handling of the ETU600 electronic trip unit

**See capter 1**
**page 1/4**

## *SENTRON 5ST3 COM remote control auxiliaries*



- Remote switching function also via communications interface to Powercenter 1000
- Integrated AS/FC function
- Automatic reclosing function (ARD) can be set
- Variant with integrated, automatic RCD/IR test function including logging

**See chapter 3**
**page 3/59**

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# New products

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## *SENTRON 5TY1 COM electronic circuit protection devices (ECPD)*



- Electronic switching technology enables ultrafast, wear-free switching, flexible parameter setting and a vast range of functions
- Compact 1+N (2 MW) device with RCBO function type F based on IEC/EN 61009-1 (IEC/EN 62423)
- Convenience functions, such as remote switching, auxiliary switches, undervoltage release
- Current, voltage and power measurement (energy monitoring) in accordance with IEC 61557-12
- Threshold monitoring functions: overcurrent, undercurrent, overvoltage, undervoltage, temperature
- Counter functions: active, reactive, apparent power, operating hours, operating cycles (mechanical and electrical)
- POP function based on IEC 63024
- Wireless communication capability with the Powercenter 1100 gateway

**See chapter 4**
**page 4/54**

## *SENTRON 7KM PAC3120 MID and 7KM PAC3220 MID measuring devices*







- Full-featured front-mounted device approved according to MID
- Firmware update capability
- Voltage supply via measurement inputs and optional auxiliary voltage inputs
- Calibration logbook according to PTB-A 50.7

**See chapter 10**
**page 10/6**

## *SENTRON Powercenter*



- Powercenter 1100
  - Successor for Powercenter 1000 7KN1110-0MC
  - New hardware with expanded function options
  - 2 Ethernet ports (switch function)
  - Secure communication protocol (https)
  - Role-based access via login and password
  - Variant with 64 subordinate end devices
  - Data from subordinate devices 5TY1 COM ECPD

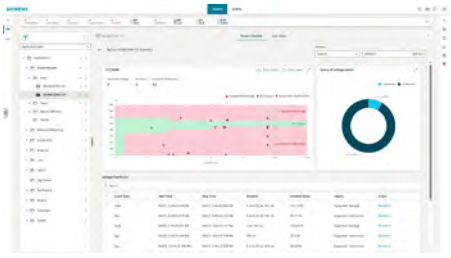
**See chapter 10**
**page 10/10**

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## *SENTRON Powermanager PQ Advisor*



- Increased transparency about the power system quality
- Power quality dashboards and reports according to EN 50160
- Reduced costs, shorter downtimes – ensuring efficient and reliable operation
- Avoidance of damage to electrical devices
- Avoidance of malfunctions in production
- Improved building and energy management – centralized control and monitoring functions
- Dashboards and reports according to EN 50160
- Application areas – it has an essential role in critical areas:
  - Data centers (information and communication technology)
  - Healthcare
  - Industry
  - Building management systems

**See chapter 10**
**page 10/18**

## *SENTRON PAC1200 multichannel current measuring system – 7KT1261 (successor of 7KT1260 from 01/2025)*



- New presentation in web browser
- New processor
- Integration of SENTRON Powercenter 1000 with SENTRON COM circuit protection devices (fall 2024)
- Successor of the 7KT1260
- 2 × RJ45 Ethernet interfaces

**See chapter 10**
**page 10/37**

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# New products

E

## *Configuration software – SIMARIS create*



- SIMARIS create is an intuitive, cloud-based configuration software, with which the ALPHA DIN/NF distribution board can be configured and ordered with just a few clicks.
- Fast creation of customer projects by 3-way configuration: material list, circuit diagram, system view
- Simple selection of enclosures and products with filter functions
- Project teamwork in real time with the share function
- Integrated, central documentation of all technical documents
- Automatic costing reports (power loss, prices)

**See chapter 15**
**page 15/15**

## *SIVACON S4 power distribution board – Digital twin directly from SIMARIS configuration*



- Automated creation of a detailed digital twin of the SIVACON S4
- Export is performed directly from SIMARIS configuration

**See chapter 15**
**page 15/15**

## *ALPHA 3200 Eco power distribution boards – Measurement applications*



- Power supply company-conformant implementation by means of
  - transformer metering section
  - meter support plates (single and double metering)
- Visualization with the SIMARIS 3D processor
  - Creation of a digital twin at the press of a button
  - Open data format (*.step) for individual further processing
  - Enabling of reliable 3D installation planning due to a high degree of detail

**See chapter 15**
**page 15/46**

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# *SIVACON S4 power distribution board – Mounting plates for clamping nuts*



- Assembly of customized solutions without drilling
- Ideal solution for flexible assembly of closed-loop and open-loop controls (e.g. SIMATIC, SIRIUS, etc.)

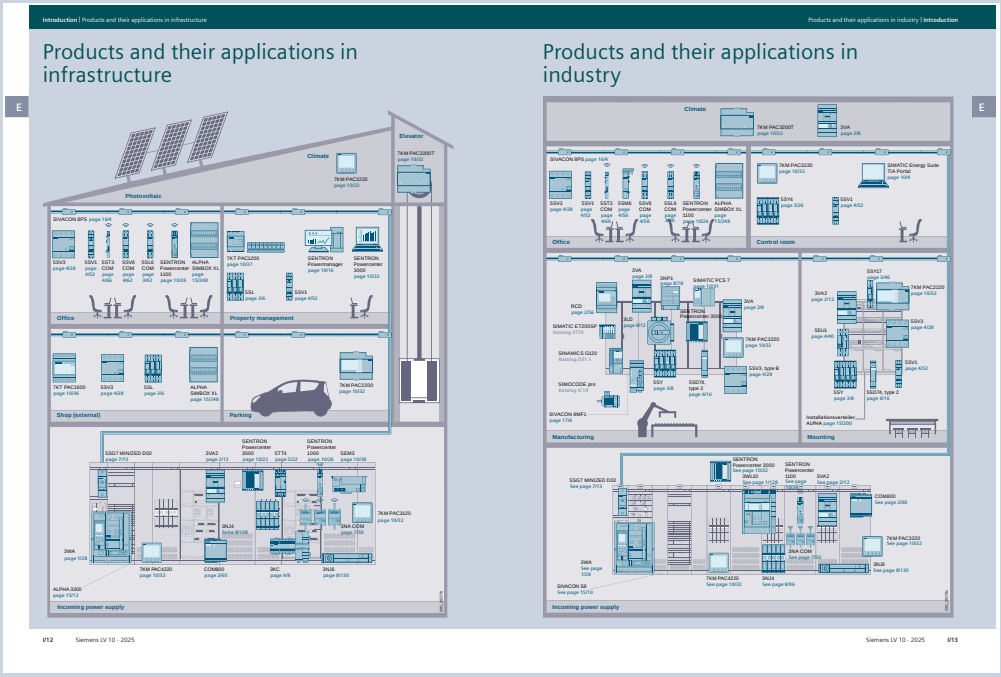
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# The fast route to the product

## Overviews and matrix tables for better orientation within the catalog




### Overview of products and their applications

On pages I/12 to I/13 you can find an overview of the diverse portfolio of catalog LV 10.



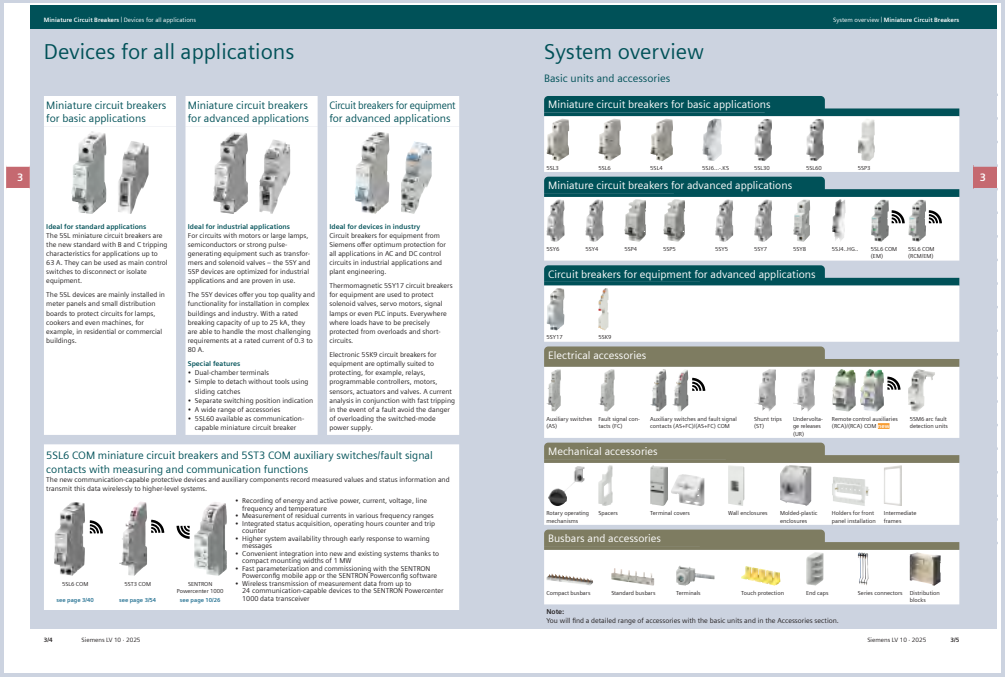

### Protection, switching, measuring and monitoring tasks

From page I/18 onwards, the catalog LV 10 portfolio is dedicated to the most important protection, switching, measuring and monitoring tasks.

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Miniature Circuit Breakers | Devices for all applications

System overview | Miniature Circuit Breakers

## Devices for all applications

### Miniature circuit breakers for basic applications

**Ideal for standard applications**
The 5SL miniature circuit breakers are the new standard with B and C tripping characteristics for applications up to 63 A. They can be used as main control switches to disconnect or isolate equipment.

The 5SL devices are mainly installed in meter panels and small distribution boards to protect circuits for lamps, cookers and even machines, for example, in residential or commercial buildings.

### Miniature circuit breakers for advanced applications

**Ideal for industrial applications**
For circuits with motors or large lamps, semiconductors or strong pulse-generating equipment such as transformers and solenoid valves – the 5SY and 5SP devices are optimized for industrial applications and are proven in use.

The 5SY devices offer you top quality and functionality for installation in complex buildings and industry. With a rated breaking capacity of up to 25 kA, they are able to handle the most challenging requirements at a rated current of 0.3 to 80 A.

**Special features**
- Dual-chamber terminals
- Simple to detach without tools using sliding catches
- Separate switching position indication
- A wide range of accessories
- 5SL60 available as communication-capable miniature circuit breaker

### Circuit breakers for equipment for advanced applications

**Ideal for devices in industry**
Circuit breakers for equipment from Siemens offer optimum protection for all applications in AC and DC control circuits in industrial applications and plant engineering.

Thermomagnetic 5SY17 circuit breakers for equipment are used to protect solenoid valves, servo motors, signal lamps or even PLC inputs. Everywhere where loads have to be precisely protected from overloads and short-circuits.

Electronic 5SK9 circuit breakers for equipment are optimally suited to protecting, for example, relays, programmable controllers, motors, sensors, actuators and valves. A current analysis in conjunction with fast tripping in the event of a fault avoid the danger of overloading the switched-mode power supply.

### 5SL6 COM miniature circuit breakers and 5ST3 COM auxiliary switches/fault signal contacts with measuring and communication functions

The new communication-capable protective devices and auxiliary components record measured values and status information and transmit this data wirelessly to higher-level systems.

- Recording of energy and active power, current, voltage, line frequency and temperature
- Measurement of residual currents in various frequency ranges
- Integrated status acquisition, operating hours counter and trip counter
- Higher system availability through early response to warning messages
- Convenient integration into new and existing systems thanks to compact mounting widths of 1 MW
- Fast parameterization and commissioning with the SENTRON Powercontig mobile app or the SENTRON Powerconfig software
- Wireless transmission of measurement data from up to 24 communication-capable devices to the SENTRON Powercenter 1000 data transceiver

5SL6 COM see page 3/40

5ST3 COM see page 3/54

SENTRON Powercenter 1000 see page 10/26

## System overview

Basic units and accessories

### Miniature circuit breakers for basic applications

5SL3 5SL6 5SL4 5SL6...-KS 5SL30 5SL60 5SP3

### Miniature circuit breakers for advanced applications

5SY6 5SY4 5SP4 5SP5 5SY5 5SY7 5SY8 5SJ4..HG.. 5SL6 COM (EM) 5SL6 COM (RCM/EM)

### Circuit breakers for equipment for advanced applications

5SY17 5SK9

### Electrical accessories

Auxiliary switches (AS) Fault signal contacts (FC) Auxiliary switches and fault signal contacts (AS+FC)/(AS+FC) COM Shunt trips (ST) Undervoltage releases (UR) Remote control auxiliaries (RCA)/(RCA) COM 2025 5SM6 arc fault detection units

### Mechanical accessories

Rotary operating mechanisms Spacers Terminal covers Wall enclosures Molded-plastic enclosures Holders for front panel installation Intermediate frames

### Busbars and accessories

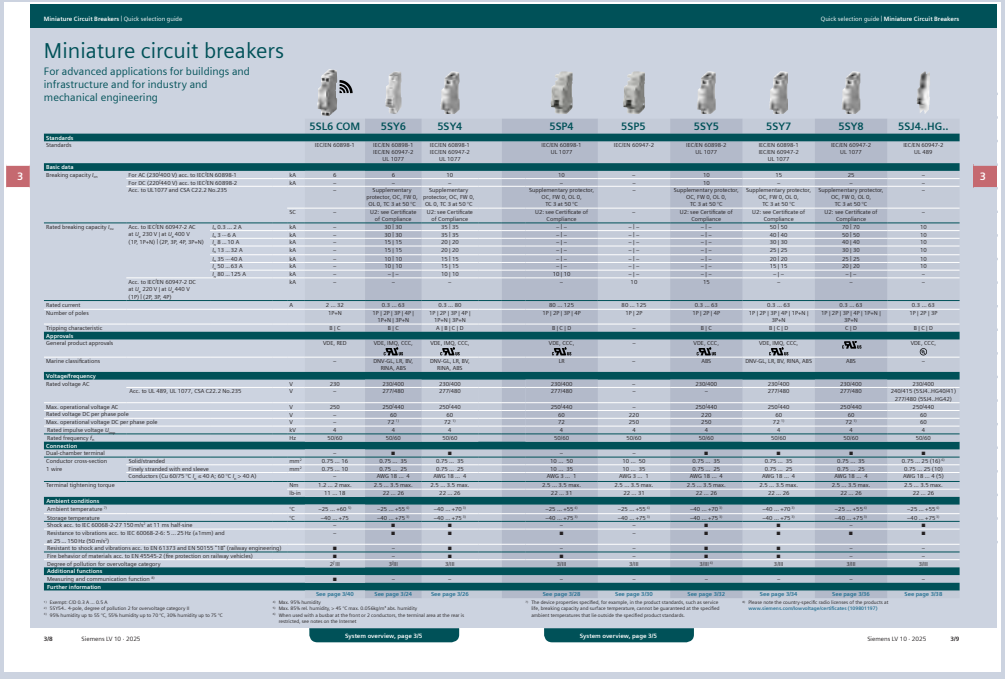
Compact busbars Standard busbars Terminals Touch protection End caps Series connectors Distribution blocks

**Note:**
You will find a detailed range of accessories with the basic units and in the Accessories section.

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## System overview

An overview of the basic units and accessories can be found in the system overview at the beginning of the chapters or sections. The color helps you recognize the accessory at a glance.



Miniature Circuit Breakers | Quick selection guide

Quick selection guide | Miniature Circuit Breakers

## Miniature circuit breakers

For advanced applications for buildings and infrastructure and for industry and mechanical engineering

| | | | | 5SL6 COM | 5SY6 | 5SY4 | 5SP4 | 5SP5 | 5SY5 | 5SY7 | 5SY8 | 5SJ4..HG.. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Standards** | | | | | | | | | | | | |
| Standards | | | | IEC/EN 60898-1 | IEC/EN 60898-1 IEC/EN 60947-2 UL 1077 | IEC/EN 60898-1 IEC/EN 60947-2 UL 1077 | IEC/EN 60898-1 UL 1077 | IEC/EN 60947-2 | IEC/EN 60898-2 UL 1077 | IEC/EN 60898-1 IEC/EN 60947-2 UL 1077 | IEC/EN 60947-2 UL 1077 | IEC/EN 60947-2 UL 489 |
| **Basic data** | | | | | | | | | | | | |
| Breaking capacity $I_{cn}$ | For AC (230/400 V) acc. to IEC/EN 60898-1 | kA | | 6 | 6 | 10 | 10 | – | 10 | 15 | 25 | – |
| | For DC (220/440 V) acc. to IEC/EN 60898-2 | kA | | – | – | – | – | – | 10 | – | – | – |
| | Acc. to UL 1077 and CSA C22.2 No.235 | | | – | Supplementary protector, OC, FW 0, OL 0, TC 3 at 50 °C | Supplementary protector, OC, FW 0, OL 0, TC 3 at 50 °C | Supplementary protector, OC, FW 0, OL 0, TC 3 at 50 °C | – | Supplementary protector, OC, FW 0, OL 0, TC 3 at 50 °C | Supplementary protector, OC, FW 0, OL 0, TC 3 at 50 °C | Supplementary protector, OC, FW 0, OL 0, TC 3 at 50 °C | – |
| | | SC | | – | U2: see Certificate of Compliance | U2: see Certificate of Compliance | U2: see Certificate of Compliance | – | U2: see Certificate of Compliance | U2: see Certificate of Compliance | U2: see Certificate of Compliance | – |
| Rated breaking capacity $I_{cn}$ | Acc. to IEC/EN 60947-2 AC at $U_e$ 230 V \| at $U_e$ 400 V (1P, 1P+N) \| (2P, 3P, 4P, 3P+N) | $I_n$ 0.3 ... 2 A | kA | – | 30 \| 30 | 35 \| 35 | – \| – | – \| – | – \| – | 50 \| 50 | 70 \| 70 | 10 |
| | | $I_n$ 3 ... 6 A | kA | – | 30 \| 30 | 35 \| 35 | – \| – | – \| – | 40 \| 40 | 50 \| 50 | 10 |
| | | $I_n$ 8 ... 32 A | kA | – | 15 \| 15 | 20 \| 20 | – \| – | – \| – | 30 \| 30 | 40 \| 40 | 10 |
| | | $I_n$ 13 ... 32 A | kA | – | 15 \| 15 | 20 \| 20 | – \| – | – \| – | 25 \| 25 | 30 \| 30 | 10 |
| | | $I_n$ 35 ... 40 A | kA | – | 10 \| 10 | 15 \| 15 | – \| – | – \| – | 20 \| 20 | 25 \| 25 | 10 |
| | | $I_n$ 50 ... 63 A | kA | – | 10 \| 10 | 15 \| 15 | – \| – | – \| – | 15 \| 15 | 20 \| 20 | 10 |
| | | $I_n$ 80 ... 125 A | kA | – | – \| – | 10 \| 10 | 10 \| 10 | – \| – | – \| – | – \| – | – \| – | – |
| | Acc. to IEC/EN 60947-2 DC at $U_e$ 220 V \| at $U_e$ 440 V (1P) \| (2P, 3P, 4P) | | kA | – | – | – | – | 10 | 15 | – | – | – |
| Rated current | | | A | 2 ... 32 | 0.3 ... 63 | 0.3 ... 80 | 80 ... 125 | 80 ... 125 | 0.3 ... 63 | 0.3 ... 63 | 0.3 ... 63 | 0.3 ... 63 |
| Number of poles | | | | 1P+N | 1P \| 2P \| 3P \| 4P \| 1P+N \| 3P+N | 1P \| 2P \| 3P \| 4P \| 1P+N \| 3P+N | 1P \| 2P \| 3P \| 4P | 1P \| 2P | 1P \| 2P \| 4P | 1P \| 2P \| 4P \| 1P+N \| 3P+N | 1P \| 2P \| 3P \| 4P \| 1P+N \| 3P+N | 1P \| 2P \| 3P |
| Tripping characteristic | | | | B \| C | B \| C | A \| B \| C \| D | B \| C \| D | – | B \| C | B \| C \| D | C \| D | B \| C \| D |
| **Approvals** | | | | | | | | | | | | |
| General product approvals | | | | VDE, RED | VDE, IMQ, CCC, cULus | VDE, IMQ, CCC, cULus | VDE, CCC, cULus | – | VDE, CCC, cULus | VDE, IMQ, CCC, cULus | cULus | VDE, CCC, |
| Marine classifications | | | | – | DNV-GL, LR, BV, RINA, ABS | DNV-GL, LR, BV, RINA, ABS | LR | – | ABS | DNV-GL, LR, BV, RINA, ABS | ABS | – |
| **Voltage/frequency** | | | | | | | | | | | | |
| Rated voltage AC | | | V | 230 | 230/400 277/480 | 230/400 277/480 | 230/400 277/480 | – | 230/400 | 230/400 277/480 | 230/400 277/480 | 230/400 240/415 (5SJ4..HG40/41) 277/480 (5SJ4..HG42) |
| | Acc. to UL 489, UL 1077, CSA C22.2 No.235 | | V | – | – | – | – | – | – | – | – | |
| Max. operational voltage AC | | | V | 250 | 250/440 | 250/440 | 250/440 | – | 250/440 | 250/440 | 250/440 | 250/440 |
| Rated voltage DC per phase pole | | | V | – | 60 | 60 | 60 | 220 | 220 | 60 | 60 | 60 |
| Max. operational voltage DC per phase pole | | | V | – | 72 [1] | 72 [1] | 72 | 250 | 250 | 72 [1] | 72 [1] | 60 |
| Rated impulse voltage $U_{imp}$ | | | kV | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Rated frequency $f_n$ | | | Hz | 50/60 | 50/60 | 50/60 | 50/60 | 50/60 | 50/60 | 50/60 | 50/60 | 50/60 |
| **Connection** | | | | | | | | | | | | |
| Dual-chamber terminal | | | | – | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Conductor cross-section | Solid/stranded | | mm² | 0.75 ... 16 | 0.75 ... 35 | 0.75 ... 35 | 10 ... 50 | 10 ... 50 | 0.75 ... 35 | 0.75 ... 35 | 0.75 ... 35 | 0.75 ... 25 (16) [2] |
| 1 wire | Finely stranded with end sleeve | | mm² | 0.75 ... 10 | 0.75 ... 25 | 0.75 ... 25 | 10 ... 35 | 10 ... 35 | 0.75 ... 25 | 0.75 ... 25 | 0.75 ... 25 | 0.75 ... 25 (10) |
| | Conductors (Cu 60/75 °C, $I_n$ ≤ 40 A) | | | – | AWG 18 ... 4 | AWG 18 ... 4 | AWG 3 ... 1 | AWG 3 ... 1 | AWG 18 ... 4 | AWG 18 ... 4 | AWG 18 ... 4 | AWG 18 ... 4 (1) |
| Terminal tightening torque | | | Nm | 1.2 ... 2 max. | 2.5 ... 3.5 max. | 2.5 ... 3.5 max. | 2.5 ... 3.5 max. | 2.5 ... 3.5 max. | 2.5 ... 3.5 max. | 2.5 ... 3.5 max. | 2.5 ... 3.5 max. | 2.5 ... 3.5 max. |
| | | | lb-in | 11 ... 18 | 22 ... 26 | 22 ... 26 | 22 ... 31 | 22 ... 31 | 22 ... 26 | 22 ... 26 | 22 ... 26 | 22 ... 26 |
| **Ambient conditions** | | | | | | | | | | | | |
| Ambient temperature [3] | | | °C | –25 ... +60 [4] | –25 ... +55 [4] | –40 ... +70 [4] | –25 ... +55 [4] | –25 ... +55 [4] | –40 ... +70 [4] | –40 ... +70 [4] | –25 ... +55 [4] | –25 ... +55 [4] |
| Storage temperature | | | °C | –40 ... +75 | –40 ... +75 [4] | –40 ... +75 [4] | –40 ... +75 [4] | –40 ... +75 [4] | –40 ... +75 [4] | –40 ... +75 [4] | –40 ... +75 [4] | –40 ... +75 [4] |
| Shock acc. to IEC 60068-2-27 150 m/s² at 11 ms half-sine | | | | – | ■ | ■ | – | – | ■ | ■ | ■ | ■ |
| Resistance to vibrations acc. to IEC 60068-2-6: 5 ... 25 Hz (± 1mm) and at 25 ... 150 Hz (50 m/s²) | | | | – | ■ | ■ | ■ | – | ■ | ■ | ■ | ■ |
| Resistant to shock and vibrations acc. to EN 61373 and EN 50155 "1B" (railway engineering) | | | | ■ | – | ■ | – | – | ■ | ■ | – | – |
| Fire behavior of materials acc. to EN 45545-2 (fire protection on railway vehicles) | | | | ■ | – | ■ | ■ | – | ■ | ■ | – | – |
| Degree of pollution for overvoltage category | | | | 2 [5] | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 [6] | 3/4 | 3/4 | 3/4 |
| **Additional functions** | | | | | | | | | | | | |
| Measuring and communication function [6] | | | | ■ | – | – | – | – | – | – | – | – |
| **Further information** | | | | | | | | | | | | |
| | | | | See page 3/40 | See page 3/24 | See page 3/26 | See page 3/28 | See page 3/30 | See page 3/32 | See page 3/34 | See page 3/36 | See page 3/38 |

[1] Except C0 0.3 A ... 0.5 A
[2] 5SY54.. 4-pole, degree of pollution 2 for overvoltage category II
[3] 95% humidity up to 55 °C, 95% humidity up to 70 °C, 30% humidity up to 75 °C
[4] Max. 95% humidity
[5] Max. 85% rel. humidity, > 45 °C max. 0.056g/m³ abs. humidity
[6] When used with a busbar at the front or 2 conductors, the terminal area at the rear is restricted, see notes on the Internet

[7] The device properties specified, for example, in the product standards, such as service life, breaking capacity and surface temperature, cannot be guaranteed at the specified ambient temperatures that lie outside the specified product standards.

[8] Please note the country-specific radio licenses of the products at www.siemens.com/lowvoltage/certificates (109801197)

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System overview, page 3/5

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## Overview of basic units

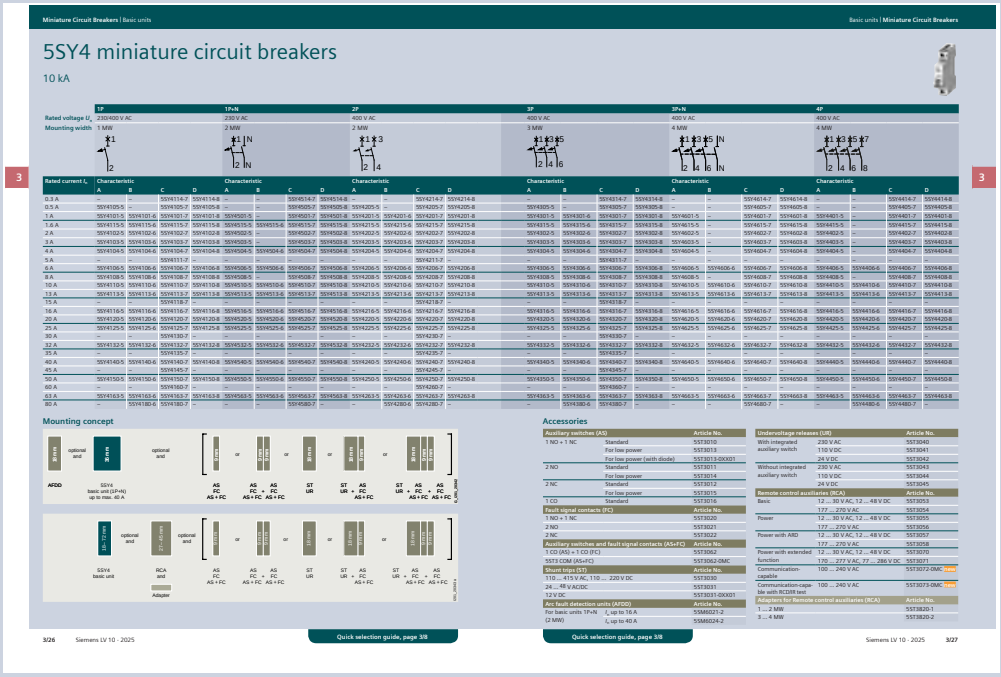
The overviews at the beginning of the chapters and sections help you make a quick advance selection of the basic units. You can use the important technical specifications to compare the basic units. Page references quickly take you to the suitable devices.

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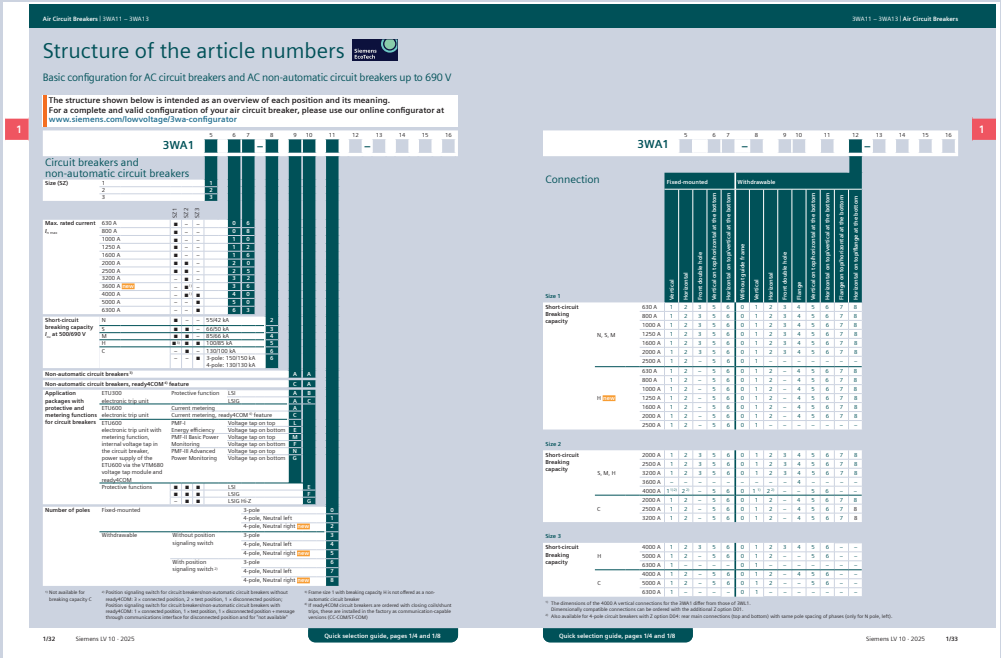
# The fast route to the product

## Overviews and matrix tables for better orientation within the catalog




### Product page

The article number matrix shows you on the spot which product variants are available. The matching accessories are clearly dedicated to each basic unit – often directly on the same page.




### Configurable products

For products which are conveniently configurable online, the structure of the article numbers is clearly displayed. A link takes you directly to the configurator which permits complete and valid configuration.

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## Clickable article numbers

Direct forwarding to the individual products in SiePortal (Product Catalog) by clicking on the article number in the catalog




or by entering this web address incl. article number
www.siemens.com/product_catalog_SIEP?Article No.

## Clickable images

Direct forwarding to the individual motif types in the Industry image database by clicking on the images in the catalog



Industry image database:
www.siemens.com/lowvoltage/picturedb

## new Search function

Search for new products by entering "new" in the text field of the search function



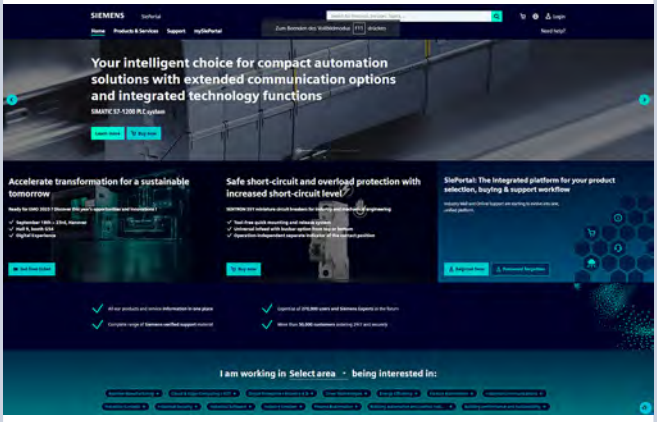

## Siemens EcoTech

Products bearing our Siemens EcoTech label are identified by this clickable symbol in the catalog




www.siemens.com/lowvoltage/SiemensEcoTech

## SiePortal – The integrated platform for product selection, ordering and support




SiePortal:
www.siemens.com/sieportal

## SiePortal – Knowledge base for low-voltage products

SiePortal > Support > Knowledge base

- Catalog/Brochure
- Manual
- Characteristic curves
- Certificates
- FAQ etc.

www.siemens.com/lowvoltage/product-support

## SiePortal – Product catalog (Internet ordering platform) for low-voltage products

SiePortal > Products & Services

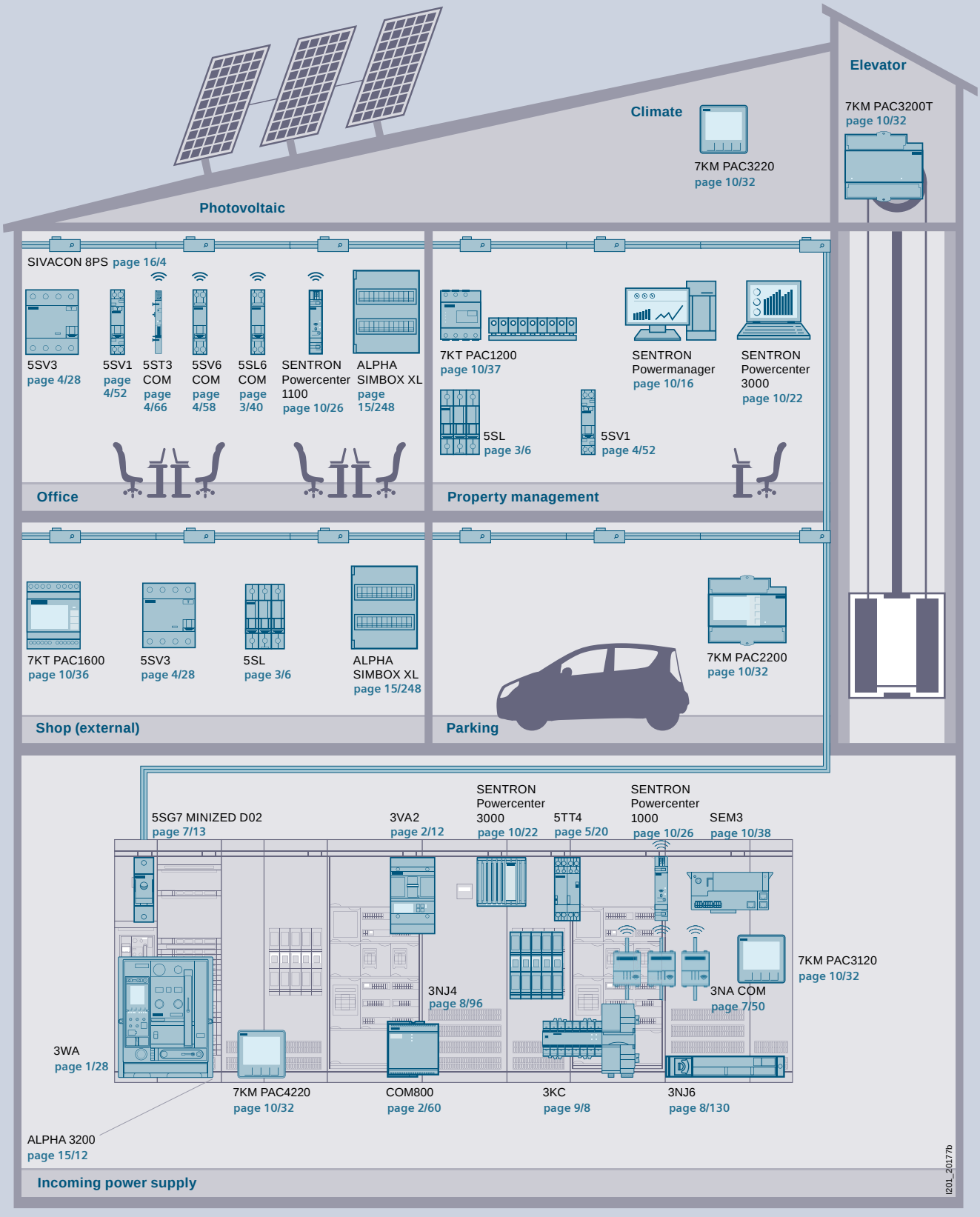
www.siemens.com/lowvoltage/product-catalog

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# Products and their applications in infrastructure

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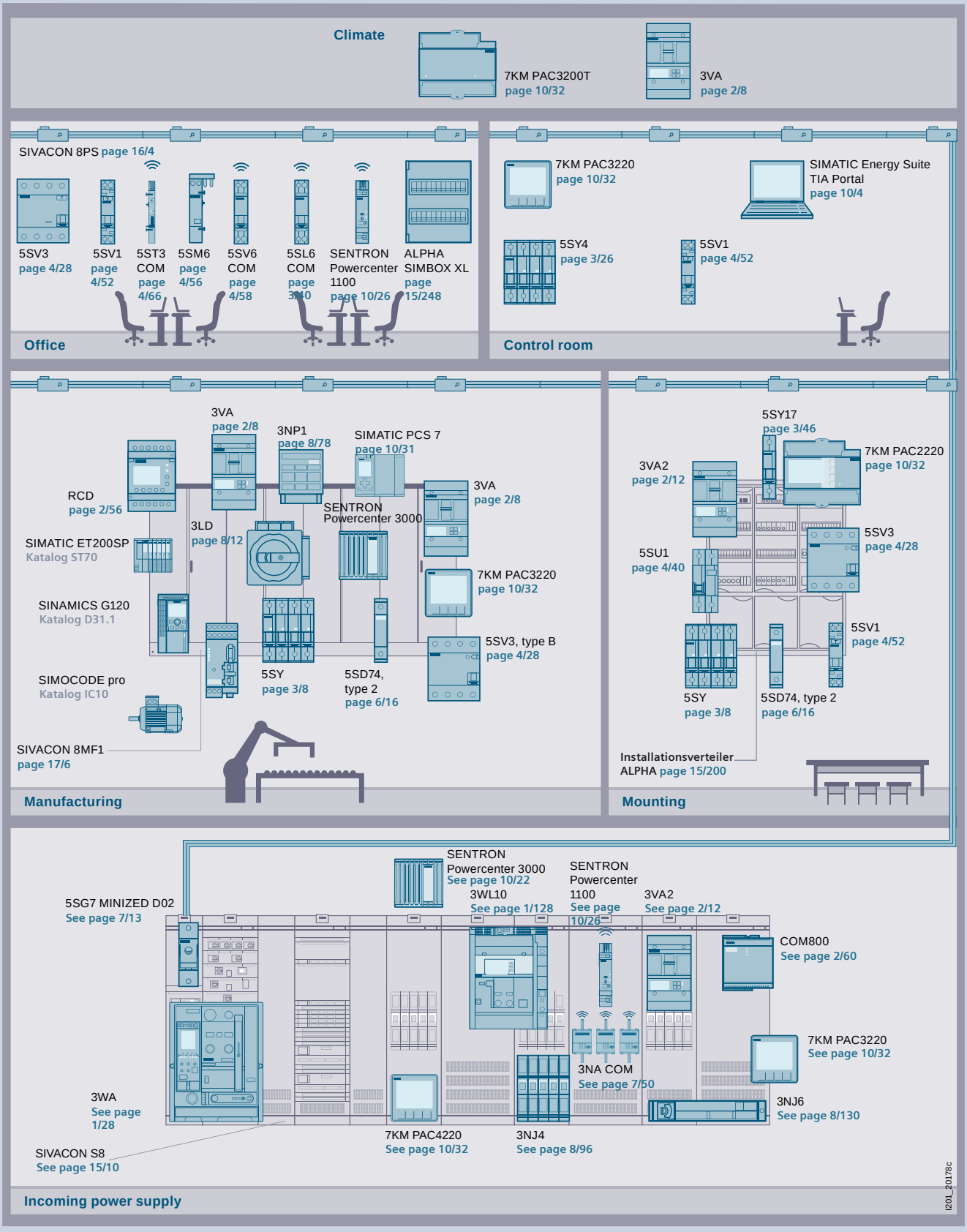


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# Products and their applications in industry

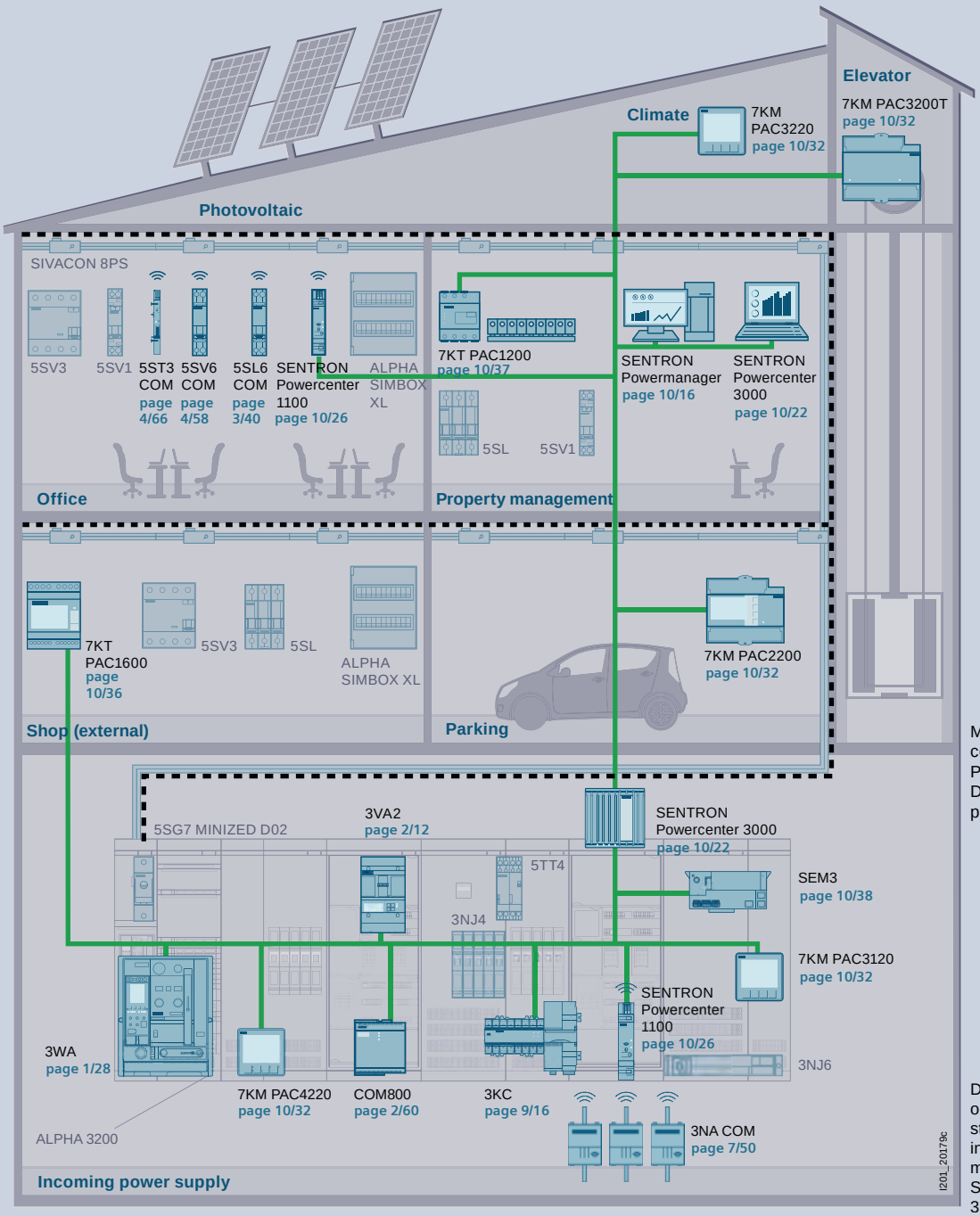




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# Examples of digitalization in infrastructure




**Cloud-based analysis**

Condition monitoring

Predictive maintenance

Power monitoring

**On premises**

Measuring, evaluating and controlling with SENTRON Powermanager / Desigo CC power monitoring software

**Stand-alone**

Decentralized visualization of measured values, states and alarms via integrated web servers in measuring devices and SENTRON Powercenter 3000

Industrial Ethernet
powerline

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# Examples of digitalization in industry



**Cloud-based analysis**



Condition monitoring

Predictive maintenance

Power monitoring

**On premises**

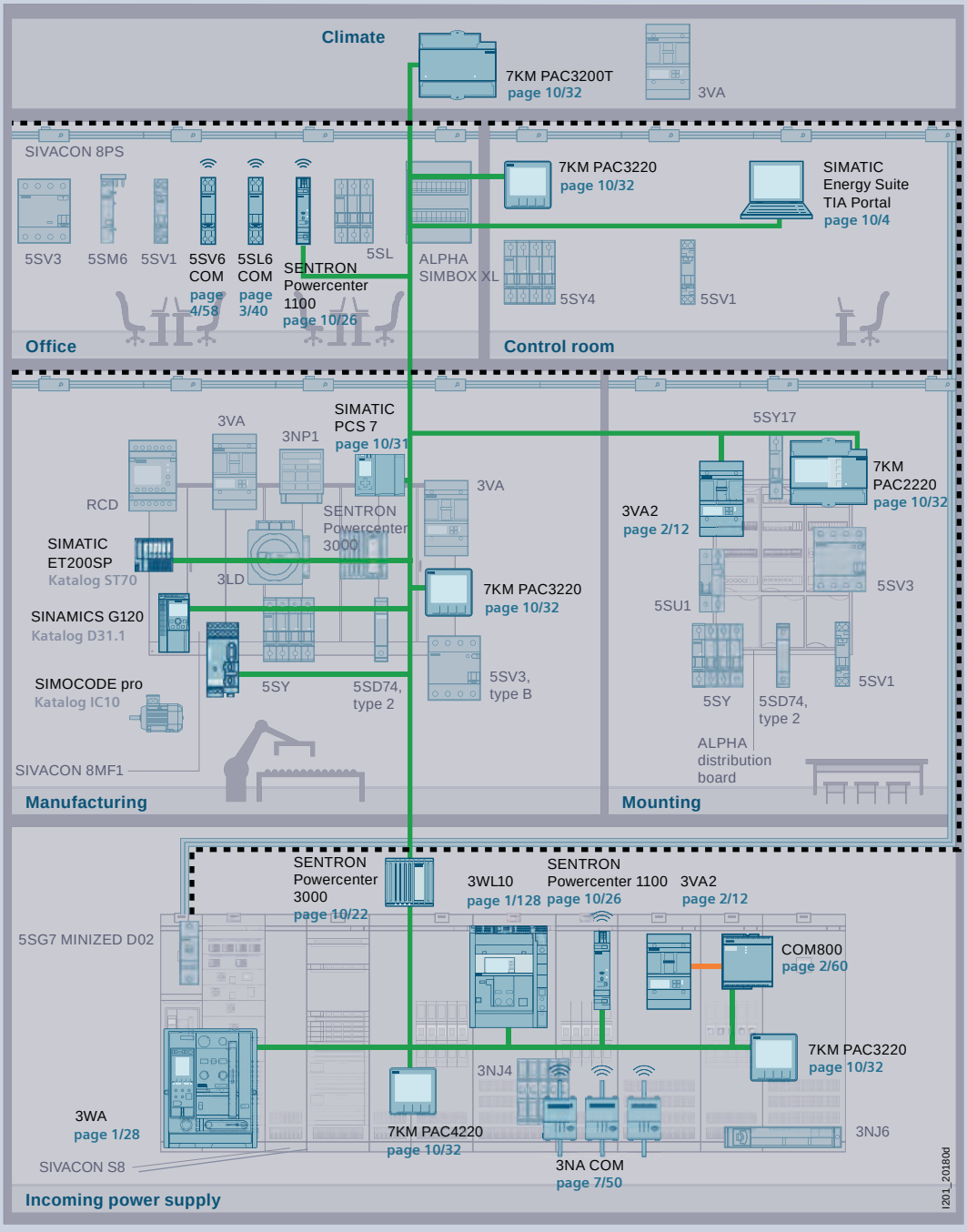


Measuring, evaluating and controlling with SIMATIC Energy Suite / TIA Portal

**Stand-alone**



Decentralized visualization of measured values, states and alarms via integrated web servers in measuring devices and SENTRON Powercenter 3000




Industrial Ethernet
3VA-line
powerline

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# Introduction to the topic of digitalization and Industry 4.0



In industrial automation, the demand for communication capability, data transparency and flexibility is growing constantly. To enable industrial switchgear technology to meet this demand, the use of bus systems and intelligent switching devices is unavoidable.

## Digitalization

Protection, switching and measuring devices in power distribution systems can display important information on local visualization via integrated communication, e.g. in Powercenter, or transmit it to energy data management systems (EDMS), e.g. SENTRON Powermanager, as well as to cloud systems and applications.

- Diagnostics management
- Fault management – Email alarm
- Maintenance management – predictive maintenance
- Cost center management

### 1. Visualization and plant transparency



- Greater operational reliability thanks to remote access to the plant.
- Plant visualization for central and simple access to all device information.

### 2. Digital documentation



- Uniform access to digital data and documentation.
- Provision of extensive CAx data for systems and components during planning and operation.
- Support in planning and process creation using SIMARIS planning tools, product and system configurators.

### 3. Power monitoring



- Fulfilling the ISO 50001 by detecting and transparently presenting the energy flows within energy distribution.

### 4. Optimization and retrofit



- Retrofitting solutions such as SEM3 offer a simple option for integrating energy monitoring into existing systems.
- Energy monitoring and plant transparency help you efficiently plan plant expansion.

### 5. Maintenance management



- Maintenance support, even remotely, by transparently presenting the status of a switchgear and controlgear assembly.

### 6. Emergency management



- Quick error localization which therefore leads to a minimization of outage times.

### 7. Cybersecurity

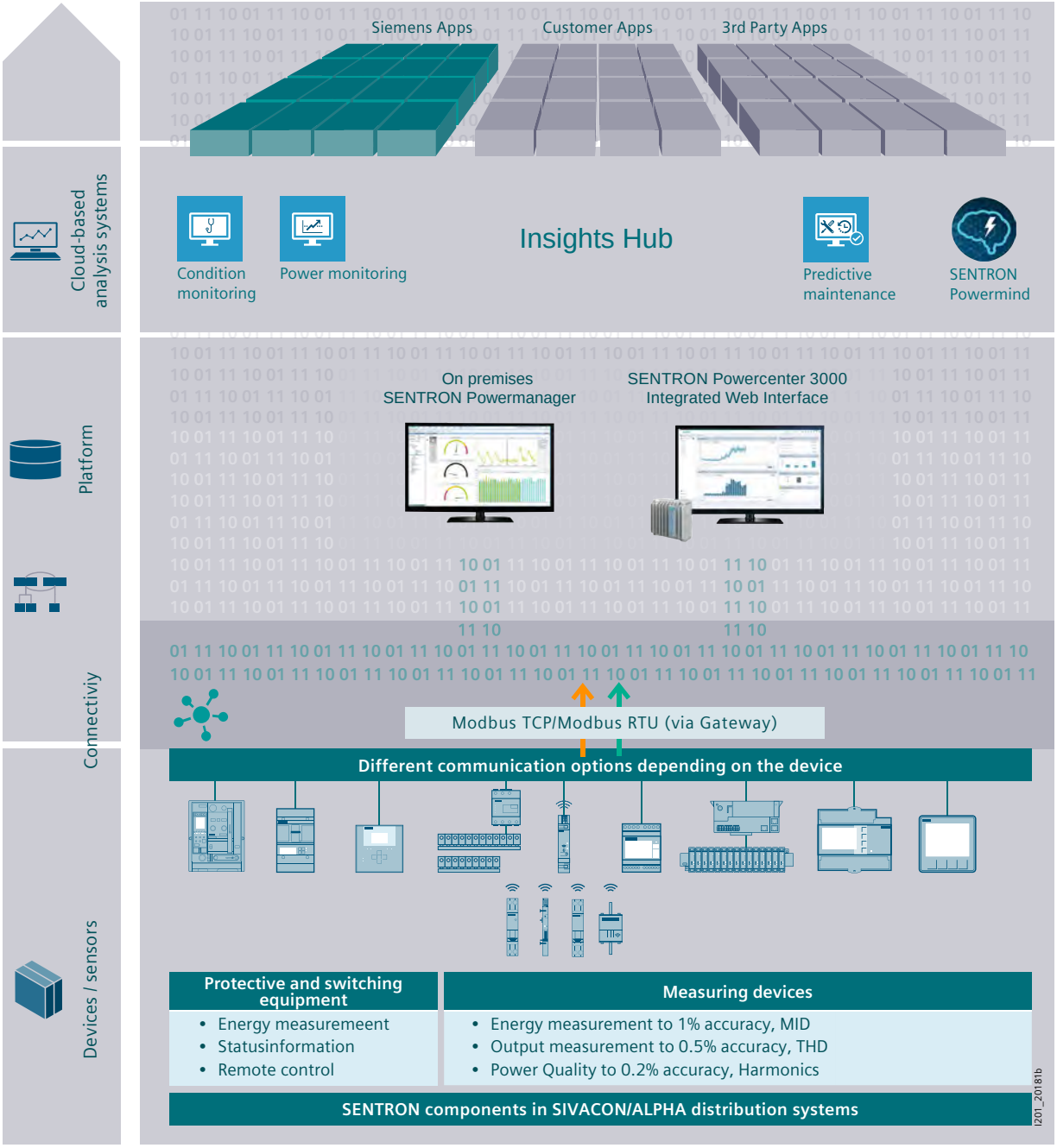


- Protection from unauthorized access and manipulation to switchgear and controlgear assemblies and devices ensures integrity, availability and confidentiality.

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# Overview of protection, switching, measuring and monitoring tasks



The functions presented here are available in combination or individually.
Details can be found in the respective chapter.

| Device class | Type | Rated current | Page | Line protection | Motor protection | Generator protection | Starter protection | Isolating function |
|---|---|---|---|---|---|---|---|---|
| Air circuit breakers | 3WA/ 3WL | 630 ... 6300 A | 1/1 | ■ | ■ | ■ | | ■ |
| Molded case circuit breakers | 3VA | 16 ... 1600 A | 2/6 | ■ | ■ | ■ | ■ | ■ |
| Miniature circuit breakers (automatic circuit breakers) | 5SY/ 5SL | 0 ... 80 A | 3/6 | | | | | ■ |
| RCCB | 5SV3/ 5SM3 | 16 ... 125 A | 4/6 | ■ | | | | ■ |
| RCBOs | 5SU1/ 5SV1 | 0 ... 40 A | 4/10 | ■ | | | | ■ |
| AFD units | 5SM6 | 0 ... 40 A | 4/12 | | | | | |
| AFDD/MCBs | 5SV6 | 0 ... 40 A | 4/12 | ■ | | | | ■ |
| On/Off switches | 5TL1 | 32 ... 125 A | 5/14 | | | | | |
| Overvoltage protection devices | 5SD7 | – | 6/1 | | | | | ■ |
| Fuses NEOZED, DIAZED, Cylindrical fuses | 5SE, 5SA, 5SB, 3NW6, 3NW8 | – | 7/30 | ■ | ■ [1] | | ■ | |
| Photovoltaic fuses | – | – | 7/84 | ■ | | | | |
| LV HRC fuses | 3NA/ 3ND | – | 7/36 | ■ | ■ | | ■ | |
| SITOR semiconductor fuses | – | – | 7/54 | ■ | | ■ | ■ | |
| Switch disconnectors | 3LD | 16 ... 250 A | 8/12 | | | | | ■ |
| | 3KD | 16 ... 1600 A | 8/60 | | | | | ■ |
| Fuse switch disconnectors | 3NP | 0 ... 630 A | 8/78 | With suitable fuse links | | | With suitable fuse links | ■ |
| Switch disconnector with fuse | 3NJ | 0 ... 630 A | 8/130 | | | | | ■ |
| | 3KF | 0 ... 630 A | 8/114 | | | | | ■ |
| Transfer switching equipment | 3KC | 16 ... 3200 A | 9/16 | | | | | ■ |
| PAC measuring devices | 7KM/ 7KT | Any | 10/32 | | | | | |
| Motor starter protectors | 3RV | – | Catalog IC 10 | | ■ | | | ■ |
| Contactor | 3RT | – | Catalog IC 10 | | | | | ■ |

[1] Only applies to 3NW8
[2] Only applies to the communication-capable COM products

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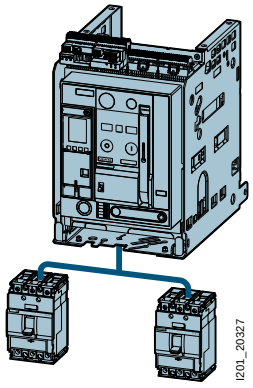
| Overload protection LT | Current limitation (Short-circuit) | Short-circuit protection, delayed ST | Short-circuit protection, instantaneous INST | Ground-fault protection GF | Measurement function | Personnel safety/ fault current protection | Overvoltage protection | Preventive fire protection | Switching function |
|---|---|---|---|---|---|---|---|---|---|
| ■ | | ■ | ■ | ■ | ■ | | | ■ | |
| ■ | ■ | ■ | ■ | ■ | ■ | ■ \| ■ | | ■ | |
| ■ | ■ | | ■ | | ■ [2] | | | | |
| | | | | | | ■ \| ■ | | | |
| ■ | ■ | | ■ | | | ■ \| ■ | | | |
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| ■ | ■ | | ■ | | ■ [2] | | | ■ | |
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| ■ | ■ | | ■ | | | | | | |
| ■ | ■ | | ■ | | ■ [2] | | | | |
| ■ | ■ | | ■ | | | | | | |
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| | | | | | | | | | |
| With suitable fuse links | With suitable fuse links | | With suitable fuse links | | | | | | |
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# Overview of protection, switching, measuring and monitoring tasks



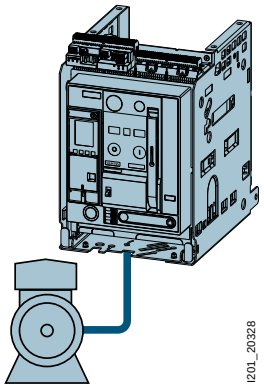
## Line protection




The trip units for line protection are designed to provide overload and short-circuit protection for:

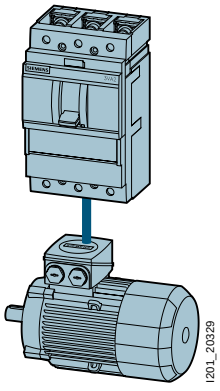
- Cables
- Leads
- Non-motor loads

## Generator protection




The setting values of the trip units are matched to protecting generators.

## Motor protection

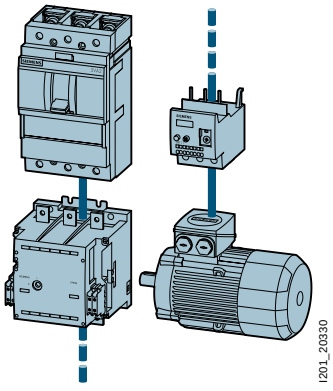



The overload and short-circuit releases are designed for optimal protection and direct starting of three-phase AC squirrel-cage motors.

The molded case circuit breakers for motor protection have phase-failure sensitivity and a thermal image that protects the motor against overheating.

The adjustable time lag class enables users to adjust the overload release to the startup conditions of the motor to be protected.

## Starter protection




Starter combinations consist of:

Molded case circuit breaker + contactor + overload relay.

The molded case circuit breaker handles short-circuit protection and the isolating function. The task of the contactor is the operational switching of the feeder. The overload relay handles overload protection that can be specially matched to the motor.

The molded case circuit breaker for the starter combination is therefore equipped with an adjustable and instantaneous short-circuit release.

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## Isolating function

Switching devices are described that meet the requirements defined for the isolating function when in the open position.

- Load switches, disconnectors, switch disconnectors according to IEC 60947-3

Switching operational currents up to the maximum rated current of the switching devices is part of the tasks performed by these devices (**See chapter 8**).



- Non-automatic circuit breakers according to IEC 60947-2 Annex L

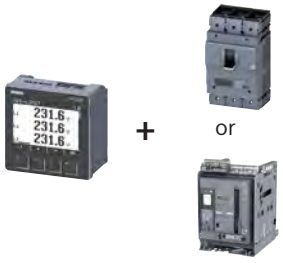
Non-automatic circuit breakers can disconnect operational currents up to the maximum rated current, including fault currents up to the specified $I_{cc}$ value.



## Measurement function

There are two possibilities for selecting the measurement function in low-voltage power distribution (**See chapter 10**):

- Measuring devices (stand-alone) combined with protection and switching devices




- Protection and switching devices with integrated measurement function (all-in-one), measurement function equivalent to a measuring device



## Current limitation (Short-circuit)

Current limitation means that the peak value of the prospective peak short-circuit current is limited to a smaller let-through current.

- Current-limiting devices include molded case circuit breakers (MCCBs), motor starter protectors (MSPs), miniature circuit breakers (MCBs) and fuses



- Air circuit breakers (ACBs) are non-current-limiting devices



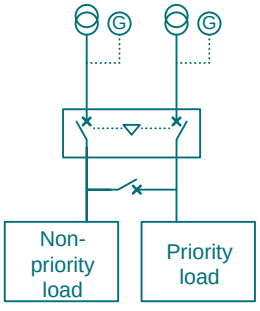
## Transfer switching function

In the selection of transfer switch equipment, the following functions are distinguished (**See chapter 9**):

- Transfer control
- Load transfer

The following possibilities for transfer switching are available:

- MTSE = manual transfer switch equipment
- RTSE = remote transfer switch equipment
- ATSE = automatic transfer switch equipment



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# Tripping characteristics



The protective function of protection and switching devices in low-voltage power distribution systems is determined by the correct selection of the respective tripping characteristic (fuses, miniature circuit breakers) or TMTU/ETU trip units (air circuit breakers, molded case circuit breakers).

All current-limiting protection devices, such as MCCBs, MSPs, MCBs and fuses, can be described in terms of three characteristic curves:

- Tripping curve (time/current)
- Let-through current curve
- Let-through energy curve

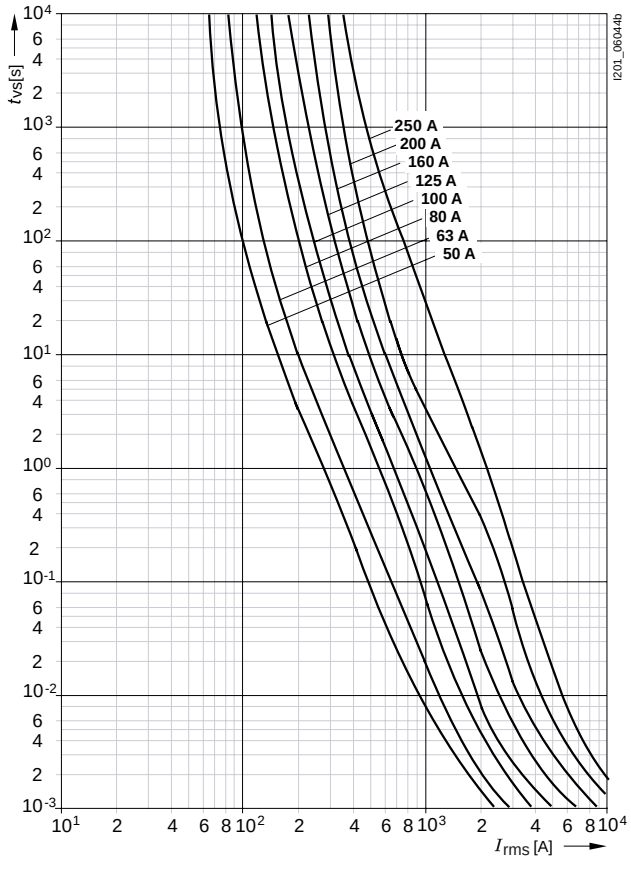
In the following, the functions of the tripping curve are presented as an example.

## Fuses

The time-current characteristic curve of fuses denotes the melting time as a function of the overload or short-circuit current.

Different characteristics must be considered in dimensioning depending on the protection requirement and operational class (e.g. gG, gR, aR, etc.).

See Configuration Manual – Fuse systems
**www.siemens.com/lowvoltage/manuals (45314810)**

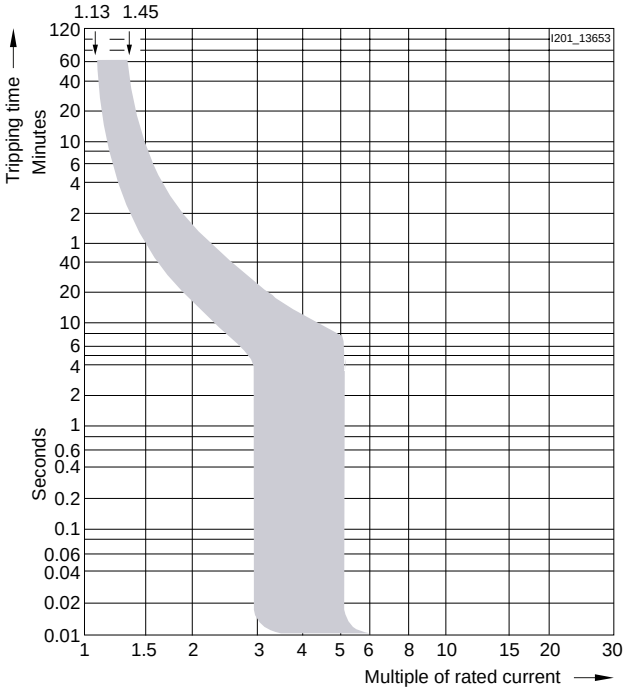



## Miniature circuit breakers (MCBs)

The characteristic curve is chosen based on the application and is classified, for example, as tripping characteristic A, B, C or D.

Tripping curve = tripping characteristics according to IEC/EN 60898-1

See Configuration Manual – Miniature circuit breakers
**www.siemens.com/lowvoltage/manuals (45302792)**



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# Molded case circuit breakers (MCCBs)

The choice of electronic trip unit is based on the protective function required in power distribution.

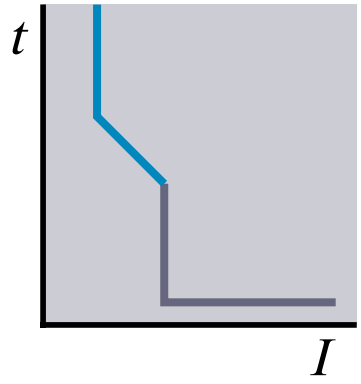
The trip units are classified as:

- thermal-magnetic trip units (TMTU; previously known as electromechanical trip units)
- electronic trip units (ETU).

Depending on the application and requirements, TMTUs are available with different protection setting options for both overload and short-circuit.

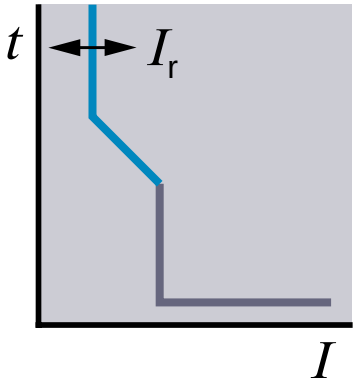
See Equipment Manual – 3VA molded case circuit breakers with IEC certificate
**www.siemens.com/lowvoltage/manuals (90318775)**

## FTFM (Fixed Thermal Fixed Magnetic)



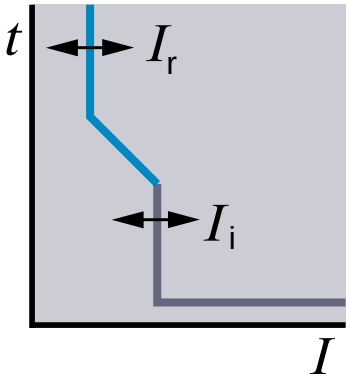

Permanently set thermal overload trip unit, permanently set magnetic trip unit with short-circuit protection

## ATFM (Adjustable Thermal Fixed Magnetic)




Adjustable thermal overload trip unit, permanently set magnetic trip unit with short-circuit protection

## ATAM (Adjustable Thermal Adjustable Magnetic)




Adjustable thermal overload trip unit, adjustable magnetic trip unit with short-circuit protection

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# Tripping characteristics

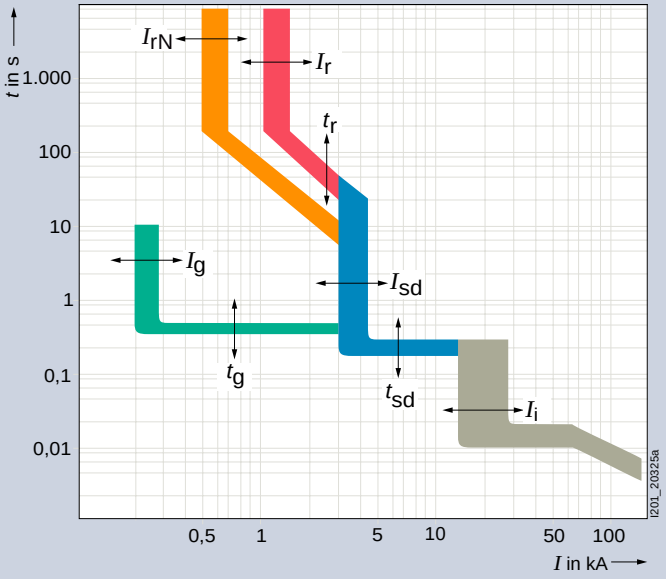
## Molded case circuit breakers (MCCBs)/air circuit breakers (ACBs) with ETU



Selection of the electronic trip unit determines the protective function in power distribution.
Electronic trip units offer the most extensive and variable protection settings of all protection and switching devices for low-voltage power distribution.

- See Equipment Manual – 3VA molded case circuit breakers with IEC certificate **www.siemens.com/lowvoltage/manuals (90318775)**
- See Equipment Manual – 3WA1 air circuit breakers **www.siemens.com/lowvoltage/manuals (109763061)**

The graphs below show an overview of the time-current characteristic curve.




LT Overload protection LT

N Neutral conductor overload protection N

ST Short-circuit protection, delayed ST

INST Short-circuit protection, instantaneous INST

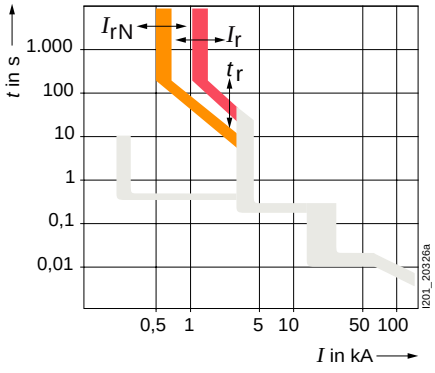
GF Ground-fault protection GF

### Overload protection LT

The ID letter for overload protection is LT (stands for "Long-time delay"). The trip unit is inverse-time delayed and exhibits the following characteristics depending on the trip unit type:

- Bimetal characteristic with thermal-magnetic trip units
- $I^2t$ characteristics for molded case circuit breakers MCCBs and $I^2t$ and $I^4t$ characteristics for ACBs
- Depending on the electronic trip units, only $I^2t$ characteristic or $I^2t$ and $I^4t$ characteristic

The letters $I_r$ refer to the current setting value; the associated tripping time is identical to $t_r$.




### Neutral conductor overload protection N

The ID letter for neutral conductor protection is N. The letters $I_N$ refer to the current setting value for the overload protection; the associated tripping time is identical to $t_r$.

The short-circuit protection of the circuit breaker also protects the neutral conductor.

Possible reasons for implementing overload protection in the neutral conductor include:

- The neutral conductor has a smaller cross-section than the phase conductors.
- Higher harmonic components in the system can be expected.
- A large number of loads, or predominantly 1-phase loads, are connected.

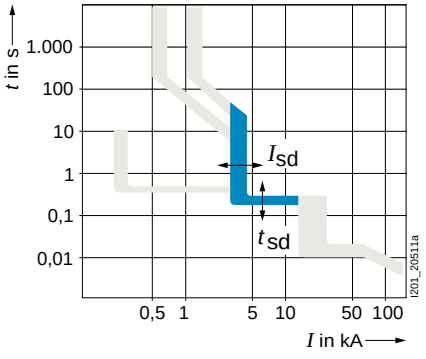
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## Short-circuit protection, delayed ST

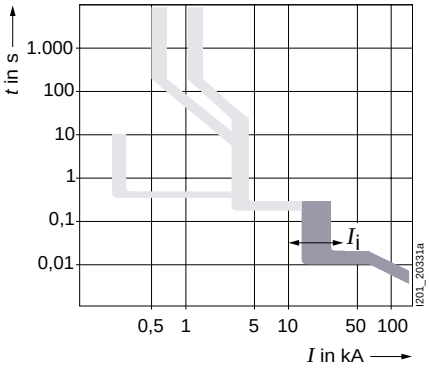
The ID letter for short-time delayed short-circuit protection is ST (stands for "Short-time"). The ST function of the electronic trip unit can be used to implement time-selective short-circuit tripping in low-voltage networks in which multiple circuit breakers are installed in series.

The short-time delayed short-circuit protection function protects phases L1 to L3 and the neutral conductor. The protective function responds if the current in at least one phase exceeds the set tripping current $I_{sd}$ for the set delay period $t_{sd}$.



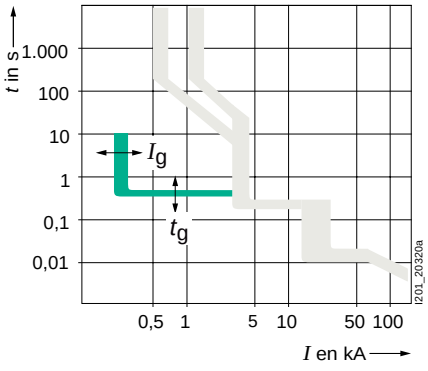

## Short-circuit protection, instantaneous INST

The ID letter for instantaneous short-circuit protection is INST (stands for "Instantaneous"). This short-circuit protection function protects phases L1 to L3. The instantaneous short-circuit protection function responds if the instantaneous value equal to the rms of the current in at least one phase exceeds the instantaneous tripping current $I_i$.




## Ground-fault protection GF

The ID letter for ground-fault protection is GF (ground fault). The G release measures fault currents between phases and grounded, electrically conductive parts. Ground-fault protection protects against the flow of current to ground in the rated current range. As ground-fault currents can produce arcing, ground-fault protection consequently offers extended fire protection.



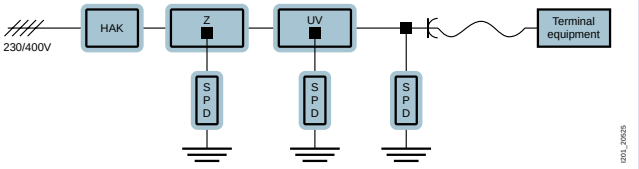
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# Overview of protection, switching, measuring and monitoring tasks



## Overvoltage protection

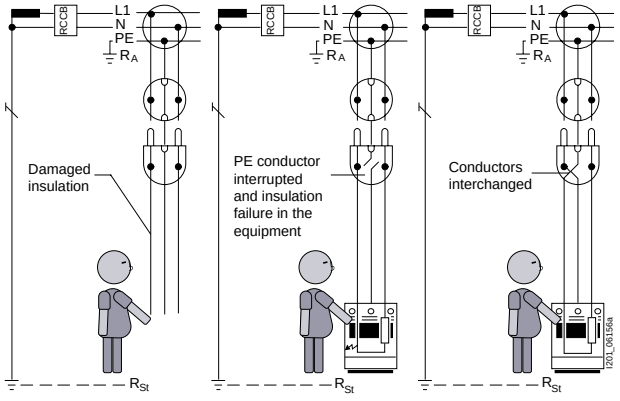
Overvoltage protection refers to the protection of electrical and electronic devices against excessively high electrical voltages. Overvoltage can be caused by switching operations or electrostatic discharging (ESD).




## Personnel safety/fault current protection

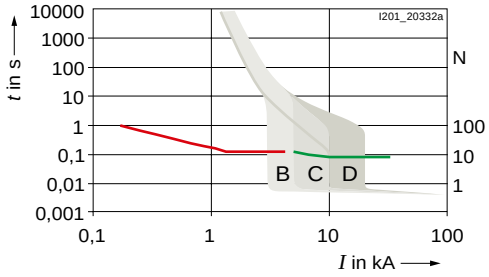
Protection in the event of direct contact:
Additional protection contact refers to direct contact with a part that is live under operating conditions.

Protection against indirect contact:
Fault protection refers to contact with an electrically conductive part which is not live under operating conditions.




## Preventive fire protection

Arc fault detection devices evaluate occurring faults in the current and voltage wave using an electronic switch and shutting off the current when it recognizes a contact fault. This prevents overheating at poor contact points which can prevent fires.




Potential failure causes

- Damaged cable insulation, e.g. by nails, screws or brackets
- The risk of a cable break exists for cables with a too-tight bending radius
- Cables which are laid through open doors and windows can be crushed when doors or windows are closed resulting in damaged insulation and arcing faults
- Environmental influences such as UV rays, temperature, humidity, gases can damage or age the insulation
- Damage caused by rodents
- Loose contact, e.g. caused by too low torque
- Conductor damaged by claw fixing

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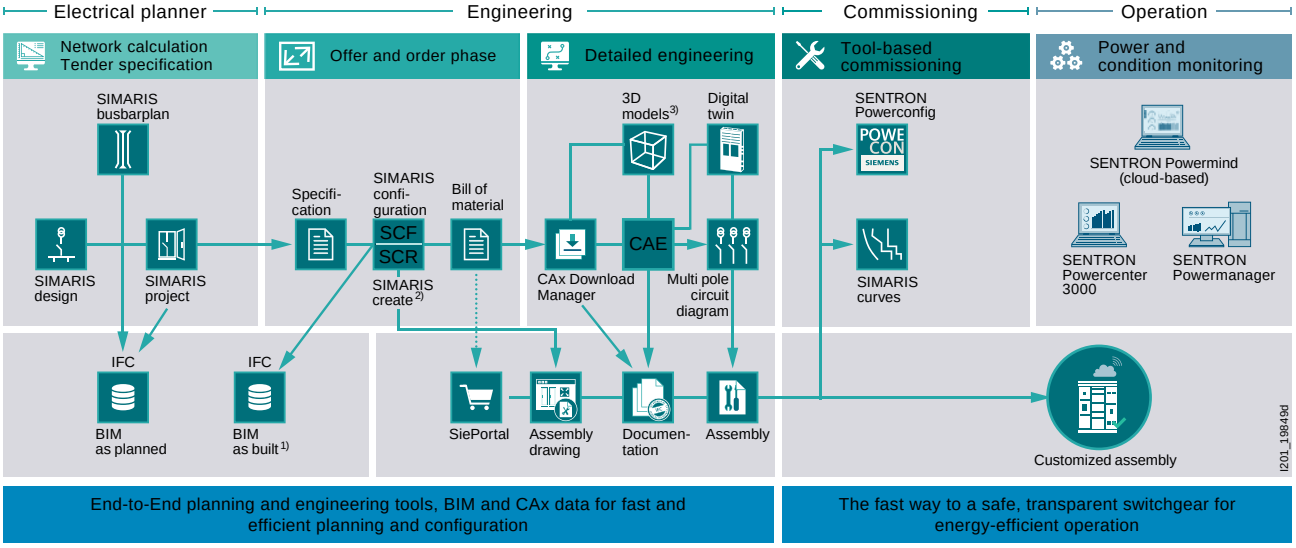


# SIMARIS planning tools

## For planning and visualizing the power distribution system



### From planning to operation




1) available for SIVACON S8
2) available for ALPHA DIN/NF
3) available for ALPHA 3200 Eco and SIVACON S4

### Highlights

- Thorough support of the engineering process with interlinked software tools
- Provision of extensive CAx data for systems and components
- Reduction of cost and time aspects during planning

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# Distribution systems

## For industrial plants or in infrastructure

E

### SIVACON S8 power distribution boards and motor control centers

- Reliable, economical, flexible and communication-capable
- For all applications in infrastructure and process industry



See page 15/6 for the overview

### SIVACON 8PS busbar trunking systems

- For economic and reliable power supply
- Space-saving and simple to install
- Low fire load, good electromagnetic compatibility



See page 16/4 for the overview

### ALPHA 3200 power distribution boards (DIN technology)

- Safe investment, enhances productivity and performance
- Optimized for applications in modern building infrastructures
- Integrated system for all SENTRON components



See page 15/6 for the overview

### ALPHA 3200 Eco power distribution boards (DIN technology)

- **Saves resources:** lower use of copper with centrally positioned busbar
- **Practical:** optimized performance – from the transformer connection via the busbar to the outgoing feeders
- **Modular:** a high packing density in a compact space due to flexible use of ALPHA assembly kits
- **Innovative:** 3D processor generates a digital twin of the configured system at the press of a button



See page 15/6 for the overview

### ALPHA distribution boards (DIN technology)

- Comprehensive portfolio with wall-mounted and floor-mounted distribution boards for currents between 160 A to 1250 A



See page 15/7 for the overview

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## SIVACON S4 power distribution boards (NF technology)

- Consistent portfolio for applications from 800 A to 6300 A
- High flexibility in system planning thanks to a modular platform structure
- Simple reproduction of type-tested solutions using software-assisted configuration in SIMARIS configuration and SIMARIS project
- Increased planning reliability due to the provision of 3D data
- Safe to use thanks to independent VDE approval



See page 15/4 for the overview

## ALPHA UNIVERSAL distribution boards (NF technology)

- Comprehensive portfolio with wall-mounted and floor-mounted distribution boards for currents between 125 A to 800 A
- Simple planning thanks to the modular platform structure



See page 15/5 for the overview

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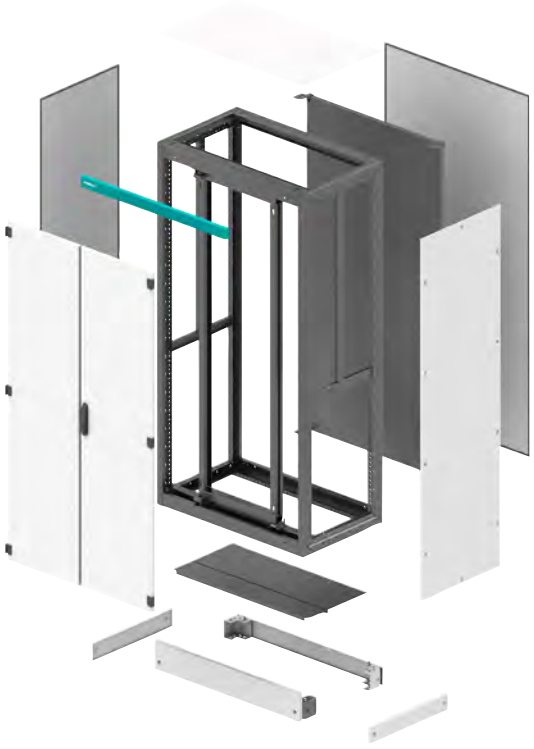
# Control cabinets/System cubicles

## For plant engineering, process control, network technology, secondary systems/energy automation

E

### SIVACON 8MF1 system cubicles

- Modular system
- Fully assembled, adapted according to your specifications, or entirely customized



See page 17/6 for the overview

### SIVACON 8MF/8MR system lighting – LED lights

The LED lights offer optimum lighting conditions for installation and maintenance. The LED technology is energy-efficient and maintenance-free.



See page 17/36 for the overview

### SIVACON 8MF/8MR system lighting – Slimline lights

The Slimline lights are an alternative with energy-saving lamps and are available as a version with an integrated socket.



See page 17/38 for the overview

### SIVACON 8MR system air-conditioning

Ensures fault-free operation of the electrical and electronic built-in units installed in the cubicle, even under the harshest ambient conditions.



See page 17/40 for the overview

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## Made for makers. Simply reliable.

All power distribution systems rely on a secure infeed of electrical energy. The 3WA air circuit breaker combines all of the functions which are required of power distribution equipment in the digital companies of today: from reliably protecting people and equipment from electrical accidents and damage, to flexible application and retrofit options, a long service life and low maintenance, to innovative features for integrated e-engineering, reliable energy data recording and seamless integration into digital environments. As the central component of the electrical power distribution, the 3WA air circuit breaker provides the basis for a holistic energy system in the digital age. The 3WA air circuit breaker is also part of the Siemens Xcelerator portfolio and therefore provides support with achieving digital and sustainable transformation – faster, simpler, and scalable.

## Reliable, versatile and perfectly integrated

The 3WL air circuit breakers reliably protect electrical equipment from damage or fire resulting from short circuit, ground fault or overload failures.

**Note:**
Products bearing our Siemens EcoTech label are identified by this clickable symbol in the catalog:

Siemens EcoTech

www.siemens.com/lowvoltage/SiemensEcoTech

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# Air Circuit Breakers




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Siemens Xcelerator

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# A multitude of additional information ...

## Information + ordering



### All the important things at a glance

For information about air circuit breakers, please visit our website **www.siemens.com/sentron-3wa**

### Your product in detail

The SiePortal platform (knowledge base) provides comprehensive information
**www.siemens.com/lowvoltage/product-support**

- Quick Selection Guide
  - 3WA air circuit breakers **(109781967)**
  - 3WL air circuit breakers **(109751638)**
- Brochure
  - 3WA air circuit breakers **(109800077)**

The relevant tender specifications can be found at
**www.siemens.com/tenderspecifications**

Use our conversion tool for quick and easy conversion to Siemens products **www.siemens.com/conversion-tool**

### Siemens YouTube channel

- 3WA air circuit breaker – Teaserfilm
  **sie.ag/2Myvit**
- 3WA air circuit breaker – Highlightfilm
  **sie.ag/3dy65A**

### Everything you need for your order

Refer to SiePortal to find an overview of your products (product catalog)

- Air circuit breakers **sie.ag/2IXiZjB**

Direct forwarding to the individual products in SiePortal by clicking on the article number in the catalog or entering this web address incl. article number
**www.siemens.com/product_catalog_SIEP?Article No.**

Order supports can be found in SiePortal at
**www.siemens.com/lowvoltage/product-support**

- Order Support
  - 3WA air circuit breakers – Made for makers. Simply reliable. **(109800074)**

### Configurators

The configurator reduces the time and effort required in the planning and ordering process, and allows for individual adaptations. Configure your air circuit breaker at
**www.siemens.com/lowvoltage/3wa-configurator**
**www.siemens.com/lowvoltage/3wl-configurator**
**www.siemens.com/lowvoltage/3wl10-configurator**

The following are additionally available for your configured air circuit breaker:

- 3D views
- CAD data
- Unit wiring diagrams
- Dimension drawings

## The fast track to the experts

### Contact persons in your region

We offer a comprehensive portfolio of services.
You can find your local contacts at
**www.siemens.com/lowvoltage/components/contact**

You will find further information on services at
**www.siemens.com/service-offers**

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at
**www.siemens.com/support-request**

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# … can be found in our online services

## Commissioning + operation

### SENTRON Powerconfig

The combined commissioning and service tool SENTRON Powerconfig for communication-capable measuring devices, circuit protection devices and circuit breakers.

Free download SENTRON Powerconfig
**www.siemens.com/powerconfig**

Free download SENTRON Powerconfig mobile via
**App Store** and **Play Store**

### Your product in detail

The SiePortal platform (knowledge base) provides detailed technical information
**www.siemens.com/lowvoltage/product-support**

- Operating instructions
- Characteristic curves
- Certificates

Online Support app available for download from the
**App Store** and **Play Store**
You will find further information at
**www.siemens.com/support-app**

Provision of 3D data (step and u3d data formats)

- SiePortal (product catalog)
  **www.siemens.com/lowvoltage/product-catalog**
- Image database
  **www.siemens.com/lowvoltage/picturedb**

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
**www.siemens.com/cax**

### Manuals

Manuals can be found in SiePortal at
**www.siemens.com/lowvoltage/manuals**

- Equipment Manual
  - 3WA1 air circuit breakers **(109763061)**
  - 3VA27 molded case circuit breakers & 3WL10 air circuit breakers **(109753821)**
- System Manual
  - 3WA air circuit breaker communication **(109792368)**
  - 3WL/3VL circuit breakers with communications capability – Modbus **(39850157)**
  - 3WL/3VL PROFIBUS circuit breakers with communications capability – PROFIBUS **(12560390)**
- Configuration Manual
  - 3WL1 air circuit breakers **(35681108)**
  - Low-voltage protection devices selectivity tables **(109748621)**
- Communication Manual
  - 3WL air circuit breakers via COM35 – PROFINET IO, Modbus TCP **(109757987)**
  - 3WL10 air circuit breakers & 3VA27 molded case circuit breakers **(109760220)**

### Face-to-face or online training

Our training courses can be found at
**www.siemens.com/sitrain-lowvoltage**

- 3WA air circuit breakers (WT-LV3WA)
- 3WL10 air circuit breaker, size 0 (WT-LVA3WL0)
- 3WL air circuit breakers, sizes 1-3 (WT-LVA3WL)
- Protection systems in low-voltage power distribution (WT-LVAPS)
- Maintenance and operation of 3WA circuit breakers (LV-3WAMAIN)
- Maintenance and operation of 3WL circuit breakers (LV-3WLMAIN)
- Maintenance and operation of 3WL and 3WA circuit breakers (LV-CBMAIN)
- Certification: Maintenance and operation of 3WL and 3WA circuit breakers (LV-CBCERT)
- 3WL and 3WA air circuit breakers protection technology and communication (LV-COPR)

Video tutorial on the 3WL air circuit breaker
**www.lowvoltage.siemens.com/wcms/3wl-tutorial**

### Technical overview – Air circuit breakers

#### The fast way to get you to our online services

This page provides you with comprehensive information and links on air circuit breakers

**www.siemens.com/lowvoltage/product-support (109781188)**

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# 3WA1 circuit breakers and non-automatic circuit breakers for AC and DC

## IEC 60947-2

1

AC





| | | 3WA11 | | | | | 3WA12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Basic data** | | | | | | | | | | | |
| Rated operational voltage $U_e$ | V | ≤ 1000 | | | | | ≤ 1150 | | | | |
| Rated current $I_n$ | A | 630 ... 2500 | | | | | 2000 ... 4000 | | | | |
| Size | | 1 | | | | | 2 | | | | |
| Type of mounting | | Withdrawable | | Fixed-mounted | | | Withdrawable | | | Fixed-mounted | |
| Number of poles | | 3/4-pole | | 3/4-pole | | | 3/4-pole | | | 3/4-pole | |
| **Dimensions** | | | | | | | | | | | |
| Width (3-pole \| 4-pole) | mm | 320 \| 410 | | 320 \| 410 | | | 460 \| 590 | | | 460 \| 590 | |
| Height (for breaking capacity N, S, M, H and D \| C and E) | mm | 466 \| 516 | | 437 \| 462 | | | 466 \| 516 | | | 437 \| 462 | |
| Depth | mm | 471 | | 357 | | | 471 | | | 357 | |
| **Approvals** | | | | | | | | | | | |
| General product approvals | | VDE, EAC, CCC, CE, C-Tick | | | | | VDE, EAC, CCC, CE, C-Tick | | | | |
| Marine/shipbuilding | | ABS, DNV, LRS, BV, PRS, CCS | | | | | ABS, DNV, LRS, BV, PRS, CCS | | | | |
| **Breaking capacity** | | **N** | **S** | **M** | **H new** | **E** | **S** | **M** | **H** | **C** | **E** |
| **Rated short-circuit breaking capacity** | | | | | | | | | | | |
| $I_{cu}$ \| $I_{cs}$ at $U_e$ up to 415/440 V AC | kA | 55 \| 55 | 66 \| 66 | 85 \| 85 | 100 \| 100 | – \| – | 66 \| 66 | 85 \| 85 | 100 \| 100 | 130 \| 130 | – \| – |
| $I_{cu}$ \| $I_{cs}$ at $U_e$ up to 500 V AC | kA | 55 \| 55 | 66 \| 66 | 85 \| 85 | 100 \| 100 | – \| – | 66 \| 66 | 85 \| 85 | 100 \| 100 | 130 \| 130 | – \| – |
| $I_{cu}$ \| $I_{cs}$ at $U_e$ up to 690 V AC | kA | 42 \| 42 | 50 \| 50 | 66 \| 66 | 66 \| 66 | 85 \| 85 | 50 \| 50 | 66 \| 66 | 85 \| 85 | 100 \| 100 | 85 \| 85 |
| $I_{cu}$ \| $I_{cs}$ at $U_e$ up to 1000 V AC | kA | – \| – | – \| – | – \| – | – \| – | 50 \| 50 | – \| – | – \| – | – \| – | – \| – | 85 \| 85 |
| $I_{cu}$ \| $I_{cs}$ at $U_e$ up to 1150 V AC | kA | – \| – | – \| – | – \| – | – \| – | – \| – | – \| – | – \| – | – \| – | – \| – | 70 \| 70 |
| **Rated short-circuit making capacity $I_{cm}$** | | | | | | | | | | | |
| $I_{cm}$ at $U_e$ up to 415 V AC | kA | 121 | 145 | 187 | 220 | – | 145 | 187 | 220 | 286 | – |
| $I_{cm}$ at $U_e$ up to 500 V AC | kA | 121 | 145 | 187 | 220 | – | 145 | 187 | 220 | 286 | – |
| $I_{cm}$ at $U_e$ up to 690 V AC | kA | 88 | 105 | 145 | 145 | 187 | 105 | 145 | 187 | 220 | 187 |
| $I_{cm}$ at $U_e$ up to 1000 V AC | kA | – | – | – | – | 105 | – | – | – | – | 187 |
| $I_{cm}$ at $U_e$ up to 1150 V AC | kA | – | – | – | | – | – | – | – | – | 154 |

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| AC | | DC | |
|---|---|---|---|
|  | |  | |
| **3WA13** | | **3WA12** | |
| ≤ 1150 | | ≤ 1000 (≤ 1500 for 4-pole, Breaking capacity E) | |
| 4000 ... 6300 | | 1000 ... 4000 | |
| 3 | | 2 | |
| Withdrawable | Fixed-mounted | Withdrawable | Fixed-mounted |
| 3/4-pole | 3/4-pole | 3/4-pole | 3/4-pole |
| 704 \| 914 | 704 \| 914 | 460 \| 590 | 460 \| 590 |
| 466 \| 516 | 437 \| 462 | 466 \| 516 | 437 \| 462 |
| 471 | 357 | 471 | 357 |
| VDE, EAC, CCC, CE, C-Tick | | VDE, EAC, CCC, CE, C-Tick | |
| ABS, DNV, LRS, BV, PRS, CCS | | ABS, DNV, LRS, BV, PRS, CCS | |
| **H** | **C** | **E** | **D** | **E** |
| 100 \| 100 | 150 \| 150 (3-pole);<br>130 \| 130 (4-pole) | – \| – | – \| – | – \| – |
| 100 \| 100 | 150 \| 150 (3-pole);<br>130 \| 130 (4-pole) | – \| – | – \| – | – \| – |
| 85 \| 85 | 150 \| 150 (3-pole);<br>130 \| 130 (4-pole) | 150 \| 150 (3-pole);<br>130 \| 130 (4-pole) | – \| – | – \| – |
| – \| – | – \| – | 125 \| 125 | – \| – | – \| – |
| – \| – | – \| – | 70 \| 70 | – \| – | – \| – |
| 220 | 330 (3-pole);<br>286 (4-pole) | – | – | – |
| 220 | 330 (3-pole);<br>286 (4-pole) | – | – | – |
| 187 | 330 (3-pole);<br>286 (4-pole) | 330 (3-pole);<br>286 (4-pole) | – | – |
| – | – | 275 | – | – |
| – | – | 154 | – | – |

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# 3WA1 circuit breakers and non-automatic circuit breakers for AC and DC

## IEC 60947-2 (continued)



AC





| | | | 3WA11 | | | | | 3WA12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Breaking capacity** | | | **N** | **S** | **M** | **H new** | **E** | **S** | **M** | **H** | **C** | **E** |
| **Rated short-time withstand current $I_{cw}$ [1]** | | | | | | | | | | | | |
| $I_{cw}$ at $U_e$ up to 500 V AC | 0.5 s | kA | 55 | 66 | 85 | 85 | – | 66 | 85 | 100 | 100 | – |
| | 1 s | kA | 50 | 66 | 85 | 85 | – | 66 | 85 | 85 | 100 | – |
| | 2 s | kA | 35 [2]/45 [3] | 45 | 70 | 70 | – | 66 | 66 [4]/85 [5] | 66 [4]/85 [5] | 85 | – |
| | 3 s | kA | 30 [2]/35 [3] | 35 | 60 | 60 | – | 55 [4]/66 [5] | 55 [4]/75 [5] | 55 [4]/75 [5] | 75 | – |
| $I_{cw}$ at $U_e$ up to 690 V AC | 0.5 s | kA | 42 | 50 | 66 | 66 | 85 | 50 | 66 | 85 | 100 | 85 |
| | 1 s | kA | 42 | 50 | 66 | 66 | 85 | 50 | 66 | 85 | 100 | 85 |
| | 2 s | kA | 35 [2]/42 [3] | 45 | 66 | 66 | 70 | 50 | 66 | 66 [4]/85 [5] | 85 | 66 [4]/85 [5] |
| | 3 s | kA | 30 [2]/35 [3] | 35 | 60 | 60 | 60 | 50 | 55 [4]/66 [5] | 55 [4]/75 [5] | 75 | 55 [4]/75 [5] |
| $I_{cw}$ at $U_e$ up to 1000 V AC | 0.5 s | kA | – | – | – | – | 50 | – | – | – | – | 85 |
| | 1 s | kA | – | – | – | – | 50 | – | – | – | – | 85 |
| | 2 s | kA | – | – | – | – | 50 | – | – | – | – | 66 [4]/85 [5] |
| | 3 s | kA | – | – | – | – | 50 | – | – | – | – | 55 [4]/75 [5] |
| $I_{cw}$ at $U_e$ up to 1150 V AC | 0.5 s | kA | – | – | – | – | – | – | – | – | – | 70 |
| | 1 s | kA | – | – | – | – | – | – | – | – | – | 70 |
| | 2 s | kA | – | – | – | – | – | – | – | – | – | 50 |
| | 3 s | kA | – | – | – | – | – | – | – | – | – | 50 |
| $I_{cw}$ at $U_e$ up to 220 V DC | 1 s | kA | – | – | – | – | – | – | – | – | – | – |
| $I_{cw}$ at $U_e$ up to 300 V DC | 1 s | kA | – | – | – | – | – | – | – | – | – | – |
| $I_{cw}$ at $U_e$ up to 600 V DC | 1 s | kA | – | – | – | – | – | – | – | – | – | – |
| $I_{cw}$ at $U_e$ up to 1000 V DC | 1 s | kA | – | – | – | – | – | – | – | – | – | – |
| $I_{cw}$ at $U_e$ up to 1500 V DC | 1 s | kA | – | – | – | – | – | – | – | – | – | – |
| **Rated conditional short-circuit current $I_{cc}$ of the non-automatic air circuit breakers** | | | | | | | | | | | | |
| Up to 500 V AC | | kA | 55 | 66 | 85 | – | – | 66 | 85 | 100 | 100 | – |
| Up to 690 V AC | | kA | 42 | 50 | 66 | – | 85 | 50 | 66 | 85 | 100 | 85 |
| Up to 1000 V AC | | kA | – | – | – | – | 50 | – | – | – | – | 85 |
| Up to 1150 V AC | | kA | – | – | – | – | – | – | – | – | – | 70 |
| Up to 220 V DC | | kA | – | – | – | – | – | – | – | – | – | – |
| Up to 300 V DC | | kA | – | – | – | – | – | – | – | – | – | – |
| Up to 600 V DC | | kA | – | – | – | – | – | – | – | – | – | – |
| Up to 1000 V DC | | kA | – | – | – | – | – | – | – | – | – | – |
| Up to 1500 V DC | | kA | – | – | – | – | – | – | – | – | – | – |
| **IT network capability** | | | | | | | | | | | | |
| 1-pole short-circuit breaking capacity $I_{IT}$ acc. to IEC 60947-2 Annex H | ≤ 500 V | kA | 50 | 50 | 50 | 50 | – | 50 | 50 | 50 | 50 | – |
| | ≤ 690 V | kA | – | – | – | – | 50 | – | – | – | – | 50 |
| | 1000 V | kA | – | – | – | – | – | – | – | – | – | – |

[1] At rated operational voltage $U_e \geq 690$ V, the $I_{cw}$ value of the circuit breaker corresponds to the $I_{cu}$ or $I_{cs}$ value

[2] Size 1 with $I_{n\,max} \leq 1250$ A

[3] Size 1 with $I_{n\,max} \geq 1600$ A

[4] $I_{n\,max} \leq 2500$ A

[5] $I_{n\,max} \geq 3200$ A

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AC



DC



| 3WA13 | | | 3WA12 | |
|---|---|---|---|---|
| H | C | E | D | E |
| | | | | |
| 100 | 130 (3-pole); 120 (4-pole) | – | – | – |
| 100 | 130 (3-pole); 120 (4-pole) | – | – | – |
| 100 | 130 (3-pole); 120 (4-pole) | – | – | – |
| 100 | 130 (3-pole); 120 (4-pole) | – | – | – |
| 85 | 130 (3-pole); 120 (4-pole) | 130 (3-pole); 120 (4-pole) | – | – |
| 85 | 130 (3-pole); 120 (4-pole) | 130 (3-pole); 120 (4-pole) | – | – |
| 85 | 130 (3-pole); 120 (4-pole) | 130 (3-pole); 120 (4-pole) | – | – |
| 85 | 130 (3-pole); 120 (4-pole) | 130 (3-pole); 120 (4-pole) | – | – |
| – | – | 125 (3-pole); 120 (4-pole) | – | – |
| – | – | 125 (3-pole); 120 (4-pole) | – | – |
| – | – | 125 (3-pole); 120 (4-pole) | – | – |
| – | – | 125 (3-pole); 120 (4-pole) | – | – |
| – | – | 70 | – | – |
| – | – | 70 | – | – |
| – | – | 70 | – | – |
| – | – | 70 | – | – |
| – | – | – | 35 | – |
| – | – | – | 30 | – |
| – | – | – | 25 | – |
| – | – | – | – | 20 |
| – | – | – | – | – (3-pole); 20 (4-pole) |
| | | | | |
| 100 | 130 (3-pole); 120 (4-pole) | – | – | – |
| 85 | 130 (3-pole); 120 (4-pole) | 130 (3-pole); 120 (4-pole) | – | – |
| – | – | 125 (3-pole); 120 (4-pole) | – | – |
| – | – | 70 | – | – |
| – | – | – | 35 | – |
| – | – | – | 30 | – |
| – | – | – | 25 | – |
| – | – | – | – | 20 |
| – | – | – | – | – (3-pole); 20 (4-pole) |
| | | | | |
| 50 | 50 | – | – | – |
| – | – | 50 | – | – |
| – | – | – | – | – |

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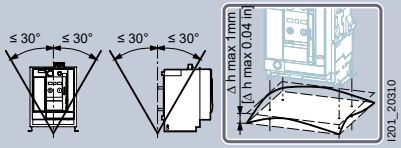
# 3WA1 circuit breakers and non-automatic circuit breakers for AC

## IEC 60947-2



3WA11



| Rated current $I_n$ | | | 630 A | 800 A | 1000 A | 1250 A | 1600 A | 2000 A | 2500 A |
|---|---|---|---|---|---|---|---|---|---|
| **General data** | | | | | | | | | |
| Isolating function acc. to EN 60947-2 | | | Yes | | | | | | |
| Utilization category | | | B | | | | | | |
| Permissible ambient temperature | Operation | °C | –40 ... +70 | | | | | | |
| | Storage | °C | –40 ... +80 | | | | | | |
| Mounting position | | |   | | | | | | |
| Degree of protection | | | IP20 without control cabinet door, IP41 with door sealing frame, IP55 with cover | | | | | | |
| **Voltage** | | | | | | | | | |
| Rated operational voltage $U_e$ at 50/60 Hz | 1000 V version | V AC | ≤ 1000 | | | | | | |
| Rated insulation voltage $U_i$ | | V AC | 1000 | | | | | | |
| Rated impulse withstand voltage $U_{imp}$ | Main conducting paths | kV | 12 | | | | | | |
| | Auxiliary circuits | kV | 4 | | | | | | |
| | Control circuits | kV | 2.5 | | | | | | |
| **Permissible load** [1] | | | | | | | | | |
| **Permissible load for withdrawable versions** | | | | | | | | | |
| For all connection types (except rear vertical main connections) | Up to 40 °C (Cu bare) | A | 630 | 800 | 1000 | 1250 | 1600 | 2000 | – |
| | Up to 55 °C (Cu bare) | A | 630 | 800 | 1000 | 1250 | 1600 | 2000 | – |
| | Up to 60 °C (Cu bare) | A | 630 | 800 | 1000 | 1250 | 1600 | 1930 | – |
| | Up to 70 °C (Cu bare) | A | 630 | 800 | 1000 | 1210 | 1490 | 1780 | – |
| With rear vertical connections | Up to 55 °C (Cu bare) | A | 630 | 800 | 1000 | 1250 | 1600 | 2000 | 2500 |
| | Up to 60 °C (Cu bare) | A | 630 | 800 | 1000 | 1250 | 1600 | 2000 | 2370 |
| | Up to 70 °C (Cu bare) | A | 630 | 800 | 1000 | 1250 | 1545 | 1855 | 2060 |
| **Permissible load for fixed-mounted versions** | | | | | | | | | |
| For all connection types (except rear vertical main connections) | Up to 55 °C (Cu bare) | A | 630 | 800 | 1000 | 1250 | 1600 | 2000 | – |
| | Up to 60 °C (Cu bare) | A | 630 | 800 | 1000 | 1250 | 1600 | 2000 | – |
| | Up to 70 °C (Cu bare) | A | 630 | 800 | 1000 | 1250 | 1600 | 2000 | – |
| With rear vertical connections | Up to 55 °C (Cu bare) | A | 630 | 800 | 1000 | 1250 | 1600 | 2000 | 2500 [2] |
| | Up to 60 °C (Cu bare) | A | 630 | 800 | 1000 | 1250 | 1600 | 2000 | 2500 [2] |
| | Up to 70 °C (Cu bare) | A | 630 | 800 | 1000 | 1250 | 1600 | 2000 | 2500 [2] |
| **Power loss at $I_n$** | | | | | | | | | |
| With 3-phase symmetrical load with maximum rated current, complete device (3/4p) | Fixed-mounted | W | 30 | 45 | 70 | 105 | 135 | 240 | 360 |
| | Withdrawable versions | W | 55 | 85 | 130 | 205 | 310 | 440 | 600 |

[1] The stated temperatures are the ambient temperatures of the circuit breaker
[2] Copper bars painted black
[3] Only flange connections are available
[4] 4000 A up to 65 °C
[5] For 4000 A circuit breakers with horizontal connection, 5 × 100 × 10 mm bars are required



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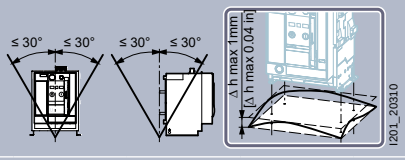
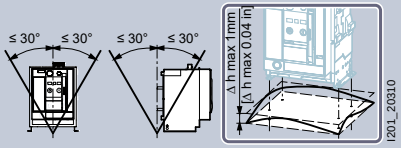


## 3WA12



## 3WA13



| 2000 A | 2500 A | 3200 A | 3600 A new | 4000 A [5] 3-pole | 4000 A [5] 4-pole | 4000 A [5] 4-pole N pole left with option D04 | 4000 A | 5000 A | 6300 A |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| Yes | | | | | | | Yes | | |
| B | | | | | | | B | | |
| –40 … +70 | | | | | | | –40 … +70 | | |
| –40 … +80 | | | | | | | –40 … +80 | | |
|  | | | | | | |  | | |
| IP20 without control cabinet door, IP41 with door sealing frame, IP55 with cover | | | | | | | IP20 without control cabinet door, IP41 with door sealing frame, IP55 with cover | | |
| | | | | | | | | | |
| ≤ 1150 | | | | | | | ≤ 1150 | | |
| ≤ 1150 | | | | | | | ≤ 1150 | | |
| 12 | | | | | | | 12 | | |
| 4 | | | | | | | 4 | | |
| 2.5 | | | | | | | 2.5 | | |
| | | | | | | | | | |
| | | | | | | | | | |
| 2000 | 2500 | 3200 | 3600 [3] | 4000 | 4000 | 4000 | 4000 | 5000 | – |
| 2000 | 2500 | 3020 | 3490 [3] | 3750 | 3750 | 3750 | 4000 | 5000 | – |
| 2000 | 2500 | 3020 | 3380 [3] | 3620 | 3620 | 3620 | 4000 | 5000 | – |
| 2000 | 2280 | 2870 | 3150 [3] | 3360 | 3360 | 3360 | 4000 | 5000 | – |
| 2000 | 2500 | 3200 | – | 4000 | 4000 | 4000 | 4000 | 5000 | 5920 |
| 2000 | 2500 | 3200 | – | 3910 | 3910 | 3910 | 4000 | 5000 | 5810 |
| 2000 | 2390 | 2945 | – | 3645 | 3645 | 3645 | 4000 | 5000 | 5500 |
| | | | | | | | | | |
| 2000 | 2500 | 3200 | – | 4000 | 4000 | 4000 | 4000 | 5000 | – |
| 2000 | 2500 | 3200 | – | 4000 | 4000 [4] | 4000 | 4000 | 5000 | – |
| 2000 | 2500 | 3200 | – | 4000 | 3860 | 4000 | 4000 | 5000 | – |
| 2000 | 2500 | 3200 | – | 4000 | 4000 | 4000 | 4000 | 5000 | 6300 |
| 2000 | 2500 | 3200 | – | 4000 | 4000 | 4000 | 4000 | 5000 | 6300 |
| 2000 | 2500 | 3200 | – | 4000 | 4000 | 4000 | 4000 | 5000 | 5920 |
| **Connections: vertical \| horizontal** | | | | | | | | | |
| 180 | 270 | 410 | – | 760 \| 805 | 760 \| 830 | 760 \| 805 | 520 | 630 | 900 |
| 320 | 520 | 710 | 800 | 1040 \| 1170 | 1040 \| 1200 | 1040 \| 1170 | 810 | 1050 | 1600 |

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# 3WA1 circuit breakers and non-automatic circuit breakers for AC

## IEC 60947-2 (continued)



### 3WA11



| Rated current $I_n$ | | | 630 A | 800 A | 1000 A | 1250 A | 1600 A | 2000 A | 2500 A |
|---|---|---|---|---|---|---|---|---|---|
| **Switching times** | | | | | | | | | |
| Make time (mechanical) | | ms | | | | 35 | | | |
| Electrical make time (through closing coil 100% OP) | | ms | | | | 80 | | | |
| Electrical make time (through closing coil 5% OP) | | ms | | | | 50 | | | |
| Opening time (mechanical) | | ms | | | | 38 | | | |
| Electrical opening time (through shunt trip 100% OP) | | ms | | | | 80 | | | |
| Electrical opening time (through shunt trip 5% OP) | | ms | | | | 50 | | | |
| Electrical opening time (through undervoltage release) | | ms | | | | 80 [2] | | | |
| Opening time due to ETU (instantaneous short-circuit release) | | ms | | | | 50 | | | |
| **Service life/endurance** | | | | | | | | | |
| **Breaking capacity N, 3/4-pole** | | | | | | | | | |
| Mechanical | Without maintenance | Operating cycles | | | | 15000 | | | |
| | With maintenance [1] | Operating cycles | | | | 30000 | | | |
| Electrical | Without maintenance 690 V | Operating cycles | | | 10000 | | | 7500 | 5000 |
| | With maintenance [1] | Operating cycles | | | | 30000 | | | |
| **Breaking capacity S, 3/4-pole** | | | | | | | | | |
| Mechanical | Without maintenance | Operating cycles | | | | 15000 | | | |
| | With maintenance [1] | Operating cycles | | | | 30000 | | | |
| Electrical | Without maintenance 690 V | Operating cycles | | | 10000 | | | 7500 | 5000 |
| | With maintenance [1] | Operating cycles | | | | 30000 | | | |
| **Breaking capacity M, 3/4-pole** | | | | | | | | | |
| Mechanical | Without maintenance | Operating cycles | | | | 10000 | | | |
| | With maintenance [1] | Operating cycles | | | | 20000 | | | |
| Electrical | Without maintenance 690 V | Operating cycles | | | 10000 | | | 7500 | 5000 |
| | With maintenance [1] | Operating cycles | | | | 20000 | | | |
| **Breaking capacity E, 3/4-pole** [3] | | | | | | | | | |
| Mechanical | Without maintenance | Operating cycles | | | | 10000 | | | |
| | With maintenance [1] | Operating cycles | | | | 20000 | | | |
| Electrical | Without maintenance 690 V | Operating cycles | | | 10000 | | | 7500 | 5000 |
| | Without maintenance 1000 V | Operating cycles | | | | 1000 | | | |
| | Without maintenance 1150 V | Operating cycles | | | | – | | | |
| | With maintenance [1] | Operating cycles | | | | 20000 | | | |
| **Breaking capacity H, 3/4-pole** | | | | | | | | | |
| Mechanical | Without maintenance | Operating cycles | | | | 10000 | | | |
| | With maintenance [1] | Operating cycles | | | | 20000 | | | |
| Electrical | Without maintenance 690 V | Operating cycles | | | 10000 | | | 7500 | 5000 |
| | With maintenance [1] | Operating cycles | | | | 20000 | | | |
| **Breaking capacity C, 3/4-pole** | | | | | | | | | |
| Mechanical | Without maintenance | Operating cycles | | | | – | | | |
| | With maintenance [1] | Operating cycles | | | | – | | | |
| Electrical | Without maintenance 690 V | Operating cycles | | | | – | | | |
| | With maintenance 690 V [1] | Operating cycles | | | | – | | | |
| **Switching frequency (Electrical operating cycles)** | | | | | | | | | |
| **Breaking capacity N and S** | | | | | | | | | |
| | 3-pole | 1/h | | | | 45 | | | |
| | 4-pole | 1/h | | | | 45 | | | |
| **Breaking capacity M and H** | | | | | | | | | |
| | 3- pole | 1/h | | | | 45 | | | |
| | 4-pole | 1/h | | | | 60 | | | |
| **Breaking capacity C** | | | | | | | | | |
| | 3-pole | 1/h | | | | – | | | |
| | 4-pole | 1/h | | | | – | | | |
| **Breaking capacity E** [3] | | | | | | | | | |
| ≤ 690 V | 3-pole | 1/h | | | | 45 | | | |
| | 4-pole | 1/h | | | | 60 | | | |
| 1000 V/1150 V | 3-pole | 1/h | | | | 20 | | | |
| | 4-pole | 1/h | | | | 20 | | | |

[1] Maintenance means: Replacing main contact elements and arc chutes (see operating instructions: www.siemens.com/lowvoltage/manuals).
[2] Opening time with short-time delay of the undervoltage release can be set up to 200 ms
[3] On E class circuit breakers, the main contact elements can only be replaced in the factory

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## 3WA12



## 3WA13



| 2000 A | 2500 A | 3200 A | 3600 A new | 4000 A | 4000 A | 5000 A | 6300 A |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | 35 | | | | 35 | |
| | | 80 | | | | 100 | |
| | | 50 | | | | 50 | |
| | | 34 | | | | 34 | |
| | | 80 | | | | 73 | |
| | | 50 | | | | 50 | |
| | | 80 [2] | | | | 80 [2] | |
| | | 50 | | | | 50 | |
| | | | | | | | |
| | | | | | | | |
| | | – | | | | – | |
| | | – | | | | – | |
| | | – | | | | – | |
| | | – | | | | – | |
| | | | | | | | |
| | | 10000 | | | | – | |
| | | 20000 | | | | – | |
| 7500 | 7500 | 4000 | 2000 | 2000 | | – | |
| | | 20000 | | | | – | |
| | | | | | | | |
| | | 10000 | | | | – | |
| | | 20000 | | | | – | |
| 7500 | 7500 | 4000 | 2000 | 2000 | | – | |
| | | 20000 | | | | – | |
| | | | | | | | |
| | | 10000 | | | | 5000 | |
| | | 20000 | | | | 10000 | |
| 7500 | 7500 | 4000 | 2000 | 2000 | | 1000 | |
| | | 1000 | | | | 1000 | |
| | | 500 | | | | 500 | |
| | | 20000 | | | | 10000 | |
| | | | | | | | |
| | | 10000 | | | | 7500 | |
| | | 20000 | | | | 15000 | |
| 7500 | 7500 | 4000 | 2000 | 2000 | | 2000 | |
| 20000 | 20000 | 20000 | 20000 | 20000 | | 15000 | |
| | | | | | | | |
| 5000 | 5000 | 5000 | – | – | | 5000 | |
| 10000 | 10000 | 10000 | – | – | | 10000 | |
| 5000 | 5000 | 4000 | – | – | | 1000 | |
| 10000 | 10000 | 10000 | – | – | | 10000 | |
| | | | | | | | |
| | | | | | | | |
| | | 45 [4] | | | | – | |
| | | 60 [4] | | | | – | |
| | | | | | | | |
| | | 45 | | | | 60 [5] | |
| | | 60 | | | | 60 [5] | |
| | | | | | | | |
| | 60 | | – | | | 60 | |
| | 60 | | – | | | 60 | |
| | | | | | | | |
| | | 45 | | | | 60 | |
| | | 60 | | | | 60 | |
| | | 20 | | | | 20 | |
| | | 20 | | | | 20 | |

[4] Breaking capacity N not available in frame size 2
[5] Breaking capacity N not available in frame size 3

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# 3WA1 circuit breakers and non-automatic circuit breakers for AC

## IEC 60947-2 (continued)



### 3WA11



| Rated current $I_n$ | | | 630 A | 800 A | 1000 A | 1250 A | 1600 A | 2000 A | 2500 A |
|---|---|---|---|---|---|---|---|---|---|
| **Connection** | | | | | | | | | |
| **Minimum main conductor cross-sections (horizontal, front and flange connection)** | | | | | | | | | |
| Copper bars, Cu, bare | Unit × mm × mm | | 1 × 40 × 10 | 1 × 50 × 10 | 1 × 60 × 10 | 2 × 40 × 10 | 2 × 50 × 10 | 3 × 50 × 10 | 4 × 50 × 10 |
| Copper bars, Cu, painted black | Unit × mm × mm | | 1 × 40 × 10 | 1 × 50 × 10 | 1 × 60 × 10 | 2 × 40 × 10 | 2 × 50 × 10 | 3 × 50 × 10 | 4 × 50 × 10 |
| **Minimum main conductor cross-sections (vertical connection)** | | | | | | | | | |
| Copper bars, Cu, bare | Unit × mm × mm | | 1 × 40 × 10 | 1 × 50 × 10 | 1 × 60 × 10 | 2 × 40 × 10 | 2 × 50 × 10 | 3 × 50 × 10 | 4 × 100 × 5<br>2 × 100 × 10 |
| Copper bars, Cu, painted black | Unit × mm × mm | | 1 × 40 × 10 | 1 × 50 × 10 | 1 × 60 × 10 | 2 × 40 × 10 | 2 × 50 × 10 | 3 × 50 × 10 | 4 × 100 × 5<br>2 × 100 × 10 |
| **Auxiliary conductor (Cu) max. number of auxiliary conductors × cross-section (solid/stranded)** | | | | | | | | | |
| Standard connection = push-in | Without end sleeve | | 2 × 0.5 ... 2.5 mm² (AWG 20 ... 14) | | | | | | |
| | With end sleeve acc. to DIN 46228 Part 1 | | 2 × 0.5 ... 2.5 mm² (AWG 20 ... 14) | | | | | | |
| | With end sleeve acc. to DIN 46228 Part 4 | | 2 × 0,5 ... 2,5 mm² (AWG 20 ... 14) | | | | | | |
| | With twin end sleeve | | 2 × 0.5 ... 1.5 mm² (AWG 20 ... 16) | | | | | | |
| | Stripped length | | 10 ... 11 mm (0,39 ... 0,43 inch) | | | | | | |
| Optional connection with screw connection | Without end sleeve | | 2 × 0,5 ... 1,5 mm² (AWG 20 ... 16)/1 × 0,5 ... 2,5 mm² (AWG 20 ...14) | | | | | | |
| | With end sleeve acc. to DIN 46228 Part 1 | | 2 × 0,5 ... 1,5 mm² (AWG 20 ... 16)/1 × 0,5 ... 2,5 mm² (AWG 20 ...14) | | | | | | |
| | With end sleeve acc. to DIN 46228 Part 4 | | 1 × 0,5 ... 1,5 mm² (AWG 20 ... 16) | | | | | | |
| | With twin end sleeve | | 1 × 0.5 ... 1.5 mm² (AWG 20 ... 16) | | | | | | |
| | Stripped length | | 7 ... 8 mm (0.28 ... 0.31 inch) | | | | | | |
| **Position signaling switch modul** | | | | | | | | | |
| Spring-loaded terminals for standard signaling contacts | Without end sleeve | | 0,2 ... 2,5 mm² (AWG 28 ... 12) | | | | | | |
| | With end sleeve acc. to DIN 46228 Part 4 | | 0,25 ... 1,5 mm² (AWG 20 ... 16) | | | | | | |
| | Stripped length | | 5 ... 6 mm (0.2 ... 0.24 inch) | | | | | | |
| Push-in connection for standard signaling contacts | Solid | | 0,5 ... 2,5 mm² (AWG 20 ... 12) | | | | | | |
| | With end sleeve | | 0,5 ... 1,5 mm² (AWG 20 ... 16) | | | | | | |
| | Stripped length | | 10 ... 12 mm (0,39 ... 0,47 inch) | | | | | | |
| Push-in connection for COM signaling contacts | Solid | | 0,5 ... 2,5 mm² (AWG 20 ... 12) | | | | | | |
| | With end sleeve | | 0,5 ... 1,5 mm² (AWG 20 ... 16) | | | | | | |
| | Stripped length | | 10 ... 12 mm (0,39 ... 0,47 inch) | | | | | | |
| **Weights** [1] | | | | | | | | | |
| 3-pole | Fixed-mounted circuit breaker | kg | 38.5 | 38.5 | 38.5 | 42.5 | 42.5 | 43.5 | 43.5 |
| | Withdrawable circuit breaker without guide frame | kg | 39 | 39 | 39 | 40 | 40 | 41 | 41 |
| | Guide frames | kg | 26 | 26 | 26 | 27 | 27 | 29 | 29 |
| 4-pole | Fixed-mounted circuit breaker | kg | 47 | 47 | 47 | 52 | 52 | 53 | 53 |
| | Withdrawable circuit breaker without guide frame | kg | 45 | 45 | 45 | 46 | 46 | 47 | 47 |
| | Guide frames | kg | 30 | 30 | 30 | 32 | 32 | 34 | 34 |

[1] Only available as a flange connection
Weights refer to:
- Breakers with the lowest breaking capacity in each case (size 1: breaking capacity N, size 2: breaking capacity S, size 3: breaking capacity H)
- Breakers with ETU600 (LSI)
- Fixed-mounted circuit breakers/guide frames with vertical connections
- Guide frame with position signaling switch
- Without any other accessories



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| 3WA12 | | | | | 3WA13 | | |
|---|---|---|---|---|---|---|---|
|  | | | | |  | | |
| **2000 A** | **2500 A** | **3200 A** | **3600 A new** | **4000 A** | **4000 A** | **5000 A** | **6300 A** |
| | | | | | | | |
| | | | | | | | |
| 3 × 100 × 5<br>(3 × 50 × 10)<br>2 × 80 × 10 | 2 × 100 × 10 | 3 × 100 × 10 | 5 × 100 × 10 [1)] | 5 × 100 × 10 | 4 × 100 × 10 | 6 × 100 × 10 | – |
| 3 × 100 × 5<br>(3 × 50 × 10)<br>2 × 80 × 10 | 2 × 100 × 10 | 3 × 100 × 10 | 5 × 100 × 10 [1)] | 5 × 100 × 10 | 4 × 100 × 10 | 6 × 100 × 10 | – |
| | | | | | | | |
| 3 × 100 × 5<br>(3 × 50 × 10)<br>2 × 80 × 10 | 2 × 100 × 10 | 3 × 100 × 10 | – | 4 × 120 × 10 | 4 × 100 × 10 | 6 × 100 × 10 | 6 × 120 × 10 |
| 3 × 100 × 5<br>(3 × 50 × 10)<br>2 × 80 × 10 | 2 × 100 × 10 | 3 × 100 × 10 | – | 4 × 120 × 10 | 4 × 100 × 10 | 6 × 100 × 10 | 6 × 120 × 10 |
| | | | | | | | |
| 2 × 0.5 ... 2.5 mm² (AWG 20 ... 14) | | | | | 2 × 0.5 ... 2.5 mm² (AWG 20 ... 14) | | |
| 2 × 0.5 ... 2.5 mm² (AWG 20 ... 14) | | | | | 2 × 0.5 ... 2.5 mm² (AWG 20 ... 14) | | |
| 2 × 0,5 ... 2,5 mm² (AWG 20 ... 14) | | | | | 2 × 0,5 ... 2,5 mm² (AWG 20 ... 14) | | |
| 2 × 0.5 ... 1.5 mm² (AWG 20 ... 16) | | | | | 2 × 0.5 ... 1.5 mm² (AWG 20 ... 16) | | |
| 10 ... 11 mm (0,39 ... 0,43 inch) | | | | | 10 ... 11 mm (0,39 ... 0,43 inch) | | |
| 2 × 0,5 ... 1,5 mm² (AWG 20 ... 16)/1 × 0,5 ... 2,5 mm² (AWG 20 ...14) | | | | | 2 × 0,5 ... 1,5 mm² (AWG 20 ... 16)/1 × 0,5 ... 2,5 mm² (AWG 20 ...14) | | |
| 2 × 0,5 ... 1,5 mm² (AWG 20 ... 16)/1 × 0,5 ... 2,5 mm² (AWG 20 ...14) | | | | | 2 × 0,5 ... 1,5 mm² (AWG 20 ... 16)/1 × 0,5 ... 2,5 mm² (AWG 20 ...14) | | |
| 1 × 0,5 ... 1,5 mm² (AWG 20 ... 16) | | | | | 1 × 0,5 ... 1,5 mm² (AWG 20 ... 16) | | |
| 1 × 0.5 ... 1.5 mm² (AWG 20 ... 16) | | | | | 1 × 0.5 ... 1.5 mm² (AWG 20 ... 16) | | |
| 7 ... 8 mm (0.28 ... 0.31 inch) | | | | | 7 ... 8 mm (0.28 ... 0.31 inch) | | |
| | | | | | | | |
| 0,2 ... 2,5 mm² (AWG 28 ... 12) | | | | | 0,2 ... 2,5 mm² (AWG 28 ... 12) | | |
| 0,25 ... 1,5 mm² (AWG 20 ... 16) | | | | | 0,25 ... 1,5 mm² (AWG 20 ... 16) | | |
| 5 ... 6 mm (0.2 ... 0.24 inch) | | | | | 5 ... 6 mm (0.2 ... 0.24 inch) | | |
| 0,5 ... 2,5 mm² (AWG 20 ... 12) | | | | | 0,5 ... 2,5 mm² (AWG 20 ... 12) | | |
| 0,5 ... 1,5 mm² (AWG 20 ... 16) | | | | | 0,5 ... 1,5 mm² (AWG 20 ... 16) | | |
| 10 ... 12 mm (0,39 ... 0,47 inch) | | | | | 10 ... 12 mm (0,39 ... 0,47 inch) | | |
| 0,5 ... 2,5 mm² (AWG 20 ... 12) | | | | | 0,5 ... 2,5 mm² (AWG 20 ... 12) | | |
| 0,5 ... 1,5 mm² (AWG 20 ... 16) | | | | | 0,5 ... 1,5 mm² (AWG 20 ... 16) | | |
| 10 ... 12 mm (0,39 ... 0,47 inch) | | | | | 10 ... 12 mm (0,39 ... 0,47 inch) | | |
| | | | | | | | |
| 55 | 57 | 69 | On request | 77 | 113 | 115 | 115 |
| 52 | 54 | 59 | On request | 59 | 91 | 92 | 92 |
| 33.5 | 35.5 | 36.5 | On request | 40 | 85.5 | 87 | 87 |
| 68.5 | 71.5 | 86.5 | On request | 97.5 | 147.5 | 149.5 | 149.5 |
| 63.5 | 66 | 73 | On request | 73 | 115.5 | 116.5 | 116.5 |
| 40 | 42.5 | 51.5 | On request | 53 | 103.5 | 105.5 | 105.5 |

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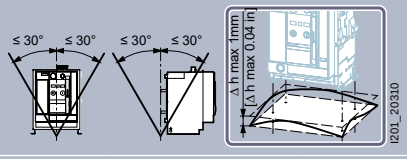
# 3WA1 non-automatic circuit breakers for DC

## IEC 60947-2



3WA12



| Rated current $I_n$ | | | 1000 A | 2000 A | 4000 A |
|---|---|---|---|---|---|
| **General data** | | | | | |
| Isolating function acc. to EN 60947-2 | | | Yes | | |
| Utilization category | | | B | | |
| Permissible ambient temperature | During operation (in operation with LCD max. 55 °C) | °C | −40 ... +70 | | |
| | Storage | °C | −40 ... +80 | | |
| Mounting position | | |   | | |
| Degree of protection | | | IP20 without control cabinet door, IP41 with door sealing frame, IP55 with cover | | |
| **Voltage** | | | | | |
| Rated operational voltage $U_e$ | Breaking capacity D \| E | V DC | 600 \| 1000 (3-pole); 1500 (4-pole) | | |
| Rated insulation voltage $U_i$ | Breaking capacity D \| E | V DC | 600 \| 1000 (3-pole); 1500 (4-pole) | | |
| Rated impulse withstand voltage $U_{imp}$ | Main conducting paths | kV | 12 | | |
| | Auxiliary circuits | kV | 4 | | |
| | Control circuits | kV | 2.5 | | |
| **Permissible load** | | | | | |
| **Permissible load for withdrawable versions** | | | | | |
| For all connection types (except rear vertical main connections) | Up to 40 °C (Cu bare) | A | 1000 | 2000 | 4000 |
| | Up to 55 °C (Cu bare) | A | 1000 | 2000 | 3640 |
| | Up to 60 °C (Cu bare) | A | 1000 | 2000 | 3500 |
| | Up to 70 °C (Cu bare) | A | 1000 | 1950 | 3250 |
| With rear vertical connections | Up to 40 °C (Cu bare) | A | 1000 | 2000 | 4000 |
| | Up to 55 °C (Cu bare) | A | 1000 | 2000 | 4000 |
| | Up to 60 °C (Cu bare) | A | 1000 | 2000 | 3640 |
| | Up to 70 °C (Cu bare) | A | 1000 | 2000 | 3400 |
| **Permissible load for fixed-mounted versions** | | | | | |
| For all connection types (except rear vertical main connections) | Up to 40 °C (Cu bare) | A | 1000 | 2000 | 4000 |
| | Up to 55 °C (Cu bare) | A | 1000 | 2000 | 4000 |
| | Up to 60 °C (Cu bare) | A | 1000 | 2000 | 4000 |
| | Up to 70 °C (Cu bare) | A | 1000 | 2000 | 3900 |
| With rear vertical connections | Up to 40 °C (Cu bare) | A | 1000 | 2000 | 4000 |
| | Up to 55 °C (Cu bare) | A | 1000 | 2000 | 4000 |
| | Up to 60 °C (Cu bare) | A | 1000 | 2000 | 4000 |
| | Up to 70 °C (Cu bare) | A | 1000 | 2000 | 4000 |
| **Power loss at $I_n$** | | | | | |
| With 3-phase symmetrical load, complete device (3/4p) | Withdrawable versions 3-/4-pole | W | 170 \| 220 | 320 \| 420 | 750 \| 1000 |
| | Fixed-mounted 3-/4-pole | W | 130 \| 190 | 240 \| 360 | 500 \| 660 |
| **Switching times** | | | | | |
| Make time (mechanical) | | ms | 35 | 35 | 35 |
| Electrical make time (through closing coil 100% OP) | | ms | 80 | 80 | 80 |
| Electrical make time (through closing coil 5% OP) | | ms | 50 | 50 | 50 |
| Opening time (mechanical) | | ms | 34 | 34 | 34 |
| Electrical opening time (through shunt trip 100% OP) | | ms | 80 | 80 | 80 |
| Electrical opening time (through shunt trip 5% OP) | | ms | 50 | 50 | 50 |
| Electrical opening time (über undervoltage release) | | ms | 80 [1)] | 80 [1)] | 80 [1)] |
| **Service life/endurance** | | | | | |
| **Breaking capacity D, 3/4-pole** | | | | | |
| Mechanical | Without maintenance | Operating cycles | 10000 | 10000 | 10000 |
| | With maintenance [1)] | Operating cycles | 20000 | 20000 | 20000 |
| Electrical | Without maintenance 600 V | Operating cycles | 6000 | 6000 | 4000 |
| | With maintenance [1)] | Operating cycles | 20000 | 20000 | 20000 |

[1)] Opening time with short-time delay of the undervoltage release can be set up to 200 ms

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## 3WA12



| Rated current $I_n$ | | | 1000 A | 2000 A | 4000 A |
|---|---|---|---|---|---|
| **Service life/endurance** | | | | | |
| **Breaking capacity E, 3/4-pole** | | | | | |
| Mechanical | Without maintenance | Operating cycles | 10000 | 10000 | 10000 |
| | With maintenance [1] | Operating cycles | 20000 | 20000 | 20000 |
| Electrical | Without maintenance 1000 V | Operating cycles | 1000 | 1000 | 1000 |
| | With maintenance [1] | Operating cycles | 20000 | 20000 | 20000 |
| **Breaking capacity E, 4-pole** | | | | | |
| Electrical | Without maintenance 1500 V [2] | Operating cycles | 1000 | 1000 | 1000 |
| | With maintenance [1] | Operating cycles | 20000 | 20000 | 20000 |
| **Switching frequency (Electrical operating cycles)** | | | | | |
| **Breaking capacity D** | | | | | |
| | 3- and 4-pole | 1/h | 45/60 | 45/60 | 45/60 |
| **Breaking capacity E** | | | | | |
| | 3- and 4-pole [3] | 1/h | 20/20 | 20/20 | 20/20 |
| **Connection** | | | | | |
| **Minimum cross-sections of main conductor bars (infeed and load connections)** | | | | | |
| Copper bars, bare or painted black | | Unit × mm × mm | 1 × 60 × 10 | 3 × 100 × 5;<br>2 × 80 × 10 | 4 × 100 × 10 |
| **Minimum cross-sections of main conductor bars (pole straps) [4]** | | | | | |
| Copper bars, bare or painted black | | Unit × mm × mm | 1 × 100 × 10;<br>(2 × 100 × 5) | 2 × 100 × 5;<br>(2 × 100 × 10) | 3 × 100 × 10;<br>vertikal |
| **Auxiliary conductor (Cu) max. number of auxiliary conductors × cross-section (solid/stranded)** | | | | | |
| Standard connection = push-in | Without end sleeve | | 2 × 0.5 ... 2.5 mm² (AWG 20 ... 14) | | |
| | With end sleeve acc. to DIN 46228 Part 1 | | 2 × 0.5 ... 2.5 mm² (AWG 20 ... 14) | | |
| | With end sleeve acc. to DIN 46228 Part 4 | | 2 × 0,5 ... 2,5 mm² (AWG 20 ... 14) | | |
| | With twin end sleeve | | 2 × 0.5 ... 1.5 mm² (AWG 20 ... 16) | | |
| | Stripped length | | 10 ... 11 mm (0,39 ... 0,43 inch) | | |
| Optional connection with screw connection | Without end sleeve | | 2 × 0,5 ... 1,5 mm² (AWG 20 ... 16)/<br>1 × 0,5 ... 2,5 mm² (AWG 20 ....14) | | |
| | With end sleeve acc. to DIN 46228 Part 1 | | 2 × 0,5 ... 1,5 mm² (AWG 20 ... 16)/<br>1 × 0,5 ... 2,5 mm² (AWG 20 ....14) | | |
| | With end sleeve acc. to DIN 46228 Part 4 | | 1 × 0,5 ... 1,5 mm² (AWG 20 ... 16) | | |
| | With twin end sleeve | | 1 × 0.5 ... 1.5 mm² (AWG 20 ... 16) | | |
| | Stripped length | | 7 ... 8 mm (0.28 ... 0.31 inch) | | |
| **Position signaling switch module** | | | | | |
| Spring-loaded terminals for standard signaling contacts | Without end sleeve | | 0,2 ... 2,5 mm² (AWG 28 ... 12) | | |
| | With end sleeve acc. to DIN 46228 Part 4 | | 0,25 ... 1,5 mm² (AWG 20 ... 16) | | |
| | Stripped length | | 5 ... 6 mm (0.2 ... 0.24 inch) | | |
| Push-in connection for standard signaling contacts | Solid | | 0,5 ... 2,5 mm² (AWG 20 ... 12) | | |
| | With end sleeve | | 0,5 ... 1,5 mm² (AWG 20 ... 16) | | |
| | Stripped length | | 10 ... 12 mm (0,39 ... 0,47 inch) | | |
| Push-in connection for COM signaling contacts | Solid | | 0,5 ... 2,5 mm² (AWG 20 ... 12) | | |
| | With end sleeve | | 0,5 ... 1,5 mm² (AWG 20 ... 16) | | |
| | Stripped length | | 10 ... 12 mm (0,39 ... 0,47 inch) | | |
| **Weights [3]** | | | | | |
| 3-pole | Fixed-mounted circuit breaker | kg | 55 | 55 | 68 |
| | Withdrawable circuit breaker without guide frame | kg | 52 | 52 | 59 |
| | Guide frames | kg | 34 | 34 | 50 |
| 4-pole | Fixed-mounted circuit breaker | kg | 68.5 | 68.5 | 86.5 |
| | Withdrawable circuit breaker without guide frame | kg | 63.5 | 63.5 | 74 |
| | Guide frames | kg | 40.5 | 40.5 | 61.5 |

[1] Maintenance means: Replacing main contact elements and arc chutes (see operating instructions: www.siemens.com/lowvoltage/manuals).
[2] 1500 V DC applications only possible with 4-pole circuit breakers and breaking capacity E.
[3] Weights refer to:
- Breakers with breaking capacity E
- Fixed-mounted circuit breakers/guide frames with vertical connections
- Guide frame with position signaling switch
- Without any other accessories

[4] For more information on the DC pole straps, see the Equipment Manual for 3WA1

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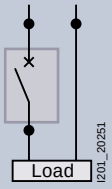
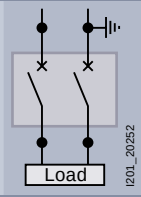
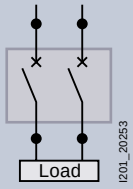
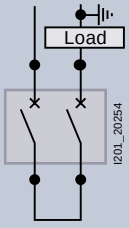
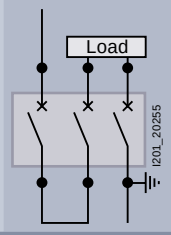
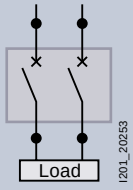
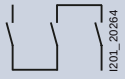
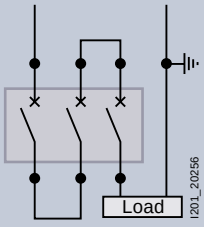
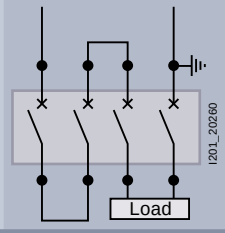
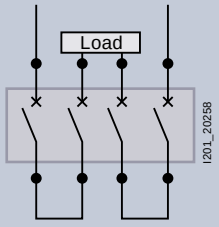
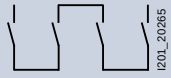
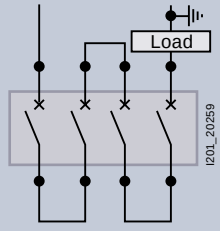
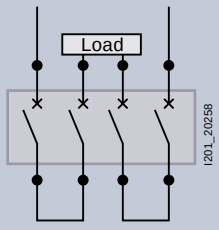
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# 3WA1 non-automatic circuit breakers for DC

## Application examples

The connection to the non-automatic circuit breakers is not dependent on direction and polarity; the circuit diagrams can be adapted accordingly. If the parallel or series connections are made directly to the connection bars, for thermal reasons the continuous load on the non-automatic circuit breakers must only be 80% of the permissible operational current. If the parallel or series connection is made at a distance of 1 m from the connection bars, the non-automatic circuit breaker can be used at full operational current load.

| Minimum required contact gaps at rated voltage | DC 1-pole disconnection Grounded system | DC 2-pole (all-pole) disconnection Grounded system | DC 2-pole (all-pole) disconnection Non-grounded system |
|---|---|---|---|
| **Rated operational voltage up to 300 V** | | | |
|  |  |  |  |
| **Rated operational voltage up to 600 V** | | | |
|  |  |  |  |
| **Rated operational voltage up to 1000 V** | | | |
|  |  |  |  |
| **Rated operational voltage up to 1500 V** | | | |
|  |  | |  |

**Note:**
**DC 2-pole (all-pole) disconnection; grounded system**
The grounded conductor must always be assigned to the individual switching pole of the non-automatic air circuit breaker, so that in the event of a ground fault there are always 2 conducting paths in series in a circuit with 3-pole circuit breakers, and 3 conducting paths in series in a circuit with 4-pole circuit breakers. The jumpers between the switching poles must be short-circuit and ground-fault proof.



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# Electronic trip unit

## Differentiation





| | ETU300 electronic trip unit | ETU600 electronic trip unit |
|---|---|---|
| **Function** | | |
| Protective function LSI | ■ | ■ |
| Protective function LSIG | ■ | ■ |
| Protective function LSIG Hi-Z | – | ■ |
| Neutral conductor protection (N) | ■ | ■ |
| Metering function | – | ■ |
| Enhanced Protective functions | – | ■ |
| **Cubicle**BUS[2] | – | ■ |
| Display | – | ■ |
| DAS+ input/output | ■ | ■ |
| LED display of reason for tripping | ■ | ■ |
| Bluetooth and USB | – | ■ |
| FW Updates | – | ■ |
| Internal self-test with and without tripping | ■ | ■ |
| Extended test option (tripping characteristic) | – | ■ |
| Activation of the ETU via powerbank | – | ■ |
| Activation of the ETU for self-test via TD400 | ■ | – |

**Note:**
By replacing the electronic trip unit, it is possible to upgrade from ETU300 to ETU600.



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# ETU300 electronic trip unit

## Protective functions



### ETU300 LSI, ETU300 LSIG

| Protective function | Setting range and invariable parameters | Values |
|---|---|---|
| **L: Overload protection LT** | | |
| Tripping | Switched on | |
| Current setting $I_r$ | 0.4 ... 1.0 × $I_n$ | 0.4/0.5/0.6/0.7/0.75/0.8/0.85/0.9/0.95/1.0 × $I_n$ |
| Tripping time $t_r$ at 6 × $I_r$ | 0.75 ... 25 s | 0.75/1/2/5/8/10/14/17/21/25 s |
| Characteristic LT curve | $I^2t$ | |
| Thermal memory | Switched on | |
| Cooling time constant | 18 × $t_r$ | |
| Phase failure detection | Switched on | |
| **L: Overload protection LT, neutral conductor** | | |
| Tripping | Switched on | |
| Current setting $I_N$ | 1.0 × $I_n$ | |
| **S: Short-time-delayed short-circuit protection ST** | | |
| Tripping | Can be switched on/off | |
| Current setting $I_{sd}$ | 1.5 ... 10 × $I_n$<br>max. 0.8 × $I_{cw}$ [1] | OFF/1.5/2/2.5/3/4/5/6/8/10 × $I_r$<br>max. 0.8 × $I_{cw}$ [1] |
| Tripping time $t_{sd}$ | 0.08 ... 0.4 s | 0.08/0.15/0.22/0.3/0.4 s |
| Characteristic ST curve | $I^0t$ and $I^2t$ | |
| Reference point $I_{ST\ ref}$ | 8 × $I_r$ | |
| **I: Instantaneous short-circuit protection INST** | | |
| Tripping | Switched on | |
| Current setting $I_i$ | 1.5 ... 15 × $I_n$<br>max. 0.8 × $I_{cs}$ [1] | 1.5/2/3/4/5/6/8/10/12/15 × $I_n$<br>max. 0.8 × $I_{cs}$ [1] |
| **Maintenance mode DAS+** | | |
| Current setting $I_{i\ DAS+}$ | 1.5 × $I_n$ | Activation via ETU input |

### ETU300 LSIG

| Protective function | Setting range | |
|---|---|---|
| **G: Ground-fault protection GF** | | |
| Tripping | Switched on | |
| Method of ground fault detection | Residual | Detection of ground-fault current via summation current formation in all phases and the N conductor |
| Characteristic GF curve | | $I^0t$ |
| Current setting $I_g$ | | 0.2 × $I_n$ (min. 100 A, max. 1200 A) |
| Tripping time $t_g$ | 0.2 s | |

[1] The setting value is limited as a function of the breaking capacity at rated operational voltage $U_e$.

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# ETU600 electronic trip unit

## Protective functions



| ETU600 LSI, ETU600 LSIG, ETU600 LSIG Hi-Z | | | Current metering | ready4COM | PMF-I Energy efficiency | PMF-II Basic Power Monitoring | PMF-III Advanced Power Monitoring |
|---|---|---|---|---|---|---|---|
| **Protective function** | **Variable setting range** | **Setting values with rotary switch** | | | | | |
| **L: Overload protection LT** | | | | | | | |
| Tripping | Can be switched on/off | | ■ | ■ | ■ | ■ | ■ |
| Current setting $I_r$ | 0.4 ... 1.0 × $I_n$ | 0.5/0.6/0.7/0.75/0.8/0.85/0.9/0.95/1.0 × $I_n$ | ■ | ■ | ■ | ■ | ■ |
| Tripping time $t_r$ at 6 × $I_r$ | At $I^2t$: 0.5 ... 30 s and at $I^4t$: 0.5 ... 5 s | 1/2/5/8/10/14/17/21/25 s | ■ | ■ | ■ | ■ | ■ |
| Characteristic LT curve | $I^2t$ and $I^4t$ | | ■ | ■ | ■ | ■ | ■ |
| Thermal memory | Can be switched on/off | | ■ | ■ | ■ | ■ | ■ |
| Cooling time constant | 10 and 18 × $t_r$ | | ■ | ■ | ■ | ■ | ■ |
| Phase failure detection | Can be switched on/off | | ■ | ■ | ■ | ■ | ■ |
| Overload pre-alarm PAL | Can be switched on/off | | ■ | ■ | ■ | ■ | ■ |
| Current setting $I_{r\ PAL}$ | 0.7 ... 1.0 × $I_r$ | | ■ | ■ | ■ | ■ | ■ |
| Delay time $t_{r\ PAL}$ | 0.5 ... 1.0 × $t_r$ | | ■ | ■ | ■ | ■ | ■ |
| **L: Overload protection LT, neutral conductor** | | | | | | | |
| Tripping | Can be switched on/off | | ■ | ■ | ■ | ■ | ■ |
| Current setting $I_{rN}$ | 0.2 ... 2.0 × $I_n$ for 4-pole circuit breakers max. $I_{n\ max}$ | | ■ | ■ | ■ | ■ | ■ |
| Current setting $I_{rN\ PAL}$ | 0.7 ... 1.0 × $I_N$ | | ■ | ■ | ■ | ■ | ■ |
| **S: Short-time-delayed short-circuit protection ST** | | | | | | | |
| Tripping | Can be switched on/off | | ■ | ■ | ■ | ■ | ■ |
| Current setting $I_{sd}$ | 0.6 × $I_n$ ... 0.8 × $I_{cw}$ max. 0.8 × $I_{cw}$ [1] | 1.5/2/2.5/3/4/5/6/8/10 × $I_r$ max. 0.8 × $I_{cw}$ [1] | ■ | ■ | ■ | ■ | ■ |
| Tripping time $t_{sd}$ | 0.02 ... 0.4 s | At Fix: 0.08/0.15/0.22/0.3/0.4 s At $I^2t$: 0.1/0.2/0.3/0.4 s | ■ | ■ | ■ | ■ | ■ |
| Characteristic ST curve | $I^0t$ and $I^2t$ | | ■ | ■ | ■ | ■ | ■ |
| Reference point $I_{ST\ ref}$ | 6-12 × $I_r$ | | ■ | ■ | ■ | ■ | ■ |
| Intermittent detection | Can be switched on/off | | ■ | ■ | ■ | ■ | ■ |
| **S: Directional short-time-delayed short-circuit protection dST** | | | | | | | |
| Tripping | Can be switched on/off | | □ | □ | □ | ■ | ■ |
| Direction setting | Forward: ↓ or ↑ | | □ | □ | □ | ■ | ■ |
| Current setting $I_{sd}$ FW | 0.6 × $I_n$ ... 0.8 × $I_{cw}$ | | □ | □ | □ | ■ | ■ |
| Current setting $I_{sd}$ REV | 0.6 × $I_n$ ... 0.8 × $I_{cw}$ | | □ | □ | □ | ■ | ■ |
| Tripping time $t_{sd}$ FW | 0.05 ... 0.4 s | | □ | □ | □ | ■ | ■ |
| Tripping time $t_{sd}$ REV | 0.05 ... 0.4 s | | □ | □ | □ | ■ | ■ |
| **I: Instantaneous short-circuit protection INST** | | | | | | | |
| Tripping | Can be switched on/off | | ■ | ■ | ■ | ■ | ■ |
| Current setting $I_i$ | 1.5 × $I_n$ ... 0.8 × $I_{cs}$ max. 0.8 × $I_{cs}$ [1] | 1.5/2/3/4/6/8/10/12/15 × $I_n$ max. 0.8 × $I_{cs}$ [1] | ■ | ■ | ■ | ■ | ■ |

[1] The setting value is limited as a function of the breaking capacity at the set rated voltage.

■ Available, feature of the application package
□ Can be retrofitted

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| ETU600 LSI, ETU600 LSIG, ETU600 LSIG Hi-Z | | | Current metering | ready4COM | PMF-I Energy efficiency | PMF-II Basic Power Monitoring | PMF-III Advanced Power Monitoring |
|---|---|---|---|---|---|---|---|
| **Protective function** | **Variable setting range** | **Setting values with rotary switch** | | | | | |
| **Reverse power protection RP** | | | | | | | |
| Tripping | Can be switched on/off | | □ | □ | □ | ■ | ■ |
| Setting value $P_{RP}$ | 0.05 ... 0.5 × $P_n$ | | □ | □ | □ | ■ | ■ |
| Tripping time $t_{RP}$ | 0.01 ... 25 s | | □ | □ | □ | ■ | ■ |
| **Enhanced Protective functions EPF** | | | | | | | |
| Phase unbalance current and phase unbalance voltage | | | □ | □ | □ | ■ | ■ |
| Undervoltage and overvoltage | | | □ | □ | □ | ■ | ■ |
| Active power import and active power export | | | □ | □ | □ | ■ | ■ |
| Underfrequency and overfrequency | | | □ | □ | □ | ■ | ■ |
| Total harmonic distortion for current and voltage | | | □ | □ | □ | ■ | ■ |
| Phase sequence detection | | | □ | □ | □ | ■ | ■ |
| **Maintenance mode DAS+** | | | | | | | |
| Current setting $I_{i\ DAS+}$ | 1.5 ... 10 × $I_n$ | | ■ | ■ | ■ | ■ | ■ |
| Current setting $I_{g\ DAS+}$ | With LSIG GFx option plug<br>Residual:<br>– Sizes 1 and 2: 100 ... 2000 A and<br>– Size 3: 400 ... 2000 A<br>Direct: 15 ... 2000 A | | ■ | ■ | ■ | ■ | ■ |
| Tripping time $t_{g\ DAS+}$ | 0 ... 5 s | | ■ | ■ | ■ | ■ | ■ |
| **Options** | | | | | | | |
| Parameter set changeover | Switchable between parameter set A and B | | □ | □ | □ | ■ | ■ |
| Limit values | Undershooting, overshooting | | ■ | ■ | ■ | ■ | ■ |
| Waveform memory | | | □ | □ | □ | □ | ■ |

■ Available, feature of the application package
□ Can be retrofitted

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# ETU600 electronic trip unit

## Protective functions



| ETU600 LSI | | | Current metering | ready4COM | PMF-I Energy efficiency | PMF-II Basic Power Monitoring | PMF-III Advanced Power Monitoring |
|---|---|---|---|---|---|---|---|
| **Protective function** | **Variable setting range** | | | | | | |
| **G: Ground fault GF alarm** | | | | | | | |
| Alarm | Can be switched on/off | | □ | □ | □ | ■ | ■ |
| Current setting $I_{g\ alarm}$ with LSIG GFx option plug | Detection method Residual | Sizes 1 and 2: 100 ... 5000 A<br>Size 3: 400 ... 5000 A | □ | □ | □ | ■ | ■ |
| | Detection method Direct | 15 ... 5000 A | □ | □ | □ | ■ | ■ |
| Alarm time $t_{g\ alarm}$ | | 0 ... 0.5 s | □ | □ | □ | ■ | ■ |

■ Available, feature of the application package
□ Can be retrofitted

| ETU600 LSIG | | | Current metering | ready4COM | PMF-I Energy efficiency | PMF-II Basic Power Monitoring | PMF-III Advanced Power Monitoring |
|---|---|---|---|---|---|---|---|
| **Protective function** | **Variable setting range** | | | | | | |
| **G: Ground fault GF** | | | | | | | |
| Tripping | Can be switched on/off | | ■ | ■ | ■ | ■ | ■ |
| Method of ground fault detection | Residual | Detection of ground-fault current via summation current formation in all phases and the N conductor | ■ | ■ | ■ | ■ | ■ |
| | Direct | Direct metering of the ground-fault current with a current transformer | ■ | ■ | ■ | ■ | ■ |
| | Dual | Protection zone UREF: Detection of the ground-fault current by means of summation current formation,<br>Protection zone REF: Metering of the ground-fault current with an external current transformer | ■ | ■ | ■ | ■ | ■ |
| Characteristic GF curve | With LSIG GFx option plug | For Fix ($I^0t$)/$I^2t$/$I^4t$/$I^6t$ | ■ | ■ | ■ | ■ | ■ |
| Current setting $I_g$ with LSIG GFx option plug | Detection method Residual | Sizes 1 and 2: 100 ... 2000 A<br>Size 3: 400 ... 2000 A | ■ | ■ | ■ | ■ | ■ |
| | Detection method Direct | 15 ... 2000 A | ■ | ■ | ■ | ■ | ■ |
| Tripping time $t_g$ | For Fix ($I^0t$) | 0 ... 5 s | ■ | ■ | ■ | ■ | ■ |
| | For $I^xt$ at 3 × $I_g$ | 0 ... 30 s | ■ | ■ | ■ | ■ | ■ |
| | $t_{g\ def}$ at $I^xt$ | 0.05 ... 0.5 s | ■ | ■ | ■ | ■ | ■ |
| Intermittent detection | Can be switched on/off | | ■ | ■ | ■ | ■ | ■ |
| **G: Ground fault GF alarm** | | | | | | | |
| Alarm | Can be switched on/off | | ■ | ■ | ■ | ■ | ■ |
| Current setting $I_{g\ alarm}$ with LSIG GFx option plug | Detection method Residual | Sizes 1 and 2: 100 ... 5000 A<br>Size 3: 400 ... 5000 A | ■ | ■ | ■ | ■ | ■ |
| | Detection method Direct | 15 ... 5000 A | ■ | ■ | ■ | ■ | ■ |
| Alarm time $t_{g\ alarm}$ | | 0 ... 0.5 s | ■ | ■ | ■ | ■ | ■ |

■ Available, feature of the application package

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| ETU600 LSIG Hi-Z | | | Current metering | ready4COM | PMF-I Energy efficiency | PMF-II Basic Power Monitoring | PMF-III Advanced Power Monitoring |
|---|---|---|---|---|---|---|---|
| **Protective function** | **Variable setting range** | | | | | | |
| **G: Ground fault GF Hi-Z** | | | | | | | |
| Tripping | Can be switched on/off | | ■ | ■ | ■ | ■ | ■ |
| Method of ground fault detection | Residual | Detection of ground-fault current via summation current formation in all phases and the N conductor | ■ | ■ | ■ | ■ | ■ |
| | Dual Hi-Z, for high-impedance connection of the external current transformers | Protection zone UREF: Detection of the ground-fault current by means of summation current formation<br>Protection zone REF: Metering of the ground-fault current with an external current transformer combination | ■ | ■ | ■ | ■ | ■ |
| Characteristic GF curve | With LSIG GFx option plug | For Fix ($I^0t$)/$I^2t$/$I^4t$/$I^6t$ | ■ | ■ | ■ | ■ | ■ |
| Current setting $I_g$ with LSIG GFx option plug | Protection zone UREF | Size 2: 100 ... 2000 A and Size 3: 400 ... 2000 A | ■ | ■ | ■ | ■ | ■ |
| | Protection zone REF | 15 ... 2000 A | ■ | ■ | ■ | ■ | ■ |
| Tripping time $t_g$ | For Fix ($I^0t$) | 0 ... 5 s | ■ | ■ | ■ | ■ | ■ |
| | For $I^xt$ 3 × $I_g$ in protection zone UREF | 0 ... 30 s | ■ | ■ | ■ | ■ | ■ |
| | $t_{g\ def}$ at $I^xt$ | 0.05 ... 0.5 s | ■ | ■ | ■ | ■ | ■ |
| Intermittent detection | Can be switched on/off | | ■ | ■ | ■ | ■ | ■ |
| **G: Ground fault GF alarm** | | | | | | | |
| Alarm | Can be switched on/off | | ■ | ■ | ■ | ■ | ■ |
| Current setting $I_{g\ alarm}$ with LSIG GFx option plug | Protection zone UREF | Size 2: 100 ... 5000 A and Size 3: 400 ... 5000 A | ■ | ■ | ■ | ■ | ■ |
| Alarm time $t_{g\ alarm}$ | | 0 ... 0.5 s | ■ | ■ | ■ | ■ | ■ |

■ Available, feature of the application package

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# ETU600 electronic trip unit

## Operation, interfaces and metering function



| ETU600 | | Current metering | ready4COM | PMF-I Energy efficiency | PMF-II Basic Power Monitoring | PMF-III Advanced Power Monitoring | Non-automatic air circuit breakers |
|---|---|---|---|---|---|---|---|
| **Operation and interfaces** | | | | | | | |
| Rotary switch | | ■ | ■ | ■ | ■ | ■ | – |
| Display and operating keys | | ■ | ■ | ■ | ■ | ■ | – |
| SENTRON Powerconfig configuration software | | ■ | ■ | ■ | ■ | ■ | – |
| Fieldbus communication | | ■ | ■ | ■ | ■ | ■ | – |
| Color display | | ■ | ■ | ■ | ■ | ■ | – |
| Bluetooth [1] and USB interface | | ■ | ■ | ■ | ■ | ■ | – |
| **Communication** | | | | | | | |
| Prepared for connection of a communications module (ready4COM feature) | Status messages of the circuit breaker | □ | ■ | ■ | ■ | ■ | □ |
| | Status messages of the ETU600 electronic trip unit | □ | ■ | ■ | ■ | ■ | – |
| | Remote operation, requires a communications module, closing coil, shunt trip | □ | ■ | ■ | ■ | ■ | □ |
| Communications module | | □ | □ | □ | □ | □ | □ |
| **Digital input and output on the ETU600 electronic trip unit** | | | | | | | |
| Parameterizable input | For activating Maintenance mode DAS+ or can be used for parameter set changeover | ■ | ■ | ■ | ■ | ■ | – |
| Parameterizable output | Usable as "life contact", early trip contact, and for displaying "Parameter set B active" or "Maintenance mode DAS+ active" | ■ | ■ | ■ | ■ | ■ | – |

[1] A country-specific radio license is required to operate the Bluetooth interface. Before activating the Bluetooth function, ensure that the license is available: www.siemens.com/lowvoltage/certificates

– Not available
■ Available, feature of the application package
□ Can be retrofitted



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| ETU600 | | Current metering | ready4COM | PMF-I Energy efficiency | PMF-II Basic Power Monitoring | PMF-III Advanced Power Monitoring |
|---|---|---|---|---|---|---|
| **Metering function** | | | | | | |
| Integrated voltage tap at top/bottom | | – | – | ■ | ■ | ■ |
| Voltage tap module VTM | | – | – | ■ | ■ | ■ |
| Type acc. to IEC 61557-12 | PMF-I | – | – | ■ | ■ | ■ |
| | PMF-II | – | – | – | ■ | ■ |
| | PMF-III | – | – | – | – | ■ |
| **Metering values** | | | | | | |
| Temperature | | – | ■ | ■ | ■ | ■ |
| **Accuracy according to IEC 61557-12** | | | | | | |
| Phase current $I_{L1}$, $I_{L2}$, $I_{L3}$ | Class 1 | ■ | ■ | ■ | ■ | ■ |
| Neutral conductor current $I_N$ | Class 1 | ■ | ■ | ■ | ■ | ■ |
| Voltage $U_{LN}$ | Class 0.5 | – | – | ■ | ■ | ■ |
| Voltage $U_{LL}$ | Class 0.5 | – | – | ■ | ■ | ■ |
| Active energy $E_a$ | Class 2 | – | – | ■ | ■ | ■ |
| Active power $P$ | Class 2 | – | – | – | ■ | ■ |
| **Accuracy according to manufacturer's specifications** | | | | | | |
| Ground-fault current $I_g$ with ETU600 LSI | 2% | – | – | – | ■ | ■ |
| Ground-fault current $I_g$ with ETU600 LSIG, ETU600 LSIG Hi-Z | 2% | ■ | ■ | ■ | ■ | ■ |
| Reactive energy $E_r$ | 2% | – | – | – | ■ | ■ |
| Apparent energy $E_{ap}$ | 2% | – | – | – | ■ | ■ |
| Reactive power $Q$ | 2% | – | – | – | ■ | ■ |
| Apparent power $S$ | 2% | – | – | – | ■ | ■ |
| Power factor $PF$ | 6% | – | – | – | ■ | ■ |
| cos φ | 6% | – | – | – | ■ | ■ |
| Frequency $f$ | 0.5% | – | – | – | ■ | ■ |
| Current unbalance | 2.5% | – | – | – | ■ | ■ |
| Voltage unbalance | 1.5% | – | – | – | ■ | ■ |
| Total harmonic distortion $THD\text{-}I$ [1] | 2% | – | – | – | – | ■ |
| Total harmonic distortion $THD\text{-}U$ [1] | 2% | – | – | – | – | ■ |
| Harmonic $I$, $U$ [1] | 2% | – | – | – | – | ■ |

[1] For 2nd to 15th harmonic ±2% and for 16th to 31st harmonic ±5%

■ Available, feature of the application package
– Not available

### Licenses for activating the test function in SENTRON Powerconfig software

| License (ALM) | Test scope | Test values can be set | Documentation | Article No. |
|---|---|---|---|---|
| Basic (unlimited) | LSIG | No | No | Free available |
| Standard (365 days) | LSIG | Yes | Yes | 7KN2720-0CE00-1YC1 |
| Extended new (365 days) | • LSIG<br>• dST<br>• Phase unbalance current<br>• Phase unbalance voltage<br>• Total harmonic distortion (THD) for current and voltage (from Powerconfig V3.28)<br>• Undervoltage, overvoltage<br>• Forward power<br>• Reverse power<br>• Underfrequency<br>• Overfrequency<br>• Phase sequence detection | Yes | Yes | 7KN2720-0CE00-2YC1 |

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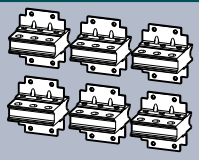
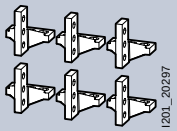
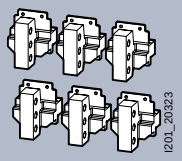
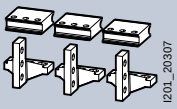
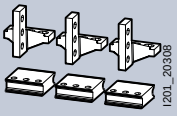
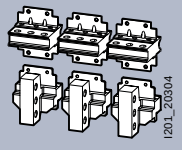
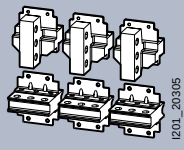
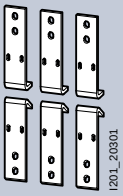
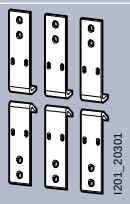
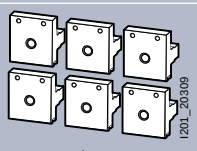
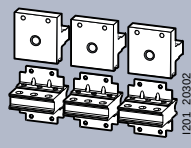
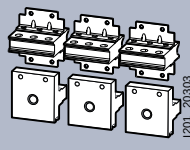




# Connection

## Main circuit connection

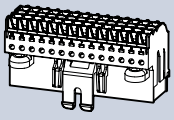
### 3WA11 – 3WA13

| Fixed-mounted | | Withdrawable | |
|---|---|---|---|
|  Rear horizontal | |  Rear horizontal | |
|  Rear vertical | |  Rear vertical | |
|  Horizontal on top, vertical at the bottom |  Vertical on top, horizontal at the bottom |  Horizontal on top, vertical at the bottom |  Vertical on top, horizontal at the bottom |
|  Front connection with double hole | |  Front connection with double hole | |
| | |  Flange | |
| | |  Flange on top and horizontal at bottom |  Flange on bottom and horizontal at top |

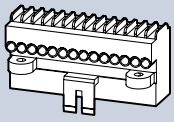
## Secondary disconnect terminal

The auxiliary and control cables are connected at the manual connectors using the push-in technology of the auxiliary conductor connections of the circuit breaker.

Coding pins on the manual connectors prevent them being inserted in the wrong slots.



Screwless connection (push in)



Screw connection (optional)

For size 1, up to 4 secondary disconnect terminal blocks are possible; for sizes 2 and 3, up to 5 secondary disconnect terminal blocks are possible

- Circuit breakers and non-automatic circuit breakers with secondary disconnect terminal blocks are supplied from the factory:
  - Non-automatic circuit breakers with 3 blocks
  - Non-automatic circuit breakers with ready4COM feature with 4 blocks
  - Circuit breakers with ETU600 LSI or LSIG with 4 blocks
  - Circuit breakers with ETU600 LSIG-HiZ with 5 blocks
  - Circuit breakers with ETU300 LSI/LSIG with 4 blocks

For dimension drawings, see Equipment Manual – 3WA1 air circuit breakers **www.siemens.com/lowvoltage/manuals (109763061)**

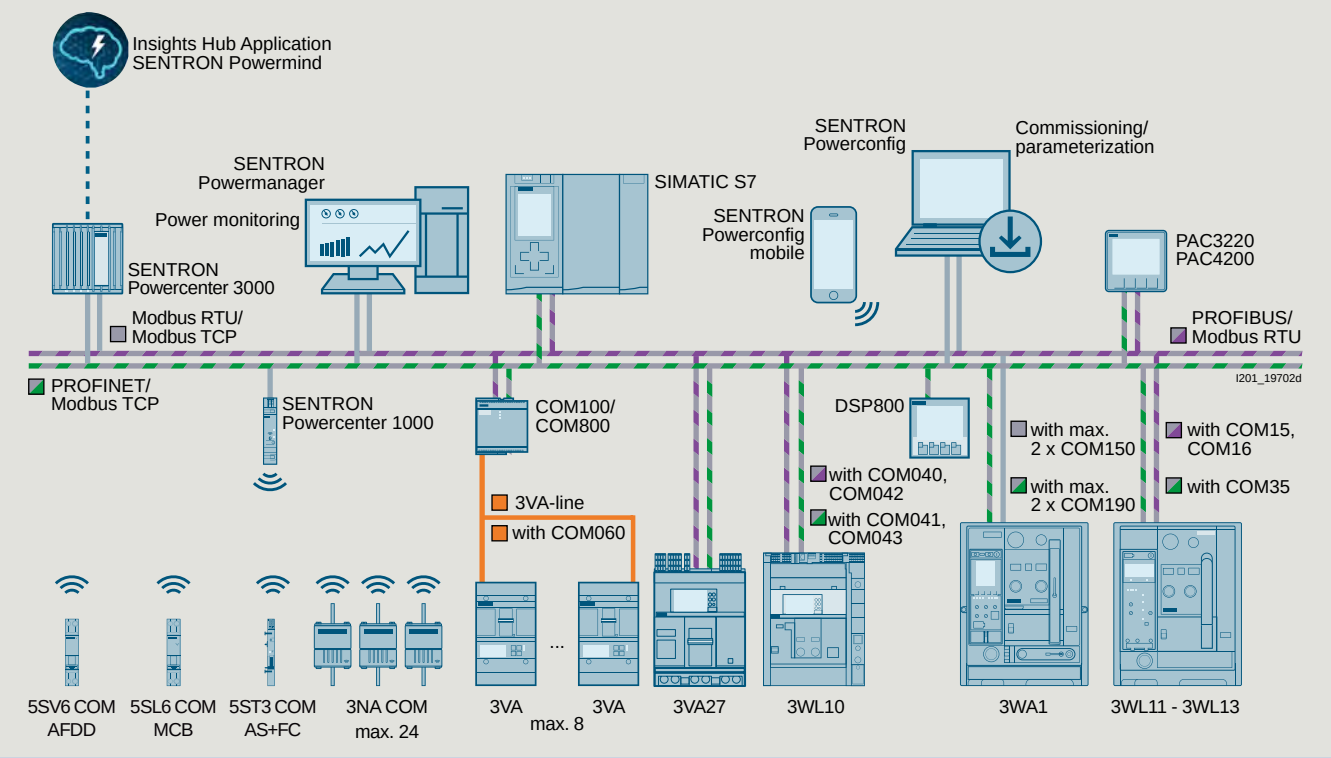
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# Communication






The 3WA can be equipped with up to two PROFINET IO/Modbus TCP COM190 communications modules or Modbus RTU COM150 and up to five IOM230 digital input/output modules.

For the optional communications interface with the COM190 or COM150 communications module, a circuit breaker with the ready4COM feature must be selected as the circuit breaker/non-automatic air circuit breaker. The first COM190 or COM150 communications module must be selected via a Z option. If you want to use a further COM190 or COM150 communications module, this must be ordered separately as an accessory. Both COM190 or COM150 communications modules can be run in parallel.

The first IOM230 digital input/output module can be selected via a Z option.
The up to four further digital input/output modules must be ordered separately as accessories.

You will find further information on the COM190 in the Equipment Manual – 3WA1 air circuit breakers
**www.siemens.com/lowvoltage/manuals (109763061)**

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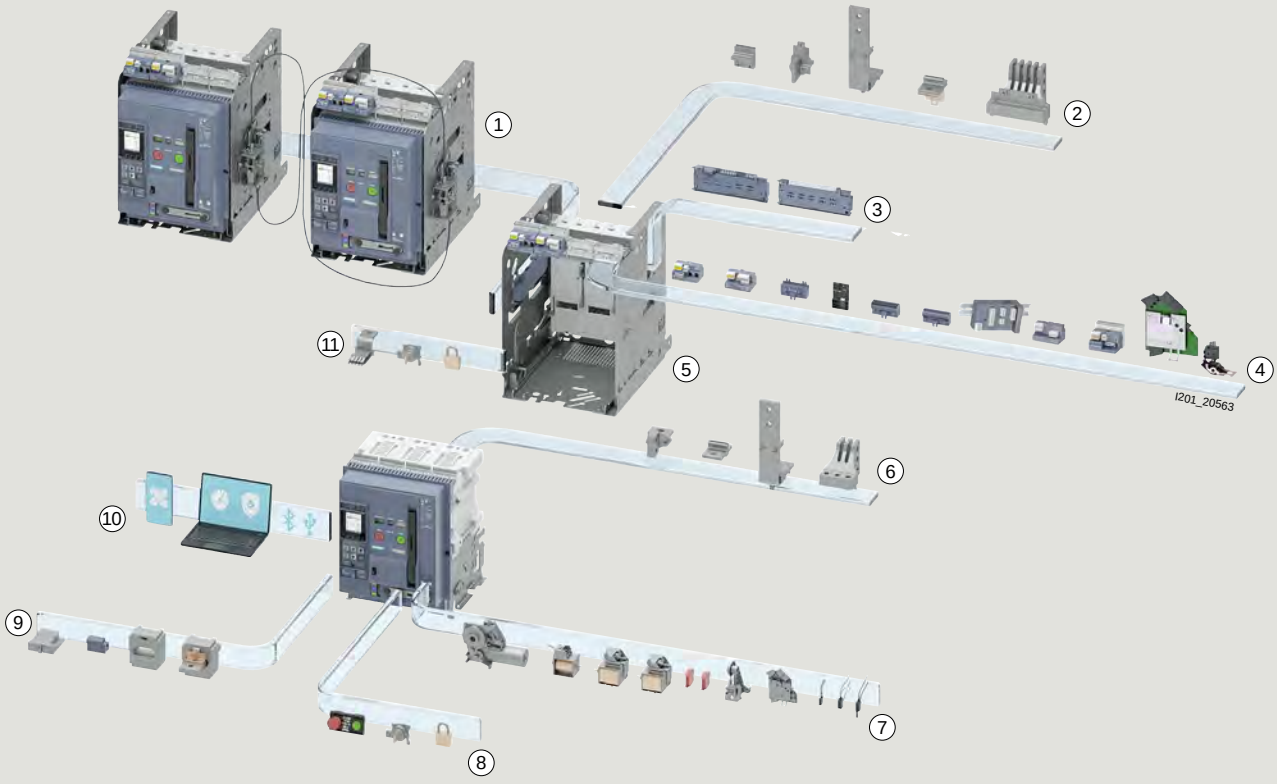


# 3WA11 – 3WA13 system overview

## Circuit breakers and non-automatic circuit breakers for AC and DC

**For a complete and valid configuration of your air circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3wa-configurator**






1. Interlocking solutions with Bowden cable
2. Main connection variants for guide frame
3. Position signaling switch (PSS) for the guide frame
4. Interfaces/COM-modules/Aux. terminals
5. Guide frame with shutter
6. Main connection variants for fixed-mounted version
7. Internal accessories: aux. release, spring charging motor, aux. contacts
8. Locking solutions for fixed-mounted version
9. Electronic trip units (ETU)
10. Digital function packages can be activated for the ETU
11. Interlocking solutions for withdrawable version

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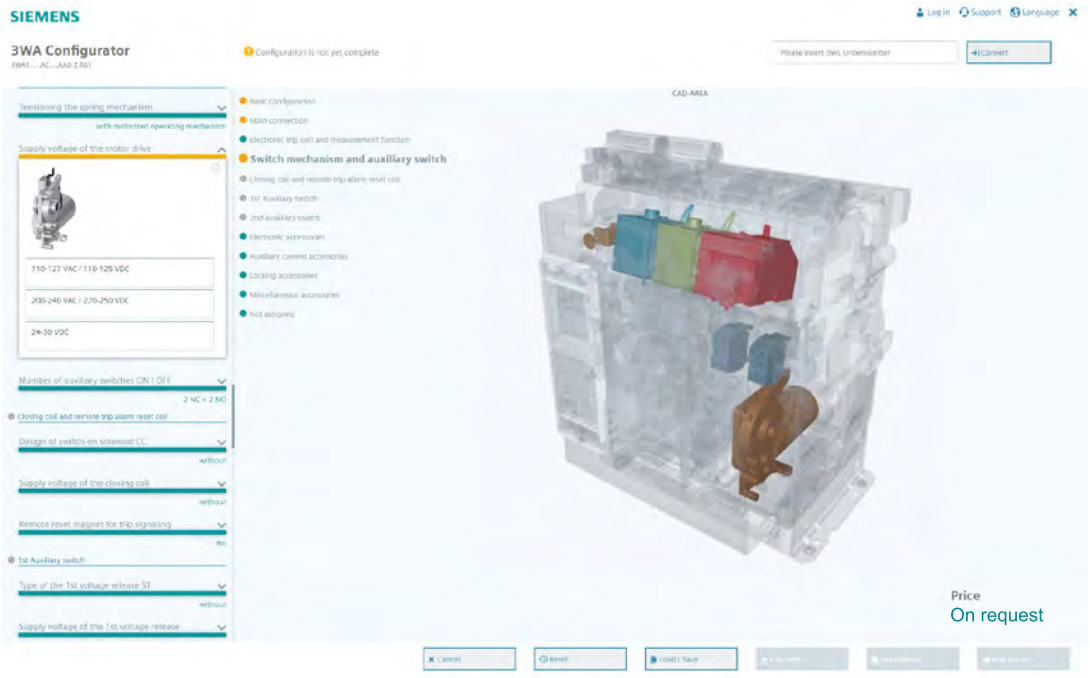
# Online configurator highlights

## www.siemens.com/lowvoltage/3wa-configurator

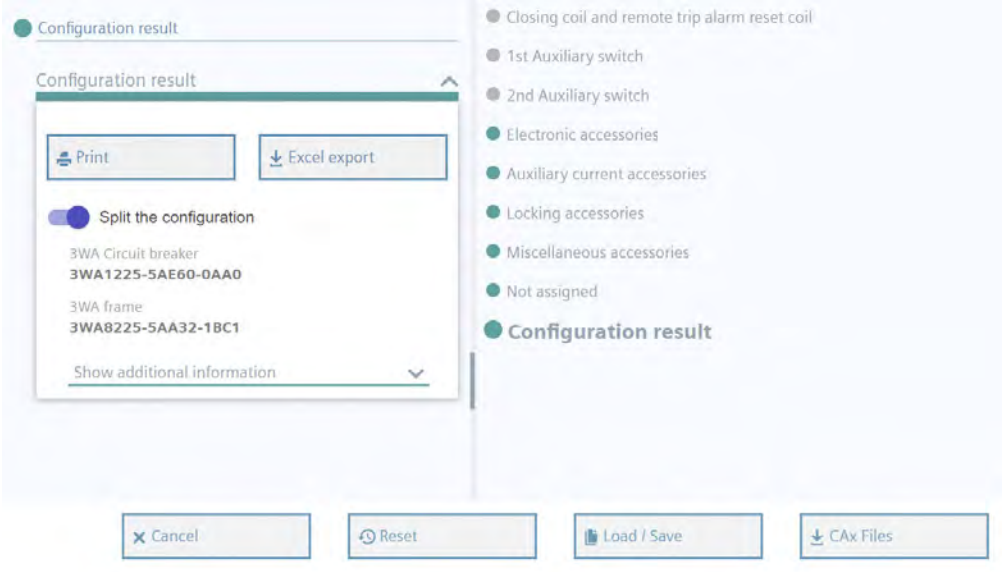
1

### Graphical display

- Integration of the legend as a color system
  - Orange: still to be selected
  - Petrol: already selected
  - Gray: preselected (default)
- Graphical highlighting of the individual configuration steps: "What you see is what you get"




### Splitting function (Frame and circuit breaker can be ordered separately)

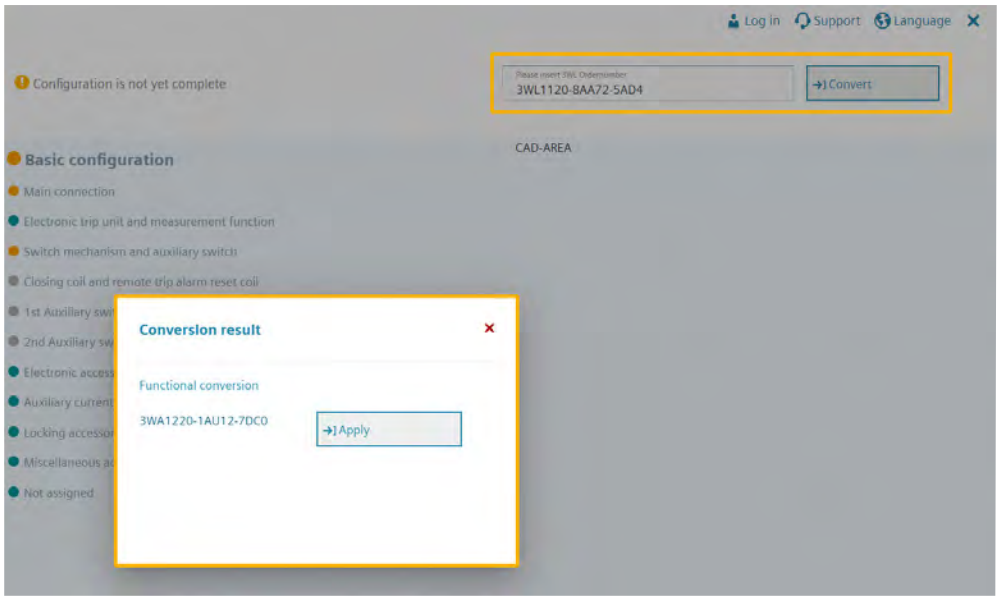


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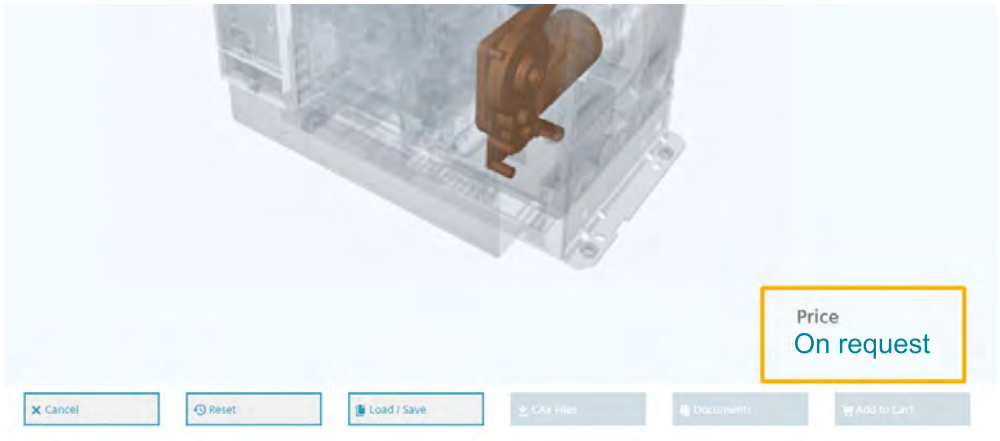
## Direct conversion of a 3WL article number to a 3WA article number in the configurator




## Responsive design (adapted to the differing requirements of the displaying devices)



## Dynamic customer price during configuration



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# Structure of the article numbers

Siemens EcoTech

## Basic configuration for AC circuit breakers and AC non-automatic circuit breakers up to 690 V

**The structure shown below is intended as an overview of each position and its meaning.**
**For a complete and valid configuration of your air circuit breaker, please use our online configurator at**
**www.siemens.com/lowvoltage/3wa-configurator**

1

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5 | 6 | 7 | | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| **3WA1** | | | | | | | | | | – | | | | | | – | | | |
| **Circuit breakers and non-automatic circuit breakers** | | | | | | | | | | | | | | | | | | | |
| **Size (SZ)** | 1 | | | | | | 1 | | | | | | | | | | | | |
| | 2 | | | | | | 2 | | | | | | | | | | | | |
| | 3 | | | | | | 3 | | | | | | | | | | | | |
| | | SZ 1 | SZ 2 | SZ 3 | | | | | | | | | | | | | | | |
| **Max. rated current $I_{n\,max}$** | 630 A | ■ | – | – | | | | 0 | 6 | | | | | | | | | | |
| | 800 A | ■ | – | – | | | | 0 | 8 | | | | | | | | | | |
| | 1000 A | ■ | – | – | | | | 1 | 0 | | | | | | | | | | |
| | 1250 A | ■ | – | – | | | | 1 | 2 | | | | | | | | | | |
| | 1600 A | ■ | – | – | | | | 1 | 6 | | | | | | | | | | |
| | 2000 A | ■ | ■ | – | | | | 2 | 0 | | | | | | | | | | |
| | 2500 A | ■ | ■ | – | | | | 2 | 5 | | | | | | | | | | |
| | 3200 A | – | ■ | – | | | | 3 | 2 | | | | | | | | | | |
| | 3600 A new | – | ■ [1] | – | | | | 3 | 6 | | | | | | | | | | |
| | 4000 A | – | ■ [1] | ■ | | | | 4 | 0 | | | | | | | | | | |
| | 5000 A | – | – | ■ | | | | 5 | 0 | | | | | | | | | | |
| | 6300 A | – | – | ■ | | | | 6 | 3 | | | | | | | | | | |
| **Short-circuit breaking capacity $I_{cu}$ at 500/690 V** | N | ■ | – | – | 55/42 kA | | | | | | 2 | | | | | | | | |
| | S | ■ | ■ | – | 66/50 kA | | | | | | 3 | | | | | | | | |
| | M | ■ | ■ | – | 85/66 kA | | | | | | 4 | | | | | | | | |
| | H | ■ [3] | ■ | ■ | 100/85 kA | | | | | | 5 | | | | | | | | |
| | C | – | ■ | – | 130/100 kA | | | | | | 6 | | | | | | | | |
| | | – | – | ■ | 3-pole: 150/150 kA<br>4-pole: 130/130 kA | | | | | | 6 | | | | | | | | |
| **Non-automatic circuit breakers** [3] | | | | | | | | | | | | A | A | | | | | | |
| **Non-automatic circuit breakers, ready4COM** [4] **feature** | | | | | | | | | | | | C | A | | | | | | |
| **Application packages with protective and metering functions for circuit breakers** | ETU300 electronic trip unit | | | | Protective function | LSI | | | | | | A | B | | | | | | |
| | | | | | | LSIG | | | | | | A | C | | | | | | |
| | ETU600 electronic trip unit | | | | Current metering | | | | | | | A | | | | | | | |
| | | | | | Current metering, ready4COM [4] feature | | | | | | | C | | | | | | | |
| | ETU600 electronic trip unit with metering function, internal voltage tap in the circuit breaker, power supply of the ETU600 via the VTM680 voltage tap module and ready4COM | | | | PMF-I | Voltage tap on top | | | | | | L | | | | | | | |
| | | | | | Energy efficiency | Voltage tap on bottom | | | | | | E | | | | | | | |
| | | | | | PMF-II Basic Power Monitoring | Voltage tap on top | | | | | | M | | | | | | | |
| | | | | | | Voltage tap on bottom | | | | | | F | | | | | | | |
| | | | | | PMF-III Advanced Power Monitoring | Voltage tap on top | | | | | | N | | | | | | | |
| | | | | | | Voltage tap on bottom | | | | | | G | | | | | | | |
| | Protective functions | ■ | ■ | ■ | | LSI | | | | | | | E | | | | | | |
| | | ■ | ■ | ■ | | LSIG | | | | | | | F | | | | | | |
| | | – | ■ | ■ | | LSIG Hi-Z | | | | | | | G | | | | | | |
| **Number of poles** | Fixed-mounted | | | | | 3-pole | | | | | | | | 0 | | | | | |
| | | | | | | 4-pole, Neutral left | | | | | | | | 1 | | | | | |
| | | | | | | 4-pole, Neutral right new | | | | | | | | 2 | | | | | |
| | Withdrawable | | | | Without position signaling switch | 3-pole | | | | | | | | 3 | | | | | |
| | | | | | | 4-pole, Neutral left | | | | | | | | 4 | | | | | |
| | | | | | | 4-pole, Neutral right new | | | | | | | | 5 | | | | | |
| | | | | | With position signaling switch [2] | 3-pole | | | | | | | | 6 | | | | | |
| | | | | | | 4-pole, Neutral left | | | | | | | | 7 | | | | | |
| | | | | | | 4-pole, Neutral right new | | | | | | | | 8 | | | | | |

[1] Not available for breaking capacity C

[2] Position signaling switch for circuit breakers/non-automatic circuit breakers without ready4COM: 3 × connected position, 2 × test position, 1 × disconnected position; Position signaling switch for circuit breakers/non-automatic circuit breakers with ready4COM: 1 × connected position, 1 × test position, 1 × disconnected position + message through communications interface for disconnected position and for "not available"

[3] Frame size 1 with breaking capacity H is not offered as a non-automatic circuit breaker

[4] If ready4COM circuit breakers are ordered with closing coils/shunt trips, these are installed in the factory as communication-capable versions (CC-COM/ST-COM)

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**3WA1** 5 6 7 – 8 9 10 11 12 – 13 14 15 16

## Connection

| | | | Fixed-mounted | | | | | Withdrawable | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Vertical | Horizontal | Front double hole | Vertical on top/horizontal at the bottom | Horizontal on top/vertical at the bottom | Without guide frame | Vertical | Horizontal | Front double hole | Flange | Vertical on top/horizontal at the bottom | Horizontal on top/vertical at the bottom | Flange on top/horizontal at the bottom | Horizontal on top/flange at the bottom |
| **Size 1** | | | | | | | | | | | | | | | | |
| **Short-circuit Breaking capacity** | N, S, M | 630 A | 1 | 2 | 3 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 800 A | 1 | 2 | 3 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 1000 A | 1 | 2 | 3 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 1250 A | 1 | 2 | 3 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 1600 A | 1 | 2 | 3 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 2000 A | 1 | 2 | 3 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 2500 A | 1 | 2 | – | 5 | 6 | 0 | 1 | – | – | – | – | – | – | – |
| | H new | 630 A | 1 | 2 | – | 5 | 6 | 0 | 1 | 2 | – | 4 | 5 | 6 | 7 | 8 |
| | | 800 A | 1 | 2 | – | 5 | 6 | 0 | 1 | 2 | – | 4 | 5 | 6 | 7 | 8 |
| | | 1000 A | 1 | 2 | – | 5 | 6 | 0 | 1 | 2 | – | 4 | 5 | 6 | 7 | 8 |
| | | 1250 A | 1 | 2 | – | 5 | 6 | 0 | 1 | 2 | – | 4 | 5 | 6 | 7 | 8 |
| | | 1600 A | 1 | 2 | – | 5 | 6 | 0 | 1 | 2 | – | 4 | 5 | 6 | 7 | 8 |
| | | 2000 A | 1 | 2 | – | 5 | 6 | 0 | 1 | 2 | – | 4 | 5 | 6 | 7 | 8 |
| | | 2500 A | 1 | 2 | – | 5 | 6 | 0 | 1 | – | – | – | – | – | – | – |
| **Size 2** | | | | | | | | | | | | | | | | |
| **Short-circuit Breaking capacity** | S, M, H | 2000 A | 1 | 2 | 3 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 2500 A | 1 | 2 | 3 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 3200 A | 1 | 2 | 3 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 3600 A | – | – | – | – | – | – | – | – | – | 4 | – | – | – | – |
| | | 4000 A | 1 [1) 2)] | 2 [2)] | – | 5 | 6 | 0 | 1 [1)] | 2 [2)] | – | – | 5 | 6 | – | – |
| | C | 2000 A | 1 | 2 | – | 5 | 6 | 0 | 1 | 2 | – | 4 | 5 | 6 | 7 | 8 |
| | | 2500 A | 1 | 2 | – | 5 | 6 | 0 | 1 | 2 | – | 4 | 5 | 6 | 7 | 8 |
| | | 3200 A | 1 | 2 | – | 5 | 6 | 0 | 1 | 2 | – | 4 | 5 | 6 | 7 | 8 |
| **Size 3** | | | | | | | | | | | | | | | | |
| **Short-circuit Breaking capacity** | H | 4000 A | 1 | 2 | 3 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | – | – |
| | | 5000 A | 1 | 2 | – | 5 | 6 | 0 | 1 | 2 | – | – | 5 | 6 | – | – |
| | | 6300 A | 1 | – | – | – | – | 0 | 1 | – | – | – | – | – | – | – |
| | C | 4000 A | 1 | 2 | – | 5 | 6 | 0 | 1 | 2 | – | 4 | 5 | 6 | – | – |
| | | 5000 A | 1 | 2 | – | 5 | 6 | 0 | 1 | 2 | – | – | 5 | 6 | – | – |
| | | 6300 A | 1 | – | – | – | – | 0 | 1 | – | – | – | – | – | – | – |

[1)] The dimensions of the 4000 A vertical connections for the 3WA1 differ from those of 3WL1. Dimensionally compatible connections can be ordered with the additional Z option D01.

[2)] Also available for 4-pole circuit breakers with Z option D04: rear main connections (top and bottom) with same pole spacing of phases (only for N pole, left).

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# Structure of the article numbers

Siemens EcoTech

## Basic configuration for AC circuit breakers and AC non-automatic circuit breakers up to 690 V

**The structure shown below is intended as an overview of each position and its meaning.**
**For a complete and valid configuration of your air circuit breaker, please use our online configurator at**
**www.siemens.com/lowvoltage/3wa-configurator**

1

| | 5 | 6 | 7 | 8 | | 9 | 10 | 11 | 12 | | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3WA1 | | | | | – | | | | | – | | | | |

## Operating mechanisms, auxiliary switches and auxiliary releases

| | | | | |
|---|---|---|---|---|
| **Operating mechanism and auxiliary switch** | Manual recharging of the stored energy mechanism | Without spring charging motor | 2 NO, 2 NC | 0 |
| | | | 4 NO, 4 NC | 1 |
| | Recharging of the stored energy mechanism by spring charging motor (M) | 24 ... 30 V DC | 2 NO, 2 NC | 2 |
| | | | 4 NO, 4 NC | 5 |
| | | 48 ... 60 V DC | 4 NO, 4 NC | 6 |
| | | 110 ... 127 V AC/ 110 ... 125 V DC | 2 NO, 2 NC | 3 |
| | | | 4 NO, 4 NC | 7 |
| | | 208 ... 240 V AC/ 220 ... 250 V DC | 2 NO, 2 NC | 4 |
| | | | 4 NO, 4 NC | 8 |

| | | | | |
|---|---|---|---|---|
| **Closing coil and remote trip alarm reset coil** [1)2)] | Without closing coil | Without remote trip alarm reset coil | | A |
| | With closing coil (CC/CC-COM) [3)] for uninterrupted duty, 100% OP | Without remote trip alarm reset coil | 24 ... 30 V DC | B |
| | | | 48 ... 60 V DC | C |
| | | | 110 ... 127 V AC/110 ... 125 V DC | D |
| | | | 208 ... 240 V AC/220 ... 250 V DC | E |
| | | With remote trip alarm reset coil (RR) for momentary duty 1% OP | 24 ... 30 V DC | F |
| | | | 48 ... 60 V DC | G |
| | | | 110 ... 127 V AC/110 ... 125 V DC | H |
| | | | 208 ... 240 V AC/220 ... 250 V DC | J |
| | With closing coil (CC) for momentary duty, 5% OP | Without remote trip alarm reset coil | 24 ... 30 V DC | K |
| | | | 48 ... 60 V DC | L |
| | | | 110 ... 127 V AC/110 ... 125 V DC | M |
| | | | 208 ... 240 V AC/220 ... 250 V DC | N |
| | | With remote trip alarm reset coil (RR) for momentary duty 1% OP | 24 ... 30 V DC | P |
| | | | 48 ... 60 V DC | Q |
| | | | 110 ... 127 V AC/110 ... 125 V DC | R |
| | | | 208 ... 240 V AC/220 ... 250 V DC | S |

| | | | |
|---|---|---|---|
| **2nd auxiliary release** | Without 2nd auxiliary release | | A |
| | With shunt trip (ST), uninterrupted duty 100% OP | 24 ... 30 V DC | B |
| | | 48 ... 60 V DC | C |
| | | 110 ... 127 V AC/110 ... 125 V DC | D |
| | | 208 ... 240 V AC/220 ... 250 V DC | E |
| | With shunt trip (ST), momentary duty 5% OP | 24 ... 30 V DC | F |
| | | 48 ... 60 V DC | G |
| | | 110 ... 127 V AC/110 ... 125 V DC | H |
| | | 208 ... 240 V AC/220 ... 250 V DC | J |
| | With undervoltage release (UVR), instantaneous (≤ 0.08 s) and short-time delayed (≤ 0.2 s) | 24 ... 30 V DC | L |
| | | 48 ... 60 V DC | N |
| | | 110 ... 127 V AC/110 ... 125 V DC | P |
| | | 208 ... 240 V AC/220 ... 250 V DC | Q |
| | | 380 ... 415 V AC | R |
| | With undervoltage release (UVR-t) [4)], adjustable delay 0.2 ... 3.2 s | 48 V DC | S |
| | | 60 V DC | T |
| | | 110 ... 127 V AC/110 ... 125 V DC | U |
| | | 208 ... 240 V AC/220 ... 250 V DC | V |
| | | 380 ... 415 V AC | W |

1) Remote trip alarm reset coil is not available for non-automatic circuit breakers
2) When using the remote trip alarm reset coil, the reclosing lockout is generally deactivated. The circuit breaker can be closed again immediately if the conditions for closing are fulfilled.
3) If the property ready4COM is selected in conjunction with 100% OP closing coils/shunt trips, communication-capable closing coils (CC-COM)/shunt trips (ST-COM) are installed in the factory. Optionally, this communication capability of the 100% OP closing coils/shunt trips can be deselected with option M71.
4) The maximum allowable cable length to the actuator for quick shutdown is currently ≦ 50 m (maximum allowable cable length between the terminals ≦ 100 m).

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| | 5 | 6 | 7 | 8 | | 9 | 10 | 11 | 12 | | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **3WA1** | | | | | – | | | | | – | | | | |

## Auxiliary releases

| | | | |
|---|---|---|---|
| **1st auxiliary release** | Without 1st auxiliary release | | **0** |
| | With shunt trip (ST/ST-COM) [1], uninterrupted duty 100% OP | 24 ... 30 V DC | **1** |
| | | 48 ... 60 V DC | **2** |
| | | 110 ... 127 V AC/110 ... 125 V DC | **3** |
| | | 208 ... 240 V AC/220 ... 250 V DC | **4** |
| | With shunt trip (ST), momentary duty 5% OP | 24 ... 30 V DC | **5** |
| | | 48 ... 60 V DC | **6** |
| | | 110 ... 127 V AC/110 ... 125 V DC | **7** |
| | | 208 ... 240 V AC/220 ... 250 V DC | **8** |

[1] If the property ready4COM is selected in conjunction with 100% OP closing coils/shunt trips, communication-capable closing coils (CC-COM)/shunt trips (ST-COM) are installed in the factory. Optionally, this communication capability of the 100% OP closing coils/shunt trips can be deselected with option M71.

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# Structure of the article numbers

Siemens EcoTech

## Basic configuration for AC circuit breakers and AC non-automatic circuit breakers in a 690 V IT system and for 1000 V

**The structure shown below is intended as an overview of each position and its meaning.**
**For a complete and valid configuration of your air circuit breaker, please use our online configurator at**
**www.siemens.com/lowvoltage/3wa-configurator**

1

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **3WA1** | | | | | | | | | | | | | | | | |
| | | | | | 5 | 6 | 7 | – | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |

### Circuit breakers and non-automatic circuit breakers

| | | | | | | | | | | | | | | | |

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**3WA1** 5 6 7 – 8 9 10 11 12 – 13 14 15 16

## Connection

| | | | Fixed-mounted | | | | | Withdrawable | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Vertical | Horizontal | Front double hole | Vertical on top/horizontal at the bottom | Horizontal on top/vertical at the bottom | Without guide frame | Vertical | Horizontal | Front double hole | Flange | Vertical on top/horizontal at the bottom | Horizontal on top/vertical at the bottom | Flange on top/horizontal at the bottom | Horizontal on top/flange at the bottom |
| **Size 1** | | | | | | | | | | | | | | | | |
| **Short-circuit Breaking capacity** | E | 630 A | 1 | 2 | 3 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 800 A | 1 | 2 | 3 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 1000 A | 1 | 2 | 3 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 1250 A | 1 | 2 | 3 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 1600 A | 1 | 2 | 3 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 2000 A | 1 | 2 | 3 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 2500 A | 1 | 2 | – | 5 | 6 | 0 | 1 | – | – | – | – | – | – | – |
| **Size 2** | | | | | | | | | | | | | | | | |
| **Short-circuit Breaking capacity** | E | 2000 A | 1 | 2 | 3 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 2500 A | 1 | 2 | 3 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 3200 A | 1 | 2 | 3 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 3600 A [3] | – | – | – | – | – | – | – | – | – | 4 | – | – | – | – |
| | | 4000 A | 1 [1] | 2 [2] | – | 5 | 6 | 0 | 1 [1] | 2 [2] | – | – | 5 | 6 | – | – |
| **Size 3** | | | | | | | | | | | | | | | | |
| **Short-circuit Breaking capacity** | E | 4000 A | 1 | 2 | – | 5 | 6 | 0 | 1 | 2 | – | 4 | 5 | 6 | – | – |
| | | 5000 A | 1 | 2 | – | 5 | 6 | 0 | 1 | 2 | – | – | 5 | 6 | – | – |
| | | 6300 A | 1 | – | – | – | – | 0 | 1 | – | – | – | – | – | – | – |

[1] The dimensions of the 4000 A vertical connections for the 3WA1 differ from those of 3WL1. Dimensionally compatible connections can be ordered with the additional Z option D01.

[2] Also available for 4-pole circuit breakers with Z option D04: rear main connections (top and bottom) with same pole spacing of phases (only for N pole, left).

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# Structure of the article numbers

Siemens EcoTech

## Basic configuration for AC circuit breakers and AC non-automatic circuit breakers in a 690 V IT system and for 1000 V

**The structure shown below is intended as an overview of each position and its meaning.**
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1

| | 5 | 6 | 7 | 8 | | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3WA1 | | | | | – | | | | | – | | | |

### Operating mechanisms, auxiliary switches and auxiliary releases

| | | | | 13 | 14 | 15 |
|---|---|---|---|---|---|---|
| **Operating mechanism and auxiliary switch** | Manual recharging of the stored energy mechanism | Without spring charging motor | 2 NO, 2 NC | 0 | | |
| | | | 4 NO, 4 NC | 1 | | |
| | Recharging of the stored energy mechanism by spring charging motor (M) | 24 ... 30 V DC | 2 NO, 2 NC | 2 | | |
| | | | 4 NO, 4 NC | 5 | | |
| | | 48 ... 60 V DC | 4 NO, 4 NC | 6 | | |
| | | 110 ... 127 V AC/ 110 ... 125 V DC | 2 NO, 2 NC | 3 | | |
| | | | 4 NO, 4 NC | 7 | | |
| | | 208 ... 240 V AC/ 220 ... 250 V DC | 2 NO, 2 NC | 4 | | |
| | | | 4 NO, 4 NC | 8 | | |
| **Closing coil and remote trip alarm reset coil** [1] | Without closing coil | Without remote trip alarm reset coil | | | A | |
| | With closing coil (CC/CC-COM) [2] for uninterrupted duty, 100% OP | Without remote trip alarm reset coil | 24 ... 30 V DC | | B | |
| | | | 48 ... 60 V DC | | C | |
| | | | 110 ... 127 V AC/110 ... 125 V DC | | D | |
| | | | 208 ... 240 V AC/220 ... 250 V DC | | E | |
| | | With remote trip alarm reset coil (RR) for momentary duty 1% OP | 24 ... 30 V DC | | F | |
| | | | 48 ... 60 V DC | | G | |
| | | | 110 ... 127 V AC/110 ... 125 V DC | | H | |
| | | | 208 ... 240 V AC/220 ... 250 V DC | | J | |
| | With closing coil (CC) for momentary duty, 5% OP | Without remote trip alarm reset coil | 24 ... 30 V DC | | K | |
| | | | 48 ... 60 V DC | | L | |
| | | | 110 ... 127 V AC/110 ... 125 V DC | | M | |
| | | | 208 ... 240 V AC/220 ... 250 V DC | | N | |
| | | With remote trip alarm reset coil (RR) for momentary duty 1% OP | 24 ... 30 V DC | | P | |
| | | | 48 ... 60 V DC | | Q | |
| | | | 110 ... 127 V AC/110 ... 125 V DC | | R | |
| | | | 208 ... 240 V AC/220 ... 250 V DC | | S | |
| **2nd auxiliary release** | Without 2nd auxiliary release | | | | | A |
| | With shunt trip (ST), uninterrupted duty 100% OP | | 24 ... 30 V DC | | | B |
| | | | 48 ... 60 V DC | | | C |
| | | | 110 ... 127 V AC/110 ... 125 V DC | | | D |
| | | | 208 ... 240 V AC/220 ... 250 V DC | | | E |
| | With shunt trip (ST), momentary duty 5% OP | | 24 ... 30 V DC | | | F |
| | | | 48 ... 60 V DC | | | G |
| | | | 110 ... 127 V AC/110 ... 125 V DC | | | H |
| | | | 208 ... 240 V AC/220 ... 250 V DC | | | J |
| | With undervoltage release (UVR), instantaneous (≤ 0.08 s) and short-time delayed (≤ 0.2 s) | | 24 ... 30 V DC | | | L |
| | | | 48 ... 60 V DC | | | N |
| | | | 110 ... 127 V AC/110 ... 125 V DC | | | P |
| | | | 208 ... 240 V AC/220 ... 250 V DC | | | Q |
| | | | 380 ... 415 V AC | | | R |
| | With undervoltage release (UVR-t) [3], adjustable delay 0.2 ... 3.2 s | | 48 V DC | | | S |
| | | | 60 V DC | | | T |
| | | | 110 ... 127 V AC/110 ... 125 V DC | | | U |
| | | | 208 ... 240 V AC/220 ... 250 V DC | | | V |
| | | | 380 ... 415 V AC | | | W |

[1] Remote trip alarm reset coil is not available for non-automatic circuit breakers
[2] If the property ready4COM is selected in conjunction with 100% OP closing coils/shunt trips, communication-capable closing coils (CC-COM)/shunt trips (ST-COM) are installed in the factory. Optionally, this communication capability of the 100% OP closing coils/shunt trips can be deselected with option M71.
[3] The maximum allowable cable length to the actuator for quick shutdown is currently ≦ 50 m (maximum allowable cable length between the terminals ≦ 100 m).

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| | 5 | 6 | 7 | 8 | | 9 | 10 | 11 | 12 | | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **3WA1** | | | | | – | | | | | – | | | | |

## Auxiliary releases

| | | | |
|---|---|---|---|
| **1st auxiliary release** | Without 1st auxiliary release | | **0** |
| | With shunt trip (ST/ST-COM) [1], uninterrupted duty 100% OP | 24 ... 30 V DC | **1** |
| | | 48 ... 60 V DC | **2** |
| | | 110 ... 127 V AC/110 ... 125 V DC | **3** |
| | | 208 ... 240 V AC/220 ... 250 V DC | **4** |
| | With shunt trip (ST), momentary duty 5% OP | 24 ... 30 V DC | **5** |
| | | 48 ... 60 V DC | **6** |
| | | 110 ... 127 V AC/110 ... 125 V DC | **7** |
| | | 208 ... 240 V AC/220 ... 250 V DC | **8** |

[1] If the property ready4COM is selected in conjunction with 100% OP closing coils/shunt trips, communication-capable closing coils (CC-COM)/shunt trips (ST-COM) are installed in the factory. Optionally, this communication capability of the 100% OP closing coils/shunt trips can be deselected with option M71.

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# Structure of the article numbers

Siemens EcoTech

## Basic configuration for AC circuit breakers and AC non-automatic circuit breakers for 1150 V

**The structure shown below is intended as an overview of each position and its meaning.**
**For a complete and valid configuration of your air circuit breaker, please use our online configurator at**
**www.siemens.com/lowvoltage/3wa-configurator**

1

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **3WA1** | | | 5 | 6 | 7 | – | 8 | 9 | 10 | 11 | 12 | – | 13 | 14 | 15 | 16 |

### Circuit breakers and non-automatic circuit breakers

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Size (SZ)** | 2 | | | **2** | | | | | | | | | | | | |
| | 3 | | | **3** | | | | | | | | | | | | |
| | | SZ 2 | SZ 3 | | | | | | | | | | | | | |
| **Max. rated current $I_{n\,max}$** | 2000 A | ■ | – | | **2** | **0** | | | | | | | | | | |
| | 2500 A | ■ | – | | **2** | **5** | | | | | | | | | | |
| | 3200 A | ■ | – | | **3** | **2** | | | | | | | | | | |
| | 4000 A | ■ | ■ | | **4** | **0** | | | | | | | | | | |
| | 5000 A | – | ■ | | **5** | **0** | | | | | | | | | | |
| | 6300 A | – | ■ | | **6** | **3** | | | | | | | | | | |
| **Short-circuit breaking capacity $I_{cu}$ at 690 V/1000 V/ 1150 V-** | E | ■ | – | 85/85/50 kA | | | **8** | | | | | | | | | |
| | | – | ■ | 3-pole: 150/125/70 kA 4-pole: 130/125/70 kA | | | **8** | | | | | | | | | |
| **Non-automatic circuit breakers** | | | | | | | | **A** | **A** | | | | | | | |
| **Non-automatic circuit breakers, ready4COM feature** | | | | | | | | **C** | **A** | | | | | | | |
| **Application packages with protective and metering functions for circuit breakers** | ETU300 electronic trip unit | | | Protective function | LSI | | | **A** | **B** | | | | | | | |
| | | | | | LSIG | | | **A** | **C** | | | | | | | |
| | ETU600 electronic trip unit | | | Current metering | | | | **A** | | | | | | | | |
| | | | | Current metering, ready4COM [2] feature | | | | **C** | | | | | | | | |
| | Protective functions | ■ | ■ | LSI | | | | | **E** | | | | | | | |
| | | ■ | ■ | LSIG | | | | | **F** | | | | | | | |
| | | ■ | ■ | LSIG Hi-Z | | | | | **G** | | | | | | | |
| **Number of poles** | Fixed-mounted | | | | 3-pole | | | | | **0** | | | | | | |
| | | | | | 4-pole, Neutral left | | | | | **1** | | | | | | |
| | | | | | 4-pole, Neutral right new | | | | | **2** | | | | | | |
| | Withdrawable | | Without position signaling switch | | 3-pole | | | | | **3** | | | | | | |
| | | | | | 4-pole, Neutral left | | | | | **4** | | | | | | |
| | | | | | 4-pole, Neutral right new | | | | | **5** | | | | | | |
| | | | With position signaling switch [1] | | 3-pole | | | | | **6** | | | | | | |
| | | | | | 4-pole, Neutral left | | | | | **7** | | | | | | |
| | | | | | 4-pole, Neutral right new | | | | | **8** | | | | | | |

[1] Position signaling switch for circuit breakers/non-automatic circuit breakers without ready4COM:
3 × connected position, 2 × test position, 1 × disconnected position;
Position signaling switch for circuit breakers/non-automatic circuit breakers with ready4COM:
1 × connected position, 1 × test position, 1 × disconnected position + message through communications interface for disconnected position and for "not available".

[2] If ready4COM circuit breakers are ordered with closing coils/shunt trips, these are installed in the factory as communication-capable versions (CC-COM/ST-COM)

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**3WA1** 5 6 7 – 8 9 10 11 12 – 13 14 15 16

## Connection

| | | | Fixed-mounted | | | | | Withdrawable | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Vertical | Horizontal | Front double hole | Vertical on top/horizontal at the bottom | Horizontal on top/vertical at the bottom | Without guide frame | Vertical | Horizontal | Front double hole | Flange | Vertical on top/horizontal at the bottom | Horizontal on top/vertical at the bottom | Flange on top/horizontal at the bottom | Horizontal on top/flange at the bottom |
| **Size 2** | | | | | | | | | | | | | | | | |
| **Short-circuit Breaking capacity** | E | 2000 A | 1 | 2 | 3 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 2500 A | 1 | 2 | 3 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 3200 A | 1 | 2 | 3 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 3600 A | – | – | – | – | – | – | – | – | – | 4 | – | – | – | – |
| | | 4000 A | 1 [1] | 2 [2] | – | 5 | 6 | 0 | 1 [1] | 2 [2] | – | – | 5 | 6 | – | – |
| **Size 3** | | | | | | | | | | | | | | | | |
| **Short-circuit Breaking capacity** | E | 4000 A | 1 | 2 | – | 5 | 6 | 0 | 1 | 2 | – | 4 | 5 | 6 | – | – |
| | | 5000 A | 1 | 2 | – | 5 | 6 | 0 | 1 | 2 | – | – | 5 | 6 | – | – |
| | | 6300 A | 1 | – | – | – | – | 0 | 1 | – | – | – | – | – | – | – |

[1] Vertical connection for 3WA size 2 for 4000 A has different dimensions than for the 3WL.
With Z option D01, vertical connection can be changed to the connection compatible with 3WL.

[2] Also available for 4-pole circuit breakers with Z option D04: rear main connections (top and bottom) with same pole spacing of phases (only for N pole, left).

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# Structure of the article numbers

Siemens EcoTech

## Basic configuration for AC circuit breakers and AC non-automatic circuit breakers for 1150 V

**The structure shown below is intended as an overview of each position and its meaning.**
**For a complete and valid configuration of your air circuit breaker, please use our online configurator at**
**www.siemens.com/lowvoltage/3wa-configurator**

1

| | 5 | 6 | 7 | 8 | | 9 | 10 | 11 | 12 | | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3WA1 | | | | | – | | | | | – | | | | |

## Operating mechanisms, auxiliary switches and auxiliary releases

| | | | | |
|---|---|---|---|---|
| **Operating mechanism and auxiliary switch** | Manual recharging of the stored energy mechanism | Without spring charging motor | 2 NO, 2 NC | 0 |
| | | | 4 NO, 4 NC | 1 |
| | Recharging of the stored energy mechanism by spring charging motor (M) | 24 ... 30 V DC | 2 NO, 2 NC | 2 |
| | | | 4 NO, 4 NC | 5 |
| | | 48 ... 60 V DC | 4 NO, 4 NC | 6 |
| | | 110 ... 127 V AC/ 110 ... 125 V DC | 2 NO, 2 NC | 3 |
| | | | 4 NO, 4 NC | 7 |
| | | 208 ... 240 V AC/ 220 ... 250 V DC | 2 NO, 2 NC | 4 |
| | | | 4 NO, 4 NC | 8 |
| **Closing coil and remote trip alarm reset coil** [1] | Without closing coil | Without remote trip alarm reset coil | | A |
| | With closing coil (CC/CC-COM) [2] for uninterrupted duty, 100% OP | Without remote trip alarm reset coil | 24 ... 30 V DC | B |
| | | | 48 ... 60 V DC | C |
| | | | 110 ... 127 V AC/110 ... 125 V DC | D |
| | | | 208 ... 240 V AC/220 ... 250 V DC | E |
| | | With remote trip alarm reset coil (RR) for momentary duty 1% OP | 24 ... 30 V DC | F |
| | | | 48 ... 60 V DC | G |
| | | | 110 ... 127 V AC/110 ... 125 V DC | H |
| | | | 208 ... 240 V AC/220 ... 250 V DC | J |
| | With closing coil (CC) for momentary duty, 5% OP | Without remote trip alarm reset coil | 24 ... 30 V DC | K |
| | | | 48 ... 60 V DC | L |
| | | | 110 ... 127 V AC/110 ... 125 V DC | M |
| | | | 208 ... 240 V AC/220 ... 250 V DC | N |
| | | With remote trip alarm reset coil (RR) for momentary duty 1% OP | 24 ... 30 V DC | P |
| | | | 48 ... 60 V DC | Q |
| | | | 110 ... 127 V AC/110 ... 125 V DC | R |
| | | | 208 ... 240 V AC/220 ... 250 V DC | S |

| | | | |
|---|---|---|---|
| **2nd auxiliary release** | Without 2nd auxiliary release | | A |
| | With shunt trip (ST), uninterrupted duty 100% OP | 24 ... 30 V DC | B |
| | | 48 ... 60 V DC | C |
| | | 110 ... 127 V AC/110 ... 125 V DC | D |
| | | 208 ... 240 V AC/220 ... 250 V DC | E |
| | With shunt trip (ST), momentary duty 5% OP | 24 ... 30 V DC | F |
| | | 48 ... 60 V DC | G |
| | | 110 ... 127 V AC/110 ... 125 V DC | H |
| | | 208 ... 240 V AC/220 ... 250 V DC | J |
| | With undervoltage release (UVR), instantaneous (≤ 0.08 s) and short-time delayed (≤ 0.2 s) | 24 ... 30 V DC | L |
| | | 48 ... 60 V DC | N |
| | | 110 ... 127 V AC/110 ... 125 V DC | P |
| | | 208 ... 240 V AC/220 ... 250 V DC | Q |
| | | 380 ... 415 V AC | R |
| | With undervoltage release (UVR-t) [3], adjustable delay 0.2 ... 3.2 s | 48 V DC | S |
| | | 60 V DC | T |
| | | 110 ... 127 V AC/110 ... 125 V DC | U |
| | | 208 ... 240 V AC/220 ... 250 V DC | V |
| | | 380 ... 415 V AC | W |

[1] Remote trip alarm reset coil is not available for non-automatic circuit breakers
[2] If the property ready4COM is selected in conjunction with 100% OP closing coils/shunt trips, communication-capable closing coils (CC-COM)/shunt trips (ST-COM) are installed in the factory. Optionally, this communication capability of the 100% OP closing coils/shunt trips can be deselected with option M71.
[3] The maximum allowable cable length to the actuator for quick shutdown is currently ≦ 50 m (maximum allowable cable length between the terminals ≦ 100 m).

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**3WA1** 5 6 7 8 – 9 10 11 12 – 13 14 15 16

## Auxiliary releases

| | | | |
|---|---|---|---|
| **1st auxiliary release** | Without 1st auxiliary release | | **0** |
| | With shunt trip (ST/ST-COM) [1], uninterrupted duty 100% OP | 24 ... 30 V DC | **1** |
| | | 48 ... 60 V DC | **2** |
| | | 110 ... 127 V AC/110 ... 125 V DC | **3** |
| | | 208 ... 240 V AC/220 ... 250 V DC | **4** |
| | With shunt trip (ST), momentary duty 5% OP | 24 ... 30 V DC | **5** |
| | | 48 ... 60 V DC | **6** |
| | | 110 ... 127 V AC/110 ... 125 V DC | **7** |
| | | 208 ... 240 V AC/220 ... 250 V DC | **8** |

[1] If the property ready4COM is selected in conjunction with 100% OP closing coils/shunt trips, communication-capable closing coils (CC-COM)/shunt trips (ST-COM) are installed in the factory. Optionally, this communication capability of the 100% OP closing coils/shunt trips can be deselected with option M71.

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# Structure of the article numbers

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## Basic configuration for DC non-automatic circuit breakers

**The structure shown below is intended as an overview of each position and its meaning.**
**For a complete and valid configuration of your air circuit breaker, please use our online configurator at**
**www.siemens.com/lowvoltage/3wa-configurator**

1

| | | | | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **3WA1** | | | | | | | – | | | | | – | | | |

### Non-automatic circuit breakers

| | | | | |
|---|---|---|---|---|
| **Size (SZ)** | 2 | | | 2 |
| | | BG 2 | | |
| **Max. rated current $I_{n\,max}$** | 1000 A | ■ | | 1 0 |
| | 2000 A | ■ | | 2 0 |
| | 4000 A | ■ | | 4 0 |
| **Short-circuit breaking capacity $I_{cc}$** | D | ■ | 25 kA, 600 V DC | 1 |
| | E | ■ | 20 kA, 1000 V DC<br>20 kA, 1500 V DC [1] | 8 |
| **Non-automatic circuit breakers** | | | | A U |
| **Non-automatic circuit breakers, ready4COM feature** | | | | C U |

| | | | | |
|---|---|---|---|---|
| **Number of poles** [2] | Fixed-mounted | | 3-pole | 0 |
| | | | 4-pole | 1 |
| | Withdrawable | Without position signaling switch | 3-pole | 3 |
| | | | 4-pole | 4 |
| | | With position signaling switch [2] | 3-pole | 6 |
| | | | 4-pole | 7 |

### Connection

| | | | Fixed-mounted | | | | | Withdrawable | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Size 2** | | | Vertical | Horizontal | Front double hole | Vertical on top/horizontal at the bottom | Horizontal on top/vertical at the bottom | Without guide frame | Vertical | Horizontal | Front double hole | Flange | Vertical on top/horizontal at the bottom | Horizontal on top/vertical at the bottom | Flange on top/horizontal at the bottom | Horizontal on top/flange at the bottom |
| **Short-circuit Breaking capacity** | D | 1000 A | 1 | 2 | 3 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 2000 A | 1 | 2 | 3 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 4000 A | 1 | 2 | – | 5 | 6 | 0 | 1 | 2 | – | 4 | 5 | 6 | 7 | 8 |
| | E | 1000 A | 1 | 2 | 3 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 2000 A | 1 | 2 | 3 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 4000 A | 1 | 2 | – | 5 | 6 | 0 | 1 | 2 | – | 4 | 5 | 6 | 7 | 8 |

[1] 1500 V DC only for 4-pole circuit breakers and for breaking capacity E
[2] Position signaling switch for circuit breakers/non-automatic circuit breakers without ready4COM:
3 × connected position, 2 × test position, 1 × disconnected position;
Position signaling switch for circuit breakers/non-automatic circuit breakers with ready4COM:
1 × connected position, 1 × test position, 1 × disconnected position + message through communications interface for disconnected position and for "not available"

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**3WA1** 5 6 7 8 – 9 10 11 12 – 13 14 15 16

## Operating mechanisms, auxiliary switches and auxiliary releases

| | | | | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|
| **Operating mechanism and auxiliary switch** | Manual recharging of the stored energy mechanism | Without spring charging motor | 2 NO, 2 NC | 0 | | | |
| | | | 4 NO, 4 NC | 1 | | | |
| | Recharging of the stored energy mechanism by spring charging motor (M) | 24 ... 30 V DC | 2 NO, 2 NC | 2 | | | |
| | | | 4 NO, 4 NC | 5 | | | |
| | | 48 ... 60 V DC | 4 NO, 4 NC | 6 | | | |
| | | 110 ... 127 V AC/ 110 ... 125 V DC | 2 NO, 2 NC | 3 | | | |
| | | | 4 NO, 4 NC | 7 | | | |
| | | 208 ... 240 V AC/ 220 ... 250 V DC | 2 NO, 2 NC | 4 | | | |
| | | | 4 NO, 4 NC | 8 | | | |
| **Closing coil** | Without closing coil | | | | A | | |
| | With closing coil (CC/CC-COM) [1] for uninterrupted duty, 100% OP | | 24 ... 30 V DC | | B | | |
| | | | 48 ... 60 V DC | | C | | |
| | | | 110 ... 127 V AC/110 ... 125 V DC | | D | | |
| | | | 208 ... 240 V AC/220 ... 250 V DC | | E | | |
| | With closing coil (CC) for momentary duty, 5% OP | | 24 ... 30 V DC | | K | | |
| | | | 48 ... 60 V DC | | L | | |
| | | | 110 ... 127 V AC/110 ... 125 V DC | | M | | |
| | | | 208 ... 240 V AC/220 ... 250 V DC | | N | | |
| **2nd auxiliary release** | Without 2nd auxiliary release | | | | | A | |
| | With shunt trip (ST), uninterrupted duty 100% OP [1] | | 24 ... 30 V DC | | | B | |
| | | | 48 ... 60 V DC | | | C | |
| | | | 110 ... 127 V AC/110 ... 125 V DC | | | D | |
| | | | 208 ... 240 V AC/220 ... 250 V DC | | | E | |
| | With shunt trip (ST), momentary duty 5% OP | | 24 ... 30 V DC | | | F | |
| | | | 48 ... 60 V DC | | | G | |
| | | | 110 ... 127 V AC/110 ... 125 V DC | | | H | |
| | | | 208 ... 240 V AC/220 ... 250 V DC | | | J | |
| | With undervoltage release (UVR), instantaneous (≤ 0.08 s) and short-time delayed (≤ 0.2 s) | | 24 ... 30 V DC | | | L | |
| | | | 48 ... 60 V DC | | | N | |
| | | | 110 ... 127 V AC/110 ... 125 V DC | | | P | |
| | | | 208 ... 240 V AC/220 ... 250 V DC | | | Q | |
| | | | 380 ... 415 V AC | | | R | |
| | With undervoltage release (UVR-t) [2], adjustable delay 0.2 ... 3.2 s | | 48 V DC | | | S | |
| | | | 60 V DC | | | T | |
| | | | 110 ... 127 V AC/110 ... 125 V DC | | | U | |
| | | | 208 ... 240 V AC/220 ... 250 V DC | | | V | |
| | | | 380 ... 415 V AC | | | W | |
| **1st auxiliary release** | Without 1st auxiliary release | | | | | | 0 |
| | With shunt trip (ST/ST-COM) [1], uninterrupted duty 100% OP | | 24 ... 30 V DC | | | | 1 |
| | | | 48 ... 60 V DC | | | | 2 |
| | | | 110 ... 127 V AC/110 ... 125 V DC | | | | 3 |
| | | | 208 ... 240 V AC/220 ... 250 V DC | | | | 4 |
| | With shunt trip (ST), momentary duty 5% OP | | 24 ... 30 V DC | | | | 5 |
| | | | 48 ... 60 V DC | | | | 6 |
| | | | 110 ... 127 V AC/110 ... 125 V DC | | | | 7 |
| | | | 208 ... 240 V AC/220 ... 250 V DC | | | | 8 |

[1] If the property ready4COM is selected in conjunction with 100% OP closing coils/shunt trips, communication-capable closing coils (CC-COM)/shunt trips (ST-COM) are installed in the factory. Optionally, this communication capability of the 100% OP closing coils/shunt trips can be deselected with option M71.

[2] The maximum allowable cable length to the actuator for quick shutdown is currently ≦ 50 m (maximum allowable cable length between the terminals ≦ 100 m).

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# Accessory options

**For a complete and valid configuration of your air circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3wa-configurator**

1

To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

**3WA....-.....-.... -Z**

| | | | | | | Order code |
|---|---|---|---|---|---|---|
| | | | | | | |
| **Option plug for electronic trip unit** | | | | | | |
| • To reduce the rated current of the circuit breaker | | | | | | |
| • Only one module is possible per circuit breaker. As standard, the electronic trip unit is equipped with an option plug which is equal to the maximum rated breaker current ( $I_{n\,max}$ ). The rated current of the selected option plug must be less than $I_{n\,max}$ . | | | | | | |
| | Rated current $I_n$ | SZ 1 | SZ 2 | SZ 3 | | |
| **Option plug** | 250 A | ■ | ■ | – | | B02 |
| | 315 A | ■ | ■ | – | | B03 |
| | 400 A | ■ | ■ | – | | B04 |
| | 500 A | ■ | ■ | – | | B05 |
| | 630 A | ■ | ■ | – | | B06 |
| | 800 A | ■ | ■ | ■ | | B08 |
| | 1000 A | ■ | ■ | ■ | | B10 |
| | 1250 A | ■ | ■ | ■ | | B12 |
| | 1600 A | ■ | ■ | ■ | | B16 |
| | 2000 A | ■ | ■ | ■ | | B20 |
| | 2500 A | – | ■ | ■ | | B25 |
| | 3200 A | – | ■ | ■ | | B32 |
| | 4000 A | – | – | ■ | | B40 |
| | 5000 A | – | – | ■ | | B50 |
| **IOM230 digital input/output module** [1] | | | | | | |
| **Module with 2 inputs and 3 outputs** | A module including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, connecting cables and **Cubicle**BUS[2] terminating resistor; five modules can be operated at the same time. Further modules must be ordered separately as 3WA9111-0EC11, which includes the adapter for mounting on the secondary disconnect terminal system of the circuit breaker and the adapter for external mounting on a DIN rail. | | | | | F23 |
| **ZSI200 Zone-selective interlocking module** [1] | | | | | | |
| **Zone-selective interlocking with ETU600** | A module, circuit breaker internal. A module including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, connecting cables and **Cubicle**BUS[2] terminating resistor | | | | | F20 |
| **COM190 communications module** [1] [2] | | | | | | |
| • The precondition for connection is a circuit breaker or non-automatic circuit breaker with the ready4COM feature | | | | | | |
| **PROFINET IO/Modbus TCP** [2] | A module including 2 Switched Ethernet ports, circuit breaker internal. A module including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, connecting cables and **Cubicle**BUS[2] terminating resistor; two communications modules can be run at the same time. The second communications module must be ordered separately as 3WA9111-0EC13. | | | | | F19 |
| **COM150 communications module** [1] | | | | | | |
| • The precondition for connection is a circuit breaker or non-automatic circuit breaker with the ready4COM feature | | | | | | |
| **Modbus RTU** | A module with terminal connection and optional internal terminating resistor, circuit breaker internal. A module including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, connecting cables and **Cubicle**BUS[2] terminating resistor; two communications modules can be run at the same time. The second communications module must be ordered separately as 3WA9111-0EC15. | | | | | F15 |
| **ready4COM circuit breakers without communication-capable closing coils/shunt trips** | | | | | | |
| **Note** | If this option is used, remote switching directly via communication is no longer possible. | | | | | M71 |

[1] When ordering this option for a circuit breaker or a non-automatic air circuit breaker of the installation type "withdrawable version without guide frame", this must be used as the order option for the guide frame.

[2] For connecting the Ethernet cable, connectors angled 90° to the right are recommended, e.g. PROFINET connector 6GK1901-1BB20-2AA0.

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To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

**3WA....-.....-.... -Z**

| | | | Order code |
|---|---|---|---|
| **Automatic reset** | | | |
| • Only possible for circuit breakers with an electronic trip unit | | | |
| **Automatic reset** | Automatic reset of the reclosing lockout after ETU tripping; this option is not required when ordering a circuit breaker with a remote trip alarm reset coil RR. | | K01 |
| **Circuit breakers with a metering function for connection of an external voltage transformer** | | | |
| • The circuit breaker is equipped with a metering function. The scope of measured values is the same as for the PMF metering function. Unlike the metering function with internal voltage tap, this version is not certified according to IEC 61557-12.<br>• External voltage transformers are required for the function.<br>• Only possible for circuit breakers of frame sizes 2 and 3 with ETU600 and A or C in position 9 of the article number. | Scope of measured values Metering function | PMF-I | V61 |
| | | PMF-II | V62 |
| | | PMF-III | V63 |
| **Special approval according to UL 489b in addition to IEC 60947** | | | |
| **DC non-automatic circuit breakers up to 1500 V** | Sizes 2, 4-pole, 2000 A with $I_{cc}$ = 20 kA | | U09 |
| | Available for: | 3WA1220-8AU12-_ _ _ _ | |
| | | 3WA1220-8AU42-_ _ _ _ | |
| | | 3WA1220-8AU72-_ _ _ _ | |
| | | 3WA1220-8CU12-_ _ _ _ | |
| | | 3WA1220-8CU42-_ _ _ _ | |
| | | 3WA1220-8CU72-_ _ _ _ | |

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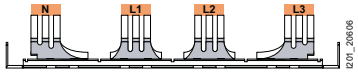
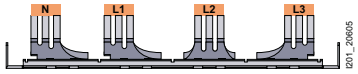
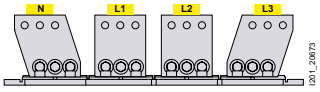
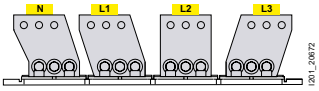
# Accessory options

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1

To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

**3WA....-.....-.... -Z**

| | | | | | Order code |
|---|---|---|---|---|---|
| **Rear main connections (top and bottom) with same pole spacing of phases (only possible for 4-pole circuit breakers with N pole, left)** | | | | | |
| **AC circuit breakers/ AC non-automatic circuit breakers and AC guide frames** | Sizes 2, 4-pole, 4000 A breaking capacity S/M/H/E | | | | **D04** |
| | Rear vertical |  | Standard | N – L1 160 mm<br>L1 – L2 130 mm<br>L2 – L3 160 mm | |
| | |  | Option | N – L1 130 mm<br>L1 – L2 160 mm<br>L2 – L3 160 mm | |
| | Rear horizontal |  | Standard | N – L1 160 mm<br>L1 – L2 130 mm<br>L2 – L3 160 mm | |
| | |  | Option | N – L1 130 mm<br>L1 – L2 160 mm<br>L2 – L3 160 mm | |
| **Tinned version of the main circuit connections on the guide frame**<br>• Only for withdrawable circuit breakers with horizontal connection or flange connection<br>• Cannot be ordered for circuit breakers without a guide frame<br>• The normal delivery time increases to 15 work days | | | | | |
| **Tinned connections** | Sizes 1, 2, 3 | | | | **D08** |
| **Broadened vertical main circuit connection**<br>• Only possible on complete order for a withdrawable circuit breaker or when ordering the guide frame separately | | | | | |
| **Main circuit connection** | For 3WA1, 4000 A, size 2 | | Compatible with 3WL1240 for retrofit | | **D01** |
| **Circuit breakers without Bluetooth function** | | | | | |
| **Circuit breakers without Bluetooth function** | In this version of the circuit breaker, Bluetooth is not provided. Neither can Bluetooth be retrofitted by replacing the electronic trip unit. | | | | **D80** |
| **Secondary disconnect terminal system**<br>• Can be ordered for circuit breakers with guide frames and for guide frames | | | | | |
| **Manual connector with screw terminal** | With screw connection instead of push-in connection (standard) | | | | **N03** |
| **Manual connector for ring lugs** | With screw connection for ring lugs instead of push-in connection (standard) | | | | **N05** |
| **Mechanical operating cycles counters** | | | | | |
| **Mechanical operating cycles counter, 5-digit** | Can be used with all circuit breakers and non-automatic circuit breakers including those without a spring charging motor | | | | **C01** |
| **Signaling switches** | | | | | |
| **Trip alarm switch** | 2nd trip alarm switch (S25)<br>1st trip alarm switch included as standard for circuit breakers.<br>Can only be used with circuit breakers with an electronic trip unit without ready4COM. | | 1 NO | | **K06** |



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To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

**3WA....-.....-.... -Z**

| | | | Order code |
|---|---|---|---|
| **Pushbuttons/disconnect switches/closing lockouts/special packaging/arc chute cover** | | | |
| **Emergency OPEN button** | Mushroom pushbutton instead of the mechanical OFF pushbutton | | C25 |
| **Local electric close on operator panel (S10)** | This prevents unauthorized electrical closing from the operator panel. Mechanical closing and remote closing remain possible. Only possible in combination with a closing coil (CC) | With sealing cap | C11 |
| | | With CES lock | C12 |
| **Motor disconnect switch on operator panel (S12)** | This prevents automatic charging of the stored energy mechanism by the spring charging motor | | C24 |
| **Cardboard packaging with water-repellent coating on corrugated cardboard (moisture protection)** | | | P61 |
| **Arc chute cover mounted on the guide frame** | Not available for:<br>– Fixed-mounted<br>– Breaking capacity C, E and D<br>– 3600/4000 A size 2 | | R10 |
| **Cover for electronic trip unit** | Top cover with safety lock<br>(The lower sealable cover of the rotary coding switch is included in the scope of supply of the circuit breaker) | | F40 |
| **Internal current sensors without energy core for applications with frequency converters**<br>• Used in converter applications with high harmonic components; can only be used for circuit breakers with an ETU600 electronic trip unit<br>– External 24 V DC supply required<br>– Instantaneous undervoltage release UVR required (15th position in article number: L, N, P, Q, R)<br>– Not possible with delayed undervoltage release UVR-t (15th position in article number: S, T, U, V, W)<br>– Additionally contains a relay for monitoring the 24 V DC and warning labels<br>– If Z option = K60 is provided, an optional PMF-I to PMF-III metering function is feasible. The accuracy of this metering function is in accordance with the manufacturer's specifications. A certificate according to IEC 61557-12 cannot be provided for this version. | | | |
| **Internal current sensors** | Sizes 1, 2, 3 | | K60 |
| **Mechanical interlocks**<br>• Interlocking module with Bowden cable 2 m | | | |
| **Mechanical interlocks** | For fixed-mounted breakers | | S55 |
| | For withdrawable circuit breakers with guide frame [1] | | R55 |
| | For guide frames (ordered separately) | | R56 |
| | For withdrawable circuit breakers (ordered separately) | | R57 |
| **Locking provisions (for fixed-mounted and withdrawable circuit breakers)** | | | |
| **Locking provisions** | Against unauthorized closing from the operator panel of the circuit breaker. The disconnector unit fulfills the requirements for main circuit breakers according to EN 60204-1 | Made by CES | S01 |
| | | Made by IKON | S03 |
| | | Assembly kit FORTRESS or CASTELL [2] | S05 |
| | | Assembly kit for padlocks [3] | S07 |
| | | Made by RONIS | S08 |
| | | Made by PROFALUX | S09 |
| **Locking provisions** | For charging handle with padlock [3] | | S33 |
| **Locking provisions (for withdrawable circuit breaker)** | | | |
| **Locking provision to prevent movement of the withdrawable circuit breaker** | Safety lock for mounting onto the circuit breaker | Made by CES | S71 |
| | | Made by PROFALUX | S75 |
| | | Made by RONIS | S76 |

[1] Not available in combination with R40
[2] Locks must be ordered from the manufacturer.
[3] Padlock not included in the scope of supply.

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# Accessory options

**For a complete and valid configuration of your air circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3wa-configurator**

1

| To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s). | | 3WA....-.....-.... -Z | Order code |
|---|---|---|---|
| **Locking provisions against unauthorized closing, for withdrawable circuit breakers**<br>• The disconnector unit fulfills the requirements for main circuit breakers acc. to EN 60204-1, consisting of a lock in the guide frame, active in the connected position, function is retained when circuit breaker is replaced.<br>• Not possible in combination with order code "R81", "R85" or "R86".<br>• Only possible on complete order for a withdrawable circuit breaker or when ordering the guide frame separately | | | |
| **Made by CES** | | | **R61** |
| **Made by RONIS** | | | **R68** |
| **Made by PROFALUX** | | | **R60** |
| **Locking mechanisms**<br>• R30 and R50 not possible in combination with order code "R81", "R85" or "R86".<br>• R30 and R50 only possible on complete order for a circuit breaker with a guide frame or when ordering the guide frame separately<br>• R40 can only be ordered with the circuit breaker | | | |
| **For fixed-mounted circuit breakers** | To prevent opening of the control cabinet door in ON position | | **S30** |
| **For withdrawable circuit breakers** | To prevent opening of the control cabinet door in connected position | | **R30** |
| | To prevent activation when the control cabinet door is open [1] | | **R40** |
| | To prevent movement when the control cabinet door is open [2] | | **R50** |
| **Locking provisions to prevent movement of the withdrawable circuit breaker in disconnected position**<br>• Consisting of Bowden cable and lock in the control cabinet door<br>• Not possible in combination with order code "R30", "R50", "R61", "R68" or "R60"<br>• Only possible for a complete order for a circuit breaker with a guide frame or when ordering the guide frame separately | | | |
| **Made by CES** | | | **R81** |
| **Made by PROFALUX** | | | **R85** |
| **Made by RONIS** | | | **R86** |
| **Increased degree of protection for installation in a control cabinet** | | | |
| **Door sealing frame for degree of protection IP41** | | | **T40** |

[1] Not available in combination with R50 and R55
[2] Not available in combination with R40



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# Accessory options

## Further technical specifications



| Manual operating mechanism | 3WA11 – 3WA13 |
|---|---|
| **Switching on/charging energy store** | |
| Maximum force required to operate the hand lever | ≤ 230 N |
| Required number of strokes on the hand lever | 9 |

| Closing coils (CC/CC-COM) [1] | | 3WA11 – 3WA13 | |
|---|---|---|---|
| **Rated operational voltage** | | | |
| Rated control supply voltage $U_s$ | | 24 … 30 V DC | |
| | | 48 … 60 V DC | |
| | | 110 … 127 V AC/110 … 125 V DC | |
| | | 208 … 240 V AC/220 … 250 V DC | |
| **Primary operating range** | | | |
| Primary operating range (acc. to IEC 60947-2) | | 75 … 110% $U_s$ | |
| Extended operating range for battery operation | | 75 … 126% $U_s$ | |
| Integrated freewheeling diode | | Yes | No |
| **Operation** | | | |
| Version | | 100% OP | 5% OP |
| Closing power | AC/DC | 60 VA/60 W | 300 VA/300 W |
| Continuous power | AC/DC | 8 VA/8 W | – |
| Minimum command time at 100% $U_s$ | | 60 ms | 60 ms |
| Maximum command time at 100% $U_s$ | | – | 2000 ms |
| Opening time of the circuit breaker at 100% $U_s$ | | 80 ms | 50 ms |
| **Fuse protection of the control circuit at $U_s$ for closing coil** | | | |
| Fuse gG | 24 … 30 V DC | 2 A | 10 A |
| | 48 … 60 V DC | 2 A | 10 A |
| | 110 … 127 V AC/110 … 125 V DC | 2 A | 4 A |
| | 208 … 240 V AC/220 … 250 V DC | 2 A | 2 A |
| Automatic circuit breaker with C characteristic | 24 … 30 V DC | 2 A | 10 A |
| | 48 … 60 V DC | 2 A | 10 A |
| | 110 … 127 V AC/110 … 125 V DC | 2 A | 4 A |
| | 208 … 240 V AC/220 … 250 V DC | 2 A | 2 A |
| **Fuse protection of the control circuit at $U_s$ for spring charging motor + closing coil [2]** | | | |
| Fuse gG | 24 … 30 V DC | 8 A | 10 A |
| | 48 … 60 V DC | 8 A | 10 A |
| | 110 … 127 V AC/110 … 125 V DC | 4 A | 4 A |
| | 208 … 240 V AC/220 … 250 V DC | 4 A | 2 A |
| Automatic circuit breaker with C characteristic | 24 … 30 V DC | 8 A | 10 A |
| | 48 … 60 V DC | 8 A | 10 A |
| | 110 … 127 V AC/110 … 125 V DC | 4 A | 4 A |
| | 208 … 240 V AC/220 … 250 V DC | 4 A | 2 A |

[1] Technical specifications also apply to 3WL see page 1/106
[2] With the same control circuit for the closing coil and spring charging motor

| Spring charging motor [1] | | 3WA11 – 3WA13 |
|---|---|---|
| **Rated operational voltage** | | |
| Rated control supply voltage $U_s$ | | 24 … 30 V DC |
| | | 48 … 60 V DC |
| | | 110 … 127 V AC/110 … 125 V DC |
| | | 208 … 240 V AC/220 … 250 V DC |
| **Primary operating range** | | |
| Primary operating range (acc. to IEC 60947-2) | | 85 … 110% $U_s$ |
| Extended operating range for battery operation | | 85 … 126% $U_s$ |
| **Operation** | | |
| Closing power | AC/DC | 135 VA/135 W |
| Continuous power | AC/DC | 135 VA/135 W |
| Charging time at 100% $U_s$ | | ≤ 10 s |

[1] Technical specifications also apply to 3WL see page 1/106



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## Spring charging motor [1)]

| | | 3WA11 – 3WA13 |
|---|---|---|
| **Fuse protection of the control circuit at $U_s$ for spring charging motor** | | |
| Fuse gG | 24 … 30 V DC | 6 A |
| | 48 … 60 V DC | 6 A |
| | 110 … 127 V AC/110 … 125 V DC | 2 A |
| | 208 … 240 V AC/220 … 250 V DC | 2 A |
| Automatic circuit breaker with C characteristic | 24 … 30 V DC | 6 A |
| | 48 … 60 V DC | 6 A |
| | 110 … 127 V AC/110 … 125 V DC | 2 A |
| | 208 … 240 V AC/220 … 250 V DC | 2 A |

[1)] Technical specifications also apply to 3WL see page 1/106

## Undervoltage releases UVR and UVR-t [1)]

| | | 3WA11 – 3WA13 |
|---|---|---|
| **Rated operational voltage** | | |
| Rated control supply voltage $U_s$: UVR | | 24 … 30 V DC |
| | | 48 … 60 V DC |
| | | 110 … 127 V AC/110 … 125 V DC |
| | | 208 … 240 V AC/220 … 250 V DC |
| | | 380 … 415 V AC |
| Rated control supply voltage $U_s$: UVR-t [2)] | | 48 V DC |
| | | 60 V DC |
| | | 110 … 127 V AC/110 … 125 V DC |
| | | 208 … 240 V AC/220 … 250 V DC |
| | | 380 … 415 V AC |
| Operating limits | Operate voltage | < 7% $U_s$ |
| | Pick-up voltage | 85 … 126% $U_s$ |
| Integrated freewheeling diode | | Yes |
| Closing power | AC/DC | 60 VA/50 W |
| Continuous power | AC/DC | 5 VA/5 W |
| **Break time** | | |
| $U_s$ = 0 with UVR instantaneous | | ≤ 80 ms |
| $U_s$ = 0 with UVR short-time delayed | | ≤ 200 ms |
| $U_s$ = 0 with UVR-t delayed | | 0.2 … 3.2 s |
| With UVR-t by disconnection at terminals X5.13 and X5.14 (EMERGENCY-STOP circuit) (quick shutdown) [2)] | | ≤ 100 ms (maximum allowable cable length between the terminals)/cable length ≦ 50 m |
| **Fuse protection of the control circuit** | | |
| Fuse gG | 24 … 30 V DC (UVR) | 2 A |
| | 48 … 60 V DC (UVR) | 2 A |
| | 48 V DC (UVR-t) | 2 A |
| | 60 V DC (UVR-t) | 2 A |
| | 110 … 127 V AC/110 … 125 V DC | 2 A |
| | 208 … 240 V AC/220 … 250 V DC | 2 A |
| | 380 … 415 V AC | 2 A |
| Automatic circuit breaker with C characteristic | 24 … 30 V DC (UVR) | 4 A |
| | 48 … 60 V DC (UVR) | 4 A |
| | 48 V DC (UVR-t) | 4 A |
| | 60 V DC (UVR-t) | 4 A |
| | 110 … 127 V AC/110 … 125 V DC | 4 A |
| | 208 … 240 V AC/220 … 250 V DC | 6 A |
| | 380 … 415 V AC | 6 A |
| Automatic circuit breaker with D characteristic | 24 … 30 V DC (UVR) | 2 A |
| | 48 … 60 V DC (UVR) | 2 A |
| | 48 V DC (UVR-t) | 2 A |
| | 60 V DC (UVR-t) | 2 A |
| | 110 … 127 V AC/110 … 125 V DC | 2 A |
| | 208 … 240 V AC/220 … 250 V DC | 4 A |
| | 380 … 415 V AC | 4 A |

[1)] Technical specifications also apply to 3WL see page 1/106
[2)] The maximum allowable cable length to the actuator for quick shutdown is currently ≦ 50 m (maximum allowable cable length between the terminals ≦ 100 m).

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# Accessory options

## Further technical specifications

| Shunt trip (ST/ST-COM/ST2) [1] | | 3WA11 – 3WA13 | |
|---|---|---|---|
| **Rated operational voltage** | | | |
| Rated control supply voltage $U_s$ | | 24 ... 30 V DC | |
| | | 48 ... 60 V DC | |
| | | 110 ... 127 V AC/110 ... 125 V DC | |
| | | 208 ... 240 V AC/220 ... 250 V DC | |
| **Primary operating range** | | | |
| Primary operating range (acc. to IEC 60947-2) | | 75 ... 110% $U_s$ | |
| Extended operating range for battery operation | | 75 ... 126% $U_s$ | |
| Integrated freewheeling diode | | Yes | No |
| **Operation** | | | |
| Version | | 100% OP | 5% OP |
| Closing power AC/DC | 24 ... 30 V DC, 48 ... 60 V DC | 60 VA/60 W | 300 VA/300 W |
| | 110 ... 127 V AC/110 ... 125 V DC | | |
| | 208 ... 240 V AC/220 ... 250 V DC | | |
| Continuous power AC/DC | | 8 VA/8 W | – |
| Minimum command time at 100% $U_s$ | | 60 ms | 60 ms |
| Maximum command time at 100% $U_s$ | | – | 2000 ms |
| Make time of the circuit breaker at 100% $U_s$ | | 80 ms | 50 ms |
| **Fuse protection of the control circuit** | | | |
| Fuse gG | 24 ... 30 V DC | 2 A | 10 A |
| | 48 ... 60 V DC | 2 A | 10 A |
| | 110 ... 127 V AC/110 ... 125 V DC | 2 A | 4 A |
| | 208 ... 240 V AC/220 ... 250 V DC | 2 A | 2 A |
| Automatic circuit breaker with C characteristic | 24 ... 30 V DC | 2 A | 10 A |
| | 48 ... 60 V DC | 2 A | 10 A |
| | 110 ... 127 V AC/110 ... 125 V DC | 2 A | 4 A |
| | 208 ... 240 V AC/220 ... 250 V DC | 2 A | 2 A |

[1] Technical specifications also apply to 3WL see page 1/106

| Remote trip alarm reset coil for mechanical tripped indicator (F7) [1] | | 3WA11 – 3WA13 |
|---|---|---|
| **Rated operational voltage** | | |
| Rated control supply voltage $U_s$ | | 24 ... 30 V DC |
| | | 48 ... 60 V DC |
| | | 110 ... 125 V DC/110 ... 127 V AC |
| | | 220 ... 250 V DC/208 ... 240 V AC |
| **Primary operating range** | | |
| Primary operating range (acc. to IEC 60947-2) | | 85 ... 110% $U_s$ |
| **Operation** | | |
| Power consumption | AC/DC | 60 VA/60 W |
| Minimum command time at 1 × $U_s$ | | 60 ms |
| **Fuse protection of the control circuit** | | |
| Fuse gG | 24 ... 30 V DC | 2 A |
| | 48 ... 60 V DC | |
| | 110 ... 127 V AC /110 ... 125 V DC | 1 A |
| | 208 ... 240 V AC /220 ... 250 V DC | |
| Automatic circuit breaker with C characteristic | 24 ... 30 V DC | 2 A |
| | 48 ... 60 V DC | |
| | 110 ... 127 V AC/110 ... 125 V DC | 1 A |
| | 208 ... 240 V AC/220 ... 250 V DC | |

[1] Technical specifications also apply to 3WL see page 1/106

| Contact position-driven auxiliary switches (S1 bis S8) [1] | 3WA11 – 3WA13 |
|---|---|
| | |
| Type | NO or NC |
| Contact reliability | From 1 mA at 5 V DC |
| Rated insulation voltage $U_i$ | 660 V DC/660 V AC 50/60 Hz |
| Rated impulse withstand voltage $U_{imp}$ | 6 kV |

[1] Technical specifications also apply to 3WL see page 1/106



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## Contact position-driven auxiliary switches (S1 bis S8) [1)]

| | | 3WA11 – 3WA13 | |
|---|---|---|---|
| **Breaking capacity** | | | |
| Rated operational current $I_e$ | DC12 | 24 V | 10 A |
| | | 48 V | 8 A |
| | | 110 V | 3.5 A |
| | | 220/240 V | 1 A |
| | DC13 | 24 V | 6 A |
| | | 48 V | 4 A |
| | | 110 V | 1.2 A |
| | | 220/240 V | 0.4 A |
| | | 440 V | 0.2 A |
| | AC12 | ≤ 660 V | 10 A |
| | AC15 | ≤ 230 V | 6 A |
| | | 400 V | 4 A |
| | | 500 V | 3 A |
| | | 690 V | 2 A |

[1)] Technical specifications also apply to 3WL see page 1/106

## Ready-to-close signaling switches (S20) (acc. to DIN VDE 0630)

| | | 3WA11 – 3WA13 | |
|---|---|---|---|
| Type | | NO contact | |
| Contact reliability | | From 1 mA at 5 V DC [1)] | |
| Rated insulation voltage $U_i$ | | 250 V DC/250 V AC | |
| **Breaking capacity** | | | |
| Rated operational current $I_e$ | DC12 | 24 V | 5 A |
| | | 60 V | 0.4 A |
| | | 110/127 V | 0.4 A |
| | | 220/240 V | 0.2 A |
| | DC13 | 24 V | 2.5 A |
| | | 60 V | 0.22 A |
| | | 110/127 V | 0.22 A |
| | | 220/240 V | 0.1 A |
| | AC12 | ≤ 240 V | 6 A |
| | A300 AC | ≤ 250 V | 6 A |
| | R300 DC | 110 ... 125 V | 0.22 A |
| | | 220 ... 240 V | 0.11 A |
| | AC15 | 220 V | 5 A |
| | | 240 V | 4 A |

## Trip alarm switches (S24, S25)

| | | 3WA11 – 3WA12 | |
|---|---|---|---|
| 1st trip alarm switch S24 | | Changeover contact | |
| 2nd trip alarm switch S25 | | NO contact | |
| Contact reliability | | From 1 mA at 5 V DC [1)] | |
| Rated insulation voltage $U_i$ | | 250 V DC/250 V AC 50/60 Hz | |
| **Breaking capacity** | | | |
| Rated operational current $I_e$ | DC12 | 24 V | 5 A |
| | | 60 V | 0.4 A |
| | | 110/127 V | 0.4 A |
| | | 220/240 V | 0.2 A |
| | DC13 | 24 V | 2.5 A |
| | | 60 V | 0.2 A |
| | | 110/127 V | 0.2 A |
| | | 220/240 V | 0.1 A |
| | AC12 | ≤ 240 V | 6 A |
| | A300 AC | ≤ 250 V | 6 A |
| | R300 DC | 110 ... 125 V | 0.22 A |
| | | 220 ... 240 V | 0.11 A |
| | AC15 | 220 V | 5 A |
| | | 240 V | 4 A |

[1)] To ensure contact reliability at 1 mA, the contacts are gold-plated. If 1 mA is exceeded, the gold-plating is eroded. As a consequence, contact reliability at 1 mA can no longer be ensured.

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# Accessory options

## Further technical specifications



| **Position signaling switches on guide frame** [1] | | | **3WA11 – 3WA13** | |
|---|---|---|---|---|
| | | | | |
| Type | | | Changeover contact (not COM) | |
| Contact reliability from [1] | | | 1 mA at 5 V DC | |
| Rated insulation voltage $U_i$ | | | 250 V, 50/60 Hz | |
| Rated impulse withstand voltage $U_{imp}$ | | | 4 kV | |
| **Connection type** | | | | |
| PSS321 | | | Spring-loaded terminal or push-in (depending on version) | |
| PSS600 | | | Push-in | |
| PSS111 COM | | | • COM contacts: Push-in<br>• Other contacts: Spring-loaded terminal or push-in | |
| PSS400 COM | | | Push-in | |
| **Conductor cross-section that can be connected by customer** | | | | |
| Spring-type terminals | | | 1 × 0,2 mm² (AWG 28) ... 1 × 2,5 mm² (AWG 14) | |
| Push-in solid | | | 1 × 0,5 mm² (AWG 20) ... 1 × 2,5 mm² (AWG 14) | |
| Push-in finely stranded with end sleeve | | | 1 × 0,5 mm² (AWG 20) ... 1 × 1,5 mm² (AWG 16) | |
| **Breaking capacity** | | | | |
| Rated operational current $I_e$ | Utilization category according to IEC 60947-5 | DC12 | 24 V | 5 A |
| | | | 60 V | 0.4 A |
| | | | 127 V | 0.4 A |
| | | | 220/240 V | 0.2 A |
| | | DC13 | 24 V | 2.5 A |
| | | | 60 V | 0.22 A |
| | | | 127 V | 0.22 A |
| | | | 250 V | 0.2 A |
| | | AC12 | ≤ 240 V AC | 6 A |
| | | AC15 | 250 V | 4 A |
| | | | 220 V | 5 A |

The COM (X89) contacts may only be connected to the communications module.

[1] To ensure contact reliability at 1 mA, the contacts are gold-plated. If 1 mA is exceeded, the gold-plating is eroded. As a consequence, contact reliability at 1 mA can no longer be ensured.

| **ETU600** | | **3WA11 – 3WA13** |
|---|---|---|
| **Power supply** | | |
| Method of power supply | | Power supply unit DC |
| DC power supply unit | | IEC 61558 SELV/PELV |
| Rated control supply voltage $U_s$ | DC | 24 V |
| Primary operating range | | $U_s$ ±20% |
| Power consumption | | 2.9 W |
| Max. current consumption | | 0.12 A |
| Max. starting current | | 0.35 A |
| Overvoltage category | | CAT I |
| Integrated short-circuit protection | | Yes |
| Protected against polarity reversal | | Yes |



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# Summary of power consumption data



| Composants | Voltage | Power consumption |
|---|---|---|
| ETU600 | 24 V DC | 2.9 W |
| Closing coil CC/CC-COM 100% OP | 24 ... 30 V DC<br>48 ... 60 V DC<br>110 ... 127 V AC/110 ... 125 V DC<br>208 ... 240 V AC/220 ... 250 V DC | 60 W<br>60 W<br>60 VA/60 W<br>60 VA/60 W |
| Closing coil CC/CC-COM 5% OP | 24 ... 30 V DC<br>48 ... 60 V DC<br>110 ... 127 V AC/110 ... 125 V DC<br>208 ... 240 V AC/220 ... 250 V DC | 300 W<br>300 W<br>300 VA/300 W<br>300 VA/300 W |
| Shunt trip ST/ST-COM 100% OP | 24 ... 30 V DC<br>48 ... 60 V DC<br>110 ... 127 V AC/110 ... 125 V DC<br>208 ... 240 V AC/220 ... 250 V DC | 60 W<br>60 W<br>60 VA/60 W<br>60 VA/60 W |
| Shunt trip ST/ST-COM 5% OP | 24 ... 30 V DC<br>48 ... 60 V DC<br>110 ... 127 V AC/110 ... 125 V DC<br>208 ... 240 V AC/220 ... 250 V DC | 300 W<br>300 W<br>300 VA/300 W<br>300 VA/300 W |
| Spring charging motors | 24 ... 30 V DC<br>48 ... 60 V DC<br>110 ... 127 V AC/110 ... 125 V DC<br>208 ... 240 V AC/220 ... 250 V DC | 135 W<br>135 W<br>135 VA/135 W<br>135 VA/135 W |
| Remote trip alarm reset coils | 24 ... 30 V DC<br>48 ... 60 V DC<br>110 ... 127 V AC/110 ... 125 V DC<br>208 ... 240 V AC/220 ... 250 V DC | 60 W<br>60 W<br>60 VA/60 W<br>60 VA/60 W |
| Undervoltage releases (UVR/UVR-t) | 24 V DC<br>30 V DC<br>48 V DC<br>60 V DC<br>110 ... 127 V AC/110 ... 125 V DC<br>208 ... 240 V AC/220 ... 250 V DC<br>380 ... 415 V AC | 50 W<br>50 W<br>50 W<br>50 W<br>60 VA/50 W<br>60 VA/50 W<br>60 VA |
| IOM230 | 24 V DC | 1.25 W |
| IOM350 | 24 V DC | 1.25 W |
| COM190/COM150 | 24 V DC | 1.7 W |

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# Guide frames for AC

**The structure shown below is intended as an overview of each position and its meaning.**
**For a complete and valid configuration of your guide frame, please use our online configurator at**
**www.siemens.com/lowvoltage/3wa-configurator**

1

| | | 5 | 6 | 7 | | 8 | 9 | 10 | 11 | 12 | | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **3WA8** | | | | | – | | A | A | | | – | | | | |

## Guide frames

| | | | SZ 1 | SZ 2 | SZ 3 | | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Size** | 1 | | | | | | 1 | | | | | | | | | | | |
| | 2 | | | | | | 2 | | | | | | | | | | | |
| | 3 | | | | | | 3 | | | | | | | | | | | |
| **Max. rated current $I_{n\,max}$** (Generate the selection of positions 6, 7 and 8 according to the list below) | 630 ... 1000 A | | ■ | – | – | | | 1 | 0 | | | | | | | | | |
| | 1250 ... 1600 A | | ■ | – | – | | | 1 | 6 | | | | | | | | | |
| | 2000 A | | ■ | ■ | – | | | 2 | 0 | | | | | | | | | |
| | 2500 A | | ■ | ■ | – | | | 2 | 5 | | | | | | | | | |
| | 2000 ... 3200 A | | – | ■ | – | | | 3 | 2 | | | | | | | | | |
| | 4000 A | | – | ■ | ■ | | | 4 | 0 | | | | | | | | | |
| | 4000 ... 5000 A | | – | – | ■ | | | 5 | 0 | | | | | | | | | |
| | 6300 A | | – | – | ■ | | | 6 | 3 | | | | | | | | | |
| **Short-circuit breaking capacity $I_{cu}$** (Generate the selection of positions 6, 7 and 8 according to the list below) | At 500/690 V | N | ■ | – | – | 55/42 kA | | | | 2 | | | | | | | | |
| | | S | ■ | ■ | – | 66/50 kA | | | | 3 | | | | | | | | |
| | | M | ■ | ■ | – | 85/66 kA | | | | 4 | | | | | | | | |
| | | H | ■ | ■ | ■ | 100/85 kA | | | | 5 | | | | | | | | |
| | | C | – | ■ | – | 130/100 kA | | | | 6 | | | | | | | | |
| | | | – | – | ■ | 3-pole: 150/150 kA<br>4-pole: 130/130 kA | | | | 8 | | | | | | | | |
| | At 690/1000/1150 V | E | ■ | – | – | 80/50 kA/– | | | | 8 | | | | | | | | |
| | | | – | ■ | – | 85/85/50 kA | | | | 8 | | | | | | | | |
| | | | – | – | ■ | 3-pole: 150/125/70 kA<br>4-pole: 130/125/70 kA | | | | 8 | | | | | | | | |
| **Number of poles** | 3-pole | | | | | | | | | | | | 3 | | | | | |
| | 4-pole, Neutral left | | | | | | | | | | | | 4 | | | | | |

## The following combinations of positions 6, 7 and 8 of the article number are technically feasible

| Size | Breaking capacity at $I_{n\,max}$ | 630 A | 800 A | 1000 A | 1250 A | 1600 A | 2000 A | 2500 A | 3200 A | 4000 A | 5000 A | 6300 A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Representation 6, 7, 8 | | | | | | | | | | |
| 1 | N | 10-2 | 10-2 | 10-2 | 16-2 | 16-2 | 20-3 | 25-3 | – | – | – | – |
| | S | 10-3 | 10-3 | 10-3 | 16-3 | 16-3 | 20-3 | 25-3 | – | – | – | – |
| | M | 20-4 | 20-4 | 20-4 | 20-4 | 20-4 | 20-4 | 25-4 | – | – | – | – |
| | H | 20-5 | 20-5 | 20-5 | 20-5 | 20-5 | 20-5 | 25-5 | – | – | – | – |
| | E | 20-8 | 20-8 | 20-8 | 20-8 | 20-8 | 20-8 | 25-8 | – | – | – | – |
| 2 | S | – | – | – | – | – | 20-5 | 25-5 | 32-5 | 40-5 | – | – |
| | M | – | – | – | – | – | 20-5 | 25-5 | 32-5 | 40-5 | – | – |
| | H | – | – | – | – | – | 20-5 | 25-5 | 32-5 | 40-5 | – | – |
| | E | – | – | – | – | – | 20-8 | 25-8 | 32-8 | 40-8 | – | – |
| | C | – | – | – | – | – | 32-6 | 32-6 | 32-6 | – | – | – |
| 3 | H | – | – | – | – | – | – | – | – | 40-5 | 50-5 | 63-5 |
| | E | – | – | – | – | – | – | – | – | 50-8 | 50-8 | 63-8 |
| | C | – | – | – | – | – | – | – | – | 50-8 | 50-8 | 63-8 |

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**3WA8** 5 6 7 8 – 9 10 11 12 – 13 14 15 16 (9 = A, 10 = A)

## Connection

| | | | Withdrawable | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Vertical | Horizontal | Front double hole | Flange | Vertical on top/horizontal at the bottom | Horizontal on top/vertical at the bottom | Flange on top/horizontal at the bottom | Horizontal on top/flange at the bottom |
| **Size 1** | | | | | | | | | | |
| **Short-circuit Breaking capacity** | N, S, M, E | 630 A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 800 A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 1000 A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 1250 A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 1600 A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 2000 A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 2500 A | 1 | – | – | – | – | – | – | – |
| | H | 630 A | 1 | 2 | – | 4 | 5 | 6 | 7 | 8 |
| | | 800 A | 1 | 2 | – | 4 | 5 | 6 | 7 | 8 |
| | | 1000 A | 1 | 2 | – | 4 | 5 | 6 | 7 | 8 |
| | | 1250 A | 1 | 2 | – | 4 | 5 | 6 | 7 | 8 |
| | | 1600 A | 1 | 2 | – | 4 | 5 | 6 | 7 | 8 |
| | | 2000 A | 1 | 2 | – | 4 | 5 | 6 | 7 | 8 |
| | | 2500 A | 1 | – | – | – | – | – | – | – |
| **Size 2** | | | | | | | | | | |
| **Short-circuit Breaking capacity** | S, M, H, E | 2000 A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 2500 A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 3200 A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 3600 A | – | – | – | 4 | – | – | – | – |
| | | 4000 A | 1 [1)] | 2 [2)] | – | – | 5 | 6 | – | – |
| | C | 2000 A | 1 | 2 | – | 4 | 5 | 6 | 7 | 8 |
| | | 2500 A | 1 | 2 | – | 4 | 5 | 6 | 7 | 7 |
| | | 3200 A | 1 | 2 | – | 4 | 5 | 6 | 7 | 7 |
| **Size 3** | | | | | | | | | | |
| **Short-circuit Breaking capacity** | H | 4000 A | 1 | 2 | 3 | 4 | 5 | 6 | – | – |
| | | 5000 A | 1 | 2 | – | – | 5 | 6 | – | – |
| | | 6300 A | 1 | – | – | – | – | – | – | – |
| | E, C [3)] | 4000 A | 1 | 2 | – | 4 | 5 | 6 | – | – |
| | | 5000 A | 1 | 2 | – | – | 5 | 6 | – | – |
| | | 6300 A | 1 | – | – | – | – | – | – | – |

[1)] The 4000 A vertical connections for the 3WA1 have different dimensions from the 3WL1. Dimensionally compatible connections can be ordered with the additional Z option D01.
[2)] Also available for 4-pole circuit breakers with Z option D04: rear main connections (top and bottom) with same pole spacing of phases (only for N pole, left).
[3)] 130 kA for 4-pole circuit breakers

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# Guide frames for AC

**The structure shown below is intended as an overview of each position and its meaning.
For a complete and valid configuration of your guide frame, please use our online configurator at
www.siemens.com/lowvoltage/3wa-configurator**



| | 5 | 6 | 7 | 8 | | 9 | 10 | 11 | 12 | | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **3WA8** | | | | | – | A | A | | | – | 1 | | | 1 |

| | | | | |
|---|---|---|---|---|
| **Push-in connection** [1] | SZ 1, SZ 2, SZ 3 | X7, X6, X5 | Non-automatic circuit breakers without ready4COM feature | A |
| | | X8, X7, X6, X5 | Circuit breakers/non-automatic circuit breakers with ready4COM feature | B |
| | SZ 2, SZ 3 | X9, X8, X7, X6, X5 | Including external trip controller ETC600 for circuit breakers with ETU600 LSIG Hi-Z | K |

| | | |
|---|---|---|
| **Position signaling switch** | Without position signaling switch | A |
| | Position signaling switch PSS (3 × connected position, 2 × test position, 1 × disconnected position) | C |
| | Position signaling switch PSS-COM (1 × connected position, 1 × test position, 1 × disconnected position) plus connection to a communications module | G |

[1] Conversion to screw connection is possible with Z option N03.

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# Guide frames for DC



**The structure shown below is intended as an overview of each position and its meaning.**
**For a complete and valid configuration of your guide frame, please use our online configurator at**
**www.siemens.com/lowvoltage/3wa-configurator**

| | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **3WA8** | | | | – | A | U | | | – 1 | | | 1 |

## Guide frames

| | | | | | |
|---|---|---|---|---|---|
| **Size (SZ)** | 2 | | | | 2 |
| **Max. rated current $I_{n\,max}$** | 2000 A | | | | 2 0 |
| | 4000 A | | | | 4 0 |
| **Short-circuit breaking capacity** | D | ≤ 600 V DC | 25 kA at 600 V DC | | 1 |
| | E | ≤ 1000 V DC | 20 kA at 1000 V DC | | 8 |
| | | ≤ 1500 V DC | 20 kA at 1500 V DC [1] | | 8 |
| **Number of poles** | 3-pole | | | | 3 |
| | 4-pole | | | | 4 |
| **Connection** | Withdrawable | | Vertical | | 1 |
| | | | Horizontal | | 2 |
| | | | Front double hole | | 3 |
| | | | Flange | | 4 |
| | | | Vertical on top/horizontal at the bottom | | 5 |
| | | | Horizontal on top/vertical at the bottom | | 6 |
| | | | Flange on top/horizontal at the bottom | | 7 |
| | | | Horizontal on top/flange at the bottom | | 8 |
| **Secondary disconnect terminal** | Push-in connection | X7, X6, X5 | | Non-automatic circuit breakers | A |
| | | X8, X7, X6, X5 | | Non-automatic circuit breakers with ready4COM | B |
| **Position signaling switch** | Without position signaling switch | | | | A |
| | Position signaling switch PSS (3 × connected position, 2 × test position, 1 × disconnected position) | | | | C |
| | Position signaling switch PSS-COM (1 × connected position, 1 × test position, 1 × disconnected position) plus connection to a communications module | | | | G |

[1] 1500 V DC applications only possible with 4-pole circuit breakers and breaking capacity E.

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# Accessories and spare parts

## Accessories for electronic trip unit

### Electronic trip unit



- **Note:** The electronic trip unit is supplied without an option plug.
  The option plug must be ordered separately. The range of functions of the ETU600 corresponds to the "Current metering" application package.

| Basic protective functions | Article No. |
|---|---|
| ETU300 LSI/LSIG | 3WA9111-0EE32 |
| ETU600 LSI/LSIG | 3WA9111-0EE62 |
| ETU600 LSIG Hi-Z | 3WA9111-0EE63 |

### Spare part battery for ETU600



| Article No. |
|---|
| 3WA9111-0EE81 |

### Option plug



| Basic configuration | Rated current $I_n$ | SZ 1 | SZ 2 | SZ 3 | Article No. | |
|---|---|---|---|---|---|---|
| Protective function LSI: LT, ST, INST | | | | | 3WA9111-0EB | .. |
| Protective function LSIG: LT, ST, INST, GF (ground-fault protection GFx with extended setting range) | | | | | 3WA9111-0EX | .. |
| | 250 A | ■ | ■ | – | | 02 |
| | 315 A | ■ | ■ | – | | 03 |
| | 400 A | ■ | ■ | – | | 04 |
| | 500 A | ■ | ■ | – | | 05 |
| | 630 A | ■ | ■ | – | | 06 |
| | 800 A | ■ | ■ | ■ | | 08 |
| | 1000 A | ■ | ■ | ■ | | 10 |
| | 1250 A | ■ | ■ | ■ | | 12 |
| | 1600 A | ■ | ■ | ■ | | 16 |
| | 2000 A | ■ | ■ | ■ | | 20 |
| | 2500 A | ■ | ■ | ■ | | 25 |
| | 3200 A | – | ■ | ■ | | 32 |
| | 4000 A | – | ■ | ■ | | 40 |
| | 5000 A | – | – | ■ | | 50 |
| | 6300 A | – | – | ■ | | 63 |

### Function packages for ETU600



| Protective and alarm functions | Article No. |
|---|---|
| Ground fault alarm (GF alarm) | 3WA9111-0ES01 |
| Directional short-time-delayed short-circuit protection (dST) and reverse power protection (RP) [1] | 3WA9111-0ES05 |
| **Enhanced protective functions (EPF) [1]** | **Article No.** |
| Full package with unbalance, voltage, active power, frequency, THD and phase sequence detection | 3WA9111-0ES11 |
| Phase unbalance current and phase unbalance voltage | 3WA9111-0ES12 |
| Undervoltage and overvoltage | 3WA9111-0ES13 |
| Active power import and active power export | 3WA9111-0ES14 |
| Underfrequency and overfrequency | 3WA9111-0ES15 |
| Total harmonic distortion for current and voltage | 3WA9111-0ES16 |
| Phase sequence detection | 3WA9111-0ES17 |
| **Functional expansions** | **Article No.** |
| Second protection parameter set | 3WA9111-0ES21 |
| Waveform memory | 3WA9111-0ES24 |
| **Extended metering function** | **Article No.** |
| Upgrade to metering function PMF-II Basic Power Monitoring (metering values, see catalog page 1/25) | 3WA9111-0ES52 |
| Upgrade to metering function PMF-III Advanced Power Monitoring (metering values, see catalog page 1/25) | 3WA9111-0ES53 |

### Licenses to activate test function in SENTRON Powerconfig software

| Version | Article No. |
|---|---|
| Standard test license for testing the protective functions of SENTRON circuit breakers. The license is time-limited to 365 days. | 7KN2720-0CE00-1YC1 |
| Advanced test license for testing the protective functions and the enhanced protective functions (EPF) of the SENTRON circuit breakers. The license is time-limited to 365 days. new | 7KN2720-0CE00-2YC1 |

[1] Requires an internal voltage tap and a voltage tap module



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## Accessories for electronic trip unit

### Upgrading to ready4COM feature through BSS200 breaker status sensor for ETU600



| Version | Article No. |
|---|---|
| • Gathers information about the statuses of the circuit breaker via signaling switches and transmits it to the **Cubicle**BUS[2]<br>• Controls the communication-capable CC-COM closing coil and the ST-COM shunt trip in a circuit breaker with the ready4COM feature<br>• The BSS200 breaker status sensor is fitted in every circuit breaker with ETU600 of the ready4COM application package and with the PMF-I to PMF-III metering function | 3WA9111-0EC40 |

### External current sensors for the N conductor



| Version | Size | Article No. |
|---|---|---|
| For mounting on busbar | 1 | 3WA9111-0AA21 |
| | 2 | 3WA9111-0AA22 |
| | 3 | 3WA9111-0AA23 |
| For busbar connection DIN connection | 1 | 3WA9111-0AA31 |
| | 2 | 3WA9111-0AA32 |
| | 3 | 3WA9111-0AA33 |

### Sealable and lockable covers

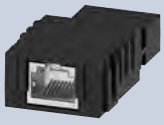




- The scope of supply includes both the top cover with safety lock and the sealable bottom cover of the rotary coding switches.

| Accessory for | Article No. |
|---|---|
| ETU300 | 3WA9111-0EM21 |
| ETU600 | 3WA9111-0EM22 |

### Adapter for connecting the ETU300 to the TD400



| Version | Article No. |
|---|---|
| Via the adapter, the ETU300 can be connected to the TD400 to supply it with an external voltage. There is no parameterization or documentation option via SENTRON Powerconfig | 3VW9011-0AT46 |

### Automatic reset of the reclosing lockout



| Version | Article No. |
|---|---|
| Spare part for option K01 or for retrofitting | 3WA9111-0EM31 |

### Remote trip alarm reset coils [1)]





- For mechanical tripped indicator
- Including automatic reset of the reclosing lockout 3WA9111-0EM31

| Voltage | Article No. |
|---|---|
| 24 ... 30 V DC | 3WA9111-0EM42 |
| 48 ... 60 V DC | 3WA9111-0EM44 |
| 110 ... 127 V AC/110 ... 125 V DC | 3WA9111-0EM45 |
| 208 ... 240 V AC/220 ... 250 V DC | 3WA9111-0EM46 |

### Second tripping solenoid (F6) with reclosing lockout



| Version | Article No. |
|---|---|
| For external control via the external trip controller ETC600, including the necessary parts for the secondary disconnect terminal | 3WA9111-0EM61 |

### External trip controller ETC600



| Version | Article No. |
|---|---|
| Including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, adapter for mounting on DIN rail | 3WA9111-0EM62 |

[1)] Article numbers also apply to 3WL see page 1/111

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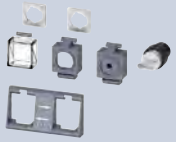


# Accessories and spare parts



## Locking provisions and interlocks

### Interlocking sets for mechanical Open/Close



- Consisting of two transparent covers each for sealing or for attaching padlocks (padlocks not included in scope of supply)
- Cover with 6.35 mm hole (for tool actuation)
- Lock mount for safety lock for key operation

| Version | Article No. |
|---|---|
| Without safety lock | 3WA9111-0BA21 |
| Made by CES | 3WA9111-0BA22 |
| Made by IKON | 3WA9111-0BA23 |

### Locking provision against unauthorized closing from the operator panel



- The disconnector unit fulfills the requirements for main circuit breakers acc. to EN 60204-1
- Spare part for options S01 to S09

| Type | Scope of supply | Article No. |
|---|---|---|
| Made by CES | Locks, cylinders and keys included (S01) | 3WA9111-0BA35 |
| Made by IKON | Locks, cylinders and keys included (S03) | 3WA9111-0BA36 |
| Assembly kit FORTRESS or CASTELL [1] | Without locks, cylinders or keys (S05) | 3WA9111-0BA31 |
| Made by KIRK-Key [1] | Without locks, cylinders or keys (S06) | 3WA9111-0BA33 |
| Assembly kit for padlocks | Without padlock (S07) | 3WA9111-0BA37 |
| Made by RONIS | Locks, cylinders and keys included (S08) | 3WA9111-0BA32 |
| Made by PROFALUX | Locks, cylinders and keys included (S09) | 3WA9111-0BA34 |

### Locking provision against unauthorized closing of the withdrawable circuit breaker



- The disconnector unit fulfills the requirements for main circuit breakers acc. to EN 60204-1
- Consisting of lock in the guide frame, active in connected position, function is retained when circuit breaker is replaced
- Spare part for option R60, R61, R68

| Type | Scope of supply | Article No. |
|---|---|---|
| Made by CES | Locks, cylinders and keys included | 3WA9111-0BA51 |
| Made by IKON | Locks, cylinders and keys included | 3WA9111-0BA53 |
| Made by KIRK-Key [1] | Without locks, cylinders or keys | 3WA9111-0BA57 |
| Made by RONIS | Locks, cylinders and keys included | 3WA9111-0BA58 |
| Made by PROFALUX | Locks, cylinders and keys included | 3WA9111-0BA50 |

### Locking provisions for charging handle with padlock



| Version | Scope of supply | Article No. |
|---|---|---|
| Spare part for S33 | Without padlock | 3WA9111-0BA71 |

### Locking provision to prevent movement of the withdrawable circuit breaker



- Safety lock for mounting onto the circuit breaker
- Spare part for option S71, S75, S76

| Type | Scope of supply | Article No. |
|---|---|---|
| Made by CES | Locks, cylinders and keys included | 3WA9111-0BA73 |
| Made by IKON | Locks, cylinders and keys included | 3WA9111-0BA75 |
| Made by PROFALUX | Locks, cylinders and keys included | 3WA9111-0BA76 |
| Made by RONIS | Locks, cylinders and keys included | 3WA9111-0BA77 |
| Made by KIRK-Key [1] | Without locks, cylinders or keys | 3WA9111-0BA80 |

[1] Locks, cylinders and keys must be ordered from the manufacturer.
Suitable cylinder lock KIRK Key C 900-301.
Suitable lock FORTRESS CLIS X005.
Suitable lock CASTELL FS2.



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## Locking provisions and interlocks

### Interlocking systems



- 2 of the same keys for 3 circuit breakers
- Locking provision in OFF position
- Lock in the operator panel
- A maximum of 2 circuit breakers can be switched on

| Type | Article No. |
|---|---|
| Made by CES | 3WA9111-0BA43 |

### Locking mechanisms to prevent movement of the withdrawable circuit breakers in the disconnected position



- Consisting of Bowden cable and the breaker mechanism in the control cabinet door
- Spare part for option R81, R85, R86
- **Note:** Not possible in combination with "Locking mechanism to prevent opening of the control cabinet door" (order code "R30") or "Locking mechanism to prevent movement with the control cabinet door open" (order code "R50")

| Type | Article No. |
|---|---|
| Made by CES | 3WA9111-0BA81 |
| Made by IKON | 3WA9111-0BA82 |
| Made by PROFALUX | 3WA9111-0BA83 |
| Made by RONIS | 3WA9111-0BA84 |

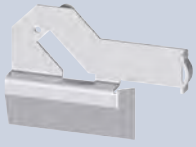
### Locking mechanisms to prevent opening of the control cabinet door when the circuit breaker is closed



- Defeatable
- **Note:** Not possible in combination with "Locking mechanisms to prevent movement of the withdrawable circuit breakers in the disconnected position" (order codes "R81", "R85" or "R86").

| Version | | Article No. |
|---|---|---|
| Spare part for option S30 | Fixed-mounted circuit breaker | 3WA9111-0BB12 |
| Spare part for option R30 | Guide frames | 3WA9111-0BB13 |

### Locking mechanisms to prevent movement when the control cabinet door is open



- Mounted on guide frame
- **Note:** Not possible in combination with "Locking mechanisms to prevent movement of the withdrawable circuit breakers in the disconnected position" (order codes "R81", "R85" or "R86").

| Version | Article No. |
|---|---|
| Spare part for option R50 | 3WA9111-0BB15 |

### Mechanical interlocks



- With Bowden cable 2000 mm (one required for each circuit breaker)

| Type | Circuit breaker and guide frame when ordered separately | Spare part for | Article No. |
|---|---|---|---|
| Fixed-mounted circuit breaker | – | Option S55 | 3WA9111-0BB21 |
| Module for withdrawable circuit breakers with guide frame | – | Option R55 [1] | 3WA9111-0BB22 |
| Module for guide frame | ✓ | Option R56 | 3WA9111-0BB23 |
| Module for withdrawable circuit breaker | ✓ | Option R57 | 3WA9111-0BB24 |
| Adapter for size 3 withdrawable circuit breaker | ✓ | – | 3WA9111-0BB25 |

### Coupling on the circuit breaker for mutual interlocking with Bowden cable



- Can be used in all circuit breakers

| | Article No. |
|---|---|
| | 3WA9111-0BB31 |

### Bowden cable for mutual mechanical interlocking



| Length | Article No. |
|---|---|
| 2000 mm | 3WA9111-0BB41 |
| 3000 mm | 3WA9111-0BB42 |
| 4500 mm | 3WA9111-0BB43 |

[1] Not available in combination with R40

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# Accessories and spare parts



## Indicators and control elements

### Ready-to-close signaling switches (S20)



| Version | Article No. |
|---|---|
| Spare part for signaling switch installed as standard | 3WA9111-0AH01 |

### 1st trip alarm switch (S24)



| Version | Article No. |
|---|---|
| Spare part for signaling switch installed as standard | 3WA9111-0AH02 |

### 2nd trip alarm switch (S25)



- Can only be used with a circuit breaker with an electronic trip unit without ready4COM
- The 1st trip alarm switch (1 changeover contact) is installed in every circuit breaker with a trip unit as standard

| Version | Contacts | Article No. |
|---|---|---|
| Spare part for option K06 | 1 NO | 3WA9111-0AH03 |

### Mechanical operating cycles counter (5-digit)



| Version | For circuit breakers/non-automatic circuit breakers | Article No. |
|---|---|---|
| Spare part for option C01 | With manual operating mechanism | 3WA9111-0AH04 |
| | With spring charging motor | 3WA9111-0AH05 |

### Spring charge signaling switch (S21)



- Standard when a spring charging motor is installed to charge the stored energy mechanism
- When a spring charging motor is retrofitted, the spring charge signaling switch can also be retrofitted

| Contacts | Article No. |
|---|---|
| 1 NO | 3WA9111-0AH06 |

### Position signaling switch for withdrawable circuit breakers



- All conventional contacts are implemented as changeover contacts.

| Contacts | Version | Article No. |
|---|---|---|
| PSS321 | 3 × connected position, 2 × test position, 1 × disconnected position | 3WA9111-0AH11 |
| PSS111-COM | 1 × connected position, 1 × test position, 1 × disconnected position and option for connection to a communications module COM (Signal: "disconnected position" and "absent") | 3WA9111-0AH12 |
| PSS400-COM new | 4 × connected position and option for connection to a communications module COM (Signal: "disconnected position" and "absent") | 3WA9111-0AH13 |
| PSS600 new | 6 × connected position | 3WA9111-0AH14 |
| PSS111 new | 1 × connected position, 1 × test position, 1 × disconnected position | 3WA9111-0AH15 |

### Local electric close (S10) for operator panel





- Scope of supply: Button + wiring
- Not possible with motor disconnect switch
- **Note:** Possible only for circuit breakers with closing coil

| Version | Article No. |
|---|---|
| With sealing cap, spare part for option C11 | 3WA9111-0AH21 |
| With CES assembly kit, spare part for option C12 | 3WA9111-0AH22 |
| With IKON assembly kit | 3WA9111-0AH23 |

### Motor disconnect switch (S12)



- Mounting onto operator panel
- Only in combination with the spring charging motor for charging the stored energy mechanism
- Not available in combination with local electric close

| Version | Article No. |
|---|---|
| Spare part for option C24 | 3WA9111-0AH24 |

### Emergency OPEN button



- Mushroom pushbutton instead of local mechanical open

| Version | Article No. |
|---|---|
| Spare part for option C25 | 3WA9111-0AH25 |

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## Secondary disconnect terminals for circuit breakers and guide frames

- For size 1, up to 4 secondary disconnect terminal blocks are possible; for sizes 2 and 3, up to 5 secondary disconnect terminal blocks are possible
- Circuit breakers and non-automatic circuit breakers with secondary disconnect terminal blocks are supplied from the factory:
  - Non-automatic circuit breakers with 3 blocks
  - Non-automatic circuit breakers with ready4COM feature with 4 blocks
  - Circuit breakers with ETU600 LSI or LSIG with 4 blocks
  - Circuit breakers with ETU600 LSIG-HiZ with 5 blocks

**Secondary disconnect terminal**

| | Version | Type | Article No. |
|---|---|---|---|
|  | Base part (1) | | 3WA9111-0AB01 |
|  | 1000 V extension [1] | | 3WA9111-0AB02 |
|  | Manual connector (2) | Screw connection | 3WA9111-0AB03 |
| | | Push-in connection | 3WA9111-0AB04 |
| | | Ring lug connection | 3WA9111-0AB05 |
|  | Coding kits (3) | For secondary disconnect terminal blocks X5 to X9 for fixed-mounted circuit breakers | 3WA9111-0AB07 |
|  | Sliding contact module (4) | For guide frames | 3WA9111-0AB08 |
|  | Blanking block | | 3WA9111-0AB12 |

For a complete secondary disconnect terminal block, you must order:
Fixed-mounted version: (1) + (2) + (3)
Withdrawable version: (1) + (4) + (2)

[1] Secondary disconnect terminal for circuit breakers with breaking capacity C and E must be ordered separately

## Auxiliary releases

**Closing coil (CC)/shunt trip (ST) [1]**



- Suitable for uninterrupted duty

| Version | Voltage | Article No. |
|---|---|---|
| 100% OP<br>Switching time ≤ 80 ms | 24 ... 30 V DC | 3WA9111-0AD02 |
| | 48 ... 60 V DC | 3WA9111-0AD04 |
| | 110 ... 125 V DC/110 ... 127 V AC | 3WA9111-0AD05 |
| | 220 ... 250 V DC/208 ... 240 V AC | 3WA9111-0AD06 |

**Closing coil (CC-COM)/shunt trip (ST-COM)**



- Suitable for uninterrupted duty

| Version | Voltage | Article No. |
|---|---|---|
| For circuit breakers and non-automatic circuit breakers with the ready4com feature<br>100% OP<br>Switching time ≤ 80 ms<br>Switching time via COM ≤ 120 ms | 24 ... 30 V DC | 3WA9111-0AD32 |
| | 48 ... 60 V DC | 3WA9111-0AD34 |
| | 110 ... 125 V DC/110 ... 127 V AC | 3WA9111-0AD35 |
| | 220 ... 250 V DC/208 ... 240 V AC | 3WA9111-0AD36 |

[1] Article numbers also apply to 3WL see page 1/116

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# Accessories and spare parts



## Auxiliary release

### Closing coils (CC) [1]



- For momentary duty, with cut-off switch S15 (NC)

| Version | Voltage | Article No. |
|---|---|---|
| 5% OP<br>Switching time 50 ms | 24 ... 30 V DC | 3WA9111-0AD12 |
| | 48 ... 60 V DC | 3WA9111-0AD14 |
| | 110 ... 125 V DC/110 ... 127 V AC | 3WA9111-0AD15 |
| | 220 ... 250 V DC/208 ... 240 V AC | 3WA9111-0AD16 |

### Shunt trips (ST) [1]



- For momentary duty, with cut-off switch S14 (NO)

| Version | Voltage | Article No. |
|---|---|---|
| 5% OP<br>Switching time 50 ms | 24 ... 30 V DC | 3WA9111-0AD22 |
| | 48 ... 60 V DC | 3WA9111-0AD24 |
| | 110 ... 125 V DC/110 ... 127 V AC | 3WA9111-0AD25 |
| | 220 ... 250 V DC/208 ... 240 V AC | 3WA9111-0AD26 |

### Capacitor trip device



- For shunt trips
- Storage time 5 min
- Also suitable for 3VL, 3VA, 3WL and 3WN circuit breakers
- **Note:** Rated control supply voltage must match the rated control supply voltage of the shunt trips.

| Rated control supply voltage/rated operational voltage | | Article No. |
|---|---|---|
| 50/60 Hz AC | DC | |
| 208 ... 240 V | 220 ... 250 V | 3WA9111-0AD81 |

### Undervoltage release (UVR) [1]



| Version | Voltage | Article No. |
|---|---|---|
| Instantaneous ≤ 0.08 s (UVR) and short-time delayed ≤ 0.2 s | 24 ... 30 V DC | 3WA9111-0AE02 |
| | 48 ... 60 V DC | 3WA9111-0AE04 |
| | 110 ... 125 V DC/110 ... 127 V AC | 3WA9111-0AE05 |
| | 220 ... 250 V DC/208 ... 240 V AC | 3WA9111-0AE06 |
| | 380 ... 415 V AC | 3WA9111-0AE07 |
| Delayed (UVR-t) [2]<br>adjustable delay 0.2 ... 3.2 s | 48 V DC | 3WA9111-0AE13 |
| | 60 V DC | 3WA9111-0AE14 |
| | 110 ... 125 V DC/110 ... 127 V AC | 3WA9111-0AE15 |
| | 220 ... 250 V DC/208 ... 240 V AC | 3WA9111-0AE16 |
| | 380 ... 415 V AC | 3WA9111-0AE17 |

[1] Article numbers also apply to 3WL see page 1/116
[2] The maximum allowable cable length to the actuator for quick shutdown is currently ≦ 50 m (maximum allowable cable length between the terminals ≦ 100 m).

## Operating mechanism [1]

### Spring charging motor to charge the stored energy mechanism



| Voltage | Article No. |
|---|---|
| 24 ... 30 V DC | 3WA9111-0AF02 |
| 48 ... 60 V DC | 3WA9111-0AF04 |
| 110 ... 125 V DC/110 ... 127 V AC | 3WA9111-0AF05 |
| 220 ... 250 V DC/208 ... 240 V AC | 3WA9111-0AF06 |

[1] Article numbers also apply to 3WL see page 1/116

## Auxiliary contacts

### Auxiliary switches (AUX)



| Contacts | Article No. |
|---|---|
| 2 NO + 2 NC | 3WA9111-0AG01 |
| 2 NO | 3WA9111-0AG02 |
| 1 NO + 1 NC | 3WA9111-0AG03 |



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## Door sealing frame, protective cover

### Door sealing frame



| Version | Article No. |
|---|---|
| Spare part for option T40 | 3WA9111-0AP01 |

### Protective covers IP55



- Cannot be used in conjunction with door sealing frames
- Hood removable and can be opened on both sides

| Article No. |
|---|
| 3WA9111-0AP03 |

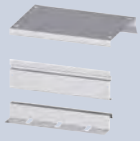
## Arc chute, arc chute cover

### Arc chute



| Voltage | Size | Breaking capacity | | Article No. |
|---|---|---|---|---|
| 690 V AC | 1 | N, S | | 3WA9111-0AS01 |
| | | M | | 3WA9111-0AS02 |
| | 2 | S, M, H | | 3WA9111-0AS10 |
| | | C | | 3WA9111-0AS11 |
| | 3 | H | | 3WA9111-0AS17 |
| | | C | | 3WA9111-0AS18 |
| 1000 V AC | 1 | E | For fixed-mounted breakers | 3WA9111-0AS04 |
| | | | For withdrawable circuit breakers | 3WA9111-0AS05 |
| | 2 | E | | 3WA9111-0AS12 |
| | 3 | E | | 3WA9111-0AS18 |
| 600 V DC | 2 | D | | 3WA9111-0AS13 |
| 1000 V DC | 2 | E | | 3WA9111-0AS14 |

### Arc chute cover



- Parts kit for guide frame
- Spare part for option R10
- Not available for:
  - Breaking capacity C, D and E
  - 4000 A size 2

| Number of poles | Size | Article No. |
|---|---|---|
| 3-pole | 1 | 3WA9111-0AS31 |
| | 2 | 3WA9111-0AS32 |
| | 3 | 3WA9111-0AS33 |
| 4-pole | 1 | 3WA9111-0AS41 |
| | 2 | 3WA9111-0AS42 |
| | 3 | 3WA9111-0AS43 |

## Coding for withdrawable version

### Coding for withdrawable version



- Variant coding by the customer with 36 coding options

| Size | Article No. |
|---|---|
| 1, 2 | 3WA9111-0AR11 |
| 3 | 3WA9111-0AR12 |

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# Accessories and spare parts



## Grounding connection

**Grounding connection between the guide frame and the circuit breaker**



- Up to 30 kA or 60 kA ground-fault current
- 2 modules must be used for up to 60 kA ground-fault current

| Contact module | Size | Number of poles | Article No. |
|---|---|---|---|
| For guide frames | 1, 2 [1] | | 3WA9111-0BG01 |
| | 3 | | 3WA9111-0BG02 |
| For withdrawable circuit breakers | 1 | 3-pole | 3WA9111-0BG11 |
| | | 4-pole | 3WA9111-0BG21 |
| | 2 | 3-pole [1] | 3WA9111-0BG12 |
| | | 4-pole [1] | 3WA9111-0BG22 |
| | 3 | 3-pole [2] | 3WA9111-0BG13 |
| | | 4-pole [2] | 3WA9111-0BG23 |

[1] Cannot be used for size 2 with breaking capacity C and size 2, 4000 A.
[2] Not for breaking capacity E

## Support bracket

**Support bracket**



- For mounting fixed-mounted circuit breakers on vertical plane
- Only for sizes 1 and 2 (1 set = 2 units)

| Article No. |
|---|
| 3WA9111-0BB50 |

## Modules of the **Cubicle**BUS²

**COM190 PROFINET IO/Modbus TCP communications module [1]**



| Version | Article No. |
|---|---|
| Including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, adapter for mounting on DIN rail, connecting cables and **Cubicle**BUS² terminating resistor | 3WA9111-0EC13 |

**COM150 communications module Modbus RTU**



| Version | Article No. |
|---|---|
| Including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, adapter for mounting on DIN rail, connecting cables and **Cubicle**BUS² terminating resistor | 3WA9111-0EC15 |

**IOM230 digital input/output module (2 inputs and 3 outputs)**



| Version | Article No. |
|---|---|
| Including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, adapter for mounting on DIN rail, connecting cables and terminating resistor for **Cubicle**BUS²<br>• Type of output contact: NO<br>• Maximum uninterrupted current of an output at 110 ... 230 V AC: 0.2 A | 3WA9111-0EC11 |

**IOM350 digital input/output module (3 inputs and 5 outputs)**



| Version | Article No. |
|---|---|
| For mounting on DIN rail, including connecting cables and terminating resistor for **Cubicle**BUS²<br>• Type of output contact: CO<br>• Maximum uninterrupted current of an output at 110 ... 230 V AC: 10 A | 3WA9111-0EC12 |

**Terminating resistor for CubicleBUS²**



| Version | Article No. |
|---|---|
| For **Cubicle**BUS² on the last module | 3WA9111-0EC50 |

**Adapters**



| Version | Article No. |
|---|---|
| For mounting the modules of the **Cubicle**BUS² on the secondary disconnect terminal system of the circuit breaker | 3WA9111-0EC60 |
| For mounting the modules of the **Cubicle**BUS² on DIN rail | 3WA9111-0EC61 |

**ZSI200 Zone-selective interlocking module**



| Version | Article No. |
|---|---|
| Including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, adapter for mounting on DIN rail, connecting cables and terminating resistor for **Cubicle**BUS² | 3WA9111-0EC10 |

[1] For connecting the Ethernet cable, connectors angled 90° to the right are recommended, e.g. PROFINET connector 6GK1901-1BB20-2AA0.



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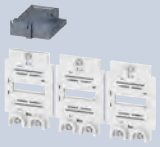


## Internal voltage tap



**Set of components for conversion of an existing internal voltage tap on the main conducting paths**

| Conversion | Circuit breaker | Size | Article No. |
|---|---|---|---|
| From bottom to top | 3-pole | 1 | 3WA9111-0EK11 |
| | | 2 | 3WA9111-0EK12 |
| | | 3 | 3WA9111-0EK13 |
| | 4-pole | 1 | 3WA9111-0EK21 |
| | | 2 | 3WA9111-0EK22 |
| | | 3 | 3WA9111-0EK23 |
| From top to bottom | 3-pole | 1 | 3WA9111-0EK31 |
| | | 2 | 3WA9111-0EK32 |
| | | 3 | 3WA9111-0EK33 |
| | 4-pole | 1 | 3WA9111-0EK41 |
| | | 2 | 3WA9111-0EK42 |
| | | 3 | 3WA9111-0EK43 |



**Retrofit of the internal voltage tap on the lower main conducting paths**

| For breaking capacity | Set for circuit breaker | Size | Article No. |
|---|---|---|---|
| N, S, M, H, C<br>with VTM680 voltage tap module,<br>with power supply of ETU600 | 3-pole | 1 | 3WA9111-0EK51 |
| | | 2 | 3WA9111-0EK52 |
| | | 3 | 3WA9111-0EK53 |
| | 4-pole | 1 | 3WA9111-0EK61 |
| | | 2 | 3WA9111-0EK62 |
| | | 3 | 3WA9111-0EK63 |
| E<br>with VTM640 voltage tap module | 3-pole | 1 | 3WA9111-0EK55 |
| | | 2 | 3WA9111-0EK56 |
| | | 3 | 3WA9111-0EK57 |
| | 4-pole | 1 | 3WA9111-0EK65 |
| | | 2 | 3WA9111-0EK66 |
| | | 3 | 3WA9111-0EK67 |



**Retrofit kit to connect an external voltage transformer**

| Size | Article No. |
|---|---|
| 2, 3<br>including VTM640 voltage tap module and the necessary connection components | 3WA9111-0EK81 |



**Voltage tap module**

| Version | For breaking capacity | Article No. |
|---|---|---|
| VTM680, with power supply of ETU600 [1] | N, S, M, H, C | 3WA9111-0EM12 |
| VTM640 | E | 3WA9111-0EM11 |

[1] When replacing the VTM680 voltage tap module in an 3WA air circuit breaker with an ID number lower than ID No. OE/230101500000, the internal cable harness of the voltage tap must also be replaced. In this case, the accessory "Retrofit of the internal voltage tap on the lower main conducting paths" is required.

## Main conductor connections, fixed-mounted versions



**Front-accessible main connections according to DIN 43673, double hole for main connection at top**

| Size | Breaking capacity \| Rated current $I_n$ | Article No. |
|---|---|---|
| 1 | N, S \| ≤ 1000 A AC | 3WA9111-0AL11 |
| | N, S \| 1250 ... 2000 A AC; M, E \| ≤ 2000 A AC | 3WA9111-0AL12 |
| 2 | S, M, H, E \| 2000 A AC; D, E \| ≤ 2000 A DC | 3WA9111-0AL21 |
| | S, M, H, E \| 2500 A AC | 3WA9111-0AL22 |
| | S, M, H, E \| 3200 A AC; D, E \| 4000 A DC | 3WA9111-0AL23 |
| 3 | 4000 A AC (up to a max. short-circuit current of 100 kA) | 3WA9111-0AL31 |



**Front-accessible main connections according to DIN 43673, double hole for main connection at bottom**

| Size | Breaking capacity \| Rated current $I_n$ | Article No. |
|---|---|---|
| 1 | N, S \| ≤ 1000 A AC | 3WA9111-0AL13 |
| | N, S \| 1250 ... 2000 A AC; M, E \| ≤ 2000 A AC | 3WA9111-0AL14 |
| 2 | S, M, H, E \| 2000 A AC; D, E \| ≤ 2000 A DC | 3WA9111-0AL24 |
| | S, M, H, E \| 2500 A AC | 3WA9111-0AL25 |
| | S, M, H, E \| 3200 A AC; D, E \| 4000 A DC | 3WA9111-0AL26 |
| 3 | 4000 A AC (up to a max. short-circuit current of 100 kA) | 3WA9111-0AL32 |

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# Accessories and spare parts



## Main conductor connections, fixed-mounted versions



**Rear vertical main connections**

| Size | Breaking capacity \| Rated current $I_n$ | Article No. |
|---|---|---|
| 1 | N, S, M, E \| ≤ 2000 A AC [1] | 3WA9111-0AM11 |
| | N, S, M, E \| 2500 A AC | 3WA9111-0AM12 |
| 2 | S, M, H, C, E \| ≤ 3200 A AC [2] | 3WA9111-0AM21 |
| 3 | H, C, E \| ≤ 6300 A AC | 3WA9111-0AM33 |

**Rear horizontal connection sets [3] new**

| Size | Breaking capacity \| Rated current $I_n$ \| Number of poles | Article No. |
|---|---|---|
| 2 | S, M, H, E \| 4000 A, 3-pole | 3WA9111-0AX28 |
| | S, M, H, E \| 4000 A, 4-pole | 3WA9111-0AX30 |
| | S, M, H, E \| 4000 A, 4-pole (Spare part for Z option D04) | 3WA9111-0AX32 |

[1] In the case of vertical connection size 1 with breaking capacity N and S, up to 1000 A one 3WA9111-0AM11 vertical connection is required for each connection, from 1250 A to 2000 A or with breaking capacity M or E two 3WA9111-0AM11 vertical connections are required for each connection.
[2] In the case of vertical connection size 2, up to 2500 A one 3WA9111-0AM21 vertical connection is required for each connection for breaking capacity S, M, H, E, D, for 3200 A and always for breaking capacity C, two 3WA9111-0AM21 vertical connections are required for each connection
[3] A set contains top and bottom terminals and is approved only as a spare part for circuit breakers with the following article numbers: 3WL1240-3xxx2-xxxx, 3WL1240-4xxx2-xxxx, 3WL1240-5xxx2-xxxx 3WL1240-8xxx2-xxxx

## Main conductor connections for withdrawable units



**Front-accessible main connections according to DIN 43673, double hole at top or at bottom [1]**

| Size | Breaking capacity \| Rated current $I_n$ | Article No. |
|---|---|---|
| 1 | N, S \| ≤ 1000 A AC | 3WA9111-0AN11 |
| | N, S \| 1250 ... 2000 A AC; M, E \| ≤ 2000 A AC | 3WA9111-0AN12 |
| 2 | N, S \| 1250 ... 2000 A AC; M, E \| ≤ 2000 A AC | 3WA9111-0AN21 |
| | S, M, H, E \| 2500 A AC | 3WA9111-0AN22 |
| | S, M, H, E \| 3200 A AC; D, E \| 4000 A DC | 3WA9111-0AN23 |
| 3 | H \| 4000 A AC | 3WA9111-0AN31 |



**Supports for front-accessible main connections according to DIN 43673**

| Number of poles | Size | Article No. |
|---|---|---|
| 3-pole, set for 3 bars, top or bottom | 1 | 3WA9111-0AN81 |
| | 2 | 3WA9111-0AN82 |
| | 3 | 3WA9111-0AN83 |
| 4-pole, set for 4 bars, top or bottom | 1 | 3WA9111-0AN84 |
| | 2 | 3WA9111-0AN85 |
| | 3 | 3WA9111-0AN86 |



**Rear vertical main connections**

| Size | Breaking capacity \| Rated current $I_n$ | Article No. |
|---|---|---|
| 1 | N, S \| ≤ 1000 A AC | 3WA9111-0AV11 |
| | N, S \| 1250 ... 2000 A AC | 3WA9111-0AV12 |
| 2 | S, M, H, E \| 2000 A AC; D, E \| ≤ 2000 A DC [2] | 3WA9111-0AV21 |
| | S, M, H, E \| 2500 A AC [2] | 3WA9111-0AV22 |
| | S, M, H, E \| 3200 A AC; D, E \| 4000 A DC [2] | 3WA9111-0AV23 |
| 3 | H, C, E \| ≤ 5000 A AC | 3WA9111-0AV31 |



**Rear horizontal main connections**

| Size | Breaking capacity \| Rated current $I_n$ | Article No. |
|---|---|---|
| 1 | N, S \| ≤ 1000 A AC | 3WA9111-0AX11 |
| | N, S \| 1250 ... 2000 A AC | 3WA9111-0AX12 |
| 2 | S, M, H, E \| 2000 A AC; D, E \| ≤ 2000 A DC [2] | 3WA9111-0AX21 |
| | S, M, H, E \| 2500 A AC [2] | 3WA9111-0AX22 |
| | S, M, H, E \| 3200 A AC; D, E \| 4000 A DC [2] | 3WA9111-0AX23 |
| 3 | H, C, E \| ≤ 5000 A AC | 3WA9111-0AX31 |



**Connecting flange**

| Size | Breaking capacity \| Rated current $I_n$ | Article No. |
|---|---|---|
| 1 | N, S \| ≤ 1000 A AC | 3WA9111-0AW11 |
| | N, S \| 1250 ... 2000 A AC; M, E \| ≤ 2000 A AC | 3WA9111-0AW12 |
| 2 | S, M, H, E \| 2000 A AC; D, E \| ≤ 2000 A DC | 3WA9111-0AW21 |
| | S, M, H, E \| 2500 A AC | 3WA9111-0AW22 |
| | S, M, H, E \| 3200 A AC; D, E \| 4000 A DC | 3WA9111-0AW23 |
| | C \| 2000 ... 3200 A new | 3WA9111-0AW24 |
| 3 | H \| 4000 A AC | 3WA9111-0AW31 |
| | C, E \| AC 4000 A new | 3WA9111-0AW32 |

[1] When using front-accessible main connections (withdrawable circuit breakers) supports are required
[2] Not for circuit breakers with very high breaking capacity C

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## Conversion kit

**Conversion kit for converting fixed-mounted circuit breakers into withdrawable circuit breakers**



- Guide frames and sliding contact modules must be ordered separately
- Conversion from fixed-mounted to withdrawable circuit breakers is not possible for 3WA circuit breakers with breaking capacity C and breaking capacity E

| Number of poles | Size | Article No. |
|---|---|---|
| 3-pole | 1 | 3WA9111-0BC11 |
| | 2 | 3WA9111-0BC12 |
| | 3 | 3WA9111-0BC13 |
| 4-pole | 1 | 3WA9111-0BC14 |
| | 2 | 3WA9111-0BC15 |
| | 3 | 3WA9111-0BC16 |

## Main contact elements

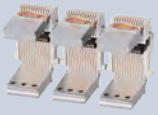
**Main contact elements for AC circuit breakers**



- **Notes:**
  - To be ordered only once for each circuit breaker
  - On the following circuit breakers, the main contact elements can only be replaced in the factory:
    3WA1 size 1 breaking capacity M and E
    3WA1 size 2 breaking capacity C
    3WA1 size 3 breaking capacity C and E

| Number of poles | Size | Breaking capacity | Rated current $I_n$ | Article No. |
|---|---|---|---|---|
| 3 | 1 | N | ≤ 1000 A | 3WA9111-0AQ01 |
| | | | 1250 A | 3WA9111-0AQ02 |
| | | | 1600 A | 3WA9111-0AQ04 |
| | | S | ≤ 1000 A | 3WA9111-0AQ03 |
| | | | 1250 ... 1600 A | 3WA9111-0AQ04 |
| | 2 | S, M, H, E | 2000 A | 3WA9111-0AQ08 |
| | | | 2500 A | 3WA9111-0AQ11 |
| | | | 3200 A | 3WA9111-0AQ13 |
| | | | 4000 A | 3WA9111-0AQ15 |
| | 3 | H | 4000 A | 3WA9111-0AQ20 |
| | | | 5000 ... 6300 A | 3WA9111-0AQ22 |
| 4 | 1 | N | ≤ 1000 A | 3WA9111-0AQ51 |
| | | | 1250 A | 3WA9111-0AQ52 |
| | | | 1600 A | 3WA9111-0AQ54 |
| | | S | ≤ 1000 A | 3WA9111-0AQ53 |
| | | | 1250 ... 1600 A | 3WA9111-0AQ54 |
| | 2 | S | 2000 A | 3WA9111-0AQ58 |
| | | | 2500 A | 3WA9111-0AQ61 |
| | | | 3200 A | 3WA9111-0AQ63 |
| | | | 4000 A | 3WA9111-0AQ65 |
| | 3 | H | 4000 A | 3WA9111-0AQ70 |
| | | | 5000 ... 6300 A | 3WA9111-0AQ72 |

**Main contact elements for DC non-automatic circuit breakers**



- **Note:** To be ordered only once for each circuit breaker

| Number of poles | Size | Breaking capacity | Rated current $I_n$ | Article No. |
|---|---|---|---|---|
| 3 | 2 | D, E | 1000/2000 A | 3WA9111-0AQ17 |
| | | | 4000 A | 3WA9111-0AQ18 |
| 4 | 2 | D, E | 1000/2000 A | 3WA9111-0AQ67 |
| | | | 4000 A | 3WA9111-0AQ68 |

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# Accessories and spare parts



## Interfaces

### Interface to the IEC 61850

- The SICAM A8000 smart data concentrator connects the circuit breakers from the SENTRON portfolio via the Modbus TCP/IP protocol and transmits data via communication protocols (e.g.: IEC 61850, IEC 60870-5-104, IEC 60870-5-101, Modbus and DNP) to higher-level systems.

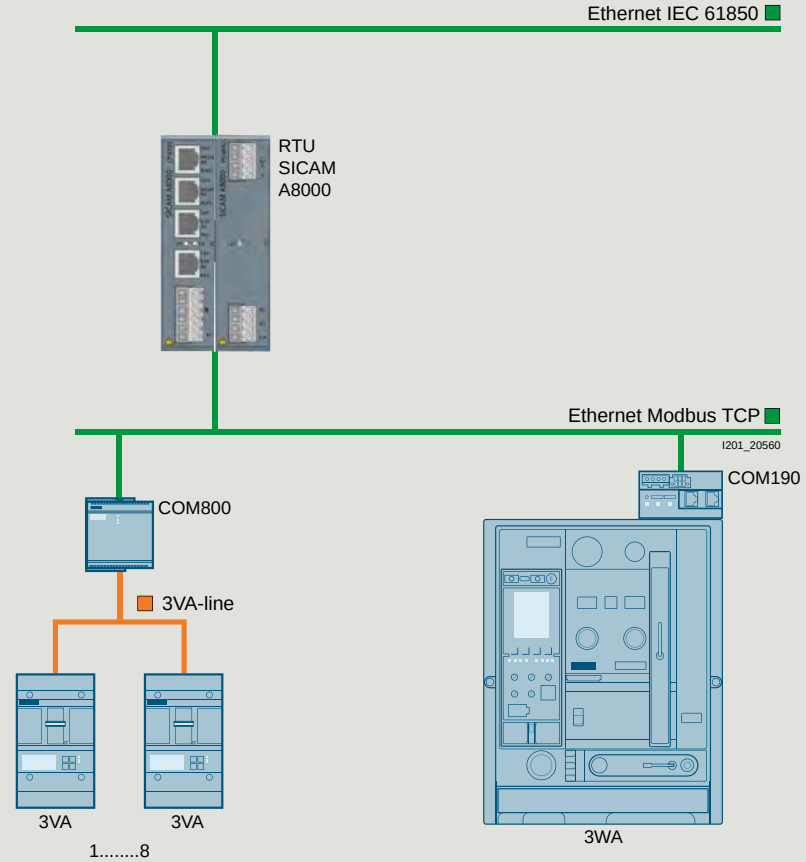




| Type | Operational voltage | Article No. |
|---|---|---|
| SICAM CP-8021 [1] | – | 6MF2802-1AA00 |
| SICAM CP-8031 [2] | – | 6MF2803-1AA00 |
| SICAM CP-8050 [2] | – | 6MF2805-0AA00 |
| SICAM PS-8620 | 24 ... 60 V DC (12 W) | 6MF2862-0AA00 |
| SICAM PS-8622 | 110 ... 220 V DC (12 W) | 6MF2862-2AA00 |

[1] Dimensioned for device quantities of max. 1 × 3WA and 1 × 3VA
[2] Dimensioned for device quantities of max. 1 × 3WA and 8 × 3VA
[3] Dimensioned for device quantities of max. 3 × 3WA and 8 × 3VA or 2 × 3WA and 8 × 3VA and 1 × PAC4200

You will find further information at:
www.siemens.com/sicam-a8000
For the SICAM CP-8021 and SICAM CP-8050, predefined modules were created to reduce commissioning work to a minimum.
The modules can be obtained free of charge via SiePortal www.siemens.com/lowvoltage/product-support (109816057)






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# 3WL1 circuit breakers and non-automatic circuit breakers for AC and DC

## IEC 60947-2



AC





| | | | 3WL10 | | 3WL11 | |
|---|---|---|---|---|---|---|
| **Basic data** | | | | | | |
| Rated operational voltage $U_e$ | | V | ≤ 690 | | ≤ 1000 | |
| Rated current $I_n$ | | A | 630 ... 1250 | | 630 ... 2000 | |
| Size | | | 0 | | 1 | |
| Type of mounting | | | Withdrawable | Fixed-mounted | Withdrawable | Fixed-mounted |
| Number of poles | | | 3/4-pole | 3/4-pole | 3/4-pole | 3/4-pole |
| **Dimensions** | | | | | | |
| Width (3-pole \| 4-pole) | | mm | 278 \| 348 | 210 \| 280 | 320 \| 410 | 320 \| 410 |
| Height (standard \| A05, A15, A16, DC greater than 600 V) | | mm | 363.5 | 296 | 468 \| 518 | 462 |
| Depth | | mm | 271 | 183 | 471 | 357 |
| **Approvals** | | | | | | |
| General product approvals | | | VDE, EAC, CCC, CE, C-Tick | | VDE, EAC, CCC, CE, C-Tick | |
| Marine/shipbuilding | | | RMRS | | ABS, DNV, LR, BV, GL, PRS, RMRS | |
| **Breaking capacity** | | | **B** | **N** | **S** | **N** | **S** | **H** |
| **Rated short-circuit breaking capacity** | | | | | | | | |
| Rated operational voltage $U_e$ up to 415 V AC $I_{cu}$ \| $I_{cs}$ | | kA | 42 \| 42 | 55 \| 50 | 66 \| 50 | 55 \| 55 | 66 \| 66 | 85 \| 85 |
| Rated operational voltage $U_e$ up to 500 V AC $I_{cu}$ \| $I_{cs}$ | | kA | 42 \| 42 | 50 \| 50 | 50 \| 50 | 55 \| 55 | 66 \| 66 | 85 \| 85 |
| Rated operational voltage $U_e$ up to 690 V AC $I_{cu}$ \| $I_{cs}$ | | kA | – \| – | 42 \| 42 | 50 \| 50 | 42 \| 42 | 50 \| 50 | 66 \| 66 [6] |
| Rated operational voltage $U_e$ up to 690 V AC +20% [6], with Z option: A16 $I_{cu}$ \| $I_{cs}$ | | kA | – \| – | – \| – | – \| – | – \| – | – \| – | 50 \| 50 |
| Rated operational voltage $U_e$ up to 1000 V AC, with Z option: A05 $I_{cu}$ \| $I_{cs}$ | | kA | – \| – | – \| – | – \| – | – \| – | – \| – | 50 \| 50 |
| Rated operational voltage $U_e$ up to 1150 V AC, with Z option: A15 $I_{cu}$ \| $I_{cs}$ | | kA | – \| – | – \| – | – \| – | – \| – | – \| – | – \| – |
| **Rated short-time withstand current $I_{cw}$** [5] | | | | | | | | |
| Rated short-time withstand current $I_{cw}$ at $U_e$ up to 500 V AC | 0.5 s | kA | – | – | – | 55 | 66 | 85 |
| | 1 s | kA | 42 | 42 | 50 | 50 | 66 | 85 |
| | 2 s | kA | – | – | – | 35 [1]/45 [2] | 45 | 70 |
| | 3 s | kA | 24 | 24 | 36 | 35 [1]/45 [2] | 35 | 60 |
| Rated short-time withstand current $I_{cw}$ at $U_e$ up to 690 V AC | 0.5 s | kA | – | – | – | 42 | 50 | 66 [7] |
| | 1 s | kA | 42 | 42 | 50 | 42 | 50 | 66 [7] |
| | 2 s | kA | – | – | – | 35 [1]/42 [2] | 45 | 66 [8] |
| | 3 s | kA | 24 | 24 | 36 | 30 [1]/45 [2] | 35 | 60 |
| Rated short-time withstand current $I_{cw}$ at DC | 1 s | kA | – | – | – | – | – | – |
| **Rated conditional short-circuit current $I_{cc}$ of the non-automatic air circuit breakers** | | | | | | | | |
| Up to 500 V AC | | kA | – | 42 | 50 | 55 | 66 | 85 |
| Up to 690 V AC | | kA | – | 42 | 50 | 42 | 50 | 66 |
| Up to 1000 V/1150 V AC, with Z option: A05, A16 | | kA | – | – | – | – | – | 50 |
| Up to 1000 V/1150 V AC, with Z option: A15 | | kA | – | – | – | – | – | – |
| Up to 220 V DC | | kA | – | – | – | – | – | – |
| Up to 300 V DC | | kA | – | – | – | – | – | – |
| Up to 600 V DC | | kA | – | – | – | – | – | – |
| Up to 1000 V DC | | kA | – | – | – | – | – | – |
| **Rated short-circuit making capacity $I_{cm}$** | | | | | | | | |
| $I_{cm}$ at 415 V AC | | kA | 88 | 121 | 145 | 121 | 145 | 187 |
| $I_{cm}$ at 500 V AC | | kA | 88 | 105 | 105 | 121 | 145 | 187 |
| $I_{cm}$ at 690 V AC | | kA | – | 88 | 105 | 88 | 105 | 145 |
| $I_{cm}$ at 1000 V AC | | kA | – | – | – | – | – | 105 |
| $I_{cm}$ at 1150 V AC | | kA | – | – | – | – | – | – |

[1] Size 1 with $I_{n\,max} \leq 1250$ A
[2] Size 1 with $I_{n\,max} \geq 1600$ A
[3] Size 2 with $I_{n\,max} \leq 2500$ A
[4] Size 2 with $I_{n\,max} \geq 3200$ A
[5] At rated operational voltage $U_e > 690$ V, the $I_{cw}$ value of the circuit breaker corresponds to the $I_{cu}$ or $I_{cs}$ value
[6] For breakers with Z options A05 and A16 $I_{cu} = I_{cs} = 85$ kA
[7] For breakers with Z options A05 and A16 $I_{cw} = 85$ kA
[8] For breakers with Z options A05 and A16 $I_{cw} = 70$ kA

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## AC



## 3WL12



## 3WL13

## DC



## 3WL11



## 3WL12

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ≤ 1150 | | | | ≤ 1150 | | | 1000 DC | ≤ 600/1000 DC |
| 800 ... 4000 | | | | 4000 ... 6300 | | | 2000 | 1000 ... 4000 |
| 2 | | | | 3 | | | 1 | 2 |
| Withdrawable | | Fixed-mounted | | Withdrawable | | Fixed-mounted | Fixed-mounted | Withdrawable | Fixed-mounted |
| 3/4-pole | | 3/4-pole | | 3/4-pole | | 3/4-pole | 4-pole | 3/4-pole | 3/4-pole |
| 460 \| 590 | | 460 \| 590 | | 704 \| 914 | | 704 \| 914 | 410 | 460 \| 590 | 460 \| 590 |
| 468 \| 518 | | 462 | | 468 \| 518 | | 462 | 462 | 468 \| 518 | 462 |
| 471 | | 357 | | 471 | | 357 | 357 | 471 | 357 |
| VDE, EAC, CCC, CE, C-Tick | | | | VDE, EAC, CCC, VDE, CE, C-Tick | | | VDE, EAC, CCC, CE, C-Tick | VDE, EAC, CCC, CE, C-Tick |
| ABS, DNV, LR, BV, GL, PRS, RMRS | | | | ABS, DNV, LR, BV, GL, PRS, RMRS | | | ABS, DNV, LR, BV, GL, PRS, RMRS | ABS, DNV, LR, BV, GL, PRS, RMRS |
| **N** | **S** | **H** | **C** [9] | **H** | **C 3p** | **C 4p** | **DC** | **DC** |
| 66 \| 66 | 85 \| 85 | 100 \| 100 | 130 \| 130 | 100 \| 100 | 150 \| 150 | 130 \| 130 | – | – |
| 66 \| 66 | 85 \| 85 | 100 \| 100 | 130 \| 130 | 100 \| 100 | 150 \| 150 | 130 \| 130 | – | – |
| 50 \| 50 | 75 \| 75 | 85 \| 85 | 100 \| 100 | 85 \| 85 | 150 \| 150 | 130 \| 130 | – | – |
| – \| – | – \| – | – \| – | – \| – | – \| – | – \| – | – \| – | – | – |
| – \| – | – \| – | 85 \| 85 | – \| – | 85 \| 85 | 125 \| 125 | 125 \| 125 | – | – |
| – \| – | – \| – | 50 \| 50 | – \| – | 70 \| 70 | – \| – | – \| – | – | – |
| 66 | 85 | 100 | 100 | 100 | 130 | 120 | – | – |
| 66 | 85 | 85 | 100 | 100 | 130 | 120 | – | – |
| 66 | 66 [3]/85 [4] | 66 [3]/85 [4] | 85 | 100 | 130 | 120 | – | – |
| 55 [3]/66 [4] | 55 [3]/75 [4] | 55 [3]/75 [4] | 75 | 100 | 130 | 120 | – | – |
| 50 | 75 | 85 | 100 | 85 | 130 | 120 | – | – |
| 50 | 75 | 85 | 100 | 85 | 130 | 120 | – | – |
| 50 | 66 [3]/75 [4] | 66 [3]/85 [4] | 85 | 85 | 130 | 120 | – | – |
| 50 | 55 [3]/75 [4] | 55 [3]/75 [4] | 75 | 85 | 130 | 120 | – | – |
| – | – | – | – | – | – | – | 20 | 35 [10]/30 [11]/25 [12]/20 [13] |
| 66 | 85 | 100 | 130 | 100 | 130 | 120 | – | – |
| 50 | 75 | 85 | 100 | 85 | 130 | 120 | – | – |
| – | – | 85/85 | – | 85/85 | – | – | – | – |
| – | – | –/50 | – | 70/70 | – | – | – | – |
| – | – | – | – | – | – | – | 20 | 35 |
| – | – | – | – | – | – | – | 20 | 30 |
| – | – | – | – | – | – | – | 20 | 25 |
| – | – | – | – | – | – | – | 20 | 20 |
| 145 | 187 | 220 | 286 | 220 | 330 | 286 | – | – |
| 145 | 187 | 220 | 286 | 220 | 330 | 286 | – | – |
| 105 | 165 | 187 | 220 | 187 | 330 | 286 | – | – |
| – | – | 105 | – | 187 | 267 | 267 | – | – |
| – | – | 105 | – | 147 | – | – | – | – |

[9] Up to 3200 A
[10] At $U_e$ = 220 V DC
[11] At $U_e$ = 300 V DC
[12] At $U_e$ = 600 V DC
[13] At $U_e$ = 1000 V DC

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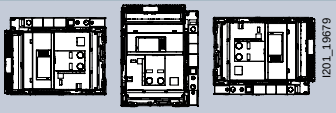
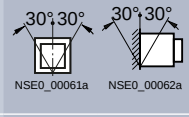
# 3WL1 circuit breakers and non-automatic circuit breakers for AC

## IEC 60947-2







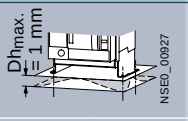
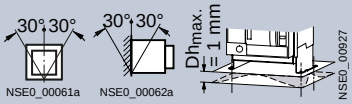
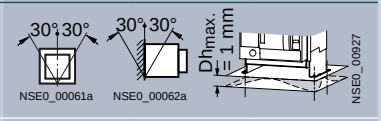
| | | | 3WL10 | | | | 3WL11 | |
|---|---|---|---|---|---|---|---|---|
| **Rated current $I_n$** | | | **630 A** | **800 A** | **1000 A** | **1250 A** | **1000 A** | **1250 A** |
| **General data** | | | | | | | | |
| Isolating function acc. to IEC 60947-2 | | | Yes | | | | Yes | |
| Utilization category | | | B | | | | B | |
| Permissible ambient temperature | During operation (in operation with LCD max. 55 °C) [1] | °C | −25 ... +70 | | | | −40 ... +70 | |
| | Storage | °C | −40 ... +70 | | | | −40 ... +80 | |
| Mounting position | | |  | | | |  | |
| Degree of protection | | | IP20 without cabinet door, IP30 with door sealing frame, IP54 with cover | | | | IP20 without cabinet door, IP41 with door sealing frame, IP55 with cover | |
| **Voltage** | | | | | | | | |
| Rated operational voltage $U_e$ at 50/60 Hz | 1000 V version | V AC | ≤ 690 | | | | 690/1000 | |
| Rated insulation voltage $U_i$ | | V AC | 1000 | | | | 1000 | |
| Rated impulse withstand voltage $U_{imp}$ | Main conducting paths | kV | 12 | | | | 12 | |
| | Auxiliary circuits | kV | 4 | | | | 4 | |
| | Control circuits [9] | kV | 2.5 | | | | 2.5 | |
| Rated rotor operational voltage $U_{er}$ | | V | | | | | 2000 | |
| **Permissible load for withdrawable versions** [2] [4] [10] | | | | | | | | |
| At rear horizontal main connections | Up to 55 °C (Cu bare) | A | 630 | 800 | 1000 | 1250 | 1000 | 1250 |
| | Up to 60 °C (Cu bare) | A | 630 | 800 | 1000 | 1250 | 1000 | 1250 |
| | Up to 70 °C | A | 630 | 800 | 1000 | 1250 | 1000 [8] | 1210 [8] |
| **Power loss at $I_n$** | | | | | | | | |
| With 3-phase symmetrical load, complete device (3/4p) | Fixed-mounted circuit breaker | W | 31 | 50 | 78 | 122 | 100 | 105 |
| | Withdrawable circuit breaker | W | 62 | 100 | 156 | 244 | 195 | 205 |
| **Switching times** | | | | | | | | |
| Make time | | ms | < 20 | < 20 | < 20 | < 20 | 35 | |
| Opening time | | ms | < 20 | < 20 | < 20 | < 20 | 38 | |
| Electrical make time (through closing coil) [5] | | ms | < 50 | < 50 | < 50 | < 50 | 80 | |
| Electrical opening time (through shunt trip) | | ms | < 35 | < 35 | < 35 | < 35 | 73 | |
| Electrical opening time (instantaneous undervoltage release) | | ms | < 50 | < 50 | < 50 | < 50 | ≤ 80 | |
| Opening time due to ETU, instantaneous short-circuit release | | ms | 25 | 25 | 25 | 25 | 50 | |
| **Service life/endurance** | | | | | | | | |
| **Breaking capacity N and S, 3/4-pole** | | | | | | | | |
| Mechanical | Without maintenance | Operating cycles | 20000 [3] | 20000 [3] | 20000 [3] | 20000 [3] | 15000 | 15000 |
| | With maintenance [6] | Operating cycles | – | – | – | – | 25000 | 25000 |
| Electrical | Without maintenance 440 V | Operating cycles | 8000 [3] [7] | 8000 [3] [7] | 8000 [3] [7] | 8000 [3] [7] | – | – |
| | Without maintenance 690 V | Operating cycles | 8000 [3] [7] | 8000 [3] [7] | 8000 [3] [7] | 6500 [3] [7] | 10000 | 10000 |
| | With maintenance [6] | Operating cycles | – | – | – | – | 25000 | 25000 |
| **Breaking capacity H, 3-pole** | | | | | | | | |
| Mechanical | Without maintenance | Operating cycles | – | – | – | – | 10000 | 10000 |
| | With maintenance [6] | Operating cycles | – | – | – | – | 15000 | 15000 |
| Electrical | Without maintenance 690 V | Operating cycles | – | – | – | – | 7500 | 7500 |
| | Without maintenance 1000 V, with Z option: A05 | Operating cycles | – | – | – | – | 1000 | 1000 |
| | Without maintenance 1150 V, with Z option: A15 | Operating cycles | – | – | – | – | – | – |
| | With maintenance [6] | Operating cycles | – | – | – | – | 15000 | 15000 |

[1] The LCD on the 3WL10 is always active.
[2] 4000 A, size 2 in fixed-mounted version, 3-pole
[3] 2000 in conjunction with mechanical interlock
[4] ETU76B with graphics display can be used up to max. 55 °C.
[5] Make time through closing coil for synchronization purposes (short-time excited) 50 ms.
[6] Maintenance means: Replacing main contact elements and arc chutes (see operating instructions). Greasing the breaker mechanism on the 3WL10, no spare part of components.

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| | 3WL11 | | 3WL12 | | | | | | | 3WL13 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| |  | |  | | | | | | |  | | |
| | 1600 A | 2000 A | 800 A | 1000 A | 1250 A | 1600 A | 2000 A | 2500 A | 3200 A | 4000 A | 4000 A | 5000 A | 6300 A |
| | | | | | | | | | | | | | |
| Withdrawable | Yes | | Yes | | | | | | | | Yes | | |
| Insulation group | B | | B | | | | | | | | B | | |
| Ambient temperature, operation | –40 ... +70 | | –40 ... +70 | | | | | | | | –40 ... +70 | | |
| Ambient temperature, storage | –40 ... +80 | | –40 ... +80 | | | | | | | | –40 ... +80 | | |
| |   | |   | | | | | | | |   | | |
| Degree of protection | IP20 without cabinet door, IP41 with door sealing frame, IP55 with cover | | IP20 without cabinet door, IP41 with door sealing frame, IP55 with cover | | | | | | | | IP20 without cabinet door, IP41 with door sealing frame, IP55 with cover | | |
| | | | | | | | | | | | | | |
| Rated voltage $U_e$ | 690/1000 | | 690/1000/1150 | | | | | | | | 690/1000/1150 | | |
| Rated insulation voltage $U_i$ | 1000 | | ≤ 1150 | | | | | | | | ≤ 1150 | | |
| Rated impulse withstand voltage $U_{imp}$ | 12 | | 12 | | | | | | | | 12 | | |
| Rated frequency | 4 | | 4 | | | | | | | | 4 | | |
| Rated operational voltage $U_e$ | 2.5 | | 2.5 | | | | | | | | 2.5 | | |
| Rated current $I_n$ | 2000 | | 2000 | | | | | | | | 2000 | | |
| | | | | | | | | | | | | | |
| Rated current $I_n$ at 40 °C | 1600 | 2000 | 800 | 1000 | 1250 | 1600 | 2000 | 2500 | 3200 | 3950 | 4000 | 5000 | 5920 |
| Rated current $I_n$ at 50 °C | 1600 | 1930 | 800 | 1000 | 1250 | 1600 | 2000 | 2500 | 3020 | 3810 | 4000 | 5000 | 5810 |
| Rated current $I_n$ at 55 °C | 1490 [8] | 1780 [8] | 800 [8] | 1000 [8] | 1250 [8] | 1600 [8] | 2000 [8] | 2280 [8] | 2870 [8] | 3600 [8] | 4000 [8] | 5000 [8] | 5500 [8] |
| | | | | | | | | | | | | | |
| Rated current $I_n$ at 40 °C | 150 | 240 | 40 | 45 | 80 | 85 | 180 | 270 | 410 | 750 | 520 | 630 | 900 |
| Rated current $I_n$ at 50 °C | 350 | 440 | 85 | 95 | 165 | 175 | 320 | 520 | 710 | 925 | 810 | 1050 | 1600 |
| | | | | | | | | | | | | | |
| Rated current $I_n$ at 40 °C | 35 | | 35 | | | | | | | | 35 | | |
| Rated current $I_n$ at 50 °C | 38 | | 34 | | | | | | | | 34 | | |
| Rated current $I_n$ at 55 °C | 80 | | 100 | | | | | | | | 100 | | |
| Rated current $I_n$ at 40 °C | 73 | | 73 | | | | | | | | 73 | | |
| Rated current $I_n$ at 50 °C | ≤ 80 | | ≤ 80 | | | | | | | | ≤ 80 | | |
| Rated current $I_n$ at 55 °C | 50 | | 50 | | | | | | | | 50 | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| Rated ultimate short-circuit breaking capacity $I_{cu}$ at 690 V AC 50/60 Hz | 15000 | 15000 | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 | – | – | – |
| Rated service short-circuit breaking capacity $I_{cs}$ at 690 V AC 50/60 Hz | 25000 | 25000 | 17500 | 17500 | 17500 | 17500 | 17500 | 17500 | 17500 | 17500 | – | – | – |
| Rated ultimate short-circuit breaking capacity $I_{cu}$ at 1000 V AC 50/60 Hz | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Rated service short-circuit breaking capacity $I_{cs}$ at 1000 V AC 50/60 Hz | 10000 | 7500 | 7500 | 7500 | 7500 | 7500 | 7500 | 7500 | 4000 | 2000 [3] | – | – | – |
| Rated ultimate short-circuit breaking capacity $I_{cu}$ at 1150 V AC 50/60 Hz | 25000 | 25000 | 17500 | 17500 | 17500 | 17500 | 17500 | 17500 | 17500 | 17500 | – | – | – |
| | | | | | | | | | | | | | |
| Rated short-time withstand current $I_{cw}$ at 690 V AC 50/60 Hz | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 | 5000 | 5000 | 5000 |
| Rated short-time withstand current $I_{cw}$ at 1000 V AC 50/60 Hz | 15000 | 15000 | 15000 | 15000 | 15000 | 15000 | 15000 | 15000 | 15000 | 15000 | 10000 | 10000 | 10000 |
| Rated short-time withstand current $I_{cw}$ at 1150 V AC 50/60 Hz | 7500 | 7500 | 7500 | 7500 | 7500 | 7500 | 7500 | 7500 | 4000 | 2000 | 2000 | 2000 | 2000 |
| Rated short-time withstand current $I_{cw}$ for 3 s | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| Rated short-time withstand current $I_{cw}$ for 1 s | – | – | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 |
| Rated peak withstand current $I_{pk}$ | 15000 | 15000 | 15000 | 15000 | 15000 | 15000 | 15000 | 15000 | 15000 | 15000 | 10000 | 10000 | 10000 |

[7] Periodic greasing of breaker mechanism on the 3WL10 (see Manual), no spare part of components

[8] Cu painted black

[9] Motorized operating mechanisms $U_{imp}$ = 1.2 kV

[10] For 3WL size 2 4000 A and size 3 6300 A with rear vertical main connections.

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# 3WL1 circuit breakers and non-automatic circuit breakers for AC

## IEC 60947-2 (continued)







| | | | 3WL10 | | | | 3WL11 | |
|---|---|---|---|---|---|---|---|---|
| **Rated current $I_n$** | | | **630 A** | **800 A** | **1000 A** | **1250 A** | **1000 A** | **1250 A** |
| **Service life/endurance** | | | | | | | | |
| **Breaking capacity H, 4-pole** | | | | | | | | |
| Mechanical | Without maintenance | Operating cycles | – | – | – | – | 10000 | 10000 |
| | With maintenance [1] | Operating cycles | – | – | – | – | 15000 | 15000 |
| Electrical | Without maintenance 690 V | Operating cycles | – | – | – | – | 7500 | 7500 |
| | Without maintenance 1000 V | Operating cycles | – | – | – | – | 1000 | 1000 |
| | Without maintenance 1150 V [2] | Operating cycles | – | – | – | – | – | – |
| | With maintenance [1] | Operating cycles | – | – | – | – | 10000 | 10000 |
| **Breaking capacity C** | | | | | | | | |
| Mechanical | Without maintenance | Operating cycles | – | – | – | – | – | – |
| | With maintenance [1] | Operating cycles | – | – | – | – | – | – |
| Electrical | Without maintenance 690 V | Operating cycles | – | – | – | – | – | – |
| | With maintenance 690 V [1] | Operating cycles | – | – | – | – | – | – |
| **Connection** | | | | | | | | |
| **Minimum main conductor cross-sections** | | | | | | | | |
| Copper bars, bare | | Unit × mm × mm | 2 × 40 × 5 | 2 × 50 × 5 | 2 × 50 × 10 [3]<br>2 × 50 × 8 [4] | 2 × 50 × 10 [3]<br>2 × 50 × 8 [3] | 1 × 60 × 10 | 2 × 40 × 10 |
| Copper bars, painted black | | Unit × mm × mm | – | – | – | – | 1 × 60 × 10 | 2 × 40 × 10 |
| **Auxiliary conductor (Cu) max. number of auxiliary conductors × cross-section (solid/stranded)** | | | | | | | | |
| Standard connection = screw | Without end sleeve | | | | – | | 2 × 0.5 ... 2 × 1.5 mm² (AWG 20 ... 16);<br>1 × 2.5 mm² (AWG 14) | |
| | With end sleeve acc. to DIN 46228 Part 2 | | | | – | | 1 × 0.5 ... 1 × 1.5 mm² (AWG 20 ... 16) | |
| | With twin end sleeve | | | | – | | 2 × 0.5 ... 2 × 1.5 mm² (AWG 20 ... 16) | |
| Screwless connection technology | Without end sleeve | | | | 0.5 ... 2.5 mm² (AWG 20 ... 14) | | 2 × 0.5 ... 2 × 2.5 mm² (AWG 20 ... 14) | |
| | With end sleeve acc. to DIN 46228 Part 2 | | | | 0.5 ... 1.5 mm² (AWG 20 ... 16) | | 2 × 0.5 ... 2 × 1.5 mm² (AWG 20 ... 16) | |
| **Position signaling switch** | | | | | | | | |
| Screwless connection technology | | | | | 1 × 0.5 ... 1 × 2.5 mm² (AWG 20 ... 14) | | 1 × 0.5 ... 1 × 2.5 mm² (AWG 20 ... 14) | |
| **Weights** | | | | | | | | |
| 3-pole | Fixed-mounted circuit breaker | kg | | | 14 | | 43 | 43 |
| | Withdrawable circuit breaker (without guide frames) | kg | | | 17.3 | | 45 | 45 |
| | Guide frames | kg | | | 21 | | 25 | 25 |
| 4-pole | Fixed-mounted circuit breaker | kg | | | 16 | | 50 | 50 |
| | Withdrawable circuit breaker (without guide frames) | kg | | | 19.3 | | 54 | 54 |
| | Guide frames | kg | | | 25 | | 30 | 30 |

[1] Maintenance means: Replacing main contact elements and arc chutes (see operating instructions).

[2] Size 2 with order code "A15" and size 3. Data for very high breaking capacity.

[3] Horizontal

[4] Vertical

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| 3WL11 | | | | | 3WL12 | | | | | 3WL13 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | | | | |  | | | | |  | | |
| **1600 A** | **2000 A** | **800 A** | **1000 A** | **1250 A** | **1600 A** | **2000 A** | **2500 A** | **3200 A** | **4000 A** | **4000 A** | **5000 A** | **6300 A** |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| 10000 | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 | 5000 | 5000 | 5000 |
| 15000 | 15000 | 15000 | 15000 | 15000 | 15000 | 15000 | 15000 | 15000 | 15000 | 10000 | 10000 | 10000 |
| 7500 | 7500 | 7500 | 7500 | 7500 | 7500 | 7500 | 7500 | 4000 | 2000 | 2000 | 2000 | 2000 |
| 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| – | – | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 |
| 10000 | 10000 | 15000 | 15000 | 15000 | 15000 | 15000 | 15000 | 15000 | 15000 | 10000 | 10000 | 10000 |
| | | | | | | | | | | | | |
| – | – | 5000 | 5000 | 5000 | 5000 | 5000 | 5000 | 5000 | – | 5000 | 5000 | 5000 |
| – | – | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 | – | 10000 | 10000 | 10000 |
| – | – | 5000 | 5000 | 5000 | 5000 | 5000 | 5000 | 4000 | – | 1000 | 1000 | 1000 |
| – | – | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 | 8000 | – | – | – | – |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| 2 × 50 × 10 | 3 × 50 × 10 | 1 × 50 × 10 | 1 × 60 × 10 | 2 × 40 × 10 | 2 × 50 × 10 | 3 × 50 × 10 | 2 × 100 × 10 | 3 × 100 × 10 | 4 × 120 × 10 | 4 × 100 × 10 | 6 × 100 × 10 | 6 × 120 × 10 |
| 2 × 50 × 10 | 3 × 50 × 10 | 1 × 50 × 10 | 1 × 60 × 10 | 2 × 40 × 10 | 2 × 50 × 10 | 3 × 50 × 10 | 2 × 100 × 10 | 3 × 100 × 10 | 4 × 100 × 10 | 4 × 100 × 10 | 6 × 100 × 10 | 6 × 120 × 10 |
| | | | | | | | | | | | | |
| 2 × 0.5 ... 2 × 1.5 mm² (AWG 20 ... 16); 1 × 2.5 mm² (AWG 14) | | | | | 2 × 0.5 ... 2 × 1.5 mm² (AWG 20 ... 16); 1 × 2.5 mm² (AWG 14) | | | | | 2 × 0.5 ... 2 × 1.5 mm² (AWG 20 ... 16); 1 × 2.5 mm² (AWG 14) | | |
| 1 × 0.5 ... 1 × 1.5 mm² (AWG 20 ... 16) | | | | | 1 × 0.5 ... 1 × 1.5 mm² (AWG 20 ... 16) | | | | | 1 × 0.5 ... 1 × 1.5 mm² (AWG 20 ... 16) | | |
| 2 × 0.5 ... 2 × 1.5 mm² (AWG 20 ... 16) | | | | | 2 × 0.5 ... 2 × 1.5 mm² (AWG 20 ... 16) | | | | | 2 × 0.5 ... 2 × 1.5 mm² (AWG 20 ... 16) | | |
| 2 × 0.5 ... 2 × 2.5 mm² (AWG 20 ... 14) | | | | | 2 × 0.5 ... 2 × 2.5 mm² (AWG 20 ... 14) | | | | | 2 × 0.5 ... 2 × 2.5 mm² (AWG 20 ... 14) | | |
| 2 × 0.5 ... 2 × 1.5 mm² (AWG 20 ... 16) | | | | | 2 × 0.5 ... 2 × 1.5 mm² (AWG 20 ... 16) | | | | | 2 × 0.5 ... 2 × 1.5 mm² (AWG 20 ... 16) | | |
| | | | | | | | | | | | | |
| 1 × 0.5 ... 1 × 2.5 mm² (AWG 20 ... 14) | | | | | 1 × 0.5 ... 1 × 2.5 mm² (AWG 20 ... 14) | | | | | 1 × 0.5 ... 1 × 2.5 mm² (AWG 20 ... 14) | | |
| | | | | | | | | | | | | |
| 43 | 43 | 56 | 56 | 56 | 56 | 56 | 59 | 64 | 85 | 82 | 82 | 90 |
| 45 | 45 | 60 | 60 | 60 | 60 | 60 | 63 | 68 | 121 | 88 | 88 | 96 |
| 25 | 25 | 31 | 31 | 31 | 31 | 31 | 39 | 45 | 52 | 60 | 60 | 70 |
| 50 | 50 | 67 | 67 | 67 | 67 | 67 | 71 | 77 | 103 | 99 | 99 | 108 |
| 54 | 54 | 72 | 72 | 72 | 72 | 72 | 76 | 82 | 146 | 106 | 106 | 108 |
| 30 | 30 | 37 | 37 | 37 | 37 | 37 | 47 | 54 | 62 | 84 | 84 | 119 |

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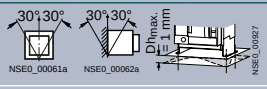


# 3WL1 non-automatic circuit breakers for DC

## IEC 60947-2





| | | | 3WL11 | 3WL12 | | |
|---|---|---|---|---|---|---|
| **Rated current $I_n$** | | | **2000 A** | **1000 A** | **2000 A** | **4000 A** |
| **General data** | | | | | | |
| Size | | | 1 | 2 | | |
| Isolating function acc. to IEC 60947-2 | | | Yes | Yes | | |
| Utilization category | | | B | B | | |
| Permissible ambient temperature | Operation | °C | –40 ... +70 | –40 ... +70 | | |
| | Storage | °C | –40 ... +80 | –40 ... +80 | | |
| Mounting position | | |  |  | | |
| Degree of protection | | | IP20 without cabinet door, IP41 with door sealing frame, IP55 with cover | IP20 without cabinet door, IP41 with door sealing frame, IP55 with cover | | |
| **Voltage** | | | | | | |
| Rated operational voltage $U_e$ at 50/60 Hz | 1000 V version | V DC | 1000 | 600/1000 | | |
| Rated insulation voltage $U_i$ | | V DC | 1000 | 1000 | | |
| Rated impulse withstand voltage $U_{imp}$ | Main conducting paths | kV | 12 | 12 | | |
| | Auxiliary circuits | kV | 4 | 4 | | |
| | Control circuits | kV | 2.5 | 2.5 | | |
| **Permissible load** | | | | | | |
| At rear horizontal main connections | Up to 40 °C (Cu black painted) | A | 2000 | 1000 | 2000 | 4000 |
| | Up to 55 °C (Cu black painted) | A | 1910 | 1000 | 2000 | 3640 |
| | Up to 60 °C (Cu black painted) | A | 1850 | 1000 | 2000 | 3500 |
| | Up to 70 °C (Cu black painted) | A | 1710 | 1000 | 1950 | 3250 |
| **Power loss at $I_n$** | | | | | | |
| With symmetrical load | Withdrawable circuit breaker | W | 150 | 280 | 770 | 1640 |
| **Switching times** | | | | | | |
| Make time | | ms | 35 | 35 | | |
| Opening time | | ms | 38 | 34 | | |
| Electrical make time (through activation solenoid) [1] | | ms | 100 | 100 | | |
| Electrical opening time (through shunt trip) | | ms | 73 | 73 | | |
| Electrical opening time (instantaneous undervoltage release) | | ms | ≤ 80 | ≤ 80 | | |
| **Service life/endurance [3]** | | | | | | |
| Mechanical | Without maintenance | Operating cycles | 10000 | 10000 | 10000 | 10000 |
| | With maintenance [2] | Operating cycles | 15000 | 17500 | 17500 | 17500 |
| Electrical | Without maintenance | Operating cycles | 1000 | 6000 | 6000 | 4000 |
| | Without maintenance 1000 V | Operating cycles | 1000 | 1000 | 1000 | 1000 |
| | With maintenance [2] | Operating cycles | 2000 | 17500 | 17500 | 17500 |

[1] Make time through activation solenoid for synchronization purposes (short-time excited) 50 ms.
[2] Maintenance means: Replace main contact elements and arc chutes (see operating instructions).
[3] Further technical specifications on request.
[4] At $U_e$ = 220 V DC
[5] At $U_e$ = 300 V DC
[6] At $U_e$ = 600 V DC
[7] At $U_e$ = 1000 V DC

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| | | | 3WL11 | 3WL12 | | |
|---|---|---|---|---|---|---|
| **Rated current $I_n$** | | | **2000 A** | **1000 A** | **2000 A** | **4000 A** |
| **Short-circuit breaking capacity $I_{cc}$** | | | | | | |
| Up to 220 V DC | | kA | 20 | 35 | | |
| Up to 300 V DC | | kA | 20 | 30 | | |
| Up to 600 V DC | | kA | 20 | 25 | | |
| Up to 1000 V DC | | kA | 20 | 20 | | |
| **Rated short-time withstand current $I_{cw}$** | | | | | | |
| 0.5 s | | kA | – | – | | |
| 1 s | | kA | 20 | 35 [4]/30 [5]/25 [6]/20 [7] | | |
| 2 s | | kA | – | – | | |
| 3 s | | kA | – | – | | |
| **Connection** | | | | | | |
| **Auxiliary conductor (Cu) max. number of auxiliary conductors × cross-section (solid/stranded)** | | | | | | |
| Standard connection = strain-relief clamp | Without end sleeve | | 2 × 0.5 … 2 × 1.5 mm² (AWG 20 … 16); 1 × 2.5 mm² (AWG 14) | 2 × 0.5 … 2 × 1.5 mm² (AWG 20 … 16); 1 × 2.5 mm² (AWG 14) | | |
| | With end sleeve acc. to DIN 46228 Part 2 | | 1 × 0.5 … 1 × 1.5 mm² (AWG 20 … 16) | 1 × 0.5 … 1 × 1.5 mm² (AWG 20 … 16) | | |
| | With twin end sleeve | | 2 × 0.5 … 2 × 1.5 mm² (AWG 20 … 16) | 2 × 0.5 … 2 × 1.5 mm² (AWG 20 … 16) | | |
| Optional connection = tension spring | Without end sleeve | | 2 × 0.5 … 2 × 2.5 mm² (AWG 20 … 14) | 2 × 0.5 … 2 × 2.5 mm² (AWG 20 … 14) | | |
| | With end sleeve acc. to DIN 46228 Part 2 | | 2 × 0.5 … 2 × 1.5 mm² (AWG 20 … 16) | 2 × 0.5 … 2 × 1.5 mm² (AWG 20 … 16) | | |
| **Weights** | | | | | | |
| 3-pole | Fixed-mounted circuit breaker | kg | 43 | 56 | 56 | 64 |
| | Withdrawable circuit breaker | kg | – | 60 | 60 | 68 |
| | Guide frames | kg | – | 31 | 31 | 45 |
| 4-pole | Fixed-mounted circuit breaker | kg | 50 | 67 | 67 | 77 |
| | Withdrawable circuit breaker | kg | – | 72 | 72 | 82 |
| | Guide frames | kg | – | 37 | 37 | 54 |

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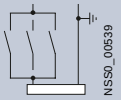
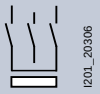
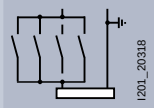
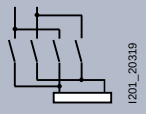
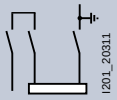
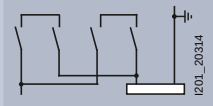
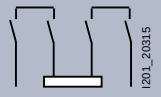
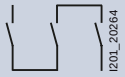
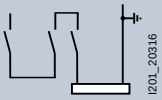
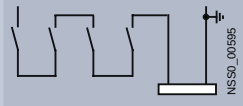
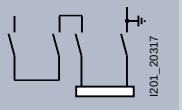


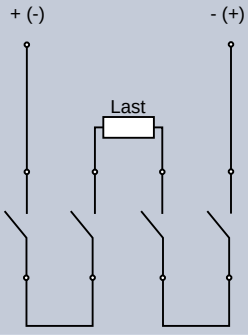
# 3WL1 non-automatic circuit breakers for DC

## Application examples



The connection to the non-automatic circuit breakers is not dependent on direction and polarity; the circuit diagrams can be adapted accordingly. If the parallel or series connections are made directly to the connection bars, for thermal reasons the continuous load on the non-automatic circuit breakers must only be 80% of the permissible operational current. If the parallel or series connection is made at a distance of 1 m from the connection bars, the non-automatic circuit breaker can be used at full operational current load.

| Required contact gaps at rated voltage [1] | Size 2<br>For 3-pole non-automatic circuit breakers<br>1-pole | Size 2<br>For 3-pole non-automatic circuit breakers<br>2-pole | Size 1 and Size 2<br>For 4-pole non-automatic circuit breakers<br>1-pole | Size 1 and Size 2<br>For 4-pole non-automatic circuit breakers<br>2-pole |
|---|---|---|---|---|
| **Rated operational voltage up to 300 V** | | | | |
|  |  Grounded system [2] |  |  Grounded system [3] |  |
| **Rated operational voltage up to 600 V** | | | | |
|  | |  Grounded system |  Grounded system [2] |  |
| **Rated operational voltage up to 1000 V [4]** | | | | |
|  |  Grounded system | |  Grounded system |  Grounded system |

| Required contact gaps at rated voltage [1] | Size 1<br>For 4-pole non-automatic circuit breakers<br>2-pole |
|---|---|
| **Rated operational voltage up to 1000 V [4]** | |
| |   |

[1] Contact gaps connected in series
[2] 2 conducting paths in parallel
[3] 3 conducting paths in parallel
[4] Version for 1000 V required, order with "-Z" and order code A05
Grounded system
Load

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# ETU electronic trip units

## With watchdog monitoring



3WL10



| | | | ETU320 (LI) | ETU350 (LSI) | ETU360 (LSIG) |
|---|---|---|---|---|---|
| **Basic protective functions** | | | | | |
| **L** | Overload protection (L tripping) | Setting range of operating value $I_r = I_n \times ...$ | 0.4 \| 0.5 \| 0.6 \| 0.7 \| 0.75 \| 0.8 \| 0.85 \| 0.9 \| 0.95 \| 1 \| Default 0.4 | 0.4 \| 0.5 \| 0.6 \| 0.7 \| 0.75 \| 0.8 \| 0.85 \| 0.9 \| 0.95 \| 1 \| Default 0.4 | 0.4 \| 0.5 \| 0.6 \| 0.7 \| 0.75 \| 0.8 \| 0.85 \| 0.9 \| 0.95 \| 1 \| Default 0.4 |
| | | Switchable overload protection (from $I^2t$- to $I^4t$-dependent function) | – | – | – |
| | | Setting range of the delay $t_r$ at $I^2t$ (Reference point 6 × $I_n$) | 0.75 \| 1 \| 2 \| 5 \| 8 \| 10 \| 14 \| 17 \| 21 \| 25 s \| Default 0.75 s | 0.75 \| 1 \| 2 \| 5 \| 8 \| 10 \| 14 \| 17 \| 21 \| 25 s \| Default 0.75 s | 0.75 \| 1 \| 2 \| 5 \| 8 \| 10 \| 14 \| 17 \| 21 \| 25 s \| Default 0.75 s |
| | | Setting range of the delay $t_r$ at $I^4t$ (Reference point 6 × $I_n$) | – | – | – |
| | | Thermal memory can be switched on/off | Permanently switched on | Permanently switched on | Permanently switched on |
| | | Phase failure sensitivity/asymmetry | – | – | – |
| **S** | Short-time-delayed short-circuit protection (ST tripping) | Setting range of operating value $I_{sd} = I_n \times ...$ | – | 1 \| 1.5 \| 2 \| 2.5 \| 3 \| 4 \| 6 \| 8 \| 10 \| Default OFF | 1 \| 1.5 \| 2 \| 2.5 \| 3 \| 4 \| 6 \| 8 \| 10 \| Default OFF |
| | | Setting range of the delay time $t_{sd}$ at $I^2t$ | – | 0.1 \| 0.2 \| 0.3 \| 0.4 \| 0.5 \| (Ref. 10 × $I_n$) | 0.1 \| 0.2 \| 0.3 \| 0.4 \| 0.5 \| (Ref. 10 × $I_n$) |
| | | Setting range of the delay time $t_{sd}$ ($t$ = const.) | – | 0.08 \| 0.15 \| 0.22 \| 0.3 \| 0.4 s | 0.08 \| 0.15 \| 0.22 \| 0.3 \| 0.4 s |
| | | ZSI function | – | – | – |
| **I** | Instantaneous short-circuit protection (INST tripping) | Setting range $I_i = I_n \times ...$ | OFF \| 1.5 \| 2 \| 3 \| 4 \| 6 \| 8 \| 10 \| 12 \| 15 | OFF \| 1.5 \| 2 \| 3 \| 4 \| 6 \| 8 \| 10 \| 12 \| 15 | OFF \| 1.5 \| 2 \| 3 \| 4 \| 6 \| 8 \| 10 \| 12 \| 15 |
| **N** | Neutral conductor protection | N conductor setting range $I_N = I_n \times ...$ | OFF \| 50% \| 100% \| 200% | OFF \| 50% \| 100% \| 200% | OFF \| 50% \| 100% \| 200% |
| **G** | Ground-fault tripping (GF tripping) Detection of ground-fault current through summation current formation with internal or external neutral conductor transformer | Tripping function can be switched on/off | – | – | ■ |
| | | Alarm function can be switched on/off | – | – | Permanently switched on |
| | | Detection of ground-fault current through external current transformer | – | – | – |
| | | Setting range of the operating current $I_g = I_n \times ...$ | – | – | 0.1 \| 0.2 \| 0.3 \| 0.4 \| 0.5 \| 0.6 \| 0.7 \| 0.8 \| 1 |
| | | Setting range of the operating current $I_g$ for alarm | – | – | – |
| | | Setting range of the delay time $t_g$ | – | – | 0.1 \| 0.2 \| 0.4 \| 0.6 \| 0.8 s \| (fixed delay) |
| | | Switchable ground-fault protection characteristic ($I^2t$-dependent function) | – | – | $t$ = const./$I^2t$ \| Default $I^2t$ |
| | | Setting range of the delay time $t_g$ at $I^2t$ | – | – | 0.1 \| 0.2 \| 0.4 \| 0.6 \| 0.8 s (Ref. 2 × $I_n$) ($I^2t$ dependent) \| Default 0.1 ($I^2t$) |
| | | ZSI-G function | – | – | – |

[1] Sizes 1 and 2/size 3

■ Available – Not available/not present

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## 3WL10



## 3WL11 – 3WL13



| ETU650 (LSI) | ETU660 (LSIG) | ETU15B (LI) | ETU25B (LSI) | ETU27B (LSIG) | ETU45B (LSIG) | ETU76B (LSIG) |
|---|---|---|---|---|---|---|
| 0.4 ... 1 \| Default 1 (in steps of 0.001) | 0.4 ... 1 \| Default 1 (in steps of 0.001) | 0.5 \| 0.55 \| 0.6 \| 0.65 \| 0.7 \| 0.75 \| 0.8 \| 0.85 \| 0.9 \| 1 | 0.4 \| 0.45 \| 0.5 \| 0.55 \| 0.6 \| 0.65 \| 0.7 \| 0.8 \| 0.9 \| 1 | 0.4 \| 0.45 \| 0.5 \| 0.55 \| 0.6 \| 0.65 \| 0.7 \| 0.8 \| 0.9 \| 1 | 0.4 \| 0.45 \| 0.5 \| 0.55 \| 0.6 \| 0.65 \| 0.7 \| 0.8 \| 0.9 \| 1 | 0.4 ... 1 |
| ■ | ■ | – | – | – | ■ | ■ |
| 0.75 ... 36 s \| (in steps of 0.25 s) \| Default 36 s | 0.75 ... 36 s \| (in steps of 0.25 s) \| Default 36 s | 10 s fixed | 10 s fixed | 10 s fixed | 2 \| 3.5 \| 5.5 \| 8 \| 10 \| 14 \| 17 \| 21 \| 25 \| 30 s | 2 ... 30 s |
| 0.75 ... 5 s \| (in steps of 0.25 s) \| Default 5 s | 0.75 ... 5 s \| (in steps of 0.25 s) \| Default 5 s | – | – | – | 1 \| 2 \| 3 \| 4 \| 5 s | 1 ... 5 s |
| ■ | ■ | – | – | – | ■ | ■ |
| 2% ... 90% (default 50%) | 2% ... 90% (default 50%) | – | At $t_{sd}$ = 20 ms (M) | At $t_{sd}$ = 20 ms (M) | At $t_{sd}$ = 20 ms (M) | ■ (on/off) |
| 0.6 ... 10 \| OFF \| (in steps of 0.1) | 0.6 ... 10 \| OFF \| (in steps of 0.1) | – | 1.25 \| 1.5 \| 2 \| 2.5 \| 3 \| 4 \| 6 \| 8 \| 10 \| 12 | 1.25 \| 1.5 \| 2 \| 2.5 \| 3 \| 4 \| 6 \| 8 \| 10 \| 12 \| OFF | 1.25 \| 1.5 \| 2 \| 2.5 \| 3 \| 4 \| 6 \| 8 \| 10 \| 12 \| OFF | 1.25 × $I_n$ ... 0.8 × $I_{cw}$ OFF |
| 0.05 ... 0.5 s (Ref. 10 × $I_n$) | 0.05 ... 0.5 s (Ref. 10 × $I_n$) | – | – | – | 100 \| 200 \| 300 \| 400 ms | 100 ... 400 ms |
| 0.05 ... 0.4 s | 0.05 ... 0.4 s | – | M (0.02 ms) \| 100 \| 200 \| 300 \| 400 ms | M (0.02 ms) \| 100 \| 200 \| 300 \| 400 ms | M (0.02 ms) \| 100 \| 200 \| 300 \| 400 ms | M (0.02 ms) \| 80 ... 4000 ms |
| – | – | – | – | – | Via module of the **Cubicle**BUS | Via module of the **Cubicle**BUS |
| OFF \| 1.5 ... 15 \| (in steps of 0.1) | OFF \| 1.5 ... 15 \| (in steps of 0.1) | 2 \| 3 \| 4 \| 5 \| 6 \| 7 \| 8 | Fixed at $I_i \geq 20 \times I_n$, max. 50 kA | Fixed at $I_i \geq 20 \times I_n$, max. 50 kA | OFF \| 1.5 \| 2.2 \| 3 \| 4 \| 6 \| 8 \| 10 \| 12 \| 0.8 × $I_{cs}$ | OFF \| 1.5 × $I_n$ ... 0.8 × $I_{cs}$ |
| OFF \| 50% \| 100% \| 150% \| 200% | OFF \| 50% \| 100% \| 200% | – | – | 100% | OFF \| 50% \| 100% | OFF \| 20% ... 200% |
| – | ■ | – | – | ■ | ■ | ■ |
| – | ■ | – | – | – | – | ■ |
| – | Alternative Rc or G-ret ground-fault monitoring | – | – | – | ■ | ■ |
| – | 0.1 ... 1 \| (in steps of 0.001) $I_g = I_n \times$ ... | – | – | A [1] (100/400 A) \| B [1] (300/600 A); C [1] (600/800 A) \| D [1] (900/ 1000 A); E [1] (1200/1200 A) | A [1] (100/400 A) \| B [1] (300/600 A); C [1] (600/800 A) \| D [1] (900/ 1000 A); E [1] (1200/1200 A) | SZ 1, 2: 100 ... 1200 A SZ 3: 400 ... 1200 A |
| – | 50% ... 90% × $I_r$ \| (in steps of 1%) PreAlarm | – | – | – | A [1] (100/400 A); B [1] (300/600 A); C [1] (600/800 A); D [1] (900/ 1000 A); E [1] (1200/1200 A) | SZ 1, 2: 100 ... 1200 A SZ 3: 400 ... 1200 A |
| – | 0.1 ... 1 s \| Default 0.1 s \| (in steps of 0.05 s) | – | – | 100 \| 200 \| 300 \| 400 \| 500 ms | 100 \| 200 \| 300 \| 400 \| 500 ms | 100 ... 500 ms |
| – | $t$ = const./$I^2t$ \| Default const. | – | – | – | ■ | ■ |
| – | 0.1 ... 1 s \| (in steps of 0.05 s) (Ref. 2 × $I_n$) | – | – | – | 100 \| 200 \| 300 \| 400 \| 500 ms | 100 ... 500 ms |
| – | – | – | – | – | Via module of the **Cubicle**BUS | Via module of the **Cubicle**BUS |

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# ETU electronic trip units

## With watchdog monitoring (continued)



3WL10



| | | ETU320 (LI) | ETU350 (LSI) | ETU360 (LSIG) |
|---|---|---|---|---|
| | | | | |
| Parameter set changeover | Switchable between parameter set A and B | – | – | – |
| LCD | | – | – | – |
| Voltage tap on top/bottom | | – | – | – |
| Metering function | | – | – | – |
| | | | | |
| Tripping as a result of enhanced protective function: (including: phase asymmetry current/voltage, harmonic distortion current/voltage, under/ overvoltage, phase rotation direction, active power in/opposite to normal direction, under/ over-frequency, protective functions dependent on direction of power flow) | | – | – | – |
| **Mode of communication** | | | | |
| Communication PROFIBUS \| PROFINET \| Modbus RTU \| Modbus TCP | | – | – | – |
| **Output modules** | | | | |
| Signals via relay: Overload warning, load shedding/load carrying, leading signal, overload tripping 200 ms, temperature alarm, phase asymmetry, instantaneous short-circuit release, short-time-delayed short-circuit release, overload trip, neutral conductor trip, auxiliary relay, ETU faults, ground-fault protection tripping and ground-fault alarm (only with ground-fault protection module) | | IOM300 | IOM300 | IOM300 |

■ Available – Not available/not present

### Increment size when settings are made for the ETU76B using the menu

| From ... to | Increment size |
|---|---|
| 0 ... 1 | 0.1 |
| 1 ... 100 | 1 |
| 100 ... 500 | 5 |
| 500 ... 1000 | 10 |
| 1000 ... 1600 | 50 |
| 1600 ... 10000 | 100 |
| 10000 ... max. | 1000 |

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## 3WL10



## 3WL11 – 3WL13



| ETU650 (LSI) | ETU660 (LSIG) | ETU15B (LI) | ETU25B (LSI) | ETU27B (LSIG) | ETU45B (LSIG) | ETU76B (LSIG) |
|---|---|---|---|---|---|---|
| | | | | | | |
| ■ | ■ | – | – | – | – | ■ |
| Integrated | Integrated | – | – | – | Optional | Integrated |
| Optional | Optional | – | – | – | Optional | Optional |
| Basic/Advanced | Basic/Advanced | – | – | – | Metering function Plus | Metering function Plus |
| | | | | | | |
| ■ | ■ | – | – | – | ■ | ■ |
| | | | | | | |
| ■ | ■ | – | – | – | ■ | ■ |
| | | | | | | |
| IOM040/IOM300 | IOM040/IOM300 | – | – | – | ■ | ■ |

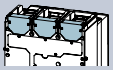
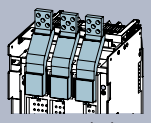
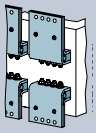
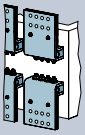
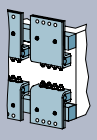
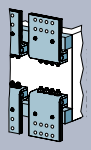
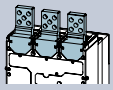
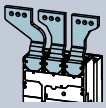
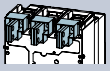
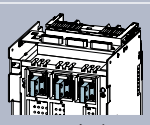
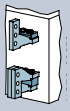
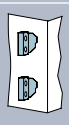
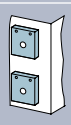
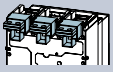
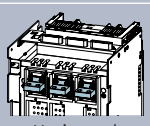
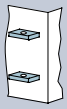
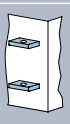
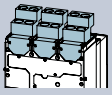
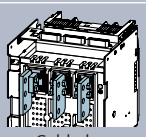
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# Connection

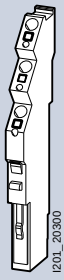
## Main circuit connection

| | 3WL10 | | 3WL11 – 3WL13 | | | |
|---|---|---|---|---|---|---|
| **Connection** | **Fixed-mounted** | **Withdrawable** | **Fixed-mounted** | | **Withdrawable** | |
| Front-mounted |  Direct |  Extended |  1-hole |  2-hole |  1-hole |  2-hole |
| |  Extended | | | | | |
| |  Broadened | | | | | |
| Rear-mounted |  Vertical |  Vertical |  Vertical | |  Vertical |  Flanges |
| |  Horizontal |  Horizontal |  Horizontal | |  Horizontal | |
| | |  Broadened | | | | |
| Cable |  Cable terminals |  Cable lug | | | | |

## Auxiliary circuit connections

### 3WL10: Withdrawable/fixed-mounted version

- Direct engagement of the auxiliary conductor vertically onto the circuit breaker or horizontally in the guide frame




Screwless connection technology (push in)

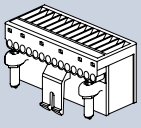
### 3WL11 – 3WL13: Withdrawable version

- Connection of the internal auxiliary switches to the male connector on the switch side
- When fully inserted, connection with the sliding contact module in the guide frame

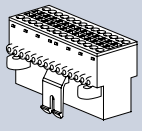
### 3WL11 – 3WL13: Fixed-mounted version

- Engagement of the auxiliary supply connectors directly onto the circuit breaker

Coding pins on the connectors prevent them being inserted in the wrong slots



Screw connection (standard)



Screwless connection (tension spring) (optional)

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# Operating mechanism, auxiliary release, auxiliary switch

## Operating mechanism

The circuit breakers are available with various optional operating mechanisms:

- Manual operating mechanism with mechanical closing (standard design)
- Manual operating mechanism with mechanical and electrical closing
- Motorized operating mechanism with mechanical and electrical closing

The operating mechanisms with electrical closing are suitable for synchronization tasks.

| | Available for air circuit breakers | |
|---|---|---|
| | 3WL10 | 3WL11 – 3WL13 |
| Closing coils (CC) | ■ | ■ |
| Undervoltage releases (UVR)/ shunt trips (ST) | ■ | ■ |
| Shunt trips (ST) | ■ | ■ |
| Remote trip alarm reset coils (RR) | ■ | ■ |
| Spring charging motors/ Motorized operating mechanisms (MO) | ■ | ■ |
| Mechanical operating cycles counters | ■ | ■ |

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# Online configurator highlights

## www.siemens.com/lowvoltage/3wl-configurator



### Ungroup into individual components:

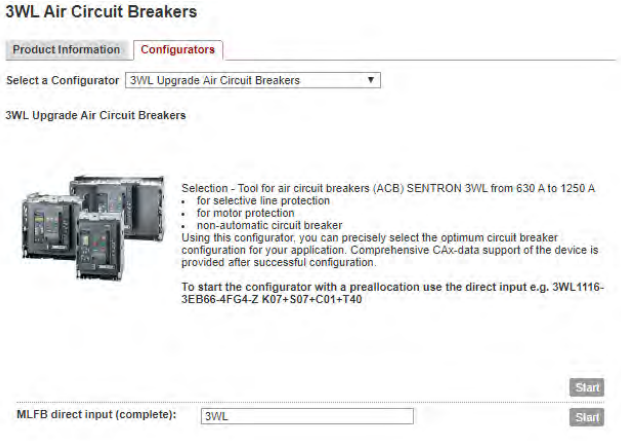
Divides the finished complete article number into single article numbers




### Automatic generation of the 3D model, 2D dimension drawing and the internal circuit diagram according to IEC




### Direct entry of an already known article number or parts of an article number



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# Structure of the article numbers

## Basic configuration for AC circuit breakers

**The structure shown below is intended as an overview of each position and its meaning.**
**For a complete and valid configuration of your air circuit breaker, please use our online configurator at**
**www.siemens.com/lowvoltage/3wl-configurator**

1

| | 5 | 6 | 7 | | 8 | 9 | 10 | 11 | 12 | | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **3WL1** | ■ | ■ | ■ | – | ■ | ■ | ■ | ■ | ■ | – | | | | |

## Circuit breakers, non-automatic circuit breakers and ETU

| | | | |

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**3WL1** 5 6 7 8 – 9 10 11 12 – 13 14 15 16

## Operating mechanisms and auxiliary releases

| | | | | |
|---|---|---|---|---|
| **Stored energy mechanism** | Manual recharging of the stored energy mechanism | With mechanical operation | | 1 |
| | | With mechanical and electrical operation, closing coil (CC) suitable for uninterrupted duty, 100% OP | 110 V AC 50/60 Hz/110 V DC | 2 |
| | | | 230 V AC 50/60 Hz/220 V DC | 3 |
| | Motorized recharging | With mechanical and electrical operation, closing coil (CC) suitable for uninterrupted duty, 100% OP | 208 ... 240 V AC 50/60 Hz/220 ... 250 V DC | 4 |
| | | | 110 ... 127 V AC 50/60 Hz/110 ... 125 V DC | 5 |
| | | | 24 V DC | 6 |

| | | | |
|---|---|---|---|
| **1st auxiliary release** | Without 1st auxiliary release | | A |
| | With shunt trip (ST) 100% OP | 24 V DC | B |
| | | 30 V DC | C |
| | | 48 V DC | D |
| | | 60 V DC | E |
| | | 110 ... 127 V AC 50/60 Hz/110 ... 125 V DC | F |
| | | 208 ... 240 V AC 50/60 Hz/220 ... 250 V DC | G |

| | | | |
|---|---|---|---|
| **2nd auxiliary release** | Without 2nd auxiliary release | | A |
| | With shunt trip (ST) 100% OP | 24 V DC | B |
| | | 30 V DC | C |
| | | 48 V DC | D |
| | | 60 V DC | E |
| | | 110 ... 127 V AC 50/60 Hz/110 ... 125 V DC | F |
| | | 208 ... 240 V AC 50/60 Hz/220 ... 250 V DC | G |
| | With undervoltage release (UVR), instantaneous | 24 V DC | J |
| | | 30 V DC | K |
| | | 48 V DC | L |
| | | 60 V DC | U |
| | | 110 ... 127 V AC 50/60 Hz/110 ... 125 V DC | M |
| | | 208 ... 240 V AC 50/60 Hz/220 ... 250 V DC | N |
| | | 380 ... 415 V AC 50/60 Hz | P |
| | With undervoltage release (UVR-t) [1], delay 0.2 ... 3.2 s | 48 V DC | Q |
| | | 110 ... 127 V AC 50/60 Hz/110 ... 125 V DC | R |
| | | 208 ... 240 V AC 50/60 Hz/220 ... 250 V DC | S |
| | | 380 ... 415 V AC 50/60 Hz | T |

## Auxiliary switches

| | | |
|---|---|---|
| **1st auxiliary switch block** | 2 NO + 2 NC | 2 |
| **1st + 2nd auxiliary switch block** | 4 NO + 4 NC | 4 |
| | 6 NO + 2 NC | 7 |
| | 5 NO + 3 NC | 8 |

[1] The maximum allowable cable length to the actuator for quick shutdown is currently ≦ 50 m (maximum allowable cable length between the terminals ≦ 100 m).

**Quick selection guide, pages 1/76 and 1/78**

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# Structure of the article numbers

## Basic configuration for DC non-automatic circuit breakers

**The structure shown below is intended as an overview of each position and its meaning.**
**For a complete and valid configuration of your air circuit breaker, please use our online configurator at**
**www.siemens.com/lowvoltage/3wl-configurator**



| | 5 | 6 | 7 | | 8 | 9 | 10 | 11 | 12 | | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **3WL1** | | | | – | | | | | | – | | | | |

### Non-automatic circuit breakers and ETU

| | | SZ 1 | SZ 2 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Size (SZ)** | 1 | | | **1** | | | | | | |
| | 2 | | | **2** | | | | | | |
| **Max. rated current $I_n$** | 1000 A | – | ■ | | **1** | **0** | | | | |
| | 2000 A | ■ | ■ | | **2** | **0** | | | | |
| | 4000 A | – | ■ | | **4** | **0** | | | | |
| **Short-circuit breaking capacity $I_{cc}$** | 1000 V DC 20 kA | ■ | – | | | | **8** | | | |
| | 600 V DC 25 kA | – | ■ | | | | **8** | | | |
| **Non-automatic circuit breakers** | Without trip unit | | | | | **A** | **A** | | | |
| **Number of poles** | 3-pole (3WL upgrade) | – | ■ | | | | | **6** | | |
| | 4-pole (3WL upgrade) | ■ | ■ | | | | | **7** | | |

### Connection

| | | SZ 1 | SZ 2 | | |
|---|---|---|---|---|---|
| **Type of mounting** | Fixed-mounted | ■ | ■ | Vertical | **1** |
| | | ■ | ■ | Horizontal | **2** |
| | | – | ■[1)] | Front single hole | **3** |
| | | – | ■[1)] | Front double hole | **4** |
| | Withdrawable | – | ■ | Without guide frame | **5** |
| | | – | ■ | Horizontal | **6** |
| | | – | ■ | Vertical | **7** |
| | | – | ■ | Flanges | **8** |

[1)] Not available for 4000 A

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**3WL1** 5 6 7 8 – 9 10 11 12 – 13 14 15 16

## Operating mechanisms and auxiliary releases

| | | | | |
|---|---|---|---|---|
| **Stored energy mechanism** | Manual recharging of the stored energy mechanism | With mechanical operation | | 1 |
| | | With mechanical and electrical operation, closing coil (CC) suitable for uninterrupted duty, 100% OP | 110 V AC 50/60 Hz/110 V DC | 2 |
| | | | 230 V AC 50/60 Hz/220 V DC | 3 |
| | Motorized recharging | With mechanical and electrical operation, closing coil (CC) suitable for uninterrupted duty, 100% OP | 208 ... 240 V AC 50/60 Hz/220 ... 250 V DC | 4 |
| | | | 110 ... 127 V AC 50/60 Hz/110 ... 125 V DC | 5 |
| | | | 24 V DC | 6 |

| | | | |
|---|---|---|---|
| **1st auxiliary release** | Without 1st auxiliary release | | A |
| | With shunt trip (ST) 100% OP | 24 V DC | B |
| | | 30 V DC | C |
| | | 48 V DC | D |
| | | 60 V DC | E |
| | | 110 ... 127 V AC 50/60 Hz/110 ... 125 V DC | F |
| | | 208 ... 240 V AC 50/60 Hz/220 ... 250 V DC | G |

| | | | |
|---|---|---|---|
| **2nd auxiliary release** | Without 2nd auxiliary release | | A |
| | With shunt trip (ST) 100% OP | 24 V DC | B |
| | | 30 V DC | C |
| | | 48 V DC | D |
| | | 60 V DC | E |
| | | 110 ... 127 V AC 50/60 Hz/110 ... 125 V DC | F |
| | | 208 ... 240 V AC 50/60 Hz/220 ... 250 V DC | G |
| | With undervoltage release (UVR), instantaneous | 24 V DC | J |
| | | 30 V DC | K |
| | | 48 V DC | L |
| | | 60 V DC | U |
| | | 110 ... 127 V AC 50/60 Hz/110 ... 125 V DC | M |
| | | 208 ... 240 V AC 50/60 Hz/220 ... 250 V DC | N |
| | | 380 ... 415 V AC 50/60 Hz | P |
| | With undervoltage release (UVR-t) [1], delay 0.2 ... 3.2 s | 48 V DC | Q |
| | | 110 ... 127 V AC 50/60 Hz/110 ... 125 V DC | R |
| | | 208 ... 240 V AC 50/60 Hz/220 ... 250 V DC | S |
| | | 380 ... 415 V AC 50/60 Hz | T |

## Auxiliary switches

| | | |
|---|---|---|
| **1st auxiliary switch block** | 2 NO + 2 NC | 2 |
| **1st + 2nd auxiliary switch block** | 4 NO + 4 NC | 4 |
| | 6 NO + 2 NC | 7 |
| | 5 NO + 3 NC | 8 |

[1] The maximum allowable cable length to the actuator for quick shutdown is currently ≦ 50 m (maximum allowable cable length between the terminals ≦ 100 m).

**Quick selection guide, pages 1/76 and 1/82**

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# Accessory options

**For a complete and valid configuration of your air circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3wl-configurator**

1

To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

**3WL....-.....-.... -Z**

## Accessories for basic configuration

### Rated operational voltage 1000 V AC and 690 V IT networks [4]

- Only for circuit breakers of size 1–3 with high breaking capacity H and of size 3 breaking capacity C.
- Cannot be combined with rated operational voltage 1150 V AC, order code "A15".

| | | Order code |
|---|---|---|
| Size 1 [1] | ≤ 2000 A | A05 |
| Size 2 [1] [2] | ≤ 4000 A | A05 |
| Size 3 [1] | ≤ 6300 A | A05 |

### Rated operational voltage 1150 V AC

- Only for circuit breakers with high breaking capacity H (8th digit of the article number is a "4").
- Cannot be combined with rated operational voltage 1000 V AC, order code "A05".

| | | |
|---|---|---|
| Size 2 [1] [2] | ≤ 4000 A | A15 |
| Size 3 [1] [3] | ≤ 6300 A | A15 |

### Rated operational voltage 690 V AC (+ 20%) [4]

- Only for 3WL11 circuit breakers, size 1 [4], with high breaking capacity H (8th digit of the article number is a "4").

| | | |
|---|---|---|
| Size 1 | ≤ 2000 A | A16 |

[1] When ordering withdrawable circuit breaker and guide frame separately, specify order code "A05" only for withdrawable circuit breaker and guide frame.

[2] Not possible for circuit breakers with very high breaking capacity C.

[3] Front connections are tinned as standard.

[4] When using withdrawable circuit breakers in conjunction with old guide frames (3WL92..-.A..-.... or 3WL92..-.B..-....), additional Z option A41 must be ordered.

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To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

**3WL....-.....-.... -Z**

Order code

# Accessories for ETU electronic trip units

## Rating plugs

- Only one module is possible per circuit breaker (not in conjunction with ETU15B electronic trip unit).
- As standard, the electronic trip units are equipped with a rating plug which is equal to the maximum rated circuit breaker current ($I_{n\ max}$). The rated current of the selected rating plug must be less than $I_{n\ max}$ .

| | | | |
|---|---|---|---|
| **Module** | Sizes 1, 2 | 250 A | **B02** |
| | | 315 A | **B03** |
| | | 400 A | **B04** |
| | | 500 A | **B05** |
| | | 630 A | **B06** |
| | | 800 A | **B08** |
| | | 1000 A | **B10** |
| | Sizes 1, 2, 3 | 1250 A | **B12** |
| | | 1600 A | **B16** |
| | | 2000 A | **B20** |
| | Sizes 2, 3 | 2500 A | **B25** |
| | | 3200 A | **B32** |
| | | 4000 A | **B40** |
| | Size 3 | 5000 A | **B50** |
| | | 6300 A | **B63** |

## Communication [1]

| | | |
|---|---|---|
| **Breaker status sensor (BSS)** | **For determining the statuses ON/OFF/Tripped** | **F01** |
| **PROFIBUS DP communication port** [2] | Including COM15 and breaker status sensor (BSS) | **F02** |
| **Modbus RTU communication port** [2] | Including COM16 and breaker status sensor (BSS) | **F12** |
| **PROFINET IO/Modbus TCP communication port** [2] | Including COM35 and breaker status sensor (BSS) | **F35** |

## Metering function (communications modules not included) [1]

| | | |
|---|---|---|
| **Metering function Plus** | With internal voltage tap on the lower main conducting paths [3] | **F36** |
| | With internal voltage tap on the upper main conducting paths [3] | **F37** |
| | For combination with external voltage transformer | **F38** |

## EMC filter

- Common-mode interference suppressor filters (e.g. in converter applications)
- Insertion loss (asymmetric) in the range 40 kHz to 10 MHz > 40 dB.

| | | |
|---|---|---|
| **EMC filter** | | **F31** |

## Overload and short-circuit protection for neutral conductors

- Only possible with 4-pole circuit breaker with ETU27B to ETU76B

| | | |
|---|---|---|
| **Internal current transformer for N conductor** | Size 1 | **F23** |
| | Size 2 | **F23** |
| | Size 3 | **F23** |

[1] The precondition is an ETU45B or ETU76B

[2] When ordering withdrawable circuit breaker and guide frame separately, specify order code "F02", "F12" or "F35" only for withdrawable circuit breaker.

[3] Can only be used for rated operational voltages up to 690 V AC.

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# Accessory options

**For a complete and valid configuration of your air circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3wl-configurator**

1

To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

**3WL....-.....-.... -Z**

| | | | Order code |
|---|---|---|---|
| **Accessories for ETU electronic trip units** | | | |
| **Remote resetting** | | | |
| **Automatic reset of the reclosing lockout** | | | K01 |
| • Remote reset for displays and reset buttons including automatic reset of the reclosing lockout<br>• Includes automatic reset of the reclosing lockout | | | |
| **Remote trip alarm reset coils** | 24 V DC | | K10 |
| | 48 V DC | | K11 |
| | 110 ... 127 V AC 50/60 Hz/110 ... 125 V DC | | K12 |
| | 208 ... 240 V AC 50/60 Hz/220 ... 250 V DC | | K13 |
| **Connection** | | | |
| **Tinned version of the customer's connections on the guide frame** | | | |
| • Only for withdrawable circuit breakers with horizontal connection or flange connection<br>• The normal delivery time increases to 15 work days | | | |
| **Customer's connections** [1) 2)] | Size 1 | | A08 |
| | Size 2 | | A08 |
| | Size 3 | | A08 |
| **Connection technology for main connections (fixed-mounted versions)** | | | |
| **Top:** [3)] **horizontal**<br>**Bottom: accessible from front, single hole** | Size 1 | ≤ 1600 A | N11 |
| | Size 2 | ≤ 3200 A | N11 |
| | Size 3 [4)] | ≤ 4000 A | N11 |
| **Top: vertical**<br>**Bottom: horizontal** | Size 1 | ≤ 2000 A | N20 |
| | Size 2 | ≤ 3200 A | N20 |
| | Size 3 | ≤ 5000 A | N20 |
| **Top: horizontal**<br>**Bottom: vertical** | Size 1 | ≤ 2000 A | N24 |
| | Size 2 | ≤ 3200 A | N24 |
| | Size 3 | ≤ 5000 A | N24 |
| **Connection technology for main connections (withdrawable versions)** | | | |
| **Top and bottom:** [5) 6)]<br>**accessible from front, single hole** | Size 1 | ≤ 1600 A | P00 |
| | Size 2 | ≤ 3200 A | P00 |
| | Size 3 | ≤ 4000 A | P00 |
| **Top and bottom:** [5)]<br>**accessible from front, double hole** | Size 1 | ≤ 1600 A | P01 |
| | Size 2 | ≤ 3200 A | P01 |
| | Size 3 | ≤ 4000 A | P01 |
| **Top:** [5) 6)] **horizontal**<br>**Bottom: accessible from front, single hole** | Size 1 | ≤ 1600 A | P07 |
| | Size 2 | ≤ 3200 A | P07 |
| | Size 3 | ≤ 4000 A | P07 |

1) Front connections are tinned as standard.
2) The permissible temperature rise limits according to IEC 60947-2 are 5 K lower for a tin surface than for a silver surface.
3) Not for 3WL1 size 1 with high breaking capacity H and circuit breakers with very high breaking capacity C.
4) Not for size 3 with very high breaking capacity C.
5) Not for size 2, 3 circuit breakers with very high breaking capacity C.
6) Not for 3WL1 size 1 with high breaking capacity H

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To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

**3WL....-.....-.... -Z**

| | | | Order code |
|---|---|---|---|
| | | | |

## Connection

### Connection technology for main connections (withdrawable versions)

| | | | |
|---|---|---|---|
| **Top: vertical**<br>**Bottom: horizontal** | Size 1 | ≤ 2000 A | P18 |
| | Size 2 | ≤ 3200 A | P18 |
| | Size 3 | ≤ 5000 A | P18 |
| **Top: [1] connecting flange**<br>**Bottom: horizontal** | Size 1 | ≤ 2000 A | P19 |
| | Size 2 | ≤ 3200 A | P19 |
| | Size 3 | ≤ 4000 A | P19 |
| **Top: horizontal**<br>**Bottom: vertical** | Size 1 | ≤ 2000 A | P23 |
| | Size 2 | ≤ 3200 A | P23 |
| | Size 3 | ≤ 5000 A | P23 |
| **Top: [1] horizontal**<br>**Bottom: connecting flange** | Size 1 | ≤ 2000 A | P28 |
| | Size 2 | ≤ 3200 A | P28 |
| | Size 3 | ≤ 4000 A | P28 |

### Connection technology for auxiliary conductors (for fixed-mounted and withdrawable versions)

| | | |
|---|---|---|
| Connection technology for screwless terminals (tension spring) | Fixed-mounted | N61 |
| | Withdrawable | P61 |

## Operating mechanisms and auxiliary releases

| | | | |
|---|---|---|---|
| **Motorized operating mechanisms** | Only possible if the 13th digit of the article number = "1" | 24 ... 30 V DC | M01 |
| | | 48 ... 60 V DC | M03 |
| | | 110 ... 127 V AC 50/60 Hz/110 ... 125 V DC | M05 |
| | | 208 ... 240 V AC 50/60 Hz/220 ... 250 V DC | M06 |
| **Mechanical operating cycles counter, 5-digit** [2] | | | C01 |
| **Closing coils** | • Suitable for uninterrupted duty, 100% OP<br>• Only possible if the 13th digit of the article number = "1" | 24 V DC | M21 |
| | | 30 V DC | M22 |
| | | 48 V DC | M23 |
| | | 60 V DC | M24 |
| | | 110 ... 127 V AC 50/60 Hz/110 ... 125 V DC | M25 |
| | | 208 ... 240 V AC 50/60 Hz/220 ... 250 V DC | M26 |
| | • Not suitable for uninterrupted duty, 5% OP, synchronizable [3]<br>• Only possible if the 13th digit of the article number = "1" | 24 V DC | M31 |
| | | 48 V DC | M33 |
| | | 110 ... 127 V AC 50/60 Hz/110 ... 125 V DC | M35 |
| | | 208 ... 240 V AC 50/60 Hz/220 ... 250 V DC | M36 |
| **Opening coils (shunt trips)** [3] [4] | Not suitable for uninterrupted duty, 5% OP, synchronizable | 24 V DC | M41 |
| | | 48 V DC | M43 |
| | | 110 ... 127 V AC 50/60 Hz/110 ... 125 V DC | M45 |
| | | 208 ... 240 V AC 50/60 Hz/220 ... 250 V DC | M46 |

[1] Not for size 2, 3 circuit breakers with very high breaking capacity C.

[2] Only possible with motorized operating mechanism.

[3] Overexcited, i.e. switching time 50 ms (standard > 80 ms).

[4] Only possible if the 14th digit of the article number for the circuit breaker is "A", i.e. "without 1st auxiliary release".

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# Accessory options

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1

To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

**3WL....-.....-.... -Z**

| | | | Order code |
|---|---|---|---|
| **Auxiliary switches and signaling switches** | | | |
| **Position signaling switches for guide frames** | 1 CO \| 1 CO \| 1 CO (connected \| test \| disconnected position) | | R15 |
| | 3 CO \| 2 CO \| 1 CO (connected \| test \| disconnected position) | | R16 |
| **Signaling switches** | Ready-to-close signaling switch (S20) | 1 NO | C22 |
| | Spring charge signaling switch [1] (S21) | 1 NO | C20 |
| | For the first auxiliary release [1] (S22) | 1 CO | C26 |
| | For the second auxiliary release [1] (S23) | 1 CO | C27 |
| | 1st tripped signaling switch [1] [2] (S24) | 1 CO | K07 |
| | 2nd tripped signaling switch [1] [2] [3] (S25) | 1 NO | K06 |
| **Further accessories** | | | |
| **Pushbuttons/disconnect switches/closing lockouts** | | | |
| **EMERGENCY-OFF pushbuttons** | Mushroom pushbutton instead of the mechanical OFF pushbutton | | S24 |
| **Local electric close on operator panel [1] (S10)** | This prevents unauthorized electrical closing from the operator panel. Mechanical closing and remote closing remain possible. Possible only for circuit breakers with closing coil (CC) | With sealing cap | C11 |
| | | With CES lock | C12 |
| **Motor disconnect switch on operator panel [4] (S12)** | This prevents automatic charging of the stored energy mechanism by motorized operating mechanism | | S25 |
| **Special packaging for increased transport requirements (moisture protection)** | | | |
| **Cardboard packaging with water-repellent coating on corrugated cardboard (moisture protection)** | | | A61 |
| **Arc chute covers** | | | |
| • Not available for:<br>– 1000 V version (order code "A05"),<br>– DC version<br>– 4000 A size 2<br>– 1150 V version (order code "A15")<br>– 130 kA version, size 2<br>– 150 kA version, size 3 | | | |
| **Arc chute covers** | 3-pole/4-pole | | R10 |
| **Shutters** | | | |
| **Shutter: 2-part, lockable, with padlocks [5]** | 3-pole/4-pole | | R21 |

[1] Not possible with "communications interface" option, order code "F02", "F12" or "F35".
[2] Not available for non-automatic air circuit breakers.
[3] Only possible with option "K07".
[4] Only for breakers with motorized operating mechanism, not possible with order codes "C11", "C12".
[5] Padlock not included in the scope of supply.

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To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

**3WL....-.....-.... -Z**

Order code

# Further accessories

## Instrument transformers (without energy transformers), for powering the ETU

- Used in converter applications with high harmonic components; can only be used with ETU45B or ETU76B
  - External 24 V DC supply required
  - Instantaneous undervoltage release UVR required (15th position in article number: J, K, L, U, M, N, P)
  - Not possible with delayed undervoltage release UVR-t (15th position in article number: Q, R, S, T)
- Comprises:
  - 3 (3-pole) or 4 (4-pole) transformers
  - 24 V DC relay
  - Warning signs
  - Manual

| | | | |
|---|---|---|---|
| **Transformer** | 3-pole/4-pole | Sizes 2, 3 | **K60** |

## Operating instructions in printed form

- As of June 1, 2023, 3WL circuit breakers and non-automatic circuit breakers are no longer supplied with operating instructions as standard. However, they can be supplied together with the circuit breaker for an additional charge.

**Article numbers for separate ordering of operating instructions can be found in chapter "Accessories and spare parts"**

| | |
|---|---|
| **3WL operating instructions German/English** | **A80** |
| **3WL operating instructions Italian/French** | **A81** |
| **3WL operating instructions Spanish/Portuguese** | **A82** |

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# Accessory options

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To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

**3WL....-.....-.... -Z**

| | | | Order code |
|---|---|---|---|
| **Interlocking** | | | |
| **Mechanical interlocking mechanism** | | | |
| • Interlocking module with Bowden cable 2 m | | | |
| **Mechanical interlocks** | | For fixed-mounted breakers | **S55** |
| | | For withdrawable circuit breakers with guide frame [1] | **R55** |
| | | For guide frames (ordered separately) | **R56** |
| | | For withdrawable circuit breakers (ordered separately) | **R57** |
| **Locking provisions (for fixed-mounted and withdrawable versions)** | | | |
| • The disconnector unit fulfills the requirements for main circuit breakers according to EN 60204-1 | | | |
| **Locking provisions** | Against unauthorized closing from the operator panel | Made by CES | **S01** |
| | | Made by IKON | **S03** |
| | | Assembly kit FORTRESS or CASTELL [2] | **S05** |
| | | Assembly kit for padlocks [3] | **S07** |
| | | Made by RONIS | **S08** |
| | | Made by PROFALUX | **S09** |
| **Locking provisions (for fixed-mounted and withdrawable versions)** | | | |
| **Locking provisions** | For charging handle with padlock [3] | | **S33** |

[1] Not available in combination with R40.
[2] Locks must be ordered from the manufacturer.
[3] Padlock not included in the scope of supply.

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To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

**3WL....-.....-.... -Z**

| | | | Order code |
|---|---|---|---|
| | | | |

## Interlocking

### Locking provisions (for withdrawable version)

- The disconnector unit fulfills the requirements for main circuit breakers acc. to EN 60204-1, consisting of a lock in the guide frame, active in the connected position, function is retained when circuit breaker is replaced.
- Not possible in combination with order code "R81", "R85" or "R86".

| | | | |
|---|---|---|---|
| **Locking provisions** | Against unauthorized closing from the operator panel | Made by CES | **R61** |
| | | Made by RONIS | **R68** |
| | | Made by PROFALUX | **R60** |

### Locking provisions (for withdrawable version)

- Safety lock for mounting onto the circuit breaker

| | | | |
|---|---|---|---|
| **Locking provisions** | To prevent movement of the withdrawable circuit breaker | Made by CES | **S71** |
| | | Made by PROFALUX | **S75** |
| | | Made by RONIS | **S76** |

### Locking mechanisms

- Not possible in combination with order code "R81", "R85" or "R86".

| | | |
|---|---|---|
| **For fixed-mounted circuit breakers** | To prevent opening of the cabinet door in ON position | **S30** |
| **For withdrawable circuit breakers** | To prevent opening of the cabinet door in connected position | **R30** |
| | To prevent activation when the cabinet door is open [1] | **R40** |
| | To prevent movement when the cabinet door is open [2] | **R50** |

### Locking mechanisms to prevent movement of the withdrawable circuit breakers in disconnected position

- Consisting of Bowden cable and lock in the control cabinet door
- Not possible in combination with order code "R30", "R50", "R61", "R68" or "R60"

| | |
|---|---|
| **Made by CES** | **R81** |
| **Made by PROFALUX** | **R85** |
| **Made by RONIS** | **R86** |

### Seals

| | |
|---|---|
| **Door sealing frame for degree of protection IP41** | **T40** |

## Accessories from current catalog

### Use of the withdrawable circuit breaker in combination with an older guide frame

Reduction of the technical specifications for withdrawable circuit breakers 3WL1 for use in combination with older guide frames supplied

- Possible article numbers of the existing "older" guide frames
  - 3WL92..-.A..-....
  - 3WL92..-.B..-....
  - 3WL92..-.D..-....
  - 3WL92..-.E..-....
- Article numbers of circuit breakers with reduced technical specifications
  - 3WL1...-...3.-.... – Z
  - 3WL1...-...4.-.... - Z

For sizes 1, 2, 3.

| | |
|---|---|
| **Use of the circuit breaker in older guide frames, including the appropriate guide frame coding** | **A41** |

[1] Not available in combination with R50 and R55 [2] Not available in combination with R40

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# Accessory options

## Further technical specifications



| Manual operating mechanism | 3WL11 – 3WL13 |
|---|---|
| **Switching on/charging energy store** | |
| Maximum force required to operate the hand lever | ≤ 230 N |
| Required number of strokes on the hand lever | 9 |

### Closing coils

**Note:**
The closing coils (CC) and shunt trips (ST) are identical for the 3WL and 3WA and can be used in both circuit breaker lines.
You will find the technical specifications in section 3WA see page 1/52
Please note: The communication-capable closing coils (CC-COM) can be used only in conjunction with 3WA.

### Motor

**Note:**
The motor operators are identical for the 3WL and 3WA and can be used in both circuit breaker lines.
You will find the technical specifications in section 3WA see page 1/52

| Signals of the electronic trip unit | 3WL11 – 3WL13 |
|---|---|
| **Signals of the electronic trip unit** | |
| Measuring accuracy of the electronic trip unit | Protective functions acc. to EN 60947; current indication ≤ 10%; metering function for base quantities ≤ 1%; metering function for derived quantities ≤ 4% |

### Undervoltage releases UVR (F3) and UVR-t (F4)

**Note:**
The undervoltage releases (UVR/UVR-t) are identical for the 3WL and 3WA and can be used in both circuit breaker lines.
You will find the technical specifications in section 3WA see page 1/53

### Shunt trip (ST) (F1, F2)

**Note:**
The shunt trips (ST) are identical for the 3WL and 3WA and can be used in both circuit breaker lines.
You will find the technical specifications in section 3WA see page 1/54
Please note: The communication-capable shunt trips (ST-COM) can be used only in conjunction with 3WA.

### Remote trip alarm reset coil for mechanical tripped indicator (F7)

**Note:**
The remote trip alarm reset coils are identical for the 3WL and 3WA and can be used in both circuit breaker lines.
You will find the technical specifications in section 3WA see page 1/54

### Contact position-driven auxiliary switches (S1, S2, S3, S4, S7, S8)

**Note:**
The switch position dependent auxiliary switches are identical for the 3WL and 3WA and can be used in both circuit breaker lines.
You will find the technical specifications in section 3WA see page 1/54

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## Ready-to-close signaling switches (S20) (acc. to DIN VDE 0630)

| | | 3WL11 – 3WL13 | | |
|---|---|---|---|---|
| **Breaking capacity** | | | | |
| Alternating current 50/60 Hz | Rated operational voltage $U_e$ | 250 V | | |
| | Rated operational current $I_e$ | 8 A | | |
| Direct current | Rated operational voltage $U_e$ | 125 V | 250 V | |
| | Rated operational current $I_e$ | 0.4 A | 0.2 A | |
| | Contact reliability | From 1 mA at 5 V DC | | |

## Tripped signaling switches (S24) and signaling switches for auxiliary releases (S22, S23) (acc. to DIN VDE 0630)

| | | 3WL11 – 3WL13 | | |
|---|---|---|---|---|
| **Breaking capacity** | | | | |
| Alternating current 50/60 Hz | Rated operational voltage $U_e$ | 250 V | | |
| | Rated operational current $I_e$/AC-12 | 8 A | | |
| Direct current | Rated operational voltage $U_e$ | 24 V | 125 V | 250 V |
| | Rated operational current $I_e$/DC-12 | 6 A | 0.4 A | 0.2 A |
| | Contact reliability | From 1 mA at 5 V DC | | |
| **Tripped signaling switches** | | | | |
| Signal duration after tripping | | Until manual or electrical remote reset (option) | | |

## Position signaling switch on guide frame

| | | 3WL11 – 3WL13 | | |
|---|---|---|---|---|
| **Type of contacts** | | | | |
| Message | "Circuit breaker in connected position" | 3 W | or | 1 W |
| | "Circuit breaker in test position" | 2 W | or | 1 W |
| | "Circuit breaker in disconnected position" | 1 W | or | 1 W |
| Contact reliability | | From 1 mA at 5 V DC | | |
| **Rated operational voltage** | | | | |
| Rated insulation voltage $U_i$ | 50/60 Hz AC | 440 V | | |
| | DC | 250 V | | |
| Rated operational voltage $U_e$ | | 250 V | | |
| Rated impulse withstand voltage $U_{imp}$ | | 4 kV | | |
| **Breaking capacity** | | | | |
| Rated operational current $I_e$ | $I_e$/AC-12 | 24 V 10 A, 110/127 V 10 A, 220/240 V 10 A, 320/440 V 10 A | | |
| | $I_e$/AC-15 | 220/240 V 4 A, 320/440 V 3 A, | | |
| | $I_e$/DC-12 | 24 V 10 A, 48 V 2.5 A, 220/240 V 0.2 A, | | |
| | $I_e$/DC-13 | 24 V 3.0 A, 220/240 V 0.1 A | | |
| | A300 AC | 120 V 6 A, 240 V 3 A | | |
| | R300 DC | 125 V 0.22 A, 250 V 0.11 A | | |

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# Guide frames for AC

**The structure shown below is intended as an overview of each position and its meaning.
For a complete and valid configuration of your guide frame, please use our online configurator at
www.siemens.com/lowvoltage/3wl-configurator**



| | 5 | 6 | 7 | | 8 | 9 | 10 | 11 | 12 | | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **3WL9** | 2 | 1 | | – | | | | | | – | | | | 1 |

| | | SZ 1 | SZ 2 | SZ 3 | |
|---|---|---|---|---|---|
| **Size (SZ)** | 1 | | | | 1 |
| | 2 | | | | 2 |
| | 3 | | | | 3 |
| **Max. rated current $I_{n\,max}$ (guide frames)** | 1000 A [5) 6)] | ■ | – | – | 1 |
| | 1600 A [5) 6)] | ■ | – | – | 2 |
| | 2000 A [6)] | ■ | ■ | – | 3 |
| | 2500 A [6)] | – | ■ | – | 4 |
| | 3200 A [7)] | – | ■ | – | 5 |
| | 4000 A [6)] | – | ■ | ■ | 6 |
| | 5000 A | – | – | ■ | 7 |
| | 6300 A | – | – | ■ | 8 |

| | | |
|---|---|---|
| **Number of poles** | 3-pole | F |
| | 4-pole | G |

| | | SZ 1 | SZ 2 | SZ 3 | |
|---|---|---|---|---|---|
| **Main connection** | Front, single hole | ■ [1)] | ■ [2) 6)] | ■ [3)] | A |
| | Front, double hole | ■ | ■ [2) 6)] | ■ [3)] | B |
| | Horizontal | ■ | ■ [2)] | ■ [4)] | C |
| | Vertical | ■ | ■ | ■ | D |
| | Connecting flange | ■ | ■ [2) 6)] | ■ [3)] | E |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Short-circuit breaking capacity $I_{cu}$ at 500 V** | N | 55 kA | ■ | – | – | N |
| | S | 66 kA | ■ | – | – | S |
| | H | 85 kA | ■ [5)] | – | – | H |
| | N, S and H | ≤ 100 kA | – | ■ | ■ | H |
| | C | 130 kA | – | ■ | – | C |
| | C | 150 kA | – | – | ■ | C |

[1)] Not available for rated circuit breaker current 2000 A and breaking capacity H
[2)] Not available for rated circuit breaker current 4000 A
[3)] Not available for rated circuit breaker current 5000 A + 6300 A + breaking capacity C
[4)] Not available for rated circuit breaker current 6300 A
[5)] For size 1 with breaking capacity H, please select the max. rated current $I_n$ 2000 A of the guide frame
[6)] Not available for breaking capacity C
[7)] For all rated circuit breaker currents up to 3200 A with breaking capacity C

## Options

| | 5 | 6 | 7 | | 8 | 9 | 10 | 11 | 12 | | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **3WL9** | 2 | 1 | | – | | | | | | – | | | | 1 |

| | | | | | |
|---|---|---|---|---|---|
| **Number of auxiliary supply connectors** | Without | 0 | | | |
| | 1 connector | 1 | | | |
| | 2 connectors | 2 | | | |
| | 3 connectors | 3 | | | |
| | 4 connectors | 4 | | | |
| **Type of auxiliary circuit connections** | Without [8)] | | 0 | | |
| | With screw terminals (SIGUT, standard) | | 1 | | |
| | With screwless terminals (tension spring) | | 2 | | |
| **Position signaling switch** | Without | | | 0 | |
| | 1 CO \| 1 CO \| 1 CO (connected \| test \| disconnected position) | | | 1 | |
| | 3 CO \| 2 CO \| 1 CO (connected \| test \| disconnected position) | | | 2 | |
| **Shutters** | Without | | | | A |
| | With shutter, 2-part, lockable | | | | B |

[8)] Can only be selected if the number of auxiliary supply connectors is zero.

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# Guide frames for DC

**The structure shown below is intended as an overview of each position and its meaning.
For a complete and valid configuration of your guide frame, please use our online configurator at
www.siemens.com/lowvoltage/3wl-configurator**



| | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **3WL9** | 2 | 1 | 2 | – | | | | | – | | 0 | 1 |

| | | |
|---|---|---|
| **Max. rated current $I_{n\,max}$** | 2000 A | 3 |
| | 4000 A | 6 |
| **Number of poles** | 3-pole | H |
| | 4-pole | J |
| **Main connection** | Front, single hole[1] | A |
| | Front, double hole[1] | B |
| | Horizontal | C |
| | Vertical | D |
| | Connecting flange | E |

[1] Not available for rated circuit breaker current 4000 A

## Options

| | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **3WL9** | 2 | 1 | 2 | – | | | | | – | | 0 | 1 |

| | | |
|---|---|---|
| **Number of auxiliary supply connectors** | Without | 0 |
| | 1 connector | 1 |
| | 2 connectors | 2 |
| | 3 connectors | 3 |
| | 4 connectors | 4 |
| **Type of auxiliary circuit connections** | Without [2] | 0 |
| | With screw terminals (SIGUT, standard) | 1 |
| | With screwless terminals (tension spring) | 2 |
| **Position signaling switch** | Without | 0 |
| | 1 CO \| 1 CO \| 1 CO (connected \| test \| disconnected position) | 1 |
| | 3 CO \| 2 CO \| 1 CO (connected \| test \| disconnected position) | 2 |
| **Shutters** | Without | A |
| | With shutter, 2-part, lockable | B |

[2] Can only be selected if the number of auxiliary supply connectors is zero.

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# Accessories and spare parts



## Accessories for ETU electronic trip units

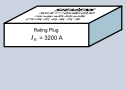
### Electronic trip units and optional metering function


NSE0_01610b

- For replacement in existing circuit breakers, please specify the circuit breaker ID No. when ordering.
- The electronic trip unit is supplied without a rating plug
- The rating plug must be ordered separately

| Type | With protective function | Metering function | Article No. |
|---|---|---|---|
| ETU15B | LI | Without | 3WL9311-5AA00-0AA2 |
| ETU25B | LSI | Without | 3WL9312-5AA00-0AA2 |
| ETU27B | LSING | Without | 3WL9312-7AA00-0AA2 |
| ETU45B (without display) | LSIN(G) | Without | 3WL9314-5AA00-0AA2 |
| | | With metering function Plus | 3WL9314-5AA30-0AA2 |
| ETU76B | LSIN(G) | Without | 3WL9317-6AA00-0AA2 |
| | | With metering function Plus | 3WL9317-6AA30-0AA2 |

### Rating plugs


NSE0_00992b

- With the rating plug selected, the maximum rated current $I_{n\,max}$ of the circuit breaker must not be exceeded. The following applies: $I_n \leq I_{n\,max}$

| Size | Rated current $I_n$ | Article No. |
|---|---|---|
| 1, 2 | 250 A | 3WL9111-0AA51-0AA0 |
| | 315 A | 3WL9111-0AA52-0AA0 |
| | 400 A | 3WL9111-0AA53-0AA0 |
| | 500 A | 3WL9111-0AA54-0AA0 |
| | 630 A | 3WL9111-0AA55-0AA0 |
| | 800 A | 3WL9111-0AA56-0AA0 |
| | 1000 A | 3WL9111-0AA57-0AA0 |
| 1, 2, 3 | 1250 A | 3WL9111-0AA58-0AA0 |
| | 1600 A | 3WL9111-0AA61-0AA0 |
| | 2000 A | 3WL9111-0AA62-0AA0 |
| 2, 3 | 2500 A | 3WL9111-0AA63-0AA0 |
| | 3200 A | 3WL9111-0AA64-0AA0 |
| | 4000 A | 3WL9111-0AA65-0AA0 |
| 3 | 5000 A | 3WL9111-0AA66-0AA0 |
| | 6300 A | 3WL9111-0AA67-0AA0 |

### Ground-fault modules


NSE0_01027a

- Alarm and tripping
- For direct metering of the ground-fault current, e.g. in the neutral point of the transformer, a 1200 A/1 A current transformer, class 1, is required. The internal load of the 3WL circuit breaker is 0.11 Ω. If the ground-fault current is to be determined using the vectorial sum of the phases, a transformer must be installed in the neutral conductor.

| Type | Accessory for | Article No. |
|---|---|---|
| GFM AT 45B | ETU45B | 3WL9111-0AT53-0AA0 |
| GFM AT 55B – 76B | ETU76B | 3WL9111-0AT56-0AA0 |

### Display


NSE0_01609

| Accessory for | Version | Article No. |
|---|---|---|
| ETU45B | 4-line | 3WL9111-0AT81-0AA0 |

### Internal current transformers, for N conductor including wiring kit

| ETU Release 2 | Size | Article No. |
|---|---|---|
| – | 1 | 3WL9111-0AA11-0AA0 |
| | 2 | 3WL9111-0AA12-0AA0 |
| | 3 | 3WL9111-0AA13-0AA0 |
| ✓ | 1 | 3WL9111-0AA14-0AA0 |
| | 2 | 3WL9111-0AA15-0AA0 |
| | 3 | 3WL9111-0AA16-0AA0 |

### External current transformers for N conductor


NSE0_00990a


NSE0_00991a

| Copper connection pieces | Size | Article No. |
|---|---|---|
| – | 1 | 3WL9111-0AA21-0AA0 |
| | 2 | 3WL9111-0AA22-0AA0 |
| | 3 | 3WL9111-0AA23-0AA0 |
| ✓ | 1 | 3WL9111-0AA31-0AA0 |
| | 2 | 3WL9111-0AA32-0AA0 |
| | 3 | 3WL9111-0AA33-0AA0 |

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## Accessories for ETU electronic trip units

### EMC filter

- Common-mode interference suppressor filters (e.g. in IT networks, caused by frequency converters)
- Insertion loss (asymmetric) in the range 40 kHz to 10 MHz > 40 dB.

| Types | Article No. |
|---|---|
| Only for ETU Release 2 | 3WL9111-0AK34-0AA0 |

### Sealable and lockable covers

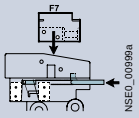



| Accessory for | Article No. |
|---|---|
| ETU15B to ETU45B | 3WL9111-0AT45-0AA0 |
| ETU76 | 3WL9111-0AT46-0AA0 |

### Automatic reset of the reclosing lockout

| Version | Article No. |
|---|---|
| Spare part for option K01 | 3WL9111-0AK21-0AA0 |

### Remote trip alarm reset coils



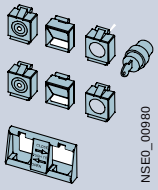

**Note:**
The remote trip alarm reset coils are identical for the 3WL and 3WA and can be used in both circuit breaker lines.
You will find the article numbers of the remote trip alarm reset coils in section 3WA – Accessories and spare parts see page 1/63

### Retrofittable internal wiring

| Use | Male connector | Accessory for | Article No. |
|---|---|---|---|
| Internal wiring of **Cubicle**BUS for connection to terminal X8 | Without male connector | ETU45B and ETU76B | 3WL9111-0AK30-0AA0 |
| For connection of the external N and G transformers to terminal X8 | Without male connector | Not for ETU Release 2 | 3WL9111-0AK31-0AA0 |
| | | ETU Release 2 | 3WL9111-0AK33-0AA0 |

## Locking provisions and interlocks

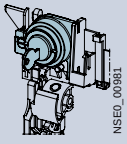
### Interlocking sets for mechanical Open/Close




- Consisting of two transparent covers each for sealing or for attaching padlocks (padlocks not included in scope of supply)
- Cover with 6.35 mm hole (for tool actuation)
- Lock mount for safety lock for key operation

| Version | Article No. |
|---|---|
| Without safety lock | 3WL9111-0BA21-0AA0 |
| Made by CES | 3WL9111-0BA22-0AA0 |
| Made by IKON | 3WL9111-0BA24-0AA0 |

### Locking provision against unauthorized closing from the operator panel




- The disconnector unit fulfills the requirements for main circuit breakers acc. to EN 60204-1
- Spare part for options S01 to S09

| Type | Scope of supply | Article No. |
|---|---|---|
| Assembly kit FORTRESS or CASTELL | Without locks, cylinders or keys | 3WL9111-0BA31-0AA0 |
| Made by RONIS | Locks, cylinders and keys included | 3WL9111-0BA33-0AA0 |
| Made by KIRK-Key | Without locks, cylinders or keys | 3WL9111-0BA34-0AA0 |
| Made by PROFALUX | Locks, cylinders and keys included | 3WL9111-0BA35-0AA0 |
| Made by CES | Locks, cylinders and keys included | 3WL9111-0BA36-0AA0 |
| Made by IKON | Locks, cylinders and keys included | 3WL9111-0BA38-0AA0 |
| Assembly kit for padlocks | Without padlock | 3WL9111-0BA41-0AA0 |

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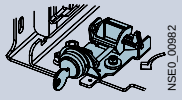


# Accessories and spare parts



## Locking provisions and interlocks

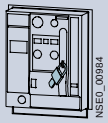
### Locking provision against unauthorized closing, for withdrawable circuit breakers




- The disconnector unit fulfills the requirements for main circuit breakers acc. to EN 60204-1
- Consisting of lock in the guide frame, active in connected position, function is retained when circuit breaker is replaced
- Spare part for option R60, R61, R68

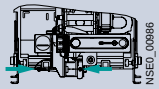
| Type | Scope of supply | Article No. |
|---|---|---|
| Made by CES | Locks, cylinders and keys included | 3WL9111-0BA51-0AA0 |
| Made by IKON | Locks, cylinders and keys included | 3WL9111-0BA53-0AA0 |
| Made by KIRK-Key [1] | Without locks, cylinders or keys | 3WL9111-0BA57-0AA0 |
| Made by RONIS | Locks, cylinders and keys included | 3WL9111-0BA58-0AA0 |
| Made by PROFALUX | Locks, cylinders and keys included | 3WL9111-0BA50-0AA0 |

### Locking provisions for charging handle with padlock




| Version | Scope of supply | Article No. |
|---|---|---|
| Spare part for option S33 | Without padlock | 3WL9111-0BA71-0AA0 |

### Locking provision to prevent movement of the withdrawable circuit breaker




- Safety lock for mounting onto the circuit breaker
- Spare part for option S71, S75, S76

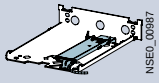
| Type | Scope of supply | Article No. |
|---|---|---|
| Made by CES | Locks, cylinders and keys included | 3WL9111-0BA73-0AA0 |
| Made by IKON | Locks, cylinders and keys included | 3WL9111-0BA75-0AA0 |
| Made by PROFALUX | Locks, cylinders and keys included | 3WL9111-0BA76-0AA0 |
| Made by RONIS | Locks, cylinders and keys included | 3WL9111-0BA77-0AA0 |
| Made by KIRK-Key [1] | Without locks, cylinders or keys | 3WL9111-0BA80-0AA0 |

### Interlocking systems

- 2 of the same keys for 3 circuit breakers
- Locking provision in OFF position
- Lock in the operator panel
- A maximum of 2 circuit breakers can be switched on

| Type | Article No. |
|---|---|
| Made by CES | 3WL9111-0BA43-0AA0 |

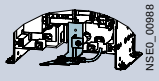
### Locking mechanisms to prevent movement of the withdrawable circuit breakers in disconnected position




- Consisting of Bowden cable and lock in the cabinet door on the circuit breaker
- Spare part for option R81, R85, R86
- **Note:** Not possible in combination with "Locking mechanism to prevent opening of the cabinet door" (order code "R30") or "Locking mechanism to prevent movement with the cabinet door open" (order code "R50")

| Type | Article No. |
|---|---|
| Made by CES | 3WL9111-0BA81-0AA0 |
| Made by IKON | 3WL9111-0BA83-0AA0 |
| Made by PROFALUX | 3WL9111-0BA85-0AA0 |
| Made by RONIS | 3WL9111-0BA86-0AA0 |

### Locking mechanisms to prevent opening of the cabinet door in ON position




- Fixed-mounted
- Defeatable
- **Note:** Not possible in combination with "Locking mechanism to prevent movement of the withdrawable circuit breakers in disconnected position" (order codes "R81", "R85" or "R86").

| Version | Article No. |
|---|---|
| Spare part for option S30 | 3WL9111-0BB12-0AA0 |

[1] Locks, cylinders and keys must be ordered from the manufacturer.

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## Locking provisions and interlocks

### Locking mechanisms to prevent opening of the cabinet door

- Guide frames
- Defeatable
- **Note:** Not possible in combination with "Locking mechanism to prevent movement of the withdrawable circuit breakers in disconnected position" (order codes "R81", "R85" or "R86").

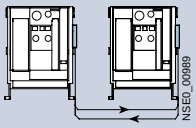
| Version | Article No. |
|---|---|
| Spare part for option R30 | 3WL9111-0BB13-0AA0 |

### Locking mechanisms to prevent movement with the cabinet door open

- Guide frames
- **Note:** Not possible in combination with "Locking mechanism to prevent movement of the withdrawable circuit breakers in disconnected position" (order codes "R81", "R85" or "R86").

| Version | Article No. |
|---|---|
| Spare part for option R50 | 3WL9111-0BB15-0AA0 |

### Mechanical interlocks




- With Bowden cable 2000 mm (one required for each circuit breaker)

| Type | When ordered separately | Spare part for | Article No. |
|---|---|---|---|
| Fixed-mounted circuit breaker | – | Option S55 | 3WL9111-0BB21-0AA0 |
| Module for withdrawable circuit breakers with guide frame | – | Option R55 [1] | 3WL9111-0BB24-0AA0 |
| Module for guide frame | ✓ | Option R56 | 3WL9111-0BB22-0AA0 |
| Module for withdrawable circuit breaker | ✓ | Option R57 | 3WL9111-0BB23-0AA0 |
| Adapter for size 3 withdrawable circuit breaker | ✓ | – | 3WL9111-0BB30-0AA0 |

### Couplings on the circuit breaker (with ring) for mutual interlocking




- Can be used in all circuit breakers

| Article No. |
|---|
| 3WL9112-8AH47-0AA0 |

### Bowden cable

| Length | Article No. |
|---|---|
| 2000 mm | 3WL9111-0BB45-0AA0 |
| 3000 mm | 3WL9111-0BB46-0AA0 |
| 4500 mm | 3WL9111-0BB47-0AA0 |

[1] Not available in combination with R40

## Test devices

### Manual tester, Release 2 for ETU15B to ETU76B electronic trip units



- For testing the electronic trip unit functions of all 3WL ETUs (Release 1 and Release 2)

| Article No. |
|---|
| 3WL9111-0AT32-0AA0 |

### Function test unit

- For testing the tripping characteristics for ETU15B to ETU76B electronic trip units (Release 1 and Release 2)

| Article No. |
|---|
| 3WL9111-0AT44-0AA0 |

### TD400 Kit IEC [1]

- Commissioning/Service Tool for IEC 3WL (ETU Release 2) and 3VA
- With adapter, cable and case
- Not suitable for 3WL10 and 3VA27

| Article No. |
|---|
| 3VW9011-0AT40 |

### TD400 adapter (spare part)

| Version | Article No. |
|---|---|
| For 3VA | 3VW9011-0AT43 |
| Only for 3WL ETU Release 1 | 3VW9011-0AT44 |
| Only for 3WL ETU Release 2 | 3VW9011-0AT45 |

[1] A country-specific radio license is required to operate the Bluetooth interface. Before activating the Bluetooth function, ensure that the license is available: www.siemens.com/lowvoltage/certificates

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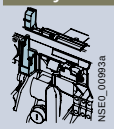


# Accessories and spare parts



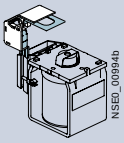
## Indicators and control elements

### Ready-to-close signaling switches (S20)




| Version | Contacts | Article No. |
|---|---|---|
| Spare part for option C22 | 1 NO | 3WL9111-0AH01-0AA0 |

### Signaling switch (S22 or S23)




- Not possible with communication port, order code "F02", "F12" or "F35".
- Auxiliary supply connector X7 required for circuit breakers or guide frames. If this is not already available, please order additionally

| Version | Contacts | Article No. |
|---|---|---|
| Spare part for options C26 and C27 | 1st or 2nd auxiliary release | 3WL9111-0AH02-0AA0 |

### 1st tripped signaling switch (S24)

- Not possible with communication port, order code "F02", "F12" or "F35".
- Auxiliary supply connector X7 required for circuit breakers or guide frames. If this is not already available, please order additionally

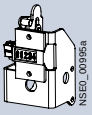
| Version | Contacts | Article No. |
|---|---|---|
| Spare part for option K07 | 1 CO | 3WL9111-0AH14-0AA0 |

### 2nd tripped signaling switch (S25)

- Not possible with communication port, order code "F02", "F12" or "F35".
- Auxiliary supply connector X7 required for circuit breakers or guide frames. If this is not already available, please order additionally
- Can only be used in combination with 1st tripped signaling switch

| Version | Contacts | Article No. |
|---|---|---|
| Spare part for option K06 | 1 NO | 3WL9111-0AH17-0AA0 |

### Operating cycles counters




- Only in conjunction with motorized operating mechanism

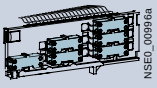
| Version | Version | Article No. |
|---|---|---|
| Spare part for option C01 | Mechanical | 3WL9111-0AH07-0AA0 |

### Spring charge signaling switch

- Not possible with communication port, order code "F02", "F12" or "F35".
- Auxiliary supply connector X7 required for circuit breakers or guide frames. If this is not already available, please order additionally

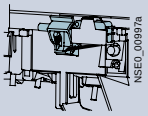
| Version | Contacts | Article No. |
|---|---|---|
| Spare part for option C20 | 1 NO | 3WL9111-0AH08-0AA0 |

### Position signaling switches for guide frames




| Version | Contacts | Article No. |
|---|---|---|
| Spare part for options R15 | 3 changeover contacts (1 × connected/1 × test/1 × disconnected position) | 3WL9111-0AH11-0AA0 |
| Spare part for options R16 | 6 changeover contacts (3 × connected/2 × test/1 × disconnected position) | 3WL9111-0AH12-0AA0 |

### Local electric close (S10) for operator panel




- Not possible with communication port, order code "F02", "F12" or "F35".
- Not possible with motor disconnect switch
- Button + wiring (Auxiliary supply connector X7 required for circuit breakers or guide frames. If this is not already available, please order additionally)
- **Note:** Possible only for circuit breakers with closing coil.

| Version | Type | Article No. |
|---|---|---|
| Spare part for options C11 and C12 | With sealing cap C11 | 3WL9111-0AJ02-0AA0 |
| | With CES assembly kit C12 | 3WL9111-0AJ03-0AA0 |
| | With IKON assembly kit | 3WL9111-0AJ05-0AA0 |

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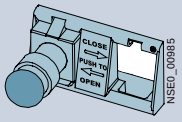
## Indicators and control elements

### Motor disconnect switch (S12)

- Mounting onto operator panel
- Not possible with local electric close

| Version | Article No. |
|---|---|
| Spare part for option S25 | 3WL9111-0AJ06-0AA0 |

### EMERGENCY-OFF pushbuttons

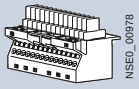



- Mushroom pushbutton instead of the mechanical OFF pushbutton

| Type | Article No. |
|---|---|
| Spare part for option S24 | 3WL9111-0BA72-0AA0 |

## Auxiliary conductor connections

### Male connectors for circuit breakers 1




| | Article No. |
|---|---|
| | 3WA9111-0AB01 |

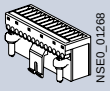
### Extension for male connector

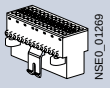
- Male connector must be ordered separately

| Version | Article No. |
|---|---|
| 1000 V | 3WA9111-0AB02 |

### Auxiliary supply connector for circuit breakers or guide frames 2

| Version | Article No. |
|---|---|
| Screw connection (SIGUT) | 3WA9111-0AB03 |
| Screwless connection (tension spring) | 3WL9111-0AB04-0AA0 |



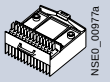




### Coding kits 3



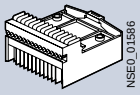

| Version | Article No. |
|---|---|
| For fixed-mounted X5 to X8 | 3WA9111-0AB07 |

### Sliding contact modules for guide frames 4




| | Article No. |
|---|---|
| | 3WA9111-0AB08 |

### One-part sliding contact modules for guide frames 5




| Version | Article No. |
|---|---|
| Screw connection (SIGUT) | 3WL9111-0AB18-0AA0 |

### Blanking blocks for circuit breakers

| | Article No. |
|---|---|
| | 3WA9111-0AB12 |

For a complete auxiliary circuit connection you must order:
Fixed-mounted version: 1 + 2 + 3
Withdrawable version: 1 + 4 + 2 or 1 + 5

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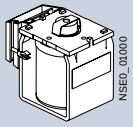


# Accessories and spare parts



## Auxiliary release

### Closing coils/shunt trips




**Note:**
The closing coils (CC) and shunt trips (ST) are identical for the 3WL and 3WA and can be used in both circuit breaker lines.
You will find article numbers in section 3WA see page 1/67

Please note: The communication-capable closing coils (CC-COM) can be used only in conjunction with 3WA.

### Closing coils (CC), 5% ED (momentary duty) with disconnect switch S15



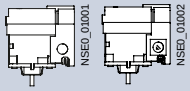
**Note:**
The closing coils (CC) with 5% OP are identical for the 3WL and 3WA and can be used in both circuit breaker lines.
You will find article numbers in section 3WA see page 1/68

### Shunt trip (ST), 5% OP (momentary duty) with disconnect switch S14



**Note:**
The shunt trips (ST) with 5% OP are identical for the 3WL and 3WA and can be used in both circuit breaker lines.
You will find article numbers in section 3WA see page 1/68

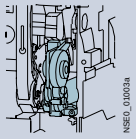
### Undervoltage release




**Note:**
The undervoltage releases (UVR and UVR-t) are identical for the 3WL and 3WA and can be used in both circuit breaker lines.
You will find article numbers in section 3WA see page 1/68

## Operating mechanism

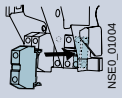
### Motorized operating mechanisms




**Note:**
The motor operators are identical for the 3WL and 3WA and can be used in both circuit breaker lines.
You will find article numbers in section 3WA see page 1/68

## Auxiliary contacts

### Auxiliary switch blocks




| Contacts | Article No. |
|---|---|
| 2 NO + 2 NC | 3WL9111-0AG01-0AA0 |
| 2 NO | 3WL9111-0AG02-0AA0 |
| 1 NO + 1 NC | 3WL9111-0AG03-0AA0 |

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## Door sealing frames, hoods, shutters

### Door sealing frames



| Version | Article No. |
|---|---|
| Spare part for option T40 | 3WL9111-0AP01-0AA0 |

### Protective covers IP55




- Cannot be used in conjunction with door sealing frames
- Hood removable and can be opened on both sides

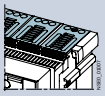
| Article No. |
|---|
| 3WL9111-0AP02-0AA0 |

### Shutters

| Version | Number of poles | Size | Breaking capacity | Article No. |
|---|---|---|---|---|
| Spare part for option R21 | 3-pole | 1 | N, S, H | 3WL9111-0AP04-0AA0 |
| | | 2 | N, S, H | 3WL9111-0AP06-0AA0 |
| | | | C | 3WL9111-0AP43-0AA0 |
| | | 3 | H, C | 3WL9111-0AP07-0AA0 |
| | 4-pole | 1 | N, S, H | 3WL9111-0AP08-0AA0 |
| | | 2 | N, S, H | 3WL9111-0AP11-0AA0 |
| | | | C | 3WL9111-0AP44-0AA0 |
| | | 3 | H, C | 3WL9111-0AP12-0AA0 |

## Arc chute

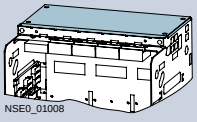
### Arc chute



| Voltage | Size | Breaking capacity | Article No. |
|---|---|---|---|
| 690 V | 1 | N, S, H | 3WL9111-0AS01-0AA0 |
| | 2 | N, S, H | 3WL9111-0AS02-0AA0 |
| | | C | 3WL9111-0AS10-0AA0 |
| | 3 | H, C | 3WL9111-0AS03-0AA0 |
| 1000 V/1150 V | 2 | H, C | 3WL9111-0AS05-0AA0 |
| | 3 | H, C | 3WL9111-0AS06-0AA0 |

### Arc chute covers

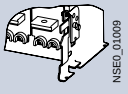
- Parts kit for guide frame
- Spare part for option R10
- Not available for:
  - 1000 V version (order code "A05"),
  - 1150 V version (order code "A15")
  - DC version
  - 4000 A size 2
  - Circuit breakers with very high breaking capacity C.




| Number of poles | Size | Article No. |
|---|---|---|
| 3-pole | 1 | 3WL9111-0AS32-0AA0 |
| | 2 | 3WL9111-0AS36-0AA0 |
| | 3 | 3WL9111-0AS38-0AA0 |
| 4-pole | 1 | 3WL9111-0AS42-0AA0 |
| | 2 | 3WL9111-0AS44-0AA0 |
| | 3 | 3WL9111-0AS46-0AA0 |

## Coding for withdrawable version

### Coding for withdrawable version




- By customer, for 36 coding variants

| Size | Article No. |
|---|---|
| 1, 2 | 3WL9111-0AR12-0AA0 |
| 3 | 3WL9111-0AR13-0AA0 |

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# Accessories and spare parts



## Grounding connections

**Grounding connection between the guide frame and the withdrawable circuit breaker**



- Up to 30 kA or 60 kA ground-fault current
- 2 modules must be used for up to 60 kA ground-fault current

| Contact module | Size | Number of poles | Article No. |
|---|---|---|---|
| For guide frames | 1, 2 [1] | | 3WL9111-0BA01-0AA0 |
| | 3 | | 3WL9111-0BA02-0AA0 |
| For withdrawable circuit breakers | 1 | 3-pole | 3WL9111-0BA05-0AA0 |
| | | 4-pole | 3WL9111-0BA08-0AA0 |
| | 2 | 3-pole [1] | 3WL9111-0BA06-0AA0 |
| | | 4-pole [1] | 3WL9111-0BA04-0AA0 |
| | 3 | 3-pole | 3WL9111-0BA07-0AA0 |
| | | 4-pole | 3WL9111-0BA10-0AA0 |

[1] Cannot be used for size 2 with very high breaking capacity C and size 2, 4000 A.

## Support bracket

**Support bracket**




- For mounting fixed-mounted circuit breakers on vertical plane
- Only for sizes 1 and 2 (1 set = 2 units)

| Article No. |
|---|
| 3WL9111-0BB50-0AA0 |

## CubicleBUS modules

- Each **Cubicle**BUS module is supplied with a 0.2 m pre-assembled cable to connect the modules with each other. A longer pre-assembled cable is required for connection to the circuit breaker.
- All communication components, **Cubicle**BUS modules and metering functions are available for the ETU45B and ETU76B electronic trip units.

**Modules of the CubicleBUS modules**




| Type | Article No. |
|---|---|
| Digital output module with rotary coding switch, relay outputs | 3WL9111-0AT26-0AA0 |
| Digital output module, configurable, relay outputs | 3WL9111-0AT20-0AA0 |
| Digital input module | 3WL9111-0AT27-0AA0 |
| Analog output module | 3WL9111-0AT23-0AA0 |
| ZSI module | 3WL9111-0AT21-0AA0 |

**Preassembled cables for the CubicleBUS**

| For connection to 3WL | Length | Article No. |
|---|---|---|
| With COM15/COM16/COM35 | 0.2 m | 3WL9111-0BC04-0AA0 |
| | 1 m | 3WL9111-0BC02-0AA0 |
| | 2 m | 3WL9111-0BC03-0AA0 |
| Without COM15/COM16/COM35 | 2 m | 3WL9111-0BC05-0AA0 |

**Voltage transformers**

- Required for 3WL circuit breakers with metering function Plus, if no direct voltage tap is available.
- 380 ... 690 V/100 V, class 0.5

| Number of poles | Metering function | Article No. |
|---|---|---|
| 3-pole | With metering function Plus | 3WL9111-0BB68-0AA0 |

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## Retrofitting and spare parts

- For retrofitting the COM15, COM16 or COM35 communications modules in withdrawable 3WL circuit breakers with Z options A05 (1000 V AC), A15 (1150 V AC) or A16 (690 V + 20%), the following additional assembly kits are required: 3WL9111-0AT62-0AA0 for circuit breakers size 1 or 3WL9111-0AT63-0AA0 for circuit breakers size 2/3

**COM35 PROFINET IO/Modbus TCP modules**



| Version | Article No. |
|---|---|
| For ETU45B and ETU76B electronic trip units | 3WL9111-0AT65-0AA0 |

**PROFINET IO/Modbus TCP retrofit kits**

- Retrofit kit for the PROFINET IO/Modbus TCP communication including COM35, BSS and set of cables for all 3WL air circuit breakers with ETU45B and ETU76B electronic trip units

| Article No. |
|---|
| 3WL9111-0AT66-0AA0 |

**PROFIBUS retrofit kits**

- Retrofit kit for the PROFIBUS communication including COM15, BSS and set of cables for all 3WL air circuit breakers with ETU45B and ETU76B electronic trip units

| Article No. |
|---|
| 3WL9111-0AT12-0AA0 |

**COM15 PROFIBUS modules**



| Version | Article No. |
|---|---|
| For ETU45B and ETU76B electronic trip units | 3WL9111-0AT15-0AA0 |

**COM16 Modbus RTU modules**

| Version | Article No. |
|---|---|
| For ETU45B and ETU76B electronic trip units | 3WL9111-0AT17-0AA0 |

**Modbus RTU retrofit kits IEC**

- Retrofit kit for the Modbus communication including COM16, BSS and set of cables for all 3WL air circuit breakers with ETU45B and ETU76B electronic trip units

| Article No. |
|---|
| 3WL9111-0AT18-0AA0 |

**Additional parts for retrofitting the COM15/COM16/COM35 communications modules**

- In withdrawable 3WL circuit breakers with Z options:
  - A05 (1000 V AC) or
  - A15 (1150 V AC) or
  - A16 (690 V + 20%)

| Size | Article No. |
|---|---|
| 1 | 3WL9111-0AT62-0AA0 |
| 2, 3 | 3WL9111-0AT63-0AA0 |

**Breaker status sensors (BSS)**



| Version | Article No. |
|---|---|
| • For acquisition via communication of the circuit breaker states ON/OFF/tripped<br>• For ETU45B and ETU76B electronic trip units | 3WL9111-0AT16-0AA0 |

**Operating instructions in printed form**

| Description | Article No. |
|---|---|
| 3WL operating instructions – Upgrade DE/EN | 3ZW1012-0WL11-0AB1 |
| 3WL operating instructions – DE/EN | 3ZX1812-0WL00-0AN4 |
| 3WL operating instructions – Upgrade IT/FR | 3ZW1012-0WL11-0AD1 |
| 3WL operating instructions – IT/FR | 3ZX1812-0WL00-0AJ3 |
| 3WL operating instructions – Upgrade ES/PT | 3ZW1012-0WL11-0AE1 |
| 3WL operating instructions – ES/PT | 3ZX1812-0WL00-0AL3 |
| **Article number assignment for 3WL or 3WL upgrade** | **Article No.** |
| 3WL breakers | 3WL1_ _ _-_ _ _3_-_ _ _ _ |
| | 3WL1_ _ _-_ _ _4_-_ _ _ _ |
| 3WL breakers upgrade | 3WL1_ _ _-_ _ _6_-_ _ _ _ |
| | 3WL1_ _ _-_ _ _7_-_ _ _ _ |
| 3WL guide frames | 3WL921_-_A_ _ _-_ _ _ _ |
| | 3WL921_-_B_ _ _-_ _ _ _ |
| | 3WL921_-_D_ _ _-_ _ _ _ |
| | 3WL921_-_E_ _ _-_ _ _ _ |
| 3WL guide frames upgrade | 3WL921_-_F_ _ _-_ _ _ _ |
| | 3WL921_-_G_ _ _-_ _ _ _ |
| | 3WL921_-_H_ _ _-_ _ _ _ |
| | 3WL921_-_I_ _ _-_ _ _ _ |

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# Accessories and spare parts



## Interfaces

### Interface to the IEC 61850

- The SICAM A8000 smart data concentrator connects the circuit breakers from the SENTRON portfolio via the Modbus TCP/IP protocol and transmits data via communication protocols (e.g.: IEC 61850, IEC 60870-5-104, IEC 60870-5-101, Modbus and DNP) to higher-level systems.

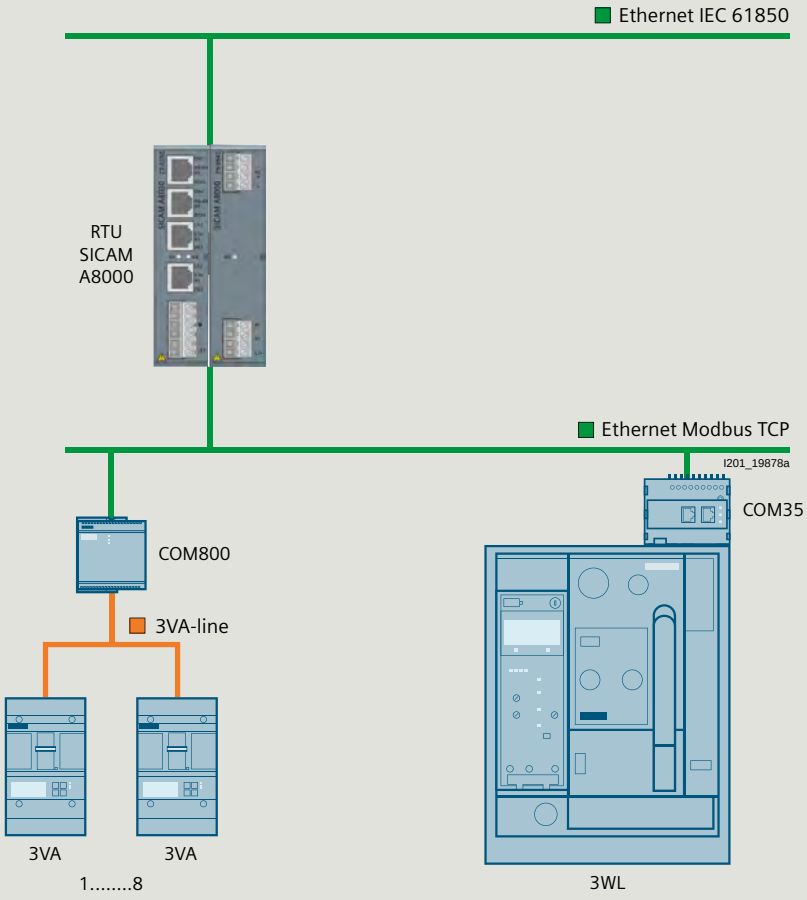




| Type | Operational voltage | Article No. |
|---|---|---|
| SICAM CP-8021 [1] | – | 6MF2802-1AA00 |
| SICAM CP-8050 [2] | – | 6MF2805-0AA00 |
| SICAM PS-8620 | 24 ... 60 V DC (12 W) | 6MF2862-0AA00 |
| SICAM PS-8622 | 110 ... 220 V DC (12 W) | 6MF2862-2AA00 |

[1] Dimensioned for device quantities of max. 1 × 3WL and 1 × 3VA
[2] Dimensioned for device quantities of 3 × 3WL and 8 × 3VA

You will find further information at:
www.siemens.com/sicam-a8000
For the SICAM CP-8021 and SICAM CP-8050, predefined modules were created to reduce commissioning work to a minimum.
The modules can be obtained free of charge via SiePortal www.siemens.com/lowvoltage/product-support (109816057)



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## Storage devices

### Capacitor trip device

- For shunt trips
- Storage time 5 min
- Also suitable for 3VL, 3VA and 3WN circuit breakers
- **Note:** Rated control supply voltage must match the rated control supply voltage of the shunt trips.

| Rated control supply voltage/rated operational voltage | | Article No. |
|---|---|---|
| 50/60 Hz AC | DC | |
| 220 ... 240 V | 220 ... 250 V | 3WL9111-0BA14-0AA0 |

## Spare parts

### Metering function Plus for retrofitting

- As spare part or for retrofitting the metering function Plus with an external voltage transformer
  - For ETU45B or ETU76B Release 2
  - A measuring accuracy of 3% is achieved if retrofitted.
- **Note:** External voltage transformer required

| | Article No. |
|---|---|
| | 3WL9111-0AT05-0AA0 |

### Voltage converter

| Version | Article No. |
|---|---|
| As a spare part for the metering function Plus | 3WL9111-0AT06-0AA0 |

### Components for conversion of an existing internal voltage tap

- Conversion requires 3 components for 3-pole 3WL
- Conversion requires 4 components for 4-pole 3WL
- Conversion of a metering function (Z option A05) is not possible.

| Conversion of internal voltage tap to main contact | Size | Article No. |
|---|---|---|
| From bottom to top | 1 | 3WL9111-0AT71-0AA0 |
| | 2 | 3WL9111-0AT72-0AA0 |
| | 3 | 3WL9111-0AT73-0AA0 |
| From top to bottom | 1 | 3WL9111-0AT74-0AA0 |
| | 2 | 3WL9111-0AT75-0AA0 |
| | 3 | 3WL9111-0AT76-0AA0 |

### Transformers (without iron core), Rogowski coil only (instrument transformer for the protective function)

- Used in converter applications with high harmonic components;
  can only be used with ETU45B or ETU76B
  - External 24 V DC supply required
  - Undervoltage release required (e.g. 3WL9111-0AE01-0AA0)
- As retrofit kit or as spare part. With new circuit breakers, please use the Z option K60
- **Scope of supply:**
  - Transformer
  - Warning signs
  - Manual

| Number of poles | Size | Article No. |
|---|---|---|
| 3-pole | 1 | 3WL9111-0AA42-0AA0 |
| | 2 | 3WL9111-0AA43-0AA0 |
| | 3 | 3WL9111-0AA44-0AA0 |
| 4-pole | 1 | 3WL9111-0AA45-0AA0 |
| | 2 | 3WL9111-0AA46-0AA0 |
| | 3 | 3WL9111-0AA47-0AA0 |

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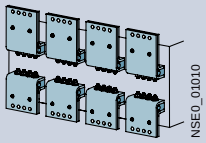


# Accessories and spare parts



## Main conductor connections, fixed-mounted versions (essential accessory)

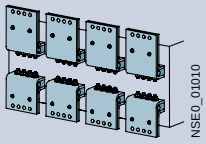
### Front-accessible main connections, single hole at top




- Not for 3WL1 size 1 with high breaking capacity H

| Size | Rated current $I_n$ | Article No. |
|---|---|---|
| 1 | ≤ 1000 A | 3WL9111-0AL01-0AA0 |
| | 1250 ... 1600 A | 3WL9111-0AL02-0AA0 |
| 2 [4] | ≤ 2000 A | 3WL9111-0AL03-0AA0 |
| | ≤ 2500 A | 3WL9111-0AL04-0AA0 |
| | ≤ 3200 A | 3WL9111-0AL05-0AA0 |
| 3 | ≤ 4000 A | 3WL9111-0AL06-0AA0 |

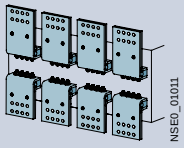
### Front-accessible main connections, single hole at bottom




- Not for 3WL1 size 1 with high breaking capacity H

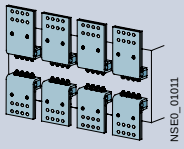
| Size | Rated current $I_n$ | Article No. |
|---|---|---|
| 1 | ≤ 1000 A | 3WL9111-0AL51-0AA0 |
| | 1250 ... 1600 A | 3WL9111-0AL52-0AA0 |
| 2 [4] | ≤ 2000 A | 3WL9111-0AL53-0AA0 |
| | ≤ 2500 A | 3WL9111-0AL54-0AA0 |
| | ≤ 3200 A | 3WL9111-0AL55-0AA0 |
| 3 | ≤ 4000 A | 3WL9111-0AL56-0AA0 |

### Front-accessible main connections according to DIN 43673, double hole at top



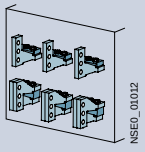

| Size | Rated current $I_n$ | Article No. |
|---|---|---|
| 1 | ≤ 1000 A [1] | 3WL9111-0AL07-0AA0 |
| | 1250 ... 2000 A [5] | 3WL9111-0AL08-0AA0 |
| 2 [4] | ≤ 2000 A | 3WL9111-0AL11-0AA0 |
| | ≤ 2500 A | 3WL9111-0AL12-0AA0 |
| | ≤ 3200 A | 3WL9111-0AL13-0AA0 |
| 3 | ≤ 4000 A | 3WL9111-0AL14-0AA0 |

### Front-accessible main connections according to DIN 43673, double hole at bottom




| Size | Rated current $I_n$ | Article No. |
|---|---|---|
| 1 | ≤ 1000 A [1] | 3WL9111-0AL57-0AA0 |
| | 1250 ... 2000 A [5] | 3WL9111-0AL58-0AA0 |
| 2 [4] | ≤ 2000 A | 3WL9111-0AL61-0AA0 |
| | ≤ 2500 A | 3WL9111-0AL62-0AA0 |
| | ≤ 3200 A | 3WL9111-0AL63-0AA0 |
| 3 | ≤ 4000 A | 3WL9111-0AL64-0AA0 |

### Rear vertical main connections




| Size | Rated current $I_n$ | Article No. |
|---|---|---|
| 1 [2] | ≤ 2000 A | 3WL9111-0AM01-0AA0 |
| 2 [3] | ≤ 3200 A | 3WL9111-0AM02-0AA0 |
| 3 | ≤ 6300 A | 3WL9111-0AM03-0AA0 |

[1] Not for 3WL1 size 1 with high breaking capacity H
[2] In the case of vertical connection size 1 with breaking capacity N and S, up to 1000 A one 3WL9111-0AM01-0AA0 vertical connection is required, up to 2000 A or with breaking capacity H two 3WL9111-0AM01-0AA0 vertical connections are required.
[3] In the case of vertical connection size 2, up to 2500 A one 3WL9111–0AM02–0AA0 vertical connection is required, up to 3200 A two 3WL9111-0AM02-0AA0 vertical connections are required.
[4] Not for circuit breakers with very high breaking capacity C.
[5] Can be used for size 1 with H breaking capacity of 630 ... 2000 A.

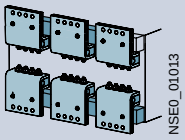
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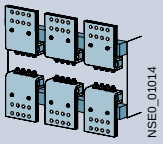
## Main conductor connections, withdrawable versions (essential accessory)

### Front-accessible main connections, single hole at top or at bottom [1] [2]



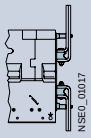

| Size | Rated current $I_n$ | Article No. |
|---|---|---|
| 1 | ≤ 1000 A | 3WL9111-0AN01-0AA0 |
| | 1250 ... 1600 A | 3WL9111-0AN02-0AA0 |
| 2 [3] | ≤ 2000 A | 3WL9111-0AN03-0AA0 |
| | ≤ 2500 A | 3WL9111-0AN04-0AA0 |
| | ≤ 3200 A | 3WL9111-0AN05-0AA0 |
| 3 | ≤ 4000 A | 3WL9111-0AN06-0AA0 |

### Front-accessible main connections according to DIN 43673, double hole at top or at bottom [1]




| Size | Rated current $I_n$ | Article No. |
|---|---|---|
| 1 | ≤ 1000 A [2] | 3WL9111-0AN07-0AA0 |
| | 1250 ... 2000 A [3] | 3WL9111-0AN08-0AA0 |
| 2 [3] | ≤ 2000 A | 3WL9111-0AN11-0AA0 |
| | ≤ 2500 A | 3WL9111-0AN12-0AA0 |
| | ≤ 3200 A | 3WL9111-0AN13-0AA0 |
| 3 | ≤ 4000 A | 3WL9111-0AN14-0AA0 |

### Supports for front and DIN connection bars




| Number of poles | Size | Article No. |
|---|---|---|
| 3-pole for 3 bars | 1 | 3WL9111-0AN41-0AA0 |
| | 2 | 3WL9111-0AN42-0AA0 |
| | 3 | 3WL9111-0AN43-0AA0 |
| 4-pole for 4 bars | 1 | 3WL9111-0AN44-0AA0 |
| | 2 | 3WL9111-0AN45-0AA0 |
| | 3 | 3WL9111-0AN46-0AA0 |

### Rear vertical main connections

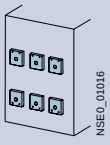



| Size | Rated current $I_n$ | Connection pieces | Article No. |
|---|---|---|---|
| 1 | ≤ 1000 A [2] | | 3WL9111-0AN15-0AA0 |
| | 1250 ... 2000 A [2] | | 3WL9111-0AN16-0AA0 |
| 2 | ≤ 2000 A [4] | | 3WL9111-0AN17-0AA0 |
| | ≤ 2500 A [4] | | 3WL9111-0AN18-0AA0 |
| | ≤ 3200 A [4] | | 3WL9111-0AN21-0AA0 |
| 3 | ≤ 5000 A | | 3WL9111-0AN22-0AA0 |
| | ≤ 6300 A | 3 pieces for 3-pole switches | 3WL9111-0AN23-0AA0 |
| | ≤ 6300 A, top | 4 pieces for 4-pole switches | 3WL9111-0AN20-0AA0 |
| | ≤ 6300 A, bottom | 4 pieces for 4-pole switches | 3WL9111-0AN10-0AA0 |

### Rear horizontal main connections

| Size | Rated current $I_n$ | Article No. |
|---|---|---|
| 1 | ≤ 1000 A [2] | 3WL9111-0AN32-0AA0 |
| | 1250 ... 2000 A [2] | 3WL9111-0AN33-0AA0 |
| 2 | ≤ 2000 A [4] | 3WL9111-0AN34-0AA0 |
| | ≤ 2500 A [4] | 3WL9111-0AN35-0AA0 |
| | ≤ 3200 A [4] and 4000 A DC | 3WL9111-0AN36-0AA0 |
| 3 | ≤ 5000 A | 3WL9111-0AN37-0AA0 |

### Connecting flange




| Size | Rated current $I_n$ | Article No. |
|---|---|---|
| 1 | ≤ 1000 A [2] | 3WL9111-0AN24-0AA0 |
| | 1250 ... 2000 A [2] | 3WL9111-0AN25-0AA0 |
| 2 [3] | ≤ 2000 A | 3WL9111-0AN26-0AA0 |
| | ≤ 2500 A | 3WL9111-0AN27-0AA0 |
| | ≤ 3200 A | 3WL9111-0AN28-0AA0 |
| 3 | ≤ 4000 A | 3WL9111-0AN31-0AA0 |

[1] When using front-accessible main connections (withdrawable circuit breakers) supports are required.
[2] Not for 3WL1 size 1 with high breaking capacity H
[3] Can be used for frame size 1 with H breaking capacity of 630 A ... 2000 A.
[4] Not for circuit breakers with very high breaking capacity C.

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# Accessories and spare parts



## Conversion kit

**Conversion kit for converting fixed-mounted circuit breakers into withdrawable circuit breakers**

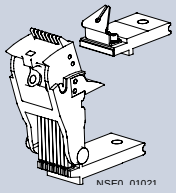
- Guide frames and sliding contact modules must be ordered separately
- Conversion from fixed-mounted to withdrawable circuit breakers is not possible for 3WL1 circuit breakers with very high breaking capacity C and for circuit breakers with Z options A05, A15 or A16

| Number of poles | Size | Article No. |
|---|---|---|
| 3-pole | 1 | 3WL9111-0BC11-0AA0 |
| | 2 | 3WL9111-0BC12-0AA0 |
| | 3 | 3WL9111-0BC13-0AA0 |
| 4-pole | 1 | 3WL9111-0BC14-0AA0 |
| | 2 | 3WL9111-0BC15-0AA0 |
| | 3 | 3WL9111-0BC16-0AA0 |

**Note:**
When the conversion kit is ordered, the switch ID (on the operator panel of the 3WL) must also be stated

## Main contact elements

**Main contact elements** [1) 2)]



- **Notes:**
  - The circuit breaker ID number must be specified when ordering [3)]
  - Specified for each connection (depending on the number of poles on the circuit breaker, order 3 or 4 units)
  - Article number is automatically adapted to the circuit breaker ID No.

| Size | Rated current $I_n$ | Article No. |
|---|---|---|
| 1 | ≤ 1600 A [4)] | 3WL9111-0AM90 L1Y |
| 2 | ≤ 2500 A | 3WL9111-0AM91 L1Y |
| | ≤ 4000 A | 3WL9111-0AM92 L1Y |
| 3 | ≤ 6300 A | 3WL9111-0AM93 L1Y |

1) Not for circuit breakers with very high breaking capacity C.
2) Replacement of the main contact elements for 3WL1 circuit breakers with very high breaking capacity C is only possible at the factory.
3) Please specify the circuit breaker ID No. in plain text when ordering.
4) Not for size 1 circuit breakers with breaking capacity H and circuit breakers with $I_n$ = 2000 A. The main contact elements can only be replaced in the factory.

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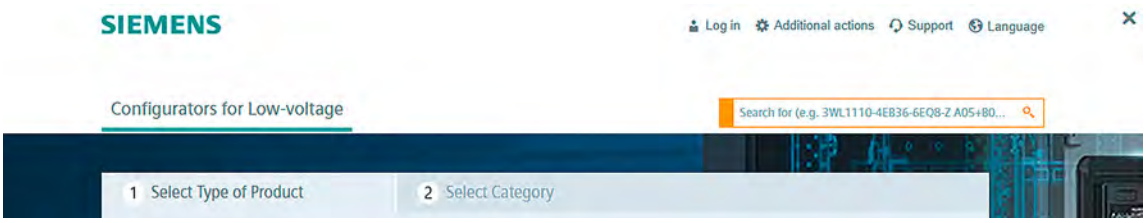
# Online configurator highlights

## www.siemens.com/lowvoltage/configurators



### Search function with global direct input

Searches for specific terms and jumps to MLFB based on input to the correct configurator



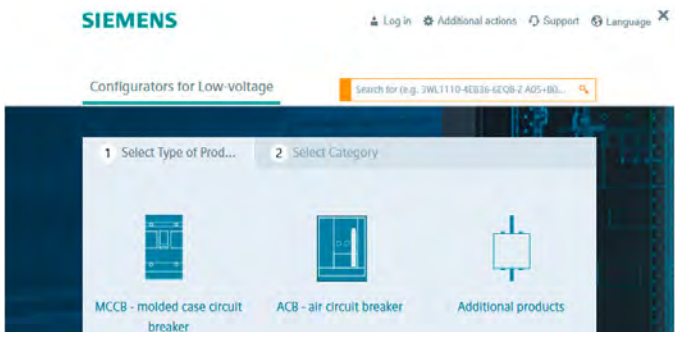

### Product list stores multiple configurations and can transfer them collectively to the shopping cart




### Recall of completed configurations for modification or additional configuration




### Responsive Design



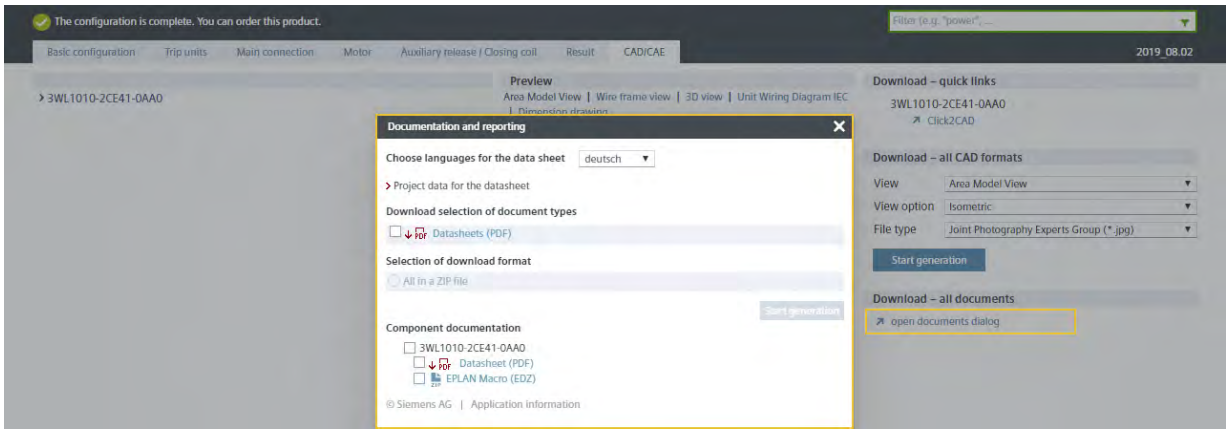
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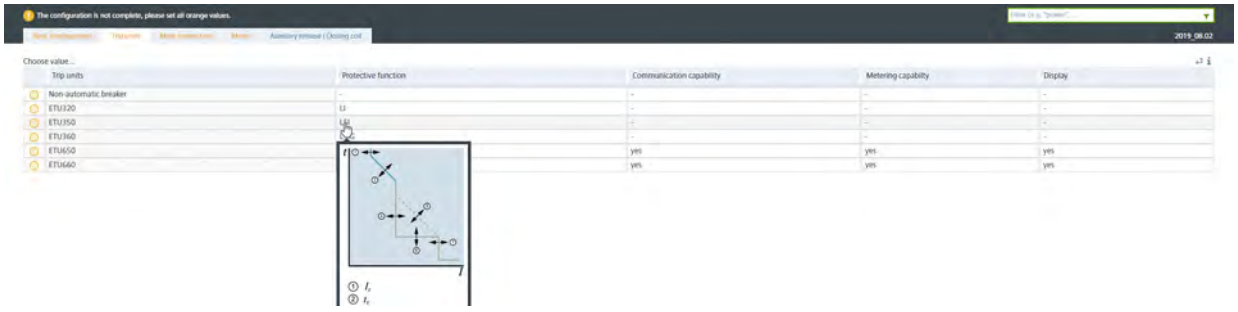


## www.siemens.com/lowvoltage/3wl10-configurator

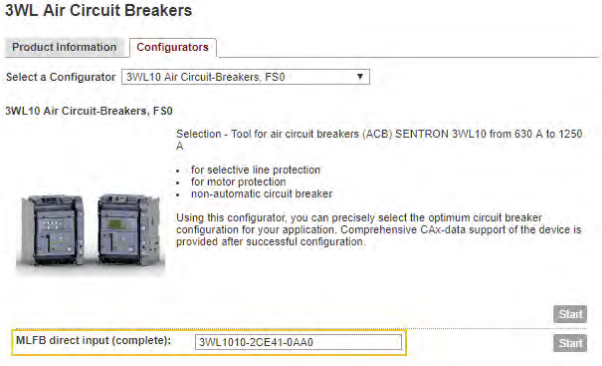
### Download an ePlan selector for 3WL10




### Mouseover display of characteristic curves to show the protective function




### Direct entry of an already known article number or parts of an article number



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# Structure of the article numbers

## Basic configuration

**The structure shown below is intended as an overview of each position and its meaning.
For a complete and valid configuration of your air circuit breaker, please use our online configurator at
www.siemens.com/lowvoltage/3wl10-configurator**

1

| 3WL10 | 6 | 7 | – | 8 | 9 | 10 | 11 | 12 | – | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

## Circuit breakers, non-automatic circuit breakers and ETU

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Max. rated current $I_{n\,max}$** | 630 A | | | | | 0 | 6 | | | | | | |
| | 800 A | | | | | 0 | 8 | | | | | | |
| | 1000 A | | | | | 1 | 0 | | | | | | |
| | 1250 A | | | | | 1 | 2 | | | | | | |
| **Short-circuit breaking capacity $I_{cu}$ at 415 V** | B | Basic (42 kA) | | | | | | 1 | | | | | |
| | N | ECO (55 kA) | | | | | | 2 | | | | | |
| | S | Standard (66 kA) | | | | | | 3 | | | | | |
| **Non-automatic circuit breaker** [1] | Without metering function, without communications interface | Without trip unit | | | | | A | A | | | | | |
| **Circuit breakers, ETU 3-series** | Without metering function, without communications interface | With trip unit | ETU320 LI | (N) [2] | | | A | B | | | | | |
| | | | ETU350 LSI | (N) [2] | | | A | C | | | | | |
| | | | ETU360 LSIG | (N) [2] | | | A | D | | | | | |
| **Circuit breakers, ETU 6-series** | | With trip unit | ETU650 LSI | (N) [2] | | | | E | | | | | |
| | | | ETU660 LSIG | (N) [2] | | | | F | | | | | |
| | Without communications interface | Without metering function | | | | | A | | | | | | |
| | With communications interface | Without metering function | | | | | B | | | | | | |
| | | Metering function Basic | Voltage tap on bottom | | | | C | | | | | | |
| | | | Voltage tap on top | | | | D | | | | | | |
| | | Metering function Advanced | Voltage tap on bottom | | | | E | | | | | | |
| | | | Voltage tap on top | | | | F | | | | | | |

[1] Only possible with N = ECO (55 kA) and S = Standard (66 kA)
[2] Neutral conductor protection for 3-pole breakers with an external neutral conductor transformer or for 4-pole breakers

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Number of poles** | Fixed-mounted versions | 3-pole | | | | | | 0 | | | | | |
| | | 4-pole | Neutral left | | | | | 1 | | | | | |
| | | | Neutral right | | | | | 2 | | | | | |
| | Withdrawable | 3-pole | | | | | | 3 | | | | | |
| | | 4-pole | Neutral left | | | | | 4 | | | | | |
| | | | Neutral right | | | | | 5 | | | | | |

## Connection [3]

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Type of mounting** | Withdrawable | Without frame | | | | | | | 0 | | | | |
| | | Rear vertical connection | | | | | | | 1 | | | | |
| | | Rear horizontal connection | | | | | | | 2 | | | | |
| | | Adapter for cable lug connection (rear) | | | | | | | 4 | | | | |
| | | Front-accessible, extended main connection | | | | | | | 5 | | | | |
| | Fixed-mounted versions | Rear vertical connection | | | | | | | 1 | | | | |
| | | Rear horizontal connection | | | | | | | 2 | | | | |
| | | Front main connection | | | | | | | 3 | | | | |
| | | Circular conductor terminals (front) | | | | | | | 4 | | | | |
| | | Front-accessible, extended main connection | | | | | | | 5 | | | | |

[3] Broadened connections available as accessories.

Quick selection guide, pages 1/76 and 1/78

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**3WL10** 6 7 – 8 9 10 11 12 – 13 14 15 16

## Motor

| | | | |
|---|---|---|---|
| **Operating mechanisms** | Manual operating mechanism | | 0 |
| | Spring charging motor | 24 ... 30 V AC/DC | 1 |
| | | 48 ... 60 V AC/DC | 2 |
| | | 110 V AC/DC | 3 |
| | | 230 V AC/DC | 4 |

## Auxiliary releases, closing coils

| | | | |
|---|---|---|---|
| **Closing coil (CC), remote reset magnet (RR)** | Without closing coil, without remote reset magnet | | A |
| | Closing coils (CC) | 24 V AC/DC | B |
| | | 30 V AC/DC | C |
| | | 48 V AC/DC | D |
| | | 60 V AC/DC | E |
| | | 110 ... 120 V AC/DC | F |
| | | 120 ... 127 V AC/DC | G |
| | | 220 ... 240 V AC/DC | H |
| | | 240 ... 250 V AC/DC | J |
| | Closing coil (CC) and additional remote reset magnet (RR) | 24 V AC/DC | K |
| | | 110 V AC/DC | L |
| | | 220 V AC/DC | M |
| **2nd auxiliary release** | Without 2nd auxiliary release | | A |
| | With undervoltage release (UVR) | 24 V AC/DC | B |
| | | 30 V AC/DC | C |
| | | 48 V AC/DC | D |
| | | 60 V AC/DC | E |
| | | 110 ... 120 V AC/DC | F |
| | | 120 ... 127 V AC/DC | G |
| | | 220 ... 240 V AC/DC | H |
| | | 240 ... 250 V AC/DC | J |
| | | 380 ... 400 V AC/DC | K |
| | | 415 ... 440 V AC/DC | L |
| | With undervoltage release (UVR), delayable with external time-delay device Scope of supply: UVR + time-delay device | 24 ... 30 V AC/DC | M |
| | | 110 ... 127 V AC/DC | N |
| | | 220 ... 250 V AC/DC | P |
| | With 2nd shunt trip (ST2) | 24 V AC/DC | Q |
| | | 30 V AC/DC | R |
| | | 48 V AC/DC | S |
| | | 60 V AC/DC | T |
| | | 110 ... 120 V AC/DC | U |
| | | 120 ... 127 V AC/DC | V |
| | | 220 ... 240 V AC/DC | W |
| | | 240 ... 250 V AC/DC | X |
| **1st auxiliary release** | Without 1st Auxiliary release | | 0 |
| | Shunt trips (ST) | 24 V AC/DC | 1 |
| | | 30 V AC/DC | 2 |
| | | 48 V AC/DC | 3 |
| | | 60 V AC/DC | 4 |
| | | 110 ... 120 V AC/DC | 5 |
| | | 120 ... 127 V AC/DC | 6 |
| | | 220 ... 240 V AC/DC | 7 |
| | | 240 ... 250 V AC/DC | 8 |

Quick selection guide, pages 1/76 and 1/78

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# Accessory options

**For a complete and valid configuration of your air circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3wl10-configurator**



To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

**3WL....-.....-.... -Z**

## Accessories for basic configuration

### Mounting options for fixed-mounted versions

- In the basic configuration, the fixed-mounted circuit breaker is mounted onto the rear panel. Floor mounting is possible as an option. The device must additionally be modified if it is to be extended to include functionalities such as external auxiliary switches or mechanical interlocking mechanism.[1)]

| | | | Order code |
|---|---|---|---|
| **Mounting options for fixed-mounted versions** [1)] | Floor mounting | Mounting support standard | **A07** |
| | | Mounting support extended [2)] | **S56** |
| | Rear panel mounting onto mounting plate | Side wall extended [2)] | **S57** |

## Accessories for ETU electronic trip units

### Rating plugs

- As standard, the electronic trip units are equipped with a rating plug for setting the rated current $I_n$, which is equal to the maximum rated circuit breaker current (< $I_{n\,max}$). The rated current of the selected rating plug must be less than or equal to $I_{n\,max}$ .
- To downrate the circuit breaker, a rated current smaller than $I_{n\,max}$ is selected for the rating plug via a Z option.
- Other functions can also be activated using rating plugs (L = OFF or Rc protection).

| | | | | Order code |
|---|---|---|---|---|
| **Rating plug** | For setting the rated current $I_n$ | For all ETUs | 400 A | **B04** |
| | | | 630 A | **B06** |
| | | | 800 A | **B08** |
| | | | 1000 A | **B10** |
| | For setting the rated current $I_n$, with overload protection L = OFF | For 6-series ETUs | 400 A | **L04** |
| | | | 630 A | **L06** |
| | | | 800 A | **L08** |
| | | | 1000 A | **L10** |
| | | | 1250 A | **L12** |
| | For setting the rated current $I_n$, for enabling of the residual current protective function. The residual current function is only possible with the MF Advanced metering function. | For ETU660 only | 400 A | **G04** |
| | | | 630 A | **G06** |
| | | | 800 A | **G08** |
| | | | 1250 A | **G12** |

### Communications modules

- No more than two different communications modules can be used at the same time.
- When using an IOM040 digital I/O module (Z option K56), only 1 communications module can be used.

| | | | Order code |
|---|---|---|---|
| **Communications modules** | COM040 | PROFIBUS | **F02** |
| | COM041 | PROFINET | **F03** |
| | COM043 | Modbus TCP | **F11** |
| | COM042 | Modbus RTU | **F12** |

### Breaker Connect modules

- When a circuit breaker with a communications interface is ordered, a Breaker Connect module for external 24 V DC power supply of the electronic components is also supplied ready installed.
- By means of this Z option, the Breaker Connect module for 24 V DC is replaced by a Breaker Connect module for 110 ... 240 V AC/DC.

| | | Order code |
|---|---|---|
| **Breaker Connect modules** | 110 ... 240 V AC/DC | **F26** |

### I/O modules internal

| | | | Order code |
|---|---|---|---|
| **I/O modules internal** | Digital I/O module IOM040 | 2 inputs, 2 outputs | **K56** |

[1)] These functionalities can be applied directly to the frame of the withdrawable circuit breaker, without any modification of the side wall.
[2)] Not possible in connection with or as an alternative to the mounting support, standard (A07).

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To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

**3WL....-.....-.... -Z**

| | | | | Order code |
|---|---|---|---|---|
| **Accessories for the motor** | | | | |
| **Mechanical operating cycles counter, 5-digit** | | | | C01 |
| **Auxiliary switches and signaling switches** | | | | |
| • Auxiliary and signaling switches for currents > 100 mA and up to 400 V AC are installed as standard.<br>• For currents < 100 mA for PLC connections, these auxiliary and signaling switches can be replaced.<br>• The auxiliary/signaling switches for 24 V DC digital signals are designed for<br>– a minimum load above 1 mA at 5 V DC, and<br>– a maximum breaking capacity of 100 mA at 24 V DC. | | | | |
| **Position signaling switches for guide frames** [1] | | 2 CO \| 2 CO \| 2 CO (connected \| test \| disconnected position) | | K55 |
| **Signaling switches** | Ready-to-close signaling switches | | 1 CO digital, 24 V DC | K50 |
| | Tripped signaling switches (S24) | | 1 CO digital, 24 V DC | K53 |
| | Spring charge signaling switch (S21) | | 1 CO digital, 24 V DC | K54 |
| **Auxiliary switches** | ON/OFF AUX | 4 CO digital, 24 V DC | | K51 |
| | | 2 CO 400 V AC + 2 CO digital 24 V DC | | K52 |
| **Locking, blocking and interlocking** | | | | |
| **Locking provisions** [1] | To prevent movement of the withdrawable circuit breaker | Cylinder lock | Made by RONIS | R78 |
| | | For no more than 3 padlocks, 8 mm | | R65 |
| **Locking mechanisms** | To prevent movement to disconnected position | | | R79 |
| **Locking provisions** | Against unauthorized closing in the operator panel (safe OFF) | Cylinder lock, made by RONIS | | S08 |
| | | For no more than 3 padlocks, plastic 4 mm | | S22 |
| | | For no more than 1 padlock, metal 7 mm | | S23 |
| | | For no more than 2 padlocks, metal 8 mm | | S07 |
| **Interlocking sets** | For mechanical Open and/or Close on the operator panel | For no more than 3 padlocks, plastic 4 mm | | S42 |
| | | For no more than 1 padlock, metal 7 mm | | S43 |
| | | For no more than 2 padlocks, metal 8 mm | | S44 |
| **Protective covers** | For mechanical Open/Close, not lockable | | | S41 |
| **Door sealing frames IP30** | IP3x | | | T30 |

[1] Can be used both for individual orders of the guide frame and complete orders (circuit breaker + guide frame).

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# Guide frames



## Guide frames for ordering separately without circuit breakers



- Guide frames without breakers up to 1250 A
- **Note:** All CB bus modules for communication COM04x/IOM300/Breaker Connect module, as well as COMPSS signaling switches are configured without frames in the withdrawable circuit breaker and defined there by means of Z options, and are included with the circuit breaker. PSS Standard is always included in the frame and can be changed to an electronics-capable signal by means of a Z option.

| Number of poles | Connection type | Article No. |
|---|---|---|
| 3-pole | Rear vertical | 3VW8112-0AA01 |
| | Rear horizontal | 3VW8112-0AB01 |
| | 4 × 240 mm² Cu/Al cable connection, for cable lug connections | 3VW8112-0AD01 |
| | Front connection bars, extended | 3VW8112-0AE01 |
| 4-pole | Rear vertical | 3VW8112-0BA01 |
| | Rear horizontal | 3VW8112-0BB01 |
| | 4 × 240 mm² Cu/Al cable connection, for cable lug connections | 3VW8112-0BD01 |
| | Front connection bars, extended | 3VW8112-0BE01 |

To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

**3VW8....-.....-.... -Z**

Order code

## Locking, blocking and interlocking

| | | | |
|---|---|---|---|
| **Locking provisions** | To prevent movement of the withdrawable circuit breaker | Cylinder lock, made by RONIS | **R78** |
| | | For no more than 3 padlocks, 8 mm | **R65** |
| **Locking mechanisms** | To prevent movement to disconnected position (only in combination with R78 or R65) | | **R79** |

## Auxiliary/signaling switches

| | | | |
|---|---|---|---|
| **Position signaling switch PSS for guide frame** | For 24 V DC digital signals, for minimum currents | 2 CO \| 2 CO \| 2 CO (connected \| test \| disconnected position) | **K55** |

Auxiliary and signaling switches for currents > 100 mA and up to 400 V AC are installed as standard.
For currents < 100 mA for PLC connections, these auxiliary and signaling switches can be modified.
The auxiliary/signaling switches for 24 V DC digital signals are designed for

- a minimum load above 1 mA at 5 V DC, and
- a maximum breaking capacity of 100 mA at 24 V DC.

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# ETU electronic trip units and accessories



## Electronic trip units (ETU)





| Version | With communications/metering function/ enhanced protective functions | Type | Protective function | Article No. |
|---|---|---|---|---|
| With rotary coding switches | No | ETU320 | LIN | 3VW9011-5AA00 |
| | | ETU350 | LSIN | 3VW9012-5AA00 |
| | | ETU360 | LSING | 3VW9012-7AA00 |
| With display | Yes | ETU650 | LSIN | 3VW9017-5AA00 |
| | | ETU660 | LSING | 3VW9017-7AA00 |

## Metering functions for ETU650 or ETU660



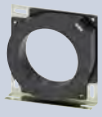
| Description | Protective function/version | Arrangement | Article No. |
|---|---|---|---|
| Metering function | MF Basic | – | 3VW9011-0AT01 |
| | MF Advanced | – | 3VW9011-0AT04 |
| Set of cables for voltage tap for MF | For 4-pole circuit breakers with neutral right | Top or bottom | 3VW9011-0AT08 |
| | For 4-pole circuit breakers with neutral left | Top | 3VW9011-0AT75 |
| | | Bottom | 3VW9011-0AT76 |
| | For 3-pole circuit breakers | Top | 3VW9011-0AT72 |
| | | Bottom | 3VW9011-0AT73 |

## External current transformers for N conductor



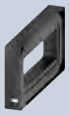
| Accessory for | Use | Article No. |
|---|---|---|
| ETU320, ETU350, ETU360, ETU650, ETU660 | For 3-pole circuit breakers only | 3VW9011-0AA30 |

## External current transformers for transformer neutral point



| Accessory for | $G_{ret}$ (Ground return) | Article No. |
|---|---|---|
| ETU660 | 100 A | 3VW9011-0GF30 |
| | 250 A | 3VW9011-0GF31 |

## Summation current transformers external Rc-CT for residual current metering



- Only with MF Advanced metering function and Rc rating plug

| Accessory for | Use | Article No. |
|---|---|---|
| ETU660 | For external residual current metering | 3VW9011-0RC30 |

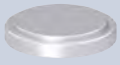
## Remote reset magnets RR for the circuit breakers including tripped signaling



- Remote reset magnet (RR) for resetting the circuit breaker after tripping as a result of overcurrent conditions

| Accessory for | Voltage | Article No. |
|---|---|---|
| ETU320, ETU350, ETU360, ETU650, ETU660 | 24 V DC | 3VW9011-0AK03 |
| | 110 V AC/DC | 3VW9011-0AK05 |
| | 250 V AC/DC | 3VW9011-0AK06 |

## Spare part batteries for ETU electronic trip unit



| Accessory for | Article No. |
|---|---|
| ETU320, ETU350, ETU360, ETU650, ETU660 | 3VW9011-0AT38 |

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# ETU electronic trip units and accessories



## Rating plugs




- Only one module is possible per circuit breaker.

| Accessory for | Version | Rated current $I_n$ | Article No. |
|---|---|---|---|
| ETU320, ETU350, ETU360, ETU650, ETU660 | Rating plugs for setting (< $I_{n\,max}$) the rated current $I_n$ | 400 A | 3VW9011-0AA53 |
| | | 630 A | 3VW9011-0AA55 |
| | | 800 A | 3VW9011-0AA56 |
| | | 1000 A | 3VW9011-0AA57 |
| | | 1250 A | 3VW9011-0AA58 |
| ETU 6-series | Rating plug without overload protection (L = OFF) and for setting (< $I_{n\,max}$) the rated current $I_n$ | 400 A | 3VW9011-0LF53 |
| | | 630 A | 3VW9011-0LF55 |
| | | 800 A | 3VW9011-0LF56 |
| | | 1000 A | 3VW9011-0LF57 |
| | | 1250 A | 3VW9011-0LF58 |
| ETU660 | Rating plug Rc for ETU660, for enabling the residual current protective function and setting (< $I_{n\,max}$) the rated current $I_n$. The residual current function is only possible with the MF Advanced metering function. | 400 A | 3VW9011-0RC53 |
| | | 630 A | 3VW9011-0RC55 |
| | | 800 A | 3VW9011-0RC56 |
| | | 1250 A | 3VW9011-0RC58 |

## CB bus modules – communications modules



- Contains the communications module
- No more than two different communications modules can be used at the same time
- When using a digital I/O module IOM040 (Z option K56), only 1 communications module can be used
- Can only be used with ETU of the 6-series and require a Breaker Connect module for connection to the circuit breaker. This can also be configured directly on the device by means of a Z option if the communications interface to the ETU 6-series is selected.

| Communications module | Protocol | Article No. |
|---|---|---|
| COM040 | PROFIBUS | 3VW9011-0AT15 |
| COM041 | PROFINET | 3VW9011-0AT14 |
| COM043 | Modbus TCP | 3VW9011-0AT16 |
| COM042 | Modbus RTU | 3VW9011-0AT17 |

## CB bus modules – I/O modules external IOM300



- For snapping onto DIN rail

| Accessory for | Maximum switching current per contact | Inputs | Outputs | Article No. |
|---|---|---|---|---|
| ETU 6-series | • 2 A at ≤ 30 V DC<br>• 0.8 A at 50 V DC<br>• 0.2 A at 150 V DC<br>• 4 A at 250 V AC | 11 | 10 | 3VW9011-0AT20 |

## CB bus modules – I/O modules internal IOM040



- When using a digital I/O module IOM040, only 1 communications module can be used

| Accessory for | Maximum switching current per contact | Inputs | Outputs | Article No. |
|---|---|---|---|---|
| ETU 6-series | • 2 A at ≤ 30 V DC<br>• 0.8 A at 50 V DC<br>• 0.2 A at 150 V DC<br>• 4 A at 250 V AC | 2 | 2 | 3VW9011-0AT30 |

## Actuator module COM ACT



- For switching the circuit breaker on/off remotely via communication
- Actuation of the closing coil (CC) and the 1st shunt trip (ST)
- Can only be used in combination with a communications module, spring charging motor, closing coil and 1st shunt trip
- Automatically included if the communications interface of the ETU 6-series is selected in the basic circuit breaker configuration

| Accessory for | Article No. |
|---|---|
| ETU 6-series | 3VW9011-0AT10 |

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## Breaker Connect modules



- For external power supply for the electronics components

| Voltage | Article No. |
|---|---|
| 110 ... 240 V AC/DC | 3VW9011-0AT06 |
| 24 ... 48 V DC | 3VW9011-0AT07 |

## Auxiliary contact signaling switch for communications interface



- Auxiliary contacts for signaling the readiness to close or for position signaling switches of the withdrawable positions.
- Can only be used in combination with communications module.
- Can be combined with standard position signaling switches or ready-to-close signaling contacts.
- **Note:** Both signaling switches are automatically included in the basic circuit breaker (COM PSS only with withdrawable versions) if the communications interface of the ETU 6-series is selected.

| Function | Article No. |
|---|---|
| Ready-to-close signaling switch for communication COM RTC | 3VW9011-0AT11 |
| Position signaling switch COM PSS (for withdrawable breaker only) | 3VW9011-0AT12 |

## Test devices and Breaker Data Adapters



- Can be used for all ETU 3-series and 6-series

| Function | Type | Article No. |
|---|---|---|
| Test device<br>• For the trip test via ETU and tripping solenoid including release<br>• Activation of the ETU and the tripping solenoid by means of a battery built into the test device<br>• On activation in the ETU 6-series, the parameters can be configured on the display | TD310 | 3VW9011-0AT32 |
| Breaker Data Adapter<br>• As gateway for parameterization of the ETU with SENTRON Powerconfig<br>• For generation of a report of the set parameters with powerservice | TD410 | 3VW9011-0AT34 |
| Test devices and Breaker Data Adapters<br>• As gateway for parameterization of the ETU with SENTRON Powerconfig<br>– Testing a tripping operation using SENTRON Powerconfig<br>• For use with the powerservice software<br>– Testing of the basic protective functions LSING<br>– Testing of the enhanced protective functions<br>– Test data storage<br>– Readout of ETU buffer<br>– Generation of a report of the set parameters | TD420 | 3VW9011-0AT33 |

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# Accessories and spare parts



## Accessories for connection

### Front main connections acc. to IEC 60947-2











- To be ordered separately for top and bottom

| Mounting | Version | Mounting onto | Number of poles/ quantity | Article No. |
|---|---|---|---|---|
| Fixed-mounted | Front main connections | | 3-pole/3 units | 3VW9011-0AL01 |
| | | | 4-pole/4 units | 3VW9011-0AL02 |
| | Extended main connections, including insulation plate and phase barriers, standard | Front main connections | 3-pole/3 units | 3VW9011-0AL77 |
| | | | 4-pole/4 units | 3VW9011-0AL78 |
| | Broadened main connections, including insulation plate and extended phase barriers | Front main connections, top | 3-pole/3 units | 3VW9011-0AL73 |
| | | Front main connections, bottom | 3-pole/3 units | 3VW9011-0AL75 |
| | | Front main connections, top, bottom | 4-pole/4 units | 3VW9011-0AL74 |
| Withdrawable | Front-accessible main connections | Flange of the guide frame | 3-pole/3 units | 3VW9011-0AN01 |
| | | | 4-pole/4 units | 3VW9011-0AN02 |
| | Broadened main connections | Front-accessible main connections | 3-pole/3 units | 3VW9011-0AN73 |
| | | | 4-pole/4 units | 3VW9011-0AN74 |

### Rear main connections acc. to IEC 60947-2







- To be ordered separately for top and bottom

| Mounting | Version | Mounting onto | Number of poles/ quantity | Article No. |
|---|---|---|---|---|
| Fixed-mounted | Rear main connections, rotatable for horizontal/vertical connection, including terminal cover | | 3-pole/3 units | 3VW9011-0AL32 |
| | | | 4-pole/4 units | 3VW9011-0AL33 |
| Withdrawable | Rear main connections, rotatable for horizontal/vertical connection, including terminal cover | | 3-pole/3 units | 3VW9011-0AN32 |
| | | | 4-pole/4 units | 3VW9011-0AN33 |
| | Broadened main connections | Rear horizontal main connections | 3-pole/3 units | 3VW9011-0AN75 |
| | | | 4-pole/4 units | 3VW9011-0AN76 |

### Cu/Al cable connections





- To be ordered separately for top and bottom

| Mounting | Version | Mounting onto | Number of poles/ quantity | Article No. |
|---|---|---|---|---|
| Fixed-mounted | Circular conductor terminals 4 × 240 mm² for front cable connection [1], including insulation plate and high, extended terminal cover | Front main connections | 3-pole/3 units | 3VW9011-0AL71 |
| | | | 4-pole/4 units | 3VW9011-0AL72 |
| Withdrawable | Set of circular conductor connection pieces 4 × 240 mm² for cable lugs for rear cable connection | Rear vertical main connections | 3-pole/3 units | 3VW9011-0AN71 |
| | | | 4-pole/4 units | 3VW9011-0AN72 |

### Auxiliary supply connectors in push-in version



- Control wire tap in push-in version for upgrading fixed-mounted circuit breakers and guide frames.
- The device is always fitted at the factory with the exact number of control wire taps required.

| Version | Article No. |
|---|---|
| Push-in | 3VW9011-0AB11 |

[1] For connecting Al cables up to 1000 A

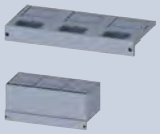
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## Accessories for connection

### Terminal covers for fixed-mounted circuit breakers





- Finger-proof for front main connection for fixed-mounted versions
- Necessary isolation measures are always supplied with the corresponding connection technology and do not need to be ordered separately.

| Version | Number of poles/quantity | Article No. |
|---|---|---|
| Standard | 3-pole/2 units | 3VW9723-0WD30 |
| | 4-pole/2 units | 3VW9724-0WD40 |
| Extended | 3-pole/2 units | 3VW9723-0WF30 |
| | 4-pole/2 units | 3VW9724-0WF40 |

### Phase barriers for fixed-mounted circuit breakers



- Necessary isolation measures are always supplied with the corresponding connection technology and do not need to be ordered separately.
- For operational voltages > 440 V AC the use of phase barriers is mandatory; up to 440 V AC their use is optional.

| Height | Number of poles/quantity | Article No. |
|---|---|---|
| 100 mm (standard) | 3-pole/4 units | 3VW9723-0WA00 |
| | 4-pole/6 units | 3VW9724-0WA10 |
| 200 mm (extended) | 3-pole/4 units | 3VW9723-0WA01 |
| | 4-pole/6 units | 3VW9724-0WA11 |

### Support for floor mounting of fixed-mounted circuit breakers



- For fixed-mounted versions

| Version | Use | Article No. |
|---|---|---|
| Mounting support standard (circuit breaker feet) (= Z option A07) | | 3VW9011-0BB51 |
| Mounting support extended (circuit breaker feet), including mechanical transmission of switch position on circuit breaker side panel (= Z option S56) | • Fixation for external auxiliary switches AUX 15 CO (3VW9011-0AG15)<br>• Locking mechanism for control cabinet door, direct (for 3VW9011-0BB10)<br>• Locking mechanism for control cabinet door, Bowden cable (for 3VW9011-0BB16)<br>• Mechanical interlock for 3WL/3VA (for 3VW9011-0BB21) | 3VW9011-0BB52 |

### Extension kits for modification of the side wall of the fixed-mounted circuit breaker



- For fixed-mounted versions
- Rear wall fixing on mounting plate
- For modification for mechanical transmission of switch position on circuit breaker side panel (= Z option S57)

| Version | Use | Article No. |
|---|---|---|
| Extension kit for side wall | • Fixation for external auxiliary switches AUX 15 CO (3VW9011-0AG15)<br>• Locking mechanism for control cabinet door, direct (for 3VW9011-0BB10)<br>• Locking mechanism for control cabinet door, Bowden cable (for 3VW9011-0BB16)<br>• Mechanical interlock for 3WL/3VA (for 3VW9011-0BB21) | 3VW9011-0BB53 |

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# Accessories and spare parts



## Motor

**Spring charging motor (MO)**



| Description | Voltage | Article No. |
|---|---|---|
| For automatic charging of the stored energy mechanism | 24 ... 30 V AC/DC | 3VW9011-0AF01 |
| | 48 ... 60 V AC/DC | 3VW9011-0AF02 |
| | 100 ... 130 V AC/DC | 3VW9011-0AF03 |
| | 220 ... 250 V AC/DC | 3VW9011-0AF04 |

**Mechanical operating cycles counters MOC**




| Description | Version | Article No. |
|---|---|---|
| In combination with a spring charging motor | 5 digits | 3VW9011-0AH07 |

## Auxiliary releases, closing coils

**Closing coils CC/shunt trips ST**



| Voltage | Article No. |
|---|---|
| 24 V AC/DC | 3VW9011-0AD01 |
| 30 V AC/DC | 3VW9011-0AD02 |
| 48 V AC/DC | 3VW9011-0AD03 |
| 60 V AC/DC | 3VW9011-0AD04 |
| 110 ... 120 V AC/DC | 3VW9011-0AD05 |
| 120 ... 127 V AC/DC | 3VW9011-0AD06 |
| 220 ... 240 V AC/DC | 3VW9011-0AD07 |
| 240 ... 250 V AC/DC | 3VW9011-0AD08 |
| 380 ... 400 V AC | 3VW9011-0AD17 |
| 415 ... 440 V AC | 3VW9011-0AD18 |

**TD320 function test units for closing coils/shunt trips**



- The TD320 test unit allows the operational availability and functions of the closing coils and shunt trips with a rated operational voltage between 24 V and 250 V (AC and DC) to be tested.
- The operational availability test is performed cyclically at intervals of 30 seconds.
- The unit has visual indicators in the form of LEDs on the front in order to display the following states:
  - LED POWER ON LIT: Correct function of the YO/YC test device
  - LED DEACTIVATION LIT: Power supply failure, wire break
  - LED SHORT-CIRCUIT LIT: Winding short-circuit
  - LED DEACTIVATION and SHORT-CIRCUIT FLASHING: Incorrect power supply
  - LED DEACTIVATION and SHORT-CIRCUIT OFF: Closing coil/shunt trips OK

| Version | Article No. |
|---|---|
| For all closing coils/shunt trips | 3VW9011-0AT31 |

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## Auxiliary releases, closing coils

### Auxiliary/signaling switches



- The auxiliary/signaling switches for 24 V DC digital signals are designed for
  - a minimum load above 1 mA at 5 V DC, and
  - a maximum breaking capacity of 100 mA at 24 V DC.
- For external auxiliary switches ON/OFF AUX 15 CO, a 3VW9011-0AG1x fixation must be ordered in addition, and for fixed-mounted circuit breakers a 3VW9011-0BB5x side wall modification

| Type | Contacts | Article No. |
|---|---|---|
| Ready-to-close signal RTC | 1 CO standard | 3VW9011-0AH01 |
| | 1 CO digital | 3VW9011-0AH02 |
| Auxiliary switch ON/OFF AUX | 4 CO standard | 3VW9011-0AG01 |
| | 4 CO digital | 3VW9011-0AG02 |
| | 2 CO standard + 2 CO digital | 3VW9011-0AG03 |
| External auxiliary switch ON/OFF AUX | 15 CO standard | 3VW9011-0AG05 |
| | 15 CO digital | 3VW9011-0AG06 |
| Tripped signaling switch S24 | 1 CO standard | 3VW9011-0AH14 |
| | 1 CO digital | 3VW9011-0AH15 |
| Spring charge signaling switch S21 | 1 CO standard | 3VW9011-0AH10 |
| | 1 CO digital | 3VW9011-0AH08 |
| Position signaling switch PSS (for withdrawable devices) | 2 CO \| 2 CO \| 2 CO (connected \| test \| disconnected position) standard | 3VW9011-0AH11 |
| | 2 CO \| 2 CO \| 2 CO (connected \| test \| disconnected position) digital | 3VW9011-0AH12 |

### Fixing for external auxiliary switches AUX 15 CO



- External auxiliary switches ON/OFF AUX 15 CO must be ordered separately.

| Version | Article No. |
|---|---|
| For fixed-mounted circuit breakers with rear panel or floor mounting (in combination with Z option S56 or S57) | 3VW9011-0AG15 |
| For guide frames | 3VW9011-0AG17 |

### Undervoltage releases UVR



| Voltage | Article No. |
|---|---|
| 24 V AC/DC | 3VW9011-0AE01 |
| 30 V AC/DC | 3VW9011-0AE02 |
| 48 V AC/DC | 3VW9011-0AE03 |
| 60 V AC/DC | 3VW9011-0AE04 |
| 110 ... 120 V AC/DC | 3VW9011-0AE05 |
| 120 ... 127 V AC/DC | 3VW9011-0AE06 |
| 220 ... 240 V AC/DC | 3VW9011-0AE07 |
| 240 ... 250 V AC/DC | 3VW9011-0AE08 |
| 380 ... 400 V AC | 3VW9011-0AE17 |
| 415 ... 440 V AC | 3VW9011-0AE18 |

### External time-delay devices for undervoltage release



- With adjustable delay time from 0.5 to 3 s.
- Suitable for mounting onto DIN rail.

| Voltage | Article No. |
|---|---|
| 24 ... 30 V AC/DC | 3VW9011-0AE10 |
| 48 V AC/DC | 3VW9011-0AE11 |
| 60 V AC/DC | 3VW9011-0AE15 |
| 110 ... 127 V AC/DC | 3VW9011-0AE12 |
| 220 ... 250 V AC/DC | 3VW9011-0AE13 |

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# Accessories and spare parts



## Interlocking

### Locking provision to prevent movement of the withdrawable circuit breaker



| Version | Article No. |
|---|---|
| RONIS cylinder lock (spare part for R78) | 3VW9011-0BA80 |
| Padlock 8 mm (spare part for R65), for no more than 3 padlocks | 3VW9011-0BA87 |

### Locking mechanisms to prevent movement of the withdrawable circuit breakers in disconnected position



- Only possible as a supplement in conjunction with R78 (3VW9011-0BA80) and/or R65 (3VW9011-0BA87)

| Description | Article No. |
|---|---|
| Locking mechanism (spare part for R79) | 3VW9011-0BA84 |

### Locking provisions in OFF position



- For fixed-mounted and withdrawable versions
- Against unauthorized closing in the operator panel (safe OFF)
- The disconnector unit fulfills the requirements for main circuit breakers according to EN 60204-1

| Description | Article No. |
|---|---|
| Cylinder lock, made by RONIS (spare part for S08) | 3VW9011-0BA33 |

### Locking provisions in OFF position



- For fixed-mounted and withdrawable versions
- Against unauthorized closing in the operator panel (safe OFF)
- The disconnector unit fulfills the requirements for main circuit breakers according to EN 60204-1

| Description | Version | Article No. |
|---|---|---|
| Padlock 4 mm (spare part for S22) | Plastic for no more than 3 locks | 3VW9011-0BA41 |
| Padlock 7 mm (spare part for S23) | Metal for no more than 1 lock | 3VW9011-0BA42 |
| Padlock 8 mm (spare part for S07) | Metal for no more than 2 locks | 3VW9011-0BA44 |

### Interlocking sets for mechanical Open and/or Close on the operator panel



| Description | Version | Article No. |
|---|---|---|
| Padlock 4 mm (spare part for S42) | Plastic for no more than 3 locks | 3VW9011-0BA22 |
| Padlock 7 mm (spare part for S43) | Metal for no more than 1 lock | 3VW9011-0BA23 |
| Padlock 8 mm (spare part for S44) | Metal for no more than 2 locks | 3VW9011-0BA24 |

### Protective covers for mechanical Open/Close



- Mechanical Open/Close to protect against unintentional actuation on the operator panel.
- Not lockable

| Description | Article No. |
|---|---|
| Not lockable (spare part for S41) | 3VW9011-0BA21 |

### Mechanical interlocks



- Mechanical interlock for 3WL10/3VA27 with Bowden cable 2 m
- For fixed-mounted versions, an additional support 3VW9011-0BB52 (option S56) or extension kit 3VW9011-0BB53 (option S57) must be ordered

| Mounting | Mounting | Article No. |
|---|---|---|
| Fixed-mounted | Rear panel or floor mounting | 3VW9011-0BB21 |
| Withdrawable | Mounting onto guide frame | 3VW9011-0BB22 |

### Bowden cable, separate

- One required for each circuit breaker

| Type | Article No. |
|---|---|
| 1000 mm | 3VW9011-0BB23 |
| 2000 mm | 3WL9111-0BB45-0AA0 |
| 3000 mm | 3WL9111-0BB46-0AA0 |

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## Interlocking

### Locking mechanisms for control cabinet door



- To prevent opening of the control cabinet door in ON position
- It additionally prevents the circuit breaker from being closed when the control cabinet door is open.

| Mounting | Version | Article No. |
|---|---|---|
| Fixed-mounted onto side panel or floor | Direct fixed interlocking | 3VW9011-0BB10 |
| | Locking with Bowden cable | 3VW9011-0BB16 |
| Withdrawable | Direct fixed interlocking | 3VW9011-0BB14 |
| | Locking with Bowden cable | 3VW9011-0BB18 |

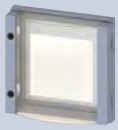
### Door sealing frame IP30



- For IP4x and higher, you must order the protective cover IP54 3VW9011-0AP03 or 3VW9011-0AP13.

| Description | Mounting | Version | Article No. |
|---|---|---|---|
| Spare part for Z option T30. | Fixed-mounted | IP3x | 3VW9011-0AP01 |
| | Withdrawable | IP3x | 3VW9011-0AP02 |

### Protective covers IP54



- Protective cover/hood IP54 lockable for fixed-mounted breakers and withdrawable breakers
- For implementing degrees of protection IP4x and IP54 when installing in switchboard door.
- Cannot be combined with IP30 door sealing frame and door mounted rotary operator

| Description | Version | Article No. |
|---|---|---|
| Lock with unique key | IP54 | 3VW9011-0AP03 |
| Lock with standard key | IP54 | 3VW9011-0AP13 |

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# Molded Case Circuit Breakers


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# A multitude of additional information ...

## Information + ordering



### All the important things at a glance

For information about molded case circuit breakers, please visit our website **www.siemens.com/sentron-3va**

### Your product in detail

The SiePortal platform (knowledge base) provides comprehensive information
**www.siemens.com/lowvoltage/product-support**

- Quick Selection Guide
  – 3VA molded case circuit breaker **(109757591)**

The relevant tender specifications can be found at
**www.siemens.com/tenderspecifications**

Use our conversion tool for quick and easy conversion to Siemens products **www.siemens.com/conversion-tool**

### Siemens YouTube channel

- 3VA molded case circuit breakers (general)
  **sie.ag/2gSX4K**

### Smart Control Panel Design

With the Smart Control Panel Design in the TIA Selection Tool, it is possible to design and dimension the electrical equipment of a machine in conformity with the standards – from the suitable switching devices to the correctly dimensioned cables
**www.siemens.com/controlpanel/cpd**

### Everything you need for your order

Refer to SiePortal to find an overview of your products (product catalog)

- Molded case circuit breakers **sie.ag/2mmLcAk**

Direct forwarding to the individual products in SiePortal by clicking on the article number in the catalog or entering this web address incl. article number
**www.siemens.com/product_catalog_SIEP?Article No.**

You will find order support in SiePortal under
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### Configurators

The configurator reduces the time and effort required in the planning and ordering process, and allows for individual adaptations. Configure your 3VA molded case circuit breaker at
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**www.siemens.com/lowvoltage/3va27-configurator**

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- 3D views
- CAD data
- Unit wiring diagrams
- Dimension drawings

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## Commissioning + operation

### SENTRON Powerconfig

The combined commissioning and service tool SENTRON Powerconfig for communication-capable measuring devices, circuit protection devices and circuit breakers.

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### Your product in detail

The SiePortal platform (knowledge base) provides detailed technical information
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- Operating instructions
- Characteristic curves
- Certificates

Online Support app available for download from the
**App Store** and **Play Store**
You will find further information at
**www.siemens.com/support-app**

Provision of 3D data (step and u3d data formats)

- SiePortal (product catalog)
  **www.siemens.com/lowvoltage/product-catalog**
- Image database
  **www.siemens.com/lowvoltage/picturedb**

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
**www.siemens.com/cax**

### Manuals

Manuals can be found in SiePortal at
**www.siemens.com/lowvoltage/manuals**

- Configuration Manual
  - 3VA selectivity **(109743975)**
- Communication Manual
  - 3VA molded case circuit breakers with IEC and UL certification **(98746267)**
  - 3WL10 air circuit breakers & 3VA27 molded case circuit breakers **(109760220)**
- Equipment Manual
  - 3VA molded case circuit breakers with IEC certificate **(90318775)**
  - 3VA27 molded case circuit breakers & 3WL10 air circuit breakers **(109753821)**

### Face-to-face or online training

Our training courses can be found at
**www.siemens.com/sitrain-lowvoltage**

- 3VA molded case circuit breaker (WT-LVA3VA)
- Protection systems in low-voltage power distribution (WT-LVAPS)

### Technical overview – Molded case circuit breakers

#### The fast way to get you to our online services

This page provides you with comprehensive information and links on molded case circuit breakers
**www.siemens.com/lowvoltage/product-support (109767421)**

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# Molded case circuit breakers and switch disconnectors for all applications






3VA10 ... 3VA15 molded case circuit breakers

## *Setting standards for standard applications*

The 3VA1 molded case circuit breaker is ideally suited for your standard applications in infrastructure and industrial facilities. It is equipped with a thermal-magnetic trip unit, and offers reliable protection for plants and generators.

With its compact dimensions and depth of just 70 mm, the 3VA1 molded case circuit breaker can even fit into locations where space is limited. Thanks to its cover size of 45 mm, it is also ideally suited for use in distribution boards up to 250 A.

### Special features

- Compact design
- AC/DC applications
- No derating up to +50 °C
- Optimized for distribution boards (45 mm cover size)
- Universal platform of accessories
- 1, 2, 3 or 4-pole versions
- Rated current range of 1 ... 1000 A

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3VA20 ... 3VA26 molded case circuit breakers

# *The power to deliver in demanding applications*

If you are looking for a solution that lets you handle your most technically demanding projects in industrial and infrastructure applications with ease, the 3VA2 molded case circuit breaker has the special capabilities you need. It combines high breaking capacity, a range of electronic trip units (ETUs), very good selectivity properties, and various additional functionalities.

### Special features

- Very good selective protection response
- AC applications
- No derating up to +50 °C
- Integrated metering function
- Connection to a communications system
- Rated current range of 25 ... 1250 A




3VA27 molded case circuit breaker

Depending on the application, the 3VA27 molded case circuit breaker handles line/motor and starter protection for low-voltage electrical power distribution, and supplements the existing IEC portfolio with a rated current of 1600 A.

### Special features

- Choice between two ranges of electronic trip units with a number of equipment versions
- Variable and versatile connections
- Connection to a communications system
- Can be used as a platform circuit breaker with the 3WL10 ACB, with an extensive range of common accessories
- Rated current range of 800 ... 1600 A

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# Molded case circuit breakers, switch disconnectors and accessories



| Protective functions | 3VA10 | 3VA11 | 3VA12 | 3VA13 | 3VA14 | 3VA15 |
|---|---|---|---|---|---|---|
| **Size** | 100 A | 160 A | 250 A | 400 A | 630 A | 1000 A |
| **Switch disconnectors** | | | | | | |
| No protection | – | ■ | ■ | ■ | ■ | – |
| **Thermal-magnetic** | | | | | | |
| Line protection | ■ | ■ | ■ | ■ | ■ | ■ |
| Starter protection | – | ■ | ■ | ■ | ■ | ■ |
| **Electronic** | | | | | | |
| Line protection | – | – | – | – | – | – |
| Line and generator protection | – | – | – | – | – | – |
| Line and generator protection, with display | – | – | – | – | – | – |
| Line and generator protection, with display, with metering function | – | – | – | – | – | – |
| Motor protection | – | – | – | – | – | – |
| Motor protection, with display | – | – | – | – | – | – |
| Motor protection, with display, with metering function | – | – | – | – | – | – |
| Starter protection | – | – | – | – | – | – |

## Accessories

| Size | 100 A | 160 A | 250 A | 400 A | 630 A | 1000 A |
|---|---|---|---|---|---|---|
| **Accessories** | | | | | | |
| Auxiliary switches and signaling switches | ■ | ■ | ■ | ■ | ■ | ■ |
| Auxiliary releases | ■ | ■ | ■ | ■ | ■ | ■ |
| Connection technology | ■ | ■ | ■ | ■ | ■ | ■ |
| Plug-in version | – | ■ | ■ | ■ | ■ | ■ |
| Withdrawable version | – | – | ■ | ■ | ■ | – |
| Front mounted rotary operator | ■ | ■ | ■ | ■ | ■ | ■ |
| Door mounted rotary operator | ■ | ■ | ■ | ■ | ■ | ■ |
| Side wall mounted rotary operator | ■ | ■ | ■ | ■ | ■ | – |
| MO310 motor operator (mounted onto the side) | – | ■ | | – | – | – |
| MO320 motor operator (mounted onto the front) | – | ■ | ■ | ■ | ■ | – |
| Motor operator with SEO520 stored energy mechanism | – | – | – | ■ | ■ | – |
| Motor operator (MO), integrable | – | – | – | – | – | – |
| Locking, blocking and interlocking | ■ | ■ | ■ | ■ | ■ | ■ |
| Residual current device (mounted onto the side) | – | ■ | ■ | – | – | – |
| Residual current device (mounted underneath) | – | ■ | ■ | – | – | – |
| Communications interface | – | – | – | – | – | – |
| EFB300 | – | – | – | – | – | – |
| Testing and commissioning devices | – | – | – | – | – | – |
| Cover frame | ■ | ■ | ■ | ■ | ■ | ■ |
| DIN-rail adapter | ■ | ■ | – | – | – | – |
| Busbar adapter | ■ | ■ | ■ | ■ | ■ | – |

■ Available – Not available/not present

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| 3VA20 | 3VA21 | 3VA22 | 3VA23 | 3VA24 | 3VA25 | 3VA26 | 3VA27 |
|---|---|---|---|---|---|---|---|
| 100 A | 160 A | 250 A | 400 A | 630 A | 1000 A | 1250 A | 1600 A |
| | | | | | | | |
| – | – | – | – | – | – | – | ■ |
| | | | | | | | |
| – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – |
| | | | | | | | |
| ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| – | ■ | ■ | ■ | ■ | ■ | – | ■ |
| – | ■ | ■ | ■ | ■ | ■ | – | ■ |
| – | ■ | ■ | ■ | ■ | ■ | – | ■ |
| – | ■ | ■ | ■ | ■ | ■ | – | ■ |

| 100 A | 160 A | 250 A | 400 A | 630 A | 1000 A | 1250 A | 1600 A |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| ■ | ■ | ■ | ■ | ■ | ■ | ■ | – |
| ■ | ■ | ■ | ■ | ■ | – | – | ■ |
| ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| ■ | ■ | ■ | ■ | ■ | – | – | – |
| – | – | – | – | – | – | – | – |
| ■ | ■ | ■ | ■ | ■ | – | – | – |
| ■ | ■ | ■ | ■ | ■ | – | – | – |
| – | – | – | – | – | – | – | ■ |
| ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| – | – | – | – | – | – | – | – |
| ■ | ■ | ■ | ■ | ■ | – | – | – |
| ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| – | – | – | – | – | – | – | – |
| ■ | ■ | ■ | ■ | ■ | – | – | – |

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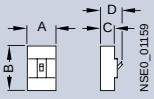
# 3VA1 molded case circuit breakers, switch disconnectors up to 1000 A

## Technical specifications







| | | | 3VA10 | | | 3VA11 | | | 3VA11 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Electrical characteristics according to IEC 60947-2** | | | | | | | | | | | |
| Number of poles | | | 3/4-pole | | | 1-pole | | | 2-pole | | |
| Size | | A | 100 | | | 160 | | | 160 | | |
| Rated current $I_n$ at 50 °C ambient temperature | | A | 16 ... 100 | | | 16 ... 160 | | | 16 ... 160 | | |
| Rated operational voltage $U_e$ 50/60 Hz AC | | V | 690 | | | 415 | | | 415 | | |
| Rated insulation voltage $U_i$ | | V | 800 | | | 500 | | | 500 | | |
| Rated impulse withstand voltage $U_{imp}$ | | kV | 8 | | | 8 | | | 8 | | |
| Use in IT networks (breaking capacity acc. to IEC 60947-2, annex H) | | V | ■ | | | ■ | | | ■ | | |
| Frequency | | Hz | 0 ... 400 | | | 0 ... 400 | | | 0 ... 400 | | |
| **Breaking capacity (line protection)** | | | **B** | **N** | **S** | **N** | **S** | **M** | **N** | **S** | **M** |
| **Rated ultimate short-circuit breaking capacity $I_{cu}$** | | | | | | | | | | | |
| 50/60 Hz AC | 220 ... 240 V | kA | 25 | 36 | 55 | 25 | 36 | 55 | 36 | 55 | 85 |
| | 380 ... 415 V | kA | 16 | 25 | 36 | 5 | 6 | 6 | 25 | 36 | 55 |
| | 440 V | kA | 8 | 16 | 25 | – | – | – | – | – | – |
| | 500 V | kA | 5 | 5 | 7 | – | – | – | – | – | – |
| | 690 V | kA | 5 | 5 | 7 | – | – | – | – | – | – |
| DC [1] | 125 V | kA | 16 | 25 | 30 | 16 | 25 | 30 | 16 | 25 | 30 |
| | 250 V | kA | 25 | 36 | 55 | – | – | – | 36 | 55 | 85 |
| | 500 V | kA | 25 | 36 | 55 | – | – | – | – | – | – |
| | 600 V | kA | 8 | 16 | 25 | – | – | – | – | – | – |
| | 750 V | kA | – | – | – | – | – | – | – | – | – |
| | 1000 V [2] | kA | – | – | – | – | – | – | – | – | – |
| **Rated service short-circuit breaking capacity $I_{cs}$** | | | | | | | | | | | |
| 50/60 Hz AC | 220 ... 240 V | kA | 25 | 36 | 55 | 25 | 35 | 55 | 36 | 55 | 85 |
| | 380 ... 415 V | kA | 16 | 25 | 36 | 5 | 6 | 6 | 25 | 36 | 55 |
| | 440 V | kA | 8 | 16 | 25 | – | – | – | – | – | – |
| | 500 V | kA | 5 | 5 | 5 | – | – | – | – | – | – |
| | 690 V | kA | 5 | 5 | 5 | – | – | – | – | – | – |
| DC [1] | 125 V | kA | 16 | 25 | 30 | 16 | 25 | 30 | 16 | 25 | 30 |
| | 250 V | kA | 25 | 36 | 55 | – | – | – | 36 | 55 | 85 |
| | 500 V | kA | 25 | 36 | 55 | – | – | – | – | – | – |
| | 600 V | kA | 8 | 16 | 25 | – | – | – | – | – | – |
| | 750 V | kA | – | – | – | – | – | – | – | – | – |
| | 1000 V [2] | kA | – | – | – | – | – | – | – | – | – |
| **Dimensions** | | | | | | | | | | | |
|  | A | mm | 76.2 (3P) \| 101.6 (4P) | | | 25.4 | | | 50.8 | | |
| | B | mm | 130 | | | 130 | | | 130 | | |
| | C | mm | 70 | | | 70 | | | 70 | | |
| | D | mm | 88 | | | 88 | | | 88 | | |



[1] For detailed data on DC breaking capacity, number of switching poles and circuit diagrams, see FAQ www.siemens.com/lowvoltage/product-support (109779932)
[2] For $I_n$ = 630 A/800 A
[3] $I_n$ 125 A, 160 A: $I_{cu}/I_{cs}$ = 36 kA/36 kA

■ Available – Not available/not present

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| 3VA11 | | | | 3VA12 | | | 3VA13 | | | | 3VA14 | | | | 3VA15 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/4-pole | | | | 3/4-pole | | | 3/4-pole | | | | 3/4-pole | | | | 3/4-pole | | |
| 160 | | | | 250 | | | 400 | | | | 630 | | | | 1000 | | |
| 16 ... 160 | | | | 160 ... 250 | | | 320 ... 400 | | | | 500 ... 630 | | | | 630 ... 1000 | | |
| 690 | | | | 690 | | | 690 | | | | 690 | | | | 690 | | |
| 800 | | | | 800 | | | 800 | | | | 800 | | | | 800 | | |
| 8 | | | | 8 | | | 8 | | | | 8 | | | | 8 | | |
| ■ | | | | ■ | | | ■ | | | | ■ | | | | ≤ 500 | | |
| 0 ... 400 | | | | 0 ... 400 | | | 0 ... 400 | | | | 0 ... 400 | | | | 0 ... 400 | | |
| N | S | M | H | S | M | H | S | M | H | C | S | M | H | C | M | H | C |
| | | | | | | | | | | | | | | | | | |
| 36 | 55 | 85 | 100 | 55 | 85 | 100 | 55 | 85 | 100 | 200 | 55 | 85 | 100 | 200 | 85 | 110 | 200 |
| 25 | 36 | 55 | 70 | 36 | 55 | 70 | 36 | 55 | 70 | 110 | 36 | 55 | 70 | 110 | 55 | 70 | 110 |
| 16 | 25 | 36 | 55 [3] | 25 | 36 | 36 | 36 | 55 | 70 | 110 | 36 | 55 | 70 | 110 | 55 | 70 | 110 |
| 7 | 7 | 10 | 10 | 10 | 15 | 15 | 25 | 36 | 55 | 70 | 25 | 36 | 55 | 70 | 36 | 55 | 70 |
| 7 | 7 | 10 | 10 | 7 | 10 | 10 | 7 | 7 | 10 | 10 | 7 | 7 | 10 | 10 | 25 | 35 | 35 |
| 16 | 25 | 30 | 30 | 55 | 85 | 100 | 8 | 16 | 25 | 25 | 8 | 16 | 25 | 25 | – | – | – |
| 36 | 55 | 85 | 100 | 55 | 85 | 100 | 8 | 16 | 25 | 25 | 8 | 16 | 25 | 25 | 35 | 50 | 100 |
| 36 | 55 | 85 | 100 | 55 | 85 | 100 | 8 | 16 | 25 | 25 | 8 | 16 | 25 | 25 | 35 | 50 | 100 |
| 16 | 25 | 36 | 55 | 25 | 36 | 55 | 8 | 16 | 25 | 25 | 8 | 16 | 25 | 25 | – | – | – |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | 50 | 85 | 100 |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | 25 | 35 | 50 |
| | | | | | | | | | | | | | | | | | |
| 36 | 55 | 85 | 100 | 55 | 85 | 100 | 55 | 85 | 100 | 200 | 55 | 85 | 100 | 200 | 85 | 100 | 150 |
| 25 | 36 | 55 | 70 | 36 | 55 | 70 | 36 | 55 | 70 | 110 | 36 | 55 | 70 | 110 | 55 | 70 | 85 |
| 16 | 25 | 36 | 40 [3] | 25 | 36 | 36 | 36 | 55 | 70 | 110 | 36 | 55 | 70 | 110 | 55 | 70 | 70 |
| 5 | 5 | 5 | 5 | 10 | 10 | 10 | 25 | 36 | 55 | 70 | 25 | 36 | 55 | 70 | 36 | 55 | 65 |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 5 | 5 | 6 | 6 | 19 | 19 | 19 |
| 16 | 25 | 30 | 30 | 55 | 85 | 100 | 8 | 16 | 25 | 25 | 8 | 16 | 25 | 25 | – | – | – |
| 36 | 55 | 85 | 100 | 55 | 85 | 100 | 8 | 16 | 25 | 25 | 8 | 16 | 25 | 25 | 35 | 50 | 100 |
| 36 | 55 | 85 | 100 | 55 | 85 | 100 | 8 | 16 | 25 | 25 | 8 | 16 | 25 | 25 | 35 | 50 | 100 |
| 16 | 25 | 36 | 55 | 25 | 36 | 55 | 8 | 16 | 25 | 25 | 8 | 16 | 25 | 25 | – | – | – |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | 50 | 85 | 100 |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | 25 | 35 | 50 |
| | | | | | | | | | | | | | | | | | |
| 76.2 (3P) \| 101.6 (4P) | | | | 105 (3P) \| 140 (4P) | | | 138 (3P) \| 184 (4P) | | | | 138 (3P) \| 184 (4P) | | | | 210 (3P) \| 280 (4P) | | |
| 130 | | | | 158 | | | 248 | | | | 248 | | | | 320 | | |
| 70 | | | | 70 | | | 110 | | | | 110 | | | | 120 | | |
| 88 | | | | 88 | | | 137 | | | | 137 | | | | 253 | | |

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# 3VA1 molded case circuit breakers, switch disconnectors up to 1000 A

## Application







| | | | 3VA10 | 3VA11 | 3VA11 |
|---|---|---|---|---|---|
| **Electrical characteristics according to IEC 60947-2** | | | | | |
| Number of poles | | | 3/4-pole | 1-pole | 2-pole |
| Size | | A | 100 | 160 | 160 |
| Rated current $I_n$ at 50 °C ambient temperature | | A | 16 ... 100 | 16 ... 160 | 16 ... 160 |
| **3VA1 molded case circuit breakers for line protection, standard applications (IEC 60947-2)** | | | | | |
| **Service life/endurance (operating cycles)** | | | | | |
| Mechanical (CLOSE-OPEN cycles) | | | 20000 | 20000 | 20000 |
| Electrical | 380 ... 415 V | $I_n$ | 9000 | 9000 | 9000 |
| | | $I_n/2$ | 15000 | 15000 | 15000 |
| | 690 V | | 6300 | 6300 | 6300 |
| **Trip units** | | | | | |
| TM210 | FTFM | | ■ | ■ | ■ |
| TM220 | ATFM | | – | – | – |
| TM240 | ATAM | | – | – | – |
| **3VA1 molded case circuit breakers for starter protection (standards and specifications acc. to IEC 60947-2, annex O)** | | | | | |
| Rated current $I_n$ at 50 °C ambient temperature | | A | – | – | – |
| **Service life/endurance (operating cycles)** | | | | | |
| Mechanical (CLOSE-OPEN cycles) | | | – | – | – |
| Electrical | 380 ... 415 V | | – | – | – |
| **Trip units** | | | | | |
| TM120M | AM | | – | – | – |
| **Switch disconnectors (IEC 60947-3)** | | | | | |
| **Electrical characteristics according to IEC 60947-3** | | | | | |
| Rated uninterrupted current $I_u$ at 50 °C ambient temperature | | A | – | – | – |
| Rated operational voltage $U_e$ 50/60 Hz AC | | V | – | – | – |
| Rated operational voltage $U_e$ DC | | V | – | – | – |
| Rated conditional short-circuit current $I_q$ with upstream 3VA1 circuit breaker | | kA | – | – | – |
| Permissible rated short-time current $I_{cw}$ (1 s) | | kA | – | – | – |

■ Available – Not available/not present

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| 3VA11 | 3VA12 | 3VA13 | 3VA14 | 3VA15 |
|---|---|---|---|---|
| 3/4-pole | 3/4-pole | 3/4-pole | 3/4-pole | 3/4-pole |
| 160 | 250 | 400 | 630 | 1000 |
| 16 ... 160 | 160 ... 250 | 320 ... 400 | 500 ... 630 | 630 ... 1000 |
| | | | | |
| | | | | |
| 20000 | 20000 | 20000 | 20000 | 10000 |
| 9000 | 8000 | 6000 | 4000 | 4600 |
| 15000 | 14000 | 12000 | 8000 | 7000 |
| 6300 | 5400 | 4200 | 3000 | 3200 |
| | | | | |
| ■ | – | – | – | – |
| ■ | – | – | – | – |
| ■ | ■ | ■ | ■ | ■ |
| | | | | |
| 1 ... 125 | 160, 200 | 250 | 400 ... 500 | 630 ... 800 |
| | | | | |
| 20000 | 20000 | 20000 | 20000 | 10000 |
| 9000 | 8000 | 6000 | 4000 | 4600 |
| | | | | |
| ■ | ■ | ■ | ■ | ■ |
| | | | | |
| | | | | |
| 63 ... 160 | 250 | 400 | 630 (3P), 500 (4P) | – |
| 690 | 690 | 690 | 690 | – |
| 500 (3P), 600 (4P) | 500 (3P), 600 (4P) | 500 (3P), 600 (4P) | 500 (3P), 600 (4P) | – |
| 70 at 415 V | 70 at 415 V | 110 at 415 V<br>10 at 690 V | 110 at 415 V<br>10 at 690 V | – |
| 2 | 3 | 6 | 7.6 (3P), 6 (4P) | – |

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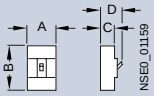
# 3VA2 molded case circuit breakers up to 1600 A

## Technical specifications







| | | | 3VA20 | | | | 3VA21 | | | | | 3VA22 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Electrical characteristics according to IEC 60947-2** | | | | | | | | | | | | | | | | |
| Number of poles | | | 3/4-pole | | | | 3/4-pole | | | | | 3/4-pole | | | | |
| Size | | A | 100 | | | | 160 | | | | | 250 | | | | |
| Rated current $I_n$ | | A | 25 ... 100 | | | | 25 ... 160 | | | | | 160 ... 250 | | | | |
| Rated operational voltage $U_e$ 50/60 Hz AC | | V | 690 | | | | 690 | | | | | 690 | | | | |
| Rated insulation voltage $U_i$ | | V | 800 | | | | 800 | | | | | 800 | | | | |
| Rated impulse withstand voltage $U_{imp}$ | | kV | 8 | | | | 8 | | | | | 8 | | | | |
| Use in IT networks (breaking capacity acc. to IEC 60947-2, annex H) | | V | ■ | | | | ■ | | | | | ■ | | | | |
| Frequency | | Hz | 50/60 | | | | 50/60 | | | | | 50/60 | | | | |
| **Breaking capacity (line protection)** | | | **M** | **H** | **C** | **L** | **M** | **H** | **C** | **L** | **E** | **M** | **H** | **C** | **L** | **E** |
| **Rated ultimate short-circuit breaking capacity $I_{cu}$** | | | | | | | | | | | | | | | | |
| 50/60 Hz AC | 220 ... 240 V | kA | 85 | 110 | 150 | 200 | 85 | 110 | 150 | 200 | – | 85 | 110 | 150 | 200 | – |
| | 380 ... 415 V | kA | 55 | 85 | 110 | 150 | 55 | 85 | 110 | 150 | 200 | 55 | 85 | 110 | 150 | 200 |
| | 440 V | kA | 55 | 85 | 110 | 150 | 55 | 85 | 110 | 150 | – | 55 | 85 | 110 | 150 | – |
| | 500 V | kA | 36 | 55 | 85 | 100 | 36 | 55 | 85 | 100 | – | 36 | 55 | 85 | 100 | – |
| | 690 V | kA | 2 | 2 | 2 | 25 | 2.5 | 2.5 | 2.5 | 25 | 85 | 3 | 3 | 3 | 25 | 85 |
| DC | 125 V (1 switching pole) | kA | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | 250 V (2 switching poles) | kA | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | 500 V (3 switching poles) | kA | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | 600 V (4 switching poles) | kA | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| **Rated service short-circuit breaking capacity $I_{cs}$** | | | | | | | | | | | | | | | | |
| 50/60 Hz AC | 220 ... 240 V | kA | 85 | 110 | 150 | 200 | 85 | 110 | 150 | 200 | – | 85 | 110 | 150 | 200 | – |
| | 380 ... 415 V | kA | 55 | 85 | 110 | 150 | 55 | 85 | 110 | 150 | 200 | 55 | 85 | 110 | 150 | 200 |
| | 440 V | kA | 55 | 85 | 110 | 150 | 55 | 85 | 110 | 150 | – | 55 | 85 | 110 | 150 | – |
| | 500 V | kA | 36 | 55 | 85 | 100 | 36 | 55 | 85 | 100 | – | 36 | 55 | 85 | 100 | – |
| | 690 V | kA | 2 | 2 | 2 | 18 | 2.5 | 2.5 | 2.5 | 18 | 65 | 3 | 3 | 3 | 18 | 65 |
| DC | 125 V (1 switching pole) | kA | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | 250 V (2 switching poles) | kA | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | 500 V (3 switching poles) | kA | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | 600 V (4 switching poles) | kA | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| **Dimensions** | | | | | | | | | | | | | | | | |
|  | A | mm | 105 (3P) \| 140 (4P) | | | | 105 (3P) \| 140 (4P) | | | | | 105 (3P) \| 140 (4P) | | | | |
| | B | mm | 181 | | | | 181 | | | | | 181 | | | | |
| | C | mm | 86 | | | | 86 | | | | | 86 | | | | |
| | D | mm | 107 | | | | 107 | | | | | 107 | | | | |

[1] Valid for $I_n$ = 400 A, 500 A; for $I_n$ = 630 A, $I_{cs}$ = 65 kA applies

■ Available – Not available/not present

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| 3VA23 | | | | | 3VA24 | | | | | 3VA25 | | | 3VA26 | | | 3VA27 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/4-pole | | | | | 3/4-pole | | | | | 3/4-pole | | | 3/4-pole | | | 3/4-pole | | |
| 400 | | | | | 630 | | | | | 1000 | | | 1250 | | | 1600 | | |
| 250 ... 400 | | | | | 400 ... 630 | | | | | 630 ... 1000 | | | 1250 | | | 800 ... 1600 | | |
| 690 | | | | | 690 | | | | | 690 | | | 690 | | | 690 | | |
| 800 | | | | | 800 | | | | | 800 | | | 800 | | | 1000 | | |
| 8 | | | | | 8 | | | | | 8 | | | 8 | | | 8 | | |
| ■ | | | | | ■ | | | | | ≤ 500 | | | ≤ 500 | | | ■ | | |
| 50/60 | | | | | 50/60 | | | | | 50/60 | | | 50/60 | | | 50/60 | | |
| M | H | C | L | E | M | H | C | L | E | M | H | C | M | H | C | M | H | C |
| | | | | | | | | | | | | | | | | | | |
| 85 | 110 | 150 | 200 | – | 85 | 110 | 150 | 200 | – | 85 | 110 | 200 | 85 | 110 | 200 | 100 | 150 | 200 |
| 55 | 85 | 110 | 150 | 200 | 55 | 85 | 110 | 150 | 200 | 55 | 85 | 110 | 55 | 85 | 110 | 55 | 85 | 110 |
| 55 | 85 | 110 | – | – | 55 | 85 | 110 | – | – | 55 | 85 | 110 | 55 | 85 | 110 | 55 | 85 | 100 |
| 36 | 55 | 85 | – | – | 36 | 55 | 85 | – | – | 36 | 55 | 85 | 36 | 55 | 85 | 36 | 55 | 85 |
| 5 | 5 | 5 | 25 | 85 | 6 | 6 | 6 | 25 | 85 | 25 | 35 | 35 | 25 | 35 | 35 | 25 | 36 | 50 |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | | | | | | | | | | | | | | | | | | |
| 85 | 110 | 150 | 200 | – | 85 | 110 | 150 | 200 | – | 85 | 110 | 150 | 85 | 110 | 150 | 100 | 150 | 200 |
| 55 | 85 | 110 | 150 | 200 | 55 | 85 | 110 | 150 | 200 | 55 | 85 | 85 | 55 | 85 | 85 | 55 | 85 | 110 |
| 55 | 85 | 110 | – | – | 55 | 85 | 110 | – | – | 55 | 70 | 70 | 55 | 70 | 70 | 55 | 85 | 100 |
| 36 | 55 | 65 | – | – | 36 | 55 | 85 [1)] | – | – | 36 | 55 | 65 | 36 | 55 | 65 | 36 | 55 | 63 |
| 5 | 5 | 5 | 18 | 65 | 6 | 6 | 6 | 18 | 65 | 19 | 19 | 19 | 19 | 19 | 19 | 25 | 36 | 36 |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 138 (3P) \| 184 (4P) | | | | | 138 (3P) \| 184 (4P) | | | | | 210 (3P) \| 280 (4P) | | | 210 (3P) \| 280 (4P) | | | 210 (3P) \| 280 (4P) | | |
| 248 | | | | | 248 | | | | | 320 | | | 320 | | | 291 | | |
| 110 | | | | | 110 | | | | | 120 | | | 120 | | | 171 (handle operating mechanism) \| 183 (stored energy operating mechanism) | | |
| 137 | | | | | 137 | | | | | 253 | | | 253 | | | 225 | | |

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# 3VA2 molded case circuit breakers up to 1600 A

## Application







| | | | | 3VA20 | 3VA21 | 3VA22 |
|---|---|---|---|---|---|---|
| **Electrical characteristics according to IEC 60947-2** | | | | | | |
| Number of poles | | | | 3/4-pole | 3/4-pole | 3/4-pole |
| Size | | | A | 100 | 160 | 250 |
| Rated current $I_n$ | | | A | 25 ... 100 | 25 ... 160 | 160 ... 250 |
| **Service life/endurance (operating cycles)** | | | | | | |
| Mechanical (OPEN-CLOSE cycles) | | | | 25000 | 25000 | 25000 |
| Electrical | 380 ... 415 V | $I_n$ | | 15000 | 14000 | 12000 |
| | | $I_n/2$ | | 20000 | 20000 | 17000 |
| | 690 V | | | 10500 | 9800 | 7200 |
| **Trip units** | | | | | | |
| ETU320 | LI | | | ■ | ■ | ■ |
| ETU330 | LIG | | | ■ | ■ | ■ |
| ETU340 | ELISA LI | | | – | ■ | ■ |
| ETU350 | LSI | | | ■ | ■ | ■ |
| ETU550/ETU850 | LSI | | | ■ | ■ | ■ |
| ETU560/ETU860 | LSIG | | | ■ | ■ | ■ |
| ETU650 | LSI | | | – | – | – |
| ETU360 | LSIG | | | – | – | – |
| ETU660 | LSIG | | | – | – | – |
| **3VA2 molded case circuit breakers for motor/starter protection (IEC 60947-4-1 standards and specifications)** | | | | | | |
| Rated current $I_n$ at 50 °C ambient temperature | | | A | – | 25 ... 100 | 160 ... 200 |
| **Service life/endurance (operating cycles)** | | | | | | |
| Mechanical (CLOSE-OPEN cycles) | | | | – | 25000 | 25000 |
| Electrical | 380 ... 415 V | | | – | 14000 | 12000 |
| **Trip units** | | | | | | |
| ETU310M | I | | | – | ■ | ■ |
| ETU350M | LSI | | | – | ■ | ■ |
| ETU550M | LSI | | | – | ■ | ■ |
| ETU860M | LSIG | | | – | ■ | ■ |
| ETU320 | LI | | | – | – | – |
| ETU350 | LSI | | | – | – | – |
| ETU360 | LSIG | | | – | – | – |
| ETU650 | LSIG | | | – | – | – |
| ETU660 | LSIG | | | – | – | – |

■ Available – Not available/not present

System overview, page 2/20 and 2/68

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| 3VA23 | 3VA24 | 3VA25 | 3VA26 | 3VA27 |
|---|---|---|---|---|
| 3/4-pole | 3/4-pole | 3/4-pole | 3/4-pole | 3/4-pole |
| 400 | 630 | 1000 | 1250 | 1600 |
| 250 ... 400 | 400 ... 630 | 630 ... 1000 | 1250 | 800 ... 1600 |
| | | | | |
| 20000 | 20000 | 10000 | 10000 | 10000 |
| 6000 | 5000 | 4600 | 4600 | 2000 |
| 12000 | 8000 | 7000 | 7000 | – |
| 4200 | 3500 | 3200 | 3200 | – |
| | | | | |
| ■ | ■ | ■ | ■ | ■ |
| ■ | ■ | ■ | ■ | – |
| ■ | ■ | ■ | ■ | – |
| ■ | ■ | ■ | ■ | ■ |
| ■ | ■ | ■ | ■ | – |
| ■ | ■ | ■ | ■ | – |
| – | – | – | – | ■ |
| – | – | – | – | ■ |
| – | – | – | – | ■ |
| | | | | |
| 250 | 400 ... 500 | 630 ... 800 | – | 800 ... 1600 |
| | | | | |
| 20000 | 20000 | 10000 | – | 10000 |
| 6000 | 5000 (400 A)<br>3000 (500 A) | 4600 | – | 2000 |
| | | | | |
| ■ | ■ | – | – | – |
| ■ | ■ | ■ | – | – |
| ■ | ■ | ■ | – | – |
| ■ | ■ | ■ | – | – |
| – | – | – | – | ■ |
| – | – | – | – | ■ |
| – | – | – | – | ■ |
| – | – | – | – | ■ |
| – | – | – | – | ■ |

**System overview, page 2/20 and 2/68**

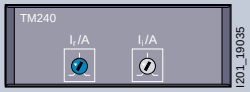
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# Trip units

## Protection system for 3VA molded case circuit breakers up to 1000 A



| Trip units | Thermal-magnetic | Electronic | Electronic with display | Electronic with display and metering function |
|---|---|---|---|---|
| |  |  |  |  |
| | **TM 2-series** | **ETU 3-series** | **ETU 5-series** | **ETU 8-series** |
| **Protective function** | | | | |
| Line protection | TM210, TM220, TM240 | ETU320, ETU330, ETU340, ETU350 | ETU550, ETU560 | ETU850, ETU860 |
| Starter protection | TM120M | ETU310M | – | – |
| Motor protection | – | ETU350M | ETU550M | ETU860M |
| **Integrated functions** | | | | |
| Parameterizing | Setting and reading the parameters<br>• Current values | Setting and reading the parameters<br>• Current values<br>• Delay times | Setting and reading the parameters<br>• Via display and communication<br>• Fine setting of the parameters<br>• Reading the measured values | Setting and reading the parameters<br>• Via display and communication<br>• Fine setting of the parameters<br>• Reading the measured values |
| Status display | – | Indicating the ETU status via LEDs | Indicating the ETU status via LEDs | Indicating the ETU status via LEDs |
| Interface | – | Interface for test devices | Interface for test devices | Interface for test devices |
| Metering function | – | – | – | Metering function integrated |
| **Optional expansions** | | | | |
| 24 V module | – | – |  <br>24 V module for continuous power supply (also without primary current through the molded case circuit breaker) |  <br>24 V module for continuous power supply (also without primary current through the molded case circuit breaker) |
| External function box | – |  <br>EFB300 external function box for connection to the ETU |  <br>EFB300 external function box for connection to the ETU |  <br>EFB300 external function box for connection to the ETU |
| Communications module | – | – |  <br>COM060 communications module |  <br>COM060 communications module |
| Data concentrator | – | – |  <br>COM800/COM100 data concentrator with interface to<br>• PROFIBUS<br>• PROFINET<br>• Modbus RTU<br>• Ethernet (Modbus TCP) |  <br>COM800/COM100 data concentrator with interface to<br>• PROFIBUS<br>• PROFINET<br>• Modbus RTU<br>• Ethernet (Modbus TCP) |
| External display | – | – |  <br>DSP800 external display for installing in the cubicle door |  <br>DSP800 external display for installing in the cubicle door |
| Test device | – |  <br>TD300/TD400/TD500 test device |  <br>TD300/TD400/TD500 test device |  <br>TD300/TD400/TD500 test device |

System overview, page 2/20 and 2/68

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## Protective functions of the 3VA1 with thermal-magnetic trip unit

| | **TM120M** AM | **TM210** FTFM | **TM220** ATFM | **TM240** ATAM |
|---|---|---|---|---|
| **Protection** | | | | |
| Starter protection | ■ | – | – | – |
| Line protection | – | ■ | ■ | ■ |
| **Version available with** | | | | |
| 1-pole and 2-pole breakers | – | ■ | – | – |
| 3-pole breaker | ■ | ■ | ■ | ■ |
| 4-pole breaker | – | ■ | ■ | ■ |
| **Available protection parameters** | | | | |
| $I_r$ adjustable | – | – | ■ | ■ |
| $I_i$ adjustable | ■ | – | – | ■ |
| $I_r$ fixed | – | ■ | – | – |
| $I_i$ fixed | – | ■ | ■ | – |
| $I_N$ [1] | – | ■ | ■ | ■ |

[1] 3VA10 only without N protection
3VA11, 3VA12, 3VA13, 3VA14 without, 50% or 100% N protection
50% N protection from $I_n \geq 100$ A

## Protective functions of the 3VA2 with electronic trip unit

| | **ETU310M** I | **ETU320** LI | **ETU330** LIG | **ETU340** ELISA® | **ETU350** LSI | **ETU350M** LSI | **ETU550** LSI | **ETU550M** LSI | **ETU560** LSIG | **ETU850** LSI | **ETU860** LSIG | **ETU860M** LSIG |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Protection** | | | | | | | | | | | | |
| Starter protection | ■ | – | – | – | – | – | – | – | – | – | – | – |
| Motor protection | – | – | – | – | – | ■ | – | ■ | – | – | – | ■ |
| Line protection | – | ■ | ■ | ■ | ■ | – | ■ | – | ■ | ■ | ■ | – |
| Generator protection | – | ■ | ■ | – | ■ | – | ■ | – | ■ | ■ | ■ | – |
| **Version available with** | | | | | | | | | | | | |
| 3-pole without external neutral conductor transformer | ■ | ■ | ■ | ■ | ■ | ■ | – | ■ | – | – | – | ■ |
| 3-pole with external neutral conductor transformer | – | – | – | – | – | – | ■ | – | ■ | ■ | ■ | – |
| 4-pole with protected neutral conductor transformer | – | ■ | ■ | ■ | ■ | – | ■ | – | ■ | ■ | ■ | – |
| **Available protection parameters** | | | | | | | | | | | | |
| Characteristic in L range | $I^2t$ | $I^2t$ | $I^2t$ | $I^4t$ | $I^2t$ | $I^2t$ | $I^2t$ | $I^2t$ | $I^2t$ | $I^2t$ | $I^2t$ | $I^2t$ |
| $I_r$ | – | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| $t_r$ at 6 × $I_r$ | – | ■ | ■ | – | ■ | – | ■ | – | ■ | ■ | ■ | – |
| $t_c$ | – | – | – | – | – | ■ | – | ■ | – | – | – | ■ |
| $t_p$ | – | – | – | – | – | – | – | ■ | – | – | – | ■ |
| Thermal memory | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Thermal memory can be switched on/off | – | – | – | – | – | – | ■ | – | ■ | ■ | ■ | – |
| $I_{sd}$ | – | – | – | – | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| $t_{sd}$ at 8 × $I_r$ | – | – | – | – | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Characteristic in S range: $I^2t_{sd}$ | – | – | – | – | ■ | – | ■ | – | ■ | ■ | ■ | – |
| Characteristic in S range: selectable $I^2t_{sd}/t_{sd}$ | – | – | – | – | – | – | ■ | – | ■ | ■ | ■ | – |
| $I_i$ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| $I_N$ [1] | – | ■ | ■ | ■ | ■ | – | ■ | – | ■ | ■ | ■ | – |
| $I_g$ | – | – | ■ | – | – | – | – | – | ■ | – | ■ | ■ |
| $t_g$ at 2 × $I_g$ | – | – | ■ | – | – | – | – | – | ■ | – | ■ | ■ |
| Characteristic in G range: $I^2t_g$ | – | – | – | – | – | – | – | – | ■ | – | ■ | ■ |
| Characteristic in G range: selectable $I^2t_g/t_g$ | – | – | – | – | – | – | – | – | ■ | – | ■ | ■ |
| Ground-fault alarm function | – | – | – | – | – | – | – | – | ■ | – | ■ | ■ |
| Blocking protection | – | – | – | – | – | – | – | – | – | – | – | ■ |
| ZSI in combination with an EFB external function box | – | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |

[1] Available in a version with external current transformer for N conductor or 4-pole breaker

**Available for:**
- Circuit breakers with ETU (4-pole)
- Circuit breakers with ETU5/ETU8 3-pole with external neutral conductor transformer or 4-pole

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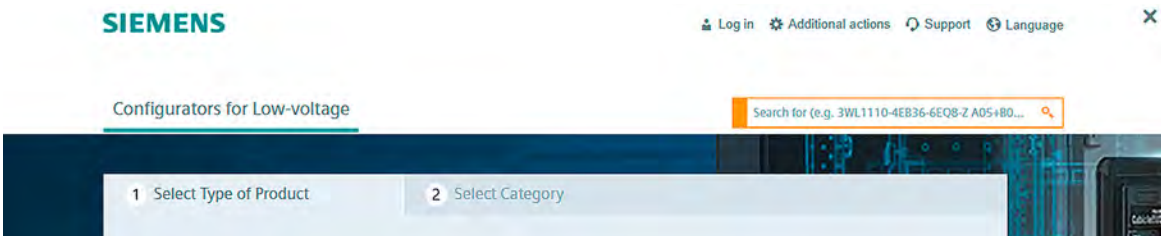
# Online configurator highlights

## www.siemens.com/lowvoltage/configurators



### Search function with global direct input

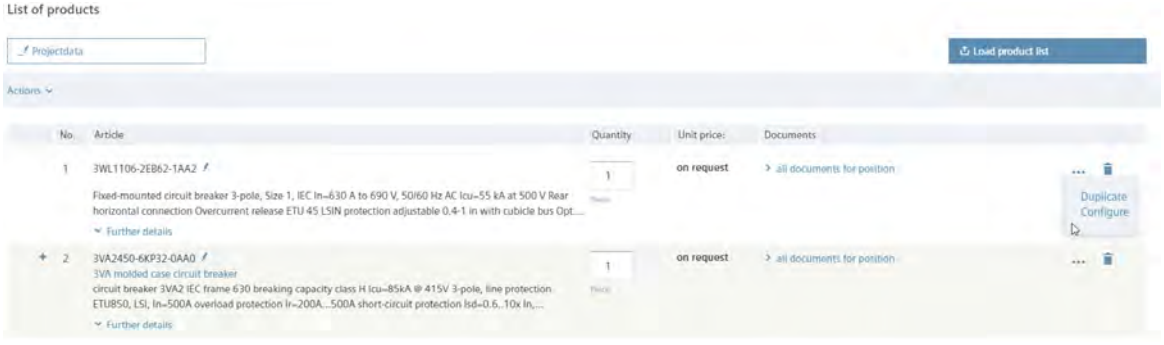
Searches for specific terms and jumps to the article number based on input to the correct configurator



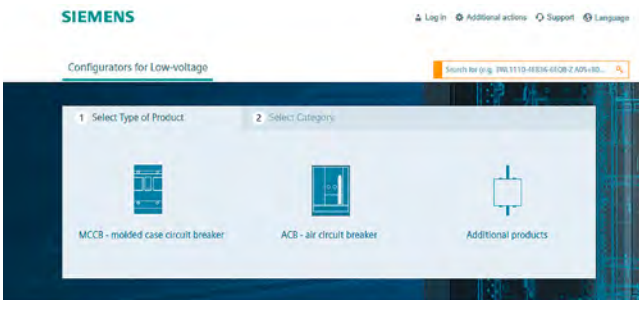

### Product list stores multiple configurations and can transfer them collectively to the shopping cart




### Recall of completed configurations for modification or additional configuration




### Responsive Design



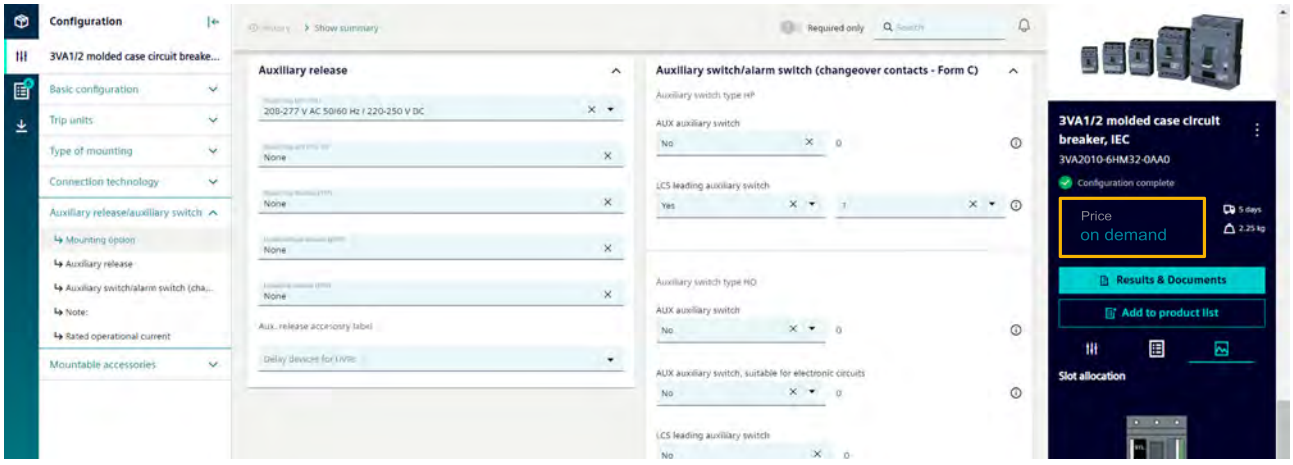
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## www.siemens.com/lowvoltage/3va-configurator and www.siemens.com/lowvoltage/3va27-configurator

### Visualization of the internally mountable accessories (slot assignment)




### Download of the individual edz files for 3VA




### Automatic generation of the 3D model, the 2D dimension drawing and the internal circuit diagram according to IEC



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# System overview

**For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3va-configurator**



## Molded case circuit breakers and switch disconnectors



3VA1 for standard applications

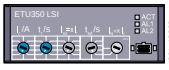


3VA2 for selective applications

## Trip units



Thermal-magnetic trip unit (TMTU)



Electronic trip unit (ETU)



Electronic trip unit (ETU) with display, and optionally with metering function

## Trip unit accessories



24 V module



Communica-tions module



Data concentrator



External display



Test device

## Type of mounting



Fixed-mounted



Withdrawable unit, complete kit



Plug-in unit, complete kit

## Supplementary accessories



Auxiliary circuit connector



Door feedthrough



Position signaling switch



Cylinder lock adapter



Crank

## Main conductor connection



Bus connectors



Bus connectors broadened



Circular conductor terminals



Box terminals



Nut keeper kits, right-angled

## Connection accessories



Insulation accessories

**Note:**
You will find a detailed range of accessories in the Accessories and spare parts section.

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## Auxiliary releases/auxiliary switches


Shunt trip


Universal release


Undervoltage release


Auxiliary switch


Tripped signaling switch


Leading changeover switch LCS


Electrical alarm switches EAS


Short circuit alarm switch SAS

## Mountable accessories


Manual operator


Motor operator


Residual current device

## Additional circuit breaker accessories


Cover frame


DIN-rail adapter


Locking provisions


Cylinder lock

## Mechanical interlocking mechanisms


Sliding bar interlock


Interlocking with rod


Handle interlocking module with Bowden cable

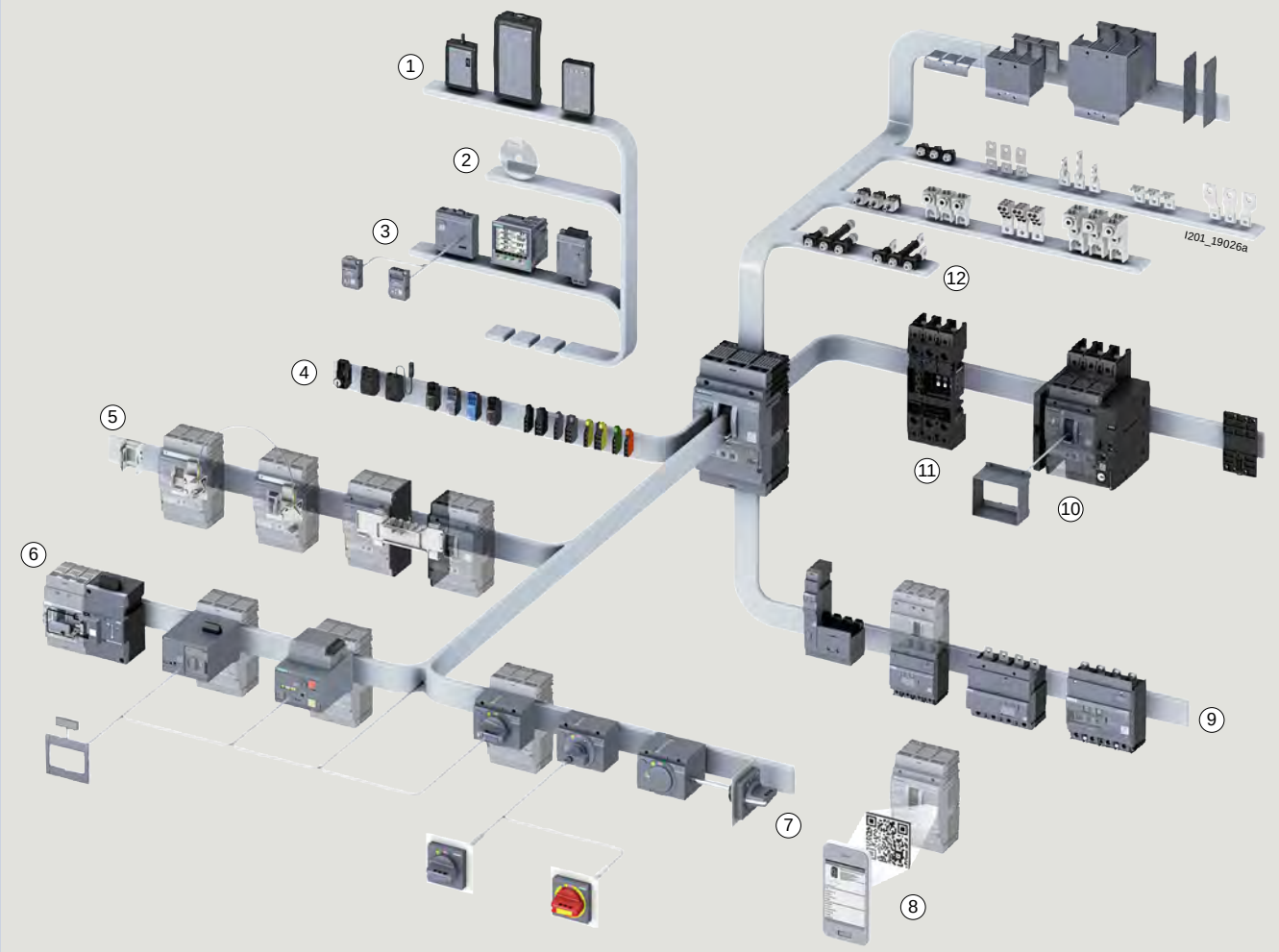
**Note:**
You will find a detailed range of accessories in the Accessories and spare parts section.

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# System overview




1 Test devices
2 SENTRON Powerconfig software
3 Communication
4 Internal accessories
5 Accessories for locking, blocking and interlocking
6 Motor operators
7 Manual operators
8 Knowledge Manager
9 Residual current devices
10 Withdrawable technology
11 Plug-in technology
12 Connection technology

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# Structure of the article numbers

Siemens EcoTech

## Basic configuration for line and generator protection

**The structure shown below is intended as an overview of each position and its meaning.
For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3va-configurator**



| | | | 3VA10 | 3VA11 | 3VA12 | 3VA13 | 3VA14 | 3VA15 | 3VA20 | 3VA21 | 3VA22 | 3VA23 | 3VA24 | 3VA25 | 3VA26 | 4 5 | 6 7 | 8 | 9 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3VA | | | | | | | | | | | | | | | | | | – | | | – 0AA0 |
| **Trip units** | Thermal-magnetic | | | | | | | | | | | | | | | 1 | | | | | |
| | Electronic | | | | | | | | | | | | | | | 2 | | | | | |
| **Size (SZ)** | 100 A | | ■ | – | – | – | – | – | ■ | – | – | – | – | – | – | 0 | | | | | |
| | 160 A | | – | ■ | – | – | – | – | – | ■ | – | – | – | – | – | 1 | | | | | |
| | 250 A | | – | – | ■ | – | – | – | – | – | ■ | – | – | – | – | 2 | | | | | |
| | 400 A | | – | – | – | ■ | – | – | – | – | – | ■ | – | – | – | 3 | | | | | |
| | 630 A | | – | – | – | – | ■ | – | – | – | – | – | ■ | – | – | 4 | | | | | |
| | 1000 A | | – | – | – | – | – | ■ | – | – | – | – | – | ■ | – | 5 | | | | | |
| | 1250 A | | – | – | – | – | – | – | – | – | – | – | – | – | ■ | 6 | | | | | |
| **Max. rated current $I_{n\,max}$** | Line protection | 16 A | ■ | ■ | – | – | – | – | – | – | – | – | – | – | – | | 9 | 6 | | | |
| | | 20 A | ■ | ■ | – | – | – | – | – | – | – | – | – | – | – | | 2 | 0 | | | |
| | | 25 A | ■ | ■ | – | – | – | – | ■ | ■ | – | – | – | – | – | | 2 | 5 | | | |
| | | 32 A | ■ | ■ | – | – | – | – | – | – | – | – | – | – | – | | 3 | 2 | | | |
| | | 40 A | ■ | ■ | – | – | – | – | ■ | ■ | – | – | – | – | – | | 4 | 0 | | | |
| | | 50 A | ■ | ■ | – | – | – | – | – | – | – | – | – | – | – | | 5 | 0 | | | |
| | | 63 A | ■ | ■ | – | – | – | – | ■ | ■ | – | – | – | – | – | | 6 | 3 | | | |
| | | 80 A | ■ | ■ | – | – | – | – | – | – | – | – | – | – | – | | 8 | 0 | | | |
| | | 100 A | ■ | ■ | – | – | – | – | ■ | ■ | – | – | – | – | – | | 1 | 0 | | | |
| | | 125 A | – | ■ | – | – | – | – | – | – | – | – | – | – | – | | 1 | 2 | | | |
| | | 160 A | – | ■ | ■ | | – | – | – | ■[1] | ■ | – | – | – | – | | 1 | 6 | | | |
| | | 200 A | – | – | ■ | – | – | – | – | – | – | – | – | – | – | | 2 | 0 | | | |
| | | 250 A | – | – | ■ | – | – | – | – | – | ■[1] | ■ | – | – | – | | 2 | 5 | | | |
| | | 320 A | – | – | – | ■ | – | – | – | – | – | – | – | – | – | | 3 | 2 | | | |
| | | 400 A | – | – | – | ■ | – | – | – | – | – | ■[1] | ■[2] | – | – | | 4 | 0 | | | |
| | | 500 A | – | – | – | – | ■ | – | – | – | – | – | ■[2] | – | – | | 5 | 0 | | | |
| | | 630 A | – | – | – | – | ■ | ■ | – | – | – | – | ■ | ■ | – | | 6 | 3 | | | |
| | | 800 A | – | – | – | – | – | ■ | – | – | – | – | – | ■ | – | | 8 | 0 | | | |
| | | 1000 A | – | – | – | – | – | ■ | – | – | – | – | – | ■ | – | | 1 | 0 | | | |
| | | 1250 A | – | – | – | – | – | – | – | – | – | – | – | – | ■ | | 1 | 2 | | | |
| | Generator protection | 25 A | – | – | – | – | – | – | ■ | ■ | – | – | – | – | – | | 2 | 5 | | | |
| | | 40 A | – | – | – | – | – | – | ■ | ■ | – | – | – | – | – | | 4 | 0 | | | |
| | | 63 A | – | – | – | – | – | – | ■ | ■ | – | – | – | – | – | | 6 | 3 | | | |
| | | 100 A | – | – | – | – | – | – | ■ | ■ | – | – | – | – | – | | 1 | 0 | | | |
| | | 160 A | – | – | – | – | – | – | – | ■ | ■ | – | – | – | – | | 1 | 6 | | | |
| | | 250 A | – | – | – | – | – | – | – | – | ■ | ■ | – | – | – | | 2 | 5 | | | |
| | | 400 A | – | – | – | – | – | – | – | – | – | ■ | ■[2] | – | – | | 4 | 0 | | | |
| | | 500 A | – | – | – | – | – | – | – | – | – | – | ■[2] | – | – | | 5 | 0 | | | |
| | | 630 A | – | – | – | – | – | – | – | – | – | – | ■ | ■ | – | | 6 | 3 | | | |
| | | 800 A | – | – | – | – | – | – | – | – | – | – | – | ■ | – | | 8 | 0 | | | |
| | | 1000 A | – | – | – | – | – | – | – | – | – | – | – | ■ | – | | 1 | 0 | | | |
| | | 1250 A | – | – | – | – | – | – | – | – | – | – | – | – | ■ | | 1 | 2 | | | |
| | Switch disconnector | 63 A | – | ■ | – | – | – | – | – | – | – | – | – | – | – | | 6 | 3 | | | |
| | | 100 A | – | ■ | – | – | – | – | – | – | – | – | – | – | – | | 1 | 0 | | | |
| | | 125 A | – | ■ | – | – | – | – | – | – | – | – | – | – | – | | 1 | 2 | | | |
| | | 160 A | – | ■ | – | – | – | – | – | – | – | – | – | – | – | | 1 | 6 | | | |
| | | 250 A | – | – | ■ | – | – | – | – | – | – | – | – | – | – | | 2 | 5 | | | |
| | | 400 A | – | – | – | ■ | – | – | – | – | – | – | – | – | – | | 4 | 0 | | | |
| | | 500 A | – | – | – | – | ■ | – | – | – | – | – | – | – | – | | 5 | 0 | | | |
| | | 630 A | – | – | – | – | ■ | – | – | – | – | – | – | – | – | | 6 | 3 | | | |

[1] Rated current not available with ETU340 ELISA LI
[2] With ETU 5-series and 8-series, utilization category B and ETU340 ELISA LI only

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**3VA** 4 5 6 7 – 8 9 10 11 12 – 0AA0

| | | | 3VA10 | 3VA11 | 3VA12 | 3VA13 | 3VA14 | 3VA15 | 3VA20 | 3VA21 | 3VA22 | 3VA23 | 3VA24 | 3VA25 | 3VA26 | | | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Short-circuit breaking capacity $I_{cu} = I_{cs}$ at 415 V** | Without overload protection | | – | ■ | – | ■ | – | ■ | – | – | – | – | – | – | – | | | 1 | | | | |
| | Without short-circuit protection | | – | ■ | ■ | ■ | ■ | – | – | – | – | – | – | – | – | | | 1 | | | | |
| | 16 kA | | ■ | – | – | – | – | – | – | – | – | – | – | – | – | | | 2 | | | | |
| | 25 kA | | ■ | ■ | – | – | – | – | – | – | – | – | – | – | – | | | 3 | | | | |
| | 36 kA | | ■ | ■ | ■ | ■ | ■ | – | – | – | – | – | – | – | – | | | 4 | | | | |
| | 55 kA | | – | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | 5 | | | | |
| | 70 kA | | – | ■ | ■ | ■ | ■ | ■ | – | – | – | – | – | – | – | | | 6 | | | | |
| | 85 kA | | – | – | – | – | – | – | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | 6 | | | | |
| | 110 kA | | – | – | – | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | 7 | | | | |
| | 150 kA | | – | – | – | – | – | – | ■ | ■ | ■ | ■ | ■ | – | – | | | 8 | | | | |
| | 200 kA [1] | | – | – | – | – | – | – | – | ■ | ■ | ■ | ■ | – | – | | | 0 | | | | |

[1] Available for 3 and 8-series ETUs

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Protective function thermal-magnetic** | No protection | | – | ■ | ■ | ■ | ■ | – | – | – | – | – | – | – | – | SD100 | – | | | A | | |
| | Line protection | | ■ | ■ | – | – | – | – | – | – | – | – | – | – | – | TM210 | FTFM | | | D | | |
| | | | – | ■ | – | – | – | – | – | – | – | – | – | – | – | TM220 | ATFM | | | E | | |
| | | | – | ■ | ■ | ■ | ■ | ■ | – | – | – | – | – | – | – | TM240 | ATAM | | | F | | |

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Protective function thermal-magnetic, neutral conductor protection** | No protection | | | | | | | | | | | | | | | | | | A | | | |
| | Line protection | Without neutral conductor protection | | | | | | | | | | | | | | | | | E | | | |
| | | 50% neutral conductor protection | | | | | | | | | | | | | | | | | F | | | |
| | | 100% neutral conductor protection | | | | | | | | | | | | | | | | | G | | | |

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Protective function electronic** | Line protection | | – | – | – | – | – | – | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ETU320 | LI | (N) [2] | H | L | | |
| | | | – | – | – | – | – | – | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ETU330 | LIG | (N) [2] | H | M | | |
| | | | – | – | – | – | – | – | – | ■ | ■ | ■ | ■ | ■ | ■ | ETU340 | ELISA LI | (N) [2] | H | K | | |
| | Line and generator protection | | – | – | – | – | – | – | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ETU350 | LSI | (N) [2] | H | N | | |
| | Line and generator protection, with display | | – | – | – | – | – | – | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ETU550 | LSI | (N) [3] | J | P | | |
| | | | – | – | – | – | – | – | ■ | ■ | ■ | ■ | ■ | – | – | ETU560 | LSIG | (N) [3] | J | Q | | |
| | Line and generator protection, with display, with metering function | | – | – | – | – | – | – | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ETU850 | LSI | (N) [3] | K | P | | |
| | | | – | – | – | – | – | – | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ETU860 | LSIG | (N) [3] | K | Q | | |

[2] Neutral conductor protection for 4-pole breakers
[3] Neutral conductor protection for 3-pole breakers with an external neutral conductor transformer or for 4-pole breakers

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Number of poles** | 1-pole | Line protection | – | ■ [4] | – | – | – | – | – | – | – | – | – | – | | | | | | 1 | | |
| | 2-pole | Line protection | – | ■ [4] | – | – | – | – | – | – | – | – | – | – | | | | | | 2 | | |
| | 3-pole | Line protection | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | 3 | | |
| | | Generator protection | – | – | – | – | – | – | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | 3 | | |
| | 4-pole | Line protection | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | 4 | | |
| | | Generator protection | – | – | – | – | – | – | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | 4 | | |

[4] For TM210 only

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Connection technology** | Nut keeper kit | Line protection | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | 2 | |
| | | Generator protection | – | – | – | – | – | – | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | 2 | |
| | Box terminal | Line protection | ■ | ■ | – | – | – | – | ■ | ■ | – | – | – | – | – | | | | | | 6 | |
| | | Generator protection | – | – | – | – | – | – | ■ | ■ | – | – | – | – | – | | | | | | 6 | |

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# Structure of the article numbers

Siemens EcoTech

## Basic configuration for starter and motor protection

**The structure shown below is intended as an overview of each position and its meaning. For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3va-configurator**



| | | | 3VA11 | 3VA12 | 3VA13 | 3VA14 | 3VA15 | 3VA21 | 3VA22 | 3VA23 | 3VA24 | 3VA25 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3VA | | | | | | | | | | | | | | | | | – | | | | – 0AA0 |
| **Trip units** | Thermal-magnetic | | | | | | | | | | | | 1 | | | | | | | | |
| | Electronic | | | | | | | | | | | | 2 | | | | | | | | |
| **Size (SZ)** | 160 A | | ■ | – | – | – | – | ■ | – | – | – | – | | 1 | | | | | | | |
| | 250 A | | – | ■ | – | – | – | – | ■ | – | – | – | | 2 | | | | | | | |
| | 400 A | | – | – | ■ | – | – | – | – | ■ | – | – | | 3 | | | | | | | |
| | 630 A | | – | – | – | ■ | – | – | – | – | ■ | – | | 4 | | | | | | | |
| | 1000 A | | – | – | – | – | ■ | – | – | – | – | ■ | | 5 | | | | | | | |
| **Max. rated current $I_{n\,max}$** | Starter protection | 1 A | ■ | – | – | – | – | – | – | – | – | – | | | 8 | 1 | | | | | |
| | | 2 A | ■ | – | – | – | – | – | – | – | – | – | | | 0 | 2 | | | | | |
| | | 4 A | ■ | – | – | – | – | – | – | – | – | – | | | 0 | 4 | | | | | |
| | | 8 A | ■ | – | – | – | – | – | – | – | – | – | | | 0 | 8 | | | | | |
| | | 12.5 A | ■ | – | – | – | – | – | – | – | – | – | | | 9 | 2 | | | | | |
| | | 20 A | ■ | – | – | – | – | – | – | – | – | – | | | 2 | 0 | | | | | |
| | | 25 A | – | – | – | – | – | ■ | – | – | – | – | | | 2 | 5 | | | | | |
| | | 32 A | ■ | – | – | – | – | – | – | – | – | – | | | 3 | 2 | | | | | |
| | | 40 A | ■ | – | – | – | – | ■ | – | – | – | – | | | 4 | 0 | | | | | |
| | | 50 A | ■ | – | – | – | – | – | – | – | – | – | | | 5 | 0 | | | | | |
| | | 63 A | ■ | – | – | – | – | ■ | – | – | – | – | | | 6 | 3 | | | | | |
| | | 80 A | ■ | – | – | – | – | – | – | – | – | – | | | 8 | 0 | | | | | |
| | | 100 A | ■ | – | – | – | – | ■ | – | – | – | – | | | 1 | 0 | | | | | |
| | | 125 A | ■ | – | – | – | – | – | – | – | – | – | | | 1 | 2 | | | | | |
| | | 160 A | – | ■ | – | – | – | – | ■ | – | – | – | | | 1 | 6 | | | | | |
| | | 200 A | – | ■ | – | – | – | – | ■ | – | – | – | | | 2 | 0 | | | | | |
| | | 250 A | – | – | ■ | – | – | – | – | ■ | – | – | | | 2 | 5 | | | | | |
| | | 320 A | – | – | ■ | – | – | – | – | – | – | – | | | 3 | 2 | | | | | |
| | | 400 A | – | – | – | ■ | – | – | – | – | ■ | – | | | 4 | 0 | | | | | |
| | | 500 A | – | – | – | ■ | – | – | – | – | ■ | – | | | 5 | 0 | | | | | |
| | | 630 A | – | – | – | – | ■ | – | – | – | – | – | | | 6 | 3 | | | | | |
| | | 800 A | – | – | – | – | ■ | – | – | – | – | – | | | 8 | 0 | | | | | |
| | Motor protection | 25 A | – | – | – | – | – | ■ | – | – | – | – | | | 2 | 5 | | | | | |
| | | 40 A | – | – | – | – | – | ■ | – | – | – | – | | | 4 | 0 | | | | | |
| | | 63 A | – | – | – | – | – | ■ | – | – | – | – | | | 6 | 3 | | | | | |
| | | 100 A | – | – | – | – | – | ■ | – | – | – | – | | | 1 | 0 | | | | | |
| | | 160 A | – | – | – | – | – | – | ■ | – | – | – | | | 1 | 6 | | | | | |
| | | 200 A | – | – | – | – | – | – | ■ | – | – | – | | | 2 | 0 | | | | | |
| | | 250 A | – | – | – | – | – | – | – | ■ | – | – | | | 2 | 5 | | | | | |
| | | 400 A | – | – | – | – | – | – | – | – | ■ | – | | | 4 | 0 | | | | | |
| | | 500 A | – | – | – | – | – | – | – | – | ■ | – | | | 5 | 0 | | | | | |
| | | 630 A | – | – | – | – | – | – | – | – | – | ■ | | | 6 | 3 | | | | | |
| | | 800 A | – | – | – | – | – | – | – | – | – | ■ | | | 8 | 0 | | | | | |
| **Short-circuit breaking capacity $I_{cu} = I_{cs}$ at 415 V** | 55 kA | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | 5 | | | | |
| | 70 kA | | ■ | ■ | ■ | ■ | ■ | – | – | – | – | – | | | | | 6 | | | | |
| | 110 kA | | – | – | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | 7 | | | | |
| | 200 kA | | – | – | – | – | – | ■ | ■ | ■ | ■ | – | | | | | 0 | | | | |

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**3VA** 4 5 6 7 – 8 9 10 11 12 – **0AA0**

| | | | 3VA11 | 3VA12 | 3VA13 | 3VA14 | 3VA15 | 3VA21 | 3VA22 | 3VA23 | 3VA24 | 3VA25 | | | | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Protective function thermal-magnetic** | Starter protection | | ■ | – | – | – | – | – | – | – | – | – | | TM110M | FM | M | G | | |
| | | | ■ | ■ | ■ | ■ | ■ | – | – | – | – | – | | TM120M | AM | M | H | | |
| **Protective function electronic** | Motor protection | | – | – | – | – | – | ■ | ■ | ■ | ■ | ■ | | ETU350M | LSI | M | N | | |
| | Motor protection, with display | | – | – | – | – | – | ■ | ■ | ■ | ■ | ■ | | ETU550M | LSI | M | P | | |
| | Motor protection, with display, with metering function | | – | – | – | – | – | ■ | ■ | ■ | ■ | ■ | | ETU860M | LSIG | M | Q | | |
| | Starter protection | | – | – | – | – | – | ■ | ■ | ■ | ■ | – | | ETU310M | I | M | S | | |
| **Number of poles** | 3-pole | Starter protection | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | – | | | | | | 3 | |
| | | Motor protection | – | – | – | – | – | ■ | ■ | ■ | ■ | ■ | | | | | | 3 | |
| **Connection technology** | Nut keeper kit | Starter protection | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | – | | | | | | | 2 |
| | | Motor protection | – | – | – | – | – | ■ | ■ | ■ | ■ | ■ | | | | | | | 2 |
| | Box terminals | Starter protection | ■ | – | – | – | – | ■ | – | – | – | – | | | | | | | 6 |
| | | Motor protection | – | – | – | – | – | ■ | – | – | – | – | | | | | | | 6 |

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# Internal accessories

## Auxiliary switches and alarm switches

**For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3va-configurator**



### Auxiliary switches AUX

- Used to signal the position of the main contacts of the molded case circuit breaker
- The contacts of the auxiliary switch and the molded case circuit breaker close in unison



| Type | Width | $I_e$ max (IEC 60947-5-1) | $U_e$ AC/DC (IEC 60947-5-1) | Version | 3VA10 | 3VA11 | 3VA12 3VA13 3VA14 | 3VA15 | 3VA20 3VA21 3VA22 3VA23 3VA24 3VA25 3VA26 |
|---|---|---|---|---|---|---|---|---|---|
| HQ | 7 mm (1 slot) | 6 A | 240 V/250 V | Standard | | | 3VA9988-0AA12 | | |
| | | < 1 A | 24 V/24 V | Electronic-compatible | | | 3VA9988-0AA13 | | |
| HP | 14 mm (2 slots) | 10 A | 600 V/250 V | Standard | – | | 3VA9988-0AA11 | | |

### Leading changeover switches LCS

- Used for load shedding, for example
- Signal the opening of the main contacts with a lead time of 20 ms in advance of molded case circuit breaker trips



| Type | Width | $I_e$ max (IEC 60947-5-1) | $U_e$ AC/DC (IEC 60947-5-1) | Version | 3VA10 | 3VA11 | 3VA12 3VA13 3VA14 | 3VA15 | 3VA20 3VA21 3VA22 3VA23 3VA24 3VA25 3VA26 |
|---|---|---|---|---|---|---|---|---|---|
| HQ | 7 mm (1 slot) | 6 A | 240 V/250 V | Standard | – | | 3VA9988-0AA22 | | |
| | | < 1 A | 24 V/24 V | Electronic-compatible | – | | 3VA9988-0AA23 | | |
| HP | 14 mm (2 slots) | 10 A | 600 V/250 V | Standard | – | | 3VA9988-0AA21 | | |

### Trip alarm switches TAS

- Signal every circuit breaker tripping operation
- Are actuated whenever the molded case circuit breaker switches to the TRIP position



| Type | Width | $I_e$ max (IEC 60947-5-1) | $U_e$ AC/DC (IEC 60947-5-1) | Version | 3VA10 | 3VA11 | 3VA12 3VA13 3VA14 | 3VA15 | 3VA20 3VA21 3VA22 3VA23 3VA24 3VA25 3VA26 |
|---|---|---|---|---|---|---|---|---|---|
| HQ | 7 mm (1 slot) | 6 A | 240 V/250 V | Standard | | | 3VA9988-0AB12 | | |
| | | < 1 A | 24 V/24 V | Electronic-compatible | | | 3VA9988-0AB13 | | |
| HP | 14 mm (2 slots) | 10 A | 600 V/250 V | Standard | – | | 3VA9988-0AB11 | | |

### Short circuit alarm switches SAS

- Signal tripping operations only if they have been initiated by a short circuit
- The tripping operation must be reset by deliberate acknowledgement of the fault before the molded case circuit breaker can be switched to ON again



| Type | Width | $I_e$ max (IEC 60947-5-1) | $U_e$ AC/DC (IEC 60947-5-1) | Version | 3VA10 | 3VA11 | 3VA12 3VA13 3VA14 | 3VA15 | 3VA20 3VA21 3VA22 3VA23 3VA24 3VA25 3VA26 |
|---|---|---|---|---|---|---|---|---|---|
| HQ | 7 mm (1 slot) | 6 A | 240 V/250 V | Standard | – | 3VA9988-0AB32 | 3VA9988-0AB34 | – | – |
| | | < 1 A | 24 V/24 V | Electronic-compatible | – | 3VA9988-0AB33 | 3VA9988-0AB35 | – | – |

### Electrical alarm switches EAS

- Are actuated as soon as the main contacts of the molded case circuit breaker open in the event that the breaker is tripped by the ETU



| Type | Width | $I_e$ max (IEC 60947-5-1) | $U_e$ AC/DC (IEC 60947-5-1) | Version | 3VA10 | 3VA11 | 3VA12 3VA13 3VA14 | 3VA15 | 3VA20 3VA21 3VA22 3VA23 3VA24 3VA25 3VA26 |
|---|---|---|---|---|---|---|---|---|---|
| HQ | 7 mm (1 slot) | 6 A | 240 V/250 V | Standard | – | – | – | – | 3VA9988-0AB22 |
| | | < 1 A | 24 V/24 V | Electronic-compatible | – | – | – | – | 3VA9988-0AB23 |

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# Auxiliary releases

**For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3va-configurator**

| | | | 3VA10<br>3VA11<br>3VA12<br>3VA13<br>3VA14<br>3VA15 | 3VA20<br>3VA21<br>3VA22<br>3VA23<br>3VA24 | 3VA25<br>3VA26 |
|---|---|---|---|---|---|
| **Shunt trips left STL** | | | | | |
| • Used for remote-controlled tripping of the molded case circuit breaker<br>• Have particularly low power consumption<br>• Especially suitable for electrical interlocking in the EI variant [1] | | | | | |
|  | **Version** | **$U_e$ 50/60 Hz AC** | **$U_e$ DC** | | |
| | Standard | – | 12 V | 3VA9988-0BL10 | |
| | | 24 V | 24 ... 30 V | 3VA9988-0BL30 | |
| | | 48 ... 60 V | 48 ... 60 V | 3VA9988-0BL31 | |
| | | 110 ... 127 V | 110 ... 127 V | 3VA9988-0BL32 | |
| | | 208 ... 277 V | 220 ... 250 V | 3VA9988-0BL33 | |
| | | 380 ... 600 V | – | 3VA9988-0BL20 | |
| | Electrical (EI) | – | 24 V | 3VA9988-0BM10 | |
| **Shunt trips flexible STF** | | | | | |
| • Used for remote-controlled tripping of the molded case circuit breaker<br>• Flexible installation | | | | | |
|  | **$U_e$ 50/60 Hz AC** | **$U_e$ DC** | | | |
| | 24 V | – | – | 3VA9988-0BA20 | – |
| | 48 ... 60 V | – | – | 3VA9988-0BA21 | – |
| | 110 ... 127 V | – | – | 3VA9988-0BA22 | – |
| | 208 ... 277 V | – | – | 3VA9988-0BA23 | – |
| | 380 ... 500 V | – | – | 3VA9988-0BA24 | – |
| | 600 V | – | – | 3VA9988-0BA25 | – |
| **Universal releases UNI** | | | | | |
| • Combination of shunt trip and undervoltage release | | | | | |
|  | **$U_e$ 50/60 Hz AC** | **$U_e$ DC** | | | |
| | – | 12 V | | 3VA9908-0BD11 | |
| | | 24 V | | 3VA9908-0BD12 | |
| | | 48 V | | 3VA9908-0BD13 | |
| **Undervoltage releases UVR** | | | | | |
|  | • Trip the molded case circuit breaker in the event that the rated operational voltage of a monitored circuit drops below a minimum permissible limit or fails altogether | | | | |
| | **$U_e$ 50/60 Hz AC** | **$U_e$ DC** | | | |
| | – | 12 V | | 3VA9908-0BB10 | |
| | | 24 V | | 3VA9908-0BB11 | |
| | | 48 V | | 3VA9908-0BB12 | |
| | | 60 V | | 3VA9908-0BB13 | |
| | | 125 ... 127 V | | 3VA9908-0BB14 | |
| | | 220 ... 230 V | | 3VA9908-0BB15 | |
| | | 250 V | | 3VA9908-0BB16 | |
| | 24 V | – | | 3VA9908-0BB20 | |
| | 48 V | – | | 3VA9908-0BB21 | |
| | 60 V | – | | 3VA9908-0BB22 | |
| | 110 V | – | | 3VA9908-0BB23 | |
| | 120 ... 127 V | – | | 3VA9908-0BB24 | |
| | 208 ... 230 V | – | | 3VA9908-0BB25 | |
| | 380 ... 400 V | – | | 3VA9908-0BB26 | |
| | 440 ... 480 V | – | | 3VA9908-0BB27 | |
| **Time-delay devices for undervoltage releases** | | | | | |
|  | **$U_e$ 50/60 Hz AC** | **$U_e$ DC** | | | |
| | 110 V | 110 V | | 3VA9988-0BF21 | |
| | 230 V | 230 V | | 3VA9988-0BF22 | |
| | – | 24 V | | 3VA9988-0BF23 | |

[1] In combination with TAS and AUX. For circuit diagrams, see the operating instructions

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# Manual operators

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| | | | | 3VA10<br>3VA11 | 3VA12 | 3VA20<br>3VA21<br>3VA22 | 3VA13<br>3VA14<br>3VA23<br>3VA24 | 3VA15<br>3VA25<br>3VA26 |
|---|---|---|---|---|---|---|---|---|
| **Front mounted rotary operators** | | | | | | | | |
| • Handle<br>• For IEC<br>• Degree of protection IP30<br>• For 3-pole and 4-pole breakers | | | | | | | | |
| | **Version** | **Illumination kit** | **Door interlock** | | | | | |
|  | Standard (gray) | Without | Without | 3VA9157-0EK11 | 3VA9257-0EK11 | 3VA9267-0EK11 | 3VA9467-0EK11 | 3VA9687-0EK11 |
| | | | With | 3VA9157-0EK21 | 3VA9257-0EK21 | 3VA9267-0EK21 | 3VA9467-0EK21 | 3VA9687-0EK21 |
| | | With | Without | 3VA9157-0EK13 | 3VA9257-0EK13 | 3VA9267-0EK13 | 3VA9467-0EK13 | – |
| | | | With | 3VA9157-0EK23 | 3VA9257-0EK23 | 3VA9267-0EK23 | 3VA9467-0EK23 | – |
|  | EMERGENCY-OFF (red/yellow) | Without | Without | 3VA9157-0EK15 | 3VA9257-0EK15 | 3VA9267-0EK15 | 3VA9467-0EK15 | 3VA9687-0EK15 |
| | | | With | 3VA9157-0EK25 | 3VA9257-0EK25 | 3VA9267-0EK25 | 3VA9467-0EK25 | 3VA9687-0EK25 |
| | | With | Without | 3VA9157-0EK17 | 3VA9257-0EK17 | 3VA9267-0EK17 | 3VA9467-0EK17 | – |
| | | | With | 3VA9157-0EK27 | 3VA9257-0EK27 | 3VA9267-0EK27 | 3VA9467-0EK27 | – |
| **Door mounted rotary operators with tolerance compensation** | | | | | | | | |
| • Shaft 300 mm (325 mm for 3VA15/3VA25/3VA26)<br>• With mounting tolerance compensation<br>• Handle with masking plate 75 × 75 mm (100 × 100 mm for 3VA15/3VA25/3VA26)<br>• Degree of protection IP65<br>• For 3-pole and 4-pole breakers | | | | | | | | |
| | **Version** | **Illumination kit** | **Door interlock** | | | | | |
|  | Standard (gray) | Without | With | 3VA9157-0FK21 | 3VA9257-0FK21 | 3VA9267-0FK21 | 3VA9467-0FK21 | 3VA9687-0FK21 |
| | | With | With | 3VA9157-0FK23 | 3VA9257-0FK23 | 3VA9267-0FK23 | 3VA9467-0FK23 | 3VA9687-0FK23 |
|  | EMERGENCY-OFF (red/yellow) | Without | With | 3VA9157-0FK25 | 3VA9257-0FK25 | 3VA9267-0FK25 | 3VA9467-0FK25 | 3VA9687-0FK25 |
| | | With | With | 3VA9157-0FK27 | 3VA9257-0FK27 | 3VA9267-0FK27 | 3VA9467-0FK27 | 3VA9687-0FK27 |
| **Door mounted rotary operators without tolerance compensation** | | | | | | | | |
|  | • Shaft 300 mm (325 mm for 3VA15/3VA25/3VA26)<br>• Handle with masking plate 75 × 75 mm (100 × 100 mm for 3VA15/3VA25/3VA26)<br>• Degree of protection IP65<br>• For 3-pole and 4-pole breakers | | | | | | | |
| | **Version** | **Illumination kit** | **Door interlock** | | | | | |
| | Standard (gray) | Without | With | 3VA9157-0FK61 | 3VA9257-0FK61 | 3VA9267-0FK61 | 3VA9467-0FK61 | 3VA9687-0FK61 |
| **Door mounted rotary operators without handle** | | | | | | | | |
|  | • For IEC<br>• Degree of protection IP30<br>• For 3-pole and 4-pole breakers | | | | | | | |
| | **Version** | **Illumination kit** | **Door interlock** | | | | | |
| | With shaft stub (gray) | – | Without | 3VA9157-0GK00 | 3VA9257-0GK00 | 3VA9267-0GK00 | 3VA9467-0GK00 | 3VA9687-0GK00 |

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| | | | 3VA10<br>3VA11 | 3VA12 | 3VA20<br>3VA21<br>3VA22 | 3VA13<br>3VA14<br>3VA23<br>3VA24 | 3VA15<br>3VA25<br>3VA26 |
|---|---|---|---|---|---|---|---|
| **Side wall mounted rotary operators** | | | | | | | |
|  • Rotary operator with shaft 300 mm<br>• Handle with masking plate 75 × 75 mm<br>• Degree of protection IP65<br>• For 3-pole and 4-pole breakers | | | | | | | |
| **Version** | **Mounting bracket** | **Illumination kit** | | | | | |
| Standard (gray) | Without | Without | 3VA9157-0PK11 | 3VA9257-0PK11 | 3VA9267-0PK11 | 3VA9467-0PK11 | – |
| | | With | 3VA9157-0PK13 | 3VA9257-0PK13 | 3VA9267-0PK13 | 3VA9467-0PK13 | – |
| EMERGENCY-OFF (red/yellow) | Without | Without | 3VA9157-0PK15 | 3VA9257-0PK15 | 3VA9267-0PK15 | 3VA9467-0PK15 | – |
| | | With | 3VA9157-0PK17 | 3VA9257-0PK17 | 3VA9267-0PK17 | 3VA9467-0PK17 | – |
| **Side wall mounted rotary operators with mounting bracket** | | | | | | | |
|  • Rotary operator with short shaft and mounting bracket for mounting directly on the side wall<br>• Handle with masking plate 75 × 75 mm<br>• Degree of protection IP65<br>• For 3-pole and 4-pole breakers | | | | | | | |
| **Version** | **Mounting bracket** | **Illumination kit** | | | | | |
| Standard (gray) | With | Without | 3VA9157-0PK51 | 3VA9257-0PK51 | 3VA9267-0PK51 | – | – |
| | | With | 3VA9157-0PK53 | 3VA9257-0PK53 | 3VA9267-0PK53 | – | – |
| EMERGENCY-OFF (red/yellow) | With | Without | 3VA9157-0PK55 | 3VA9257-0PK55 | 3VA9267-0PK55 | – | – |
| | | With | 3VA9157-0PK57 | 3VA9257-0PK57 | 3VA9267-0PK57 | – | – |
| **Extended DIN rail for N/PE terminals** | | | | | | | |
|  | | | | | | | |
| **Version** | **Rated current** | | | | | | |
| For mounting bracket | ≤ 250 A | | 3VA9987-0GL30 | 3VA9987-0GL30 | 3VA9987-0GL30 | – | – |
| **Auxiliary switch modules for rotary operator** | | | | | | | |
|  | | | | | | | |
| **Version** | | | | | | | |
| 2 × leading to "ON" | | | 3VA9257-0GX10 | 3VA9257-0GX10 | 3VA9467-0GX10 | 3VA9467-0GX10 | – |
| 2 × leading to "ON" and 1 × leading to "OFF" | | | – | – | 3VA9467-0GX20 | 3VA9467-0GX20 | – |
| **Mounting adapters for side wall mounted rotary operators** | | | | | | | |
|  | | | | | | | |
| **Version** | | | | | | | |
| Necessary accessories for 3VA side wall mounted rotary operators, if 3VA9...-0GX.0 auxiliary switch modules are used | | | 3VA9257-0GX01 | 3VA9257-0GX01 | 3VA9467-0GX01 | – | – |

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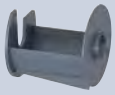
| | | 3VA10<br>3VA11 | 3VA12 | 3VA20<br>3VA21<br>3VA22 | 3VA13<br>3VA14<br>3VA23<br>3VA24 | 3VA15<br>3VA25<br>3VA26 |
|---|---|---|---|---|---|---|
| **Supplementary handles for door mounted rotary operators** | | | | | | |
|  • For operation when control cabinet door is open | | | | | | |
| **Version** | | | | | | |
| Standard (gray) | | 3VA9287-0GC01 | 3VA9287-0GC01 | 3VA9487-0GC01 | 3VA9487-0GC11 | 3VA9687-0GC01 |
| EMERGENCY-OFF (red/yellow) | | 3VA9287-0GC05 | 3VA9287-0GC05 | 3VA9487-0GC05 | 3VA9487-0GC15 | 3VA9687-0GC05 |
| **Handles** | | | | | | |
|  • With masking plate | | | | | | |
| **Version** | **Tolerance compensation** | | | | | |
| Standard (gray) | With | | 8UD1721-0AB21 | | 8UD1731-0AB21 | 8UD1741-0AB21 |
| | Without | | 8UD1721-0AB11 | | 8UD1731-0AB11 | 8UD1741-0AB11 |
| EMERGENCY-OFF (red/yellow) | With | | 8UD1721-0AB25 | | 8UD1731-0AB25 | 8UD1741-0AB25 |
| | Without | | 8UD1721-0AB15 | | 8UD1731-0AB15 | 8UD1741-0AB15 |
| **Handle lever extensions** | | | | | | |
|  • **Note:** The handle lever extension is already included in the scope of supply of the breakers. | | | | | | |
| | | – | – | – | 3VA9487-0SC10 | 3VA9987-0SC10 |
| **Shafts** | | | | | | |
|  **Type** | **Length** | | | | | |
| 8 × 8 mm | 300 mm | | 8UD1900-2WA00 | | | – |
| | 600 mm | | 8UD1900-2WB00 | | | – |
| 12 × 12 mm | 300 mm | – | – | – | – | 8UD1900-4WA00 |
| | 600 mm | – | – | – | – | 8UD1900-4WB00 |
| **Adapters for shafts** | | | | | | |
| **Type** | **Use** | | | | | |
|  8 × 8 mm | With door mounted rotary operator and side wall mounted rotary operator | | 8UD1900-2DA00 | | | – |
|  12 × 12 mm | For door mounted rotary operator | – | – | – | – | 8UD1900-4DA00 |
| **Door couplings** | | | | | | |
| **Type** | | | | | | |
|  8 × 8 mm | | | 8UD1900-2HA00 | | | – |
|  12 × 12 mm | | – | – | – | – | 8UD1900-4HA00 |

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| | | 3VA10<br>3VA11 | 3VA12 | 3VA20<br>3VA21<br>3VA22 | 3VA13<br>3VA14<br>3VA23<br>3VA24 | 3VA15<br>3VA25<br>3VA26 |
|---|---|---|---|---|---|---|
| **Mounting tolerance compensations** | | | | | | |
| | **Type** | | | | | |
|  | 8 × 8 mm | 8UD1900-2GA00 | | | | – |
|  | 12 × 12 mm | – | – | – | – | 8UD1900-4GA00 |
| **Fixing brackets for shafts** | | | | | | |
|  | | 3VA9287-0GA80 | | 3VA9487-0GA80 | | 3VA9687-0GA80 |
| **Variable depth adapters** | | | | | | |
|  | **Size** | | | | | |
| | 8 × 8 mm | 3VA9487-0GB10 | | | | – |

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# Manual operators

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| | | 3VA10<br>3VA11<br>3VA12 | 3VA13<br>3VA14 | 3VA15 | 3VA20<br>3VA21<br>3VA22<br>3VA23<br>3VA24 | 3VA25<br>3VA26 |
|---|---|---|---|---|---|---|
| **Labeling plates for manual operators** | | | | | | |
|  | | | | 3VA9087-0SX10 | | |
| **Illumination kits for manual operators** | | | | | | |
|  | • 24 V DC voltage | | | | | |
| **Version** | **Rated current** | | | | | |
| Front mounted rotary operator | 100 ... 250 A | 8UD1900-0KA10 | – | – | – | – |
| | 100 ... 630 A | – | 8UD1900-0KA20 | – | 8UD1900-0KA20 | – |
| | 630 ... 1000 A | – | – | 8UD1900-0KA30 | – | 8UD1900-0KA30 |
| Door mounted rotary operator and side wall mounted rotary operator | 100 ... 630 A | 8UD1900-0KA20 | 8UD1900-0KA20 | 8UD1900-0KA20 | 8UD1900-0KA20 | – |
| | 630 ... 1000 A | – | – | – | – | 8UD1900-0KA30 |
| **Cylinder locks (type Kaba), standard masking plates** | | | | | | |
|  | **Use** | **Key** | | | | |
| For door mounted rotary operator and side wall mounted rotary operator (in the masking plate), only for locking, not for interlocking | 1 | 8UD1900-0MB01 | 8UD1900-0MB01 | – | 8UD1900-0MB01 | – |
| | 2 | 8UD1900-0NB01 | 8UD1900-0NB01 | – | 8UD1900-0NB01 | – |
| | 3 | 8UD1900-0PB01 | 8UD1900-0PB01 | – | 8UD1900-0PB01 | – |
| | 4 | 8UD1900-0QB01 | 8UD1900-0QB01 | – | 8UD1900-0QB01 | – |
| **Cylinder locks (type Kaba), EMERGENCY-OFF masking plates** | | | | | | |
|  | **Use** | **Key** | | | | |
| For door mounted rotary operator and side wall mounted rotary operator (in the masking plate), only for locking, not for interlocking | 1 | 8UD1900-0MB05 | 8UD1900-0MB05 | – | 8UD1900-0MB05 | – |
| | 2 | 8UD1900-0NB05 | 8UD1900-0NB05 | – | 8UD1900-0NB05 | – |
| | 3 | 8UD1900-0PB05 | 8UD1900-0PB05 | – | 8UD1900-0PB05 | – |
| | 4 | 8UD1900-0QB05 | 8UD1900-0QB05 | – | 8UD1900-0QB05 | – |
| **Cylinder locks (type RONIS)** | | | | | | |
|  | • Includes a lock with 2 keys<br>• For locking or interlocking<br>• For installation on the circuit breaker side in all rotary operators<br>• For mounting in the adapter kit for the accessories compartment<br>• **Note:** The cylinder lock adapter for rotary operators is also needed for locking or interlocking circuit breakers via rotary operators | | | | | |
| **Key** | | | | | | |
| 1 | | | | 3VA9980-0VL10 | | |
| 3 | | | | 3VA9980-0VL30 | | |
| 4 | | | | 3VA9980-0VL40 | | |
| **Cylinder lock adapters for rotary operators** | | | | | | |
|  | • To mount the cylinder lock in the rotary operator (also possible with door mounted rotary operator and side wall mounted rotary operator), on circuit breaker side, NOT in masking plate | | | | | |
| **Rated current** | | | | | | |
| 100 ... 630 A | | 3VA9980-0LF20 | 3VA9980-0LF20 | – | 3VA9980-0LF20 | – |
| 1000 A | | – | – | 3VA9680-0LF20 | – | 3VA9680-0LF20 |

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# Motor operators

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## Side mounted motor operators without stored energy mechanisms (MO310)



- Cover size 45 mm

| Addressable via control signals | Isolating features in accordance with IEC/EN 60947-1 | Make time, typically For 3VA1 | Make time, typically For 3VA2 | Break time, typically For 3VA1 | Break time, typically For 3VA2 | Rated operational power |
|---|---|---|---|---|---|---|
| ■ | ■ | < 300 ms | – | < 300 ms | – | 250 W, max. 500 W (60 ms) |

## Motor operators without stored energy mechanisms (MO320)



| Addressable via control signals | Isolating features in accordance with IEC/EN 60947-1 | Make time, typically For 3VA1 | Make time, typically For 3VA2 | Break time, typically For 3VA1 | Break time, typically For 3VA2 | Rated operational power |
|---|---|---|---|---|---|---|
| ■ | ■ | < 800 ms (160 A, 250A) | < 1000 ms (250 A), < 1700 ms (630 A) | < 800 ms (160 A, 250A) | < 1000 ms (250 A), < 1400 ms (630 A) | 250 W, max. 500 W (60 ms) |

## Spare parts kit for MO320

| Scope of supply |
|---|
| Mounting plate, plug |

## Motor operators with stored energy mechanisms (SEO520)

- Synchronizable motor operator with optional communications interface
- Up to 3VA22 (250 A), it has two spring assemblies that are used to switch the 3VA2 molded case circuit breaker on and off quickly. This new principle in the MCCB area ensures fast, reliable and easily controllable switching sequences, especially in load transfer switching applications.
- The connection with the COM060 communications module, via a plug-in connection, integrates the SEO520 into the communication environment of the 3VA molded case circuit breakers and ensures that the molded case circuit breaker can also be switched via the supported communication networks and the SENTRON Powerconfig and SENTRON Powermanager software packages.
- **Note:** On account of the fast switching times, the SEO520 cannot be used with a leading changeover switch LCS.



| Addressable via control signals | Isolating features in accordance with IEC/EN 60947-1 | Make time, typically For 3VA1 | Make time, typically For 3VA2 | Break time, typically For 3VA1 | Break time, typically For 3VA2 | Rated operational power |
|---|---|---|---|---|---|---|
| ■ | ■ | < 80 ms (400 A, 630 A) | < 80 ms (100 A ... 630 A) | < 5 s (400 A, 630 A) | < 80 ms (100 A ... 250 A) < 5 s (400 A, 630 A) | 300 W, max. 500 W (60 ms) |

## Spare parts kit for SEO520

| Scope of supply |
|---|
| Mounting plate, plug |

## Spare parts kit for SEO520 with communication

| Scope of supply |
|---|
| Mounting plate, plug, SLC adapter |

## Mechanical operating cycles counters (for installation in the SEO520)



| Mounting | Article No. |
|---|---|
| For installation in the SEO520 | 3VA9987-0HX10 |

## Cylinder lock adapters for SEO520



| Mounting | Article No. |
|---|---|
| For installation of cylinder locks in the SEO520 up to 250 A | 3VA9980-0LF30 |

## Cylinder locks (type RONIS)



- Includes a lock with 2 keys
- To locking the operating mode (Manual/Auto/Lock) for SEOs up to 250 A

| Key | Article No. |
|---|---|
| 1 | 3VA9980-0VL10 |
| 3 | 3VA9980-0VL30 |
| 4 | 3VA9980-0VL40 |

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| | | 3VA10 | 3VA11 | 3VA12 | 3VA20<br>3VA21<br>3VA22 | 3VA13<br>3VA14 | 3VA23<br>3VA24 |
|---|---|---|---|---|---|---|---|
| **Rated control supply voltage** | **With communication** | | | | | | |
| 42 ... 60 V AC, 24 ... 60 V DC | – | – | 3VA9117-0HB10 | – | – | – | – |
| 110 ... 230 V AC, 110 ... 250 V DC | – | – | 3VA9117-0HB20 | – | – | – | – |
| **Rated control supply voltage** | **With communication** | | | | | | |
| 24 ... 60 V DC | – | – | 3VA9157-0HA10 | 3VA9257-0HA10 | 3VA9267-0HA10 | 3VA9467-0HA10 | 3VA9467-0HA10 |
| 110 V AC | – | – | – | – | 3VA9267-0HA21 [1] | 3VA9467-0HA21 [1] | 3VA9467-0HA21 [1] |
| 110 ... 230 V AC, 110 ... 250 V DC | – | – | 3VA9157-0HA20 | 3VA9257-0HA20 | 3VA9267-0HA20 | 3VA9467-0HA20 | 3VA9467-0HA20 |
| 230 V AC | – | – | – | – | 3VA9267-0HA22 [1] | 3VA9467-0HA22 [1] | 3VA9467-0HA22 [1] |
| | | – | 3VA9157-0HA00 | 3VA9257-0HA00 | 3VA9267-0HA00 | 3VA9467-0HA00 | 3VA9467-0HA00 |
| **Rated control supply voltage** | **With communication** | | | | | | |
| 24 V DC | – | – | – | – | 3VA9267-0HC10 | 3VA9467-0HC10 [2] | |
| 42 ... 60 V AC/DC | – | – | – | – | 3VA9267-0HC20 | 3VA9467-0HC20 [2] | |
| 110 ... 230 V AC, 110 ... 250 V DC | – | – | – | – | 3VA9267-0HC30 | 3VA9467-0HC30 [2] | |
| 24 V DC | Yes | – | – | – | 3VA9267-0HC15 | – | 3VA9467-0HC15 [2] |
| 110 ... 230 V AC, 110 ... 250 V DC | Yes | – | – | – | 3VA9267-0HC35 | – | 3VA9467-0HC35 [2] |
| | | – | – | – | 3VA9267-0HC00 | – | – |
| | | – | – | – | 3VA9267-0HC05 | – | – |

[1] Optimized for long control cable lengths, see FAQ at www.siemens.com/lowvoltage/product-support (109804710)

[2] For 3VA13 and 3VA14 (IEC) with product version < *E04* and for 3VA23 and 3VA24 (IEC) with product version < *E06*, the service life (mechanical operating cycles) of the molded case circuit breaker is reduced when the SEO520 is used. For newer product versions, this is not the case. We recommend upgrading the circuit breaker to a higher product version, if necessary.

## Reset mode

**All motor operators have the following reset modes:**
Reset mode 1: Automatic reset
Reset mode 2: Reset via OFF-signal

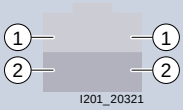
**The motor operator with SEO520 stored energy operator additionally has:**
Reset mode 3: Reset via OFF-signal with additional acknowledge signal

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# Connection technology




① For mounting onto the circuit breaker
② For mounting on plug-in and withdrawable units

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## Box terminals

| | Connection options | | Scope of supply | Cable cross-section, copper stranded | Terminal short designation |
|---|---|---|---|---|---|
|  | ① | ② | 3 single terminals | 1.5 ... 70 mm² | TS1.1 |
| | | | | 6 ... 120 mm² | TS1.2 |
| | | | | 25 ... 185 mm² | TS1.4 |
| | | | | 50 ... 185 mm² | TS1.3 |
| | | | | 35 ... 300 mm² | TS1.5 |
|  | ① | ② | 4 single terminals | 1.5 ... 70 mm² | TS1.1 |
| | | | | 6 ... 120 mm² | TS1.2 |
| | | | | 25 ... 185 mm² | TS1.4 |
| | | | | 50 ... 185 mm² | TS1.3 |
| | | | | 35 ... 300 mm² | TS1.5 |

## Nut keeper kits

| | Connection options | | Scope of supply | Max. tap width | Max. tap thickness |
|---|---|---|---|---|---|
|  | ① | ② | 3 terminals | 17 mm | 6.5 mm |
| | | | | 25 mm | 8 mm |
| | | | | 35 mm | 10 mm |
| | | | Nut keeper kit for 3-pole breakers, 1 terminal cover | 50 mm | 25 mm |
|  | ① | ② | 4 terminals | 17 mm | 6.5 mm |
| | | | | 25 mm | 8 mm |
| | | | | 35 mm | 10 mm |
| | | | Nut keeper kit for 4-pole breakers, 1 terminal cover | 50 mm | 28 mm |

## Circular conductor terminals, 1 cable

| | Connection options | | Scope of supply | Cable cross-section | Copper/aluminum stranded [1] | | Terminal short designation |
|---|---|---|---|---|---|---|---|
| | | | | | Cu | Al [2] | |
|  | ① | ② | 3 single terminals | 1.5 ... 10 mm² | ■ | – | TA1.0 |
| | | | | 1.5 ... 50 mm² | ■ | – | TA1.3 |
| | | | | 10 ... 95 mm² | ■ | ■ | TA1.1 |
| | | | | 16 ... 185 mm² | ■ | ■ [3] | TA1.4 |
| | | | | 35 ... 185 mm² | ■ | ■ | TA1.2 |
| | | | | 50 ... 300 mm² | ■ | ■ | TA1.5 |
|  | ① | ② | 4 single terminals | 1.5 ... 10 mm² | ■ | – | TA1.0 |
| | | | | 1.5 ... 50 mm² | ■ | – | TA1.3 |
| | | | | 10 ... 95 mm² | ■ | ■ | TA1.1 |
| | | | | 16 ... 185 mm² | ■ | ■ [3] | TA1.4 |
| | | | | 35 ... 185 mm² | ■ | ■ | TA1.2 |
| | | | | 50 ... 300 mm² | ■ | ■ | TA1.5 |

[1] All circular conductor terminals tested according to UL 486 A/B for Cu and Al cables
[2] Al cable tested according to IEC 60947-2 annex D
[3] Use antioxidants
[4] Maximum current-carrying capacity of cable connection 400 A
Flexible copper bar: No restrictions
[5] Maximum current-carrying capacity of copper cables 380 A
Maximum current-carrying capacity of aluminum cables 310 A

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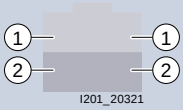
| 3VA10<br>3VA11 | 3VA12 | 3VA20<br>3VA21 | 3VA22 | 3VA13<br>3VA14<br>3VA23<br>3VA24 | 3VA15<br>3VA25 |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| 3VA9153-0JA11 | – | – | – | – | – |
| – | 3VA9253-0JA11 | 3VA9163-0JA12 | 3VA9163-0JA12 | – | – |
| – | – | 3VA9263-0JA12 | 3VA9263-0JA12 | – | – |
| – | 3VA9253-0JA12 | – | – | – | – |
| – | – | – | – | 3VA9483-0JA13 [4] | – |
| 3VA9154-0JA11 | – | – | – | – | – |
| – | 3VA9254-0JA11 | 3VA9164-0JA12 | 3VA9164-0JA12 | – | – |
| – | – | 3VA9264-0JA12 | 3VA9264-0JA12 | – | – |
| – | 3VA9254-0JA12 | – | – | – | – |
| – | – | – | – | 3VA9484-0JA13 [4] | – |
| | | | | | |
| | | | | | |
| 3VA9113-0QA00 | – | – | – | – | – |
| – | 3VA9213-0QA00 | 3VA9203-0QA00 | 3VA9203-0QA00 | – | – |
| – | – | – | – | 3VA9403-0QA00 | – |
| – | – | – | – | – | 3VA9603-0QA00 |
| 3VA9114-0QA00 | – | – | – | – | – |
| – | 3VA9214-0QA00 | 3VA9204-0QA00 | 3VA9204-0QA00 | – | – |
| – | – | – | – | 3VA9404-0QA00 | – |
| – | – | – | – | – | 3VA9604-0QA00 |
| | | | | | |
| | | | | | |
| 3VA9113-0JB10 | – | – | – | – | – |
| – | – | 3VA9103-0JB11 | 3VA9103-0JB11 | – | – |
| 3VA9113-0JB11 | – | – | – | – | – |
| – | – | 3VA9263-0JB12 | 3VA9263-0JB12 | – | – |
| – | 3VA9253-0JB12 | – | – | – | – |
| – | – | – | – | 3VA9383-0JB13 [5] | – |
| 3VA9114-0JB10 | – | – | – | – | – |
| – | – | 3VA9104-0JB11 | 3VA9104-0JB11 | – | – |
| 3VA9114-0JB11 | – | – | – | – | – |
| – | – | 3VA9264-0JB12 | 3VA9264-0JB12 | – | – |
| – | 3VA9254-0JB12 | – | – | – | – |
| – | – | – | – | 3VA9384-0JB13 [5] | – |

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# Connection technology




① For mounting onto the circuit breaker
② For mounting on plug-in and withdrawable units

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2

## Circular conductor terminals with control wire taps, 1 cable [3]





| Connection options | | Scope of supply | Cable cross-section | Copper/aluminum stranded [1] | | Terminal short designation |
|---|---|---|---|---|---|---|
| | | | | Cu | Al [2] | |
| ① | ② | 3 single terminals | 1.5 … 10 mm² | ■ | – | TA1.0 |
| | | | 1.5 … 50 mm² | ■ | – | TA1.3 |
| | | | 10 … 95 mm² | ■ | ■ | TA1.1 |
| | | | 16 … 185 mm² | ■ | ■ [3] | TA1.4 |
| | | | 50 … 185 mm² | ■ | ■ | TA1.2 |
| | | | 50 … 300 mm² | ■ | ■ | TA1.5 |
| ① | ② | 4 single terminals | 1.5 … 10 mm² | ■ | – | TA1.0 |
| | | | 1.5 … 50 mm² | ■ | – | TA1.3 |
| | | | 10 … 95 mm² | ■ | ■ | TA1.1 |
| | | | 16 … 185 mm² | ■ | ■ [3] | TA1.4 |
| | | | 50 … 185 mm² | ■ | ■ | TA1.2 |
| | | | 50 … 300 mm² | ■ | ■ | TA1.5 |

## Circular conductor terminals, 2 cables





| Connection options | | Scope of supply | Cable cross-section | Copper/aluminum stranded [1] | | Control wire tap [4] | Terminal short designation |
|---|---|---|---|---|---|---|---|
| | | | | Cu | Al [2] | | |
| ① | ② | 3 single terminals, 1 short terminal cover | 120 … 300 mm² | ■ | ■ | No | TA3.1 |
| | | | | | | Yes | TA3.1 |
| ① | ② | 4 single terminals, 1 short terminal cover | 120 … 300 mm² | ■ | ■ | No | TA3.1 |
| | | | | | | Yes | TA3.1 |

## Circular conductor terminals, 3 cables





| Connection options | | Scope of supply | Cable cross-section | Copper/aluminum stranded [1] | | Control wire tap [4] | Terminal short designation |
|---|---|---|---|---|---|---|---|
| | | | | Cu | Al [2] | | |
| ① | ② | 3 single terminals, 1 short terminal cover | 120 … 185 mm² | ■ | ■ | No | TA3.2 |
| | | | | | | Yes | TA3.2 |
| ① | ② | 4 single terminals, 1 short terminal cover | 120 … 185 mm² | ■ | ■ | No | TA3.2 |
| | | | | | | Yes | TA3.2 |

## Control wire taps for box terminals [3]



| Connection options |
|---|
| ① |
| ② |

## Control wire taps for busbars [3]



| Connection options |
|---|
| ① |
| ② |

[1] All circular conductor terminals tested according to UL 486 A/B for Cu and Al cables
[2] Al cable tested according to IEC 60947-2 annex D
[3] Use antioxidants
[4] Maximum current-carrying capacity 15 A
Maximum cable connection up to 2.5 mm²
[5] Maximum current-carrying capacity of copper cables 380 A
Maximum current-carrying capacity of aluminum cables 310 A

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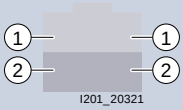
| 3VA10<br>3VA11 | 3VA12 | 3VA20<br>3VA21 | 3VA22 | 3VA13<br>3VA14<br>3VA23<br>3VA24 | 3VA15<br>3VA25 |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| 3VA9113-0JG10 | – | – | – | – | – |
| – | – | 3VA9103-0JG11 | 3VA9103-0JG11 | – | – |
| 3VA9113-0JG11 | – | – | – | – | – |
| – | – | 3VA9263-0JG12 | 3VA9263-0JG12 | – | – |
| – | 3VA9253-0JG12 | – | – | – | – |
| – | – | – | – | 3VA9383-0JG13 [5] | – |
| 3VA9114-0JG10 | – | – | – | – | – |
| – | – | 3VA9104-0JG11 | 3VA9104-0JG11 | – | – |
| 3VA9114-0JG11 | – | – | – | – | – |
| – | – | 3VA9264-0JG12 | 3VA9264-0JG12 | – | – |
| – | 3VA9254-0JG12 | – | – | – | – |
| – | – | – | – | 3VA9384-0JG13 [5] | – |
| | | | | | |
| | | | | | |
| – | – | – | – | – | 3VA9503-0JB23 |
| – | – | – | – | – | 3VA9503-0JG23 |
| – | – | – | – | – | 3VA9504-0JB23 |
| – | – | – | – | – | 3VA9504-0JG23 |
| | | | | | |
| | | | | | |
| – | – | – | – | – | 3VA9503-0JB32 |
| – | – | – | – | – | 3VA9503-0JG32 |
| – | – | – | – | – | 3VA9504-0JB32 |
| – | – | – | – | – | 3VA9504-0JG32 |
| | | | | | |
| | | | | | |
| 3VA9110-0WB00 | 3VA9200-0WB00 | 3VA9200-0WB00 | 3VA9200-0WB00 | 3VA9480-0WB00 | – |
| 3VA9150-0WB00 | 3VA9280-0WB00 | 3VA9280-0WB00 | 3VA9280-0WB00 | 3VA9480-0WB00 | – |
| | | | | | |
| | | | | | |
| 3VA9110-0WC00 | 3VA9200-0WC00 | 3VA9200-0WC00 | 3VA9200-0WC00 | 3VA9480-0WC00 | – |
| 3VA9150-0WC00 | 3VA9280-0WC00 | 3VA9280-0WC00 | 3VA9280-0WC00 | 3VA9480-0WC00 | – |

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# Connection technology




① For mounting onto the circuit breaker
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**Note:**
All bus connectors, bus connectors broadened and rear connections are Cu/Sn 6 r plated according to ISO 2093.



## Front bus connectors



| Number of poles | Connection options | | Scope of supply | Max. tap width | Max. tap thickness |
|---|---|---|---|---|---|
| 1P | ① | – | 1 terminal | 22 mm | 8 mm |
| 3P | – | ② | 3 terminals | 6 × 50 mm | 8 mm |

## Front bus connectors, with phase barriers

- 3-pole and 4-pole bus connectors only permitted if used with phase barriers!
- Phase barriers are included in the connection technology scope of supply or can be ordered as a spare part (3VA9...-.WA00).





| Number of poles | Connection options | | Scope of supply | Max. tap width | Max. tap thickness |
|---|---|---|---|---|---|
| 3P | ① | ② | 3 terminals, 2 phase barriers | 22 mm | 8 mm |
| | | | | 32 mm | 10 mm |
| | | | | 40 mm | 12.5 mm |
| | | | | 50 mm | 30 mm |
| | | | 3 short terminals,[1] 2 phase barriers | 50 mm | 30 mm |
| 4P | ① | ② | 4 terminals, 3 phase barriers | 22 mm | 8 mm |
| | | | | 32 mm | 10 mm |
| | | | | 40 mm | 12.5 mm |
| | | | | 50 mm | 30 mm |
| | | | 4 short terminals,[1] 3 phase barriers | 50 mm | 30 mm |

## Bus connectors edgewise, with phase barriers

- 3-pole and 4-pole bus connectors only permitted if used with phase barriers!
- Phase barriers are included in the connection technology scope of supply or can be ordered as a spare part (3VA9...-.WA00).



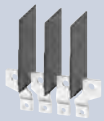


| Number of poles | Connection options | | Scope of supply | Max. tap width | Max. tap thickness |
|---|---|---|---|---|---|
| 3P | ① | ② | 3 terminals, 2 phase barriers | 20 mm | 6 mm |
| | | | | 25 mm | 7 mm |
| | | | | 40 mm | 8 mm |
| 4P | ① | ② | 4 terminals, 3 phase barriers | 20 mm | 6 mm |
| | | | | 25 mm | 7 mm |
| | | | | 40 mm | 8 mm |

## Front bus connectors broadened, with phase barriers

- 3-pole and 4-pole bus connectors broadened only permitted if used with phase barriers!
- Phase barriers are included in the connection technology scope of supply or can be ordered as a spare part (3VA9...-.WA00).
- Distance between pole centers:
  – 100/160 A = 35 mm, 250 A = 45 mm, 400/630 A = 70 mm





| Number of poles | Connection options | | Scope of supply | Max. tap width | Max. tap thickness |
|---|---|---|---|---|---|
| 3P | ① | ② | 3 terminals, 2 phase barriers | 30 mm | 8 mm |
| | | | | 35 mm | 10 mm |
| | | | | 60 mm | 12.5 mm |
| | | | | 80 mm | 10 mm |
| | – | ② | 3 terminals, 2 phase barriers | 80 mm | 15 mm |
| 4P | ① | ② | 4 terminals, 3 phase barriers | 30 mm | 8 mm |
| | | | | 35 mm | 10 mm |
| | | | | 60 mm | 12.5 mm |
| | | | | 80 mm | 10 mm |

[1] Bus connectors short for use with terminal covers



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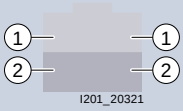
| 3VA10<br>3VA11 | 3VA12 | 3VA20<br>3VA21<br>3VA22 | 3VA13<br>3VA14<br>3VA23<br>3VA24 | 3VA15<br>3VA25 | 3VA26 |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| 3VA9151-0QB00 | – | – | – | – | – |
| – | – | – | – | 3VA9603-0QB01 | – |
| | | | | | |
| | | | | | |
| | | | | | |
| 3VA9153-0QB00 | – | – | – | – | – |
| – | 3VA9253-0QB00 | 3VA9263-0QB00 | – | – | – |
| – | – | – | 3VA9483-0QB00 | – | – |
| – | – | – | – | 3VA9603-0QB00 | – |
| – | – | – | – | 3VA9603-0QB02 | – |
| 3VA9154-0QB00 | – | – | – | – | – |
| – | 3VA9254-0QB00 | 3VA9264-0QB00 | – | – | – |
| – | – | – | 3VA9484-0QB00 | – | – |
| – | – | – | – | 3VA9604-0QB00 | – |
| – | – | – | – | 3VA9604-0QB02 | – |
| | | | | | |
| | | | | | |
| | | | | | |
| 3VA9153-0QD00 | – | – | – | – | – |
| – | 3VA9253-0QD00 | 3VA9263-0QD00 | – | – | – |
| – | – | – | 3VA9483-0QD00 | – | – |
| 3VA9154-0QD00 | – | – | – | – | – |
| – | 3VA9254-0QD00 | 3VA9264-0QD00 | – | – | – |
| – | – | – | 3VA9484-0QD00 | – | – |
| | | | | | |
| | | | | | |
| | | | | | |
| 3VA9153-0QC00 | – | – | – | – | – |
| – | 3VA9253-0QC00 | 3VA9263-0QC00 | – | – | – |
| – | – | – | 3VA9483-0QC00 | – | – |
| – | – | – | – | 3VA9603-0QC00 | – |
| – | – | – | – | 3VA9603-0QC01 | 3VA9603-0QC01 |
| 3VA9154-0QC00 | – | – | – | – | – |
| – | 3VA9254-0QC00 | 3VA9264-0QC00 | – | – | – |
| – | – | – | 3VA9484-0QC00 | – | – |
| – | – | – | – | 3VA9604-0QC00 | – |

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# Connection technology




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**Note:**
All bus connectors, bus connectors broadened and rear connections are Cu/Sn 6 r plated according to ISO 2093.

2

## Nut keeper kits, right-angled [1)]





| Number of poles | Connection options | | Scope of supply | Max. tap width | Max. tap thickness |
|---|---|---|---|---|---|
| 3P | ① | ② | 3 terminals, 2 phase barriers | 22 mm | 8 mm |
| | | | | 32 mm | 10 mm |
| | | | | 40 mm | 12.5 mm |
| 4P | ① | ② | 4 terminals, 3 phase barriers | 22 mm | 8 mm |
| | | | | 32 mm | 10 mm |
| | | | | 40 mm | 12.5 mm |

## Rear connection studs flat







| Number of poles | Connection options | | Scope of supply |
|---|---|---|---|
| 1P | ① | ② | 1 short connection stud flat |
| | | | 1 long connection stud flat |
| 3P | ① | ② | 2 short connection studs flat, 1 long connection stud flat |
| | – | ② | 3 short connection studs flat |
| 4P | ① | ② | 2 short connection studs flat, 2 long connection stud flat |

## Rear connectors vertical





| Number of poles | Connection options | | Scope of supply |
|---|---|---|---|
| 3P | ① | – | 3 rear connectors |
| 4P | ① | – | 4 rear connectors |

## Rear connectors horizontal





| Number of poles | Connection options | | Scope of supply |
|---|---|---|---|
| 3P | ① | – | 3 rear connectors |
| 4P | ① | – | 4 rear connectors |

## Rear connection studs round







| Number of poles | Connection options | | Scope of supply |
|---|---|---|---|
| 1P | ① | ② | 1 short connection stud round |
| | | | 1 long connection stud round |
| 3P | ① | ② | 1 long connection stud round, 2 short connection studs round |
| 4P | ① | ② | 2 long connection studs round, 2 short connection studs round |

[1)] Can only be connected to breaker side N, 1, 3, 5



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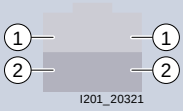
| 3VA10<br>3VA11 | 3VA12 | 3VA20<br>3VA21<br>3VA22 | 3VA13<br>3VA14<br>3VA23<br>3VA24 | 3VA15 | 3VA25<br>3VA26 |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| 3VA9113-0QG00 | – | – | – | – | – |
| – | 3VA9213-0QG00 | 3VA9223-0QG00 | – | – | – |
| – | – | – | 3VA9403-0QG00 | – | – |
| 3VA9114-0QG00 | – | – | – | – | – |
| – | 3VA9214-0QG00 | 3VA9224-0QG00 | – | – | – |
| – | – | – | 3VA9404-0QG00 | – | – |
| | | | | | |
| | | | | | |
| 3VA9111-0QE10 | 3VA9211-0QE10 | 3VA9201-0QE10 | 3VA9401-0QE10 | – | – |
| 3VA9111-0QE20 | 3VA9211-0QE20 | 3VA9201-0QE20 | 3VA9401-0QE20 | – | – |
| 3VA9113-0QE00 | 3VA9213-0QE00 | 3VA9203-0QE00 | 3VA9403-0QE00 | – | – |
| – | – | – | – | 3VA9603-0QE01 | 3VA9603-0QE01 |
| 3VA9114-0QE00 | 3VA9214-0QE00 | 3VA9204-0QE00 | 3VA9404-0QE00 | – | – |
| | | | | | |
| | | | | | |
| – | – | – | – | – | 3VA9603-0QE00 |
| – | – | – | – | – | 3VA9604-0QE00 |
| | | | | | |
| | | | | | |
| – | – | – | – | – | 3VA9603-0QE60 |
| – | – | – | – | – | 3VA9604-0QE60 |
| | | | | | |
| | | | | | |
| 3VA9111-0QF10 | 3VA9211-0QF10 | 3VA9201-0QF10 | 3VA9401-0QF10 | – | – |
| 3VA9111-0QF20 | 3VA9211-0QF20 | 3VA9201-0QF20 | 3VA9401-0QF20 | – | – |
| 3VA9113-0QF00 | 3VA9213-0QF00 | 3VA9203-0QF00 | 3VA9403-0QF00 | – | – |
| 3VA9114-0QF00 | 3VA9214-0QF00 | 3VA9204-0QF00 | 3VA9404-0QF00 | – | – |

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# Connection technology




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## Circular conductor terminals, 2P



| Connection options | | Scope of supply | Number of cables | Cable cross-section | Cu/Al stranded [1] Cu | Cu/Al stranded [1] Al [2] | Control wire tap [3] | Terminal short designation |
|---|---|---|---|---|---|---|---|---|
| ① | – | 2 single terminals, 1 extended terminal cover, 1 insulation plate | 1 | 25 … 150 mm² | ■ | ■ [4] | Yes | TA2.1 |
| | | | | | | | No | TA2.1 |
| | | | 6 | 1.5 … 35 mm² | ■ | – | No | TA2.5 |

## Circular conductor terminals, 3P

- **Note on 3VA9603-0JJ25, 3VA9603-0JJ35 and 3VA9603-0JJ45:**
  1 set of front bus connectors 3VA9603-0QB01 is required for installing circular conductor terminals on the load side and/or outgoing side.



| Connection options | | Scope of supply | Number of cables | Cable cross-section | Cu/Al stranded [1] Cu | Cu/Al stranded [1] Al [2] | Control wire tap [3] | Terminal short designation |
|---|---|---|---|---|---|---|---|---|
| ① | – | 3 single terminals, 1 extended terminal cover, 1 insulation plate | 1 | 25 … 150 mm² | ■ | ■ [4] | Yes | TA2.1 |
| | | | | | | | No | TA2.1 |
| | | | | 50 … 240 mm² | ■ | ■ | Yes | TA2.2 |
| | | | | | | | No | TA2.2 |
| | | | 2 | 25 … 150 mm² | ■ | ■ [4] | Yes | TA2.3 |
| | | | | | | | No | TA2.3 |
| | | | | 70 … 300 mm² | ■ | ■ | Yes | TA2.4 |
| | | | | | | | No | TA2.4 |
| | | | 4 | 120 … 240 mm² | ■ | – | Yes | TA4.3 |
| | | | | | | | No | TA4.3 |
| | | | | 120 … 300 mm² | ■ | ■ | Yes | TA4.4 |
| | | | | | | | No | TA4.4 |
| | | | 6 | 1.5 … 35 mm² | ■ | – | No | TA2.7 |
| – | ② | 3 single terminals, 1 extended terminal cover, 1 insulation plate | 1 | 25 … 150 mm² | ■ | ■ [4] | Yes | TA2.1 |
| | | | | 50 … 240 mm² | ■ | ■ | Yes | TA2.2 |
| | | | 2 | 25 … 150 mm² | ■ | ■ [4] | Yes | TA2.3 |
| | | | | 70 … 300 mm² | ■ | ■ | Yes | TA2.4 |
| | | | | 150 … 300 mm² | ■ | ■ | Yes | TA5.1 |
| | | | 3 | 150 … 300 mm² | ■ | ■ | Yes | TA5.2 |
| | | | 4 | 150 … 300 mm² | ■ | – | Yes | TA5.3 |
| | | | 6 | 1.5 … 35 mm² | ■ | – | No | TA2.5 |
| | | | | | | | | TA2.6 |
| | | | | | | | | TA2.7 |

[1] All circular conductor terminals tested according to UL 486 A/B for Cu and Al cables
[2] Al cable tested according to IEC 60947-2 annex D
[3] Maximum current-carrying capacity 15 A
Maximum cable connection up to 2.5 mm²
[4] Max. 225 A

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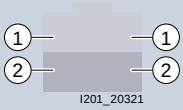
| 3VA10<br>3VA11 | 3VA12 | 3VA20<br>3VA21<br>3VA22 | 3VA13<br>3VA14<br>3VA23<br>3VA24 | 3VA15<br>3VA25 |
|---|---|---|---|---|
| | | | | |
| | | | | |
| 3VA9112-0JC12 | – | – | – | – |
| 3VA9112-0JJ12 | – | – | – | – |
| 3VA9112-0JF60 | – | – | – | – |
| | | | | |
| | | | | |
| | | | | |
| 3VA9113-0JC12 | – | – | – | – |
| 3VA9113-0JJ12 | – | – | – | – |
| – | 3VA9213-0JC13 | 3VA9223-0JC13 | – | – |
| – | 3VA9213-0JJ13 | 3VA9223-0JJ13 | – | – |
| – | 3VA9213-0JC22 | 3VA9223-0JC22 | – | – |
| – | 3VA9213-0JJ22 | 3VA9223-0JJ22 | – | – |
| – | – | – | 3VA9403-0JC23 | – |
| – | – | – | 3VA9403-0JJ23 | – |
| – | – | – | – | 3VA9603-0JC43 |
| – | – | – | – | 3VA9603-0JJ43 |
| – | – | – | – | 3VA9603-0JC44 |
| – | – | – | – | 3VA9603-0JJ44 |
| 3VA9113-0JF60 | 3VA9213-0JF60 | 3VA9223-0JF60 | 3VA9303-0JF60 | – |
| 3VA9153-0JC12 | – | – | – | – |
| – | 3VA9253-0JC13 | 3VA9263-0JC13 | – | – |
| – | 3VA9253-0JC22 | 3VA9263-0JC22 | – | – |
| – | – | – | 3VA9483-0JC23 | – |
| – | – | – | – | 3VA9603-0JJ25 |
| – | – | – | – | 3VA9603-0JJ35 |
| – | – | – | – | 3VA9603-0JJ45 |
| 3VA9153-0JF60 | – | – | – | – |
| – | 3VA9253-0JF60 | 3VA9263-0JF60 | – | – |
| – | – | – | 3VA9383-0JF60 | – |

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# Connection technology




① For mounting onto the circuit breaker
② For mounting on plug-in and withdrawable units

**For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3va-configurator**

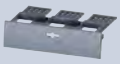
2

## Circular conductor terminals, 4P



| Connection options | | Scope of supply | Number of cables | Cable cross-section | Cu/Al stranded [1] Cu | Cu/Al stranded [1] Al [2] | Control wire tap [3] | Terminal short designation |
|---|---|---|---|---|---|---|---|---|
| ① | – | 4 single terminals, 1 extended terminal cover, 1 insulation plate | 1 | 25 ... 150 mm² | ■ | ■ [4] | Yes | TA2.1 |
| | | | | | | | No | TA2.1 |
| | | | | 50 ... 240 mm² | ■ | ■ | Yes | TA2.2 |
| | | | | | | | No | TA2.2 |
| | | | 2 | 25 ... 150 mm² | ■ | ■ [4] | Yes | TA2.3 |
| | | | | | | | No | TA2.3 |
| | | | | 70 ... 300 mm² | ■ | ■ | Yes | TA2.4 |
| | | | | | | | No | TA2.4 |
| | | | 4 | 120 ... 240 mm² | ■ | – | Yes | TA4.3 |
| | | | | | | | No | TA4.3 |
| | | | | 120 ... 300 mm² | ■ | ■ | Yes | TA4.4 |
| | | | | | | | No | TA4.4 |
| | | | 6 | 1.5 ... 35 mm² | ■ | – | No | TA2.5 |
| | | | | | | | | TA2.6 |
| | | | | | | | | TA2.7 |
| – | ② | 4 single terminals, 1 extended terminal cover, 1 insulation plate | 1 | 25 ... 150 mm² | ■ | ■ [4] | Yes | TA2.1 |
| | | | | 50 ... 240 mm² | ■ | ■ | Yes | TA2.2 |
| | | | 2 | 25 ... 150 mm² | ■ | ■ [4] | Yes | TA2.3 |
| | | | | 70 ... 300 mm² | ■ | ■ | Yes | TA2.4 |
| | | | 6 | 1.5 ... 35 mm² | ■ | – | No | TA2.5 |
| | | | | | | | | TA2.6 |
| | | | | | | | | TA2.7 |

## Terminal covers specially for fixed-mounted units

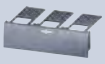






| Version | Number of poles | Mounting location | |
|---|---|---|---|
| Short | 1P | ① | – |
| | 2P | ① | – |
| | 3P | ① | – |
| | 4P | ① | – |
| Intermediate | 3P | ① | – |
| | 4P | ① | – |
| Extended [5] | 2P | ① | – |
| | 3P | ① | – |
| | 4P | ① | – |
| Broadened [5] | 3P | ① | – |
| | 4P | ① | – |

## Terminal covers specially for plug-in and withdrawable units (spare part)




- To provide circuit breaker touch protection
- For mounting to the molded case circuit breaker
- Included in scope of supply: Cover for the infeed and outgoing terminal

| Version | Number of poles | Mounting location | |
|---|---|---|---|
| Short | 3P | ① | – |
| | 4P | ① | – |

[1] All circular conductor terminals tested according to UL 486 A/B for Cu and Al cables
[2] Al cable tested according to IEC 60947-2 annex D
[3] Maximum current-carrying capacity 15 A
Maximum cable connection up to 2.5 mm²
[4] Max. 225 A
[5] Including insulating plate
[6] Suitable for circular conductor terminals 4 cables

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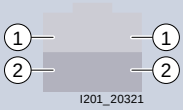
| 3VA10 | 3VA11 | 3VA12 | 3VA20<br>3VA21<br>3VA22 | 3VA13<br>3VA14<br>3VA23<br>3VA24 | 3VA15<br>3VA25 |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| 3VA9114-0JC12 | | – | – | – | – |
| 3VA9114-0JJ12 | | – | – | – | – |
| – | – | 3VA9214-0JC13 | 3VA9224-0JC13 | – | – |
| – | – | 3VA9214-0JJ13 | 3VA9224-0JJ13 | – | – |
| – | – | 3VA9214-0JC22 | 3VA9224-0JC22 | – | – |
| – | – | 3VA9214-0JJ22 | 3VA9224-0JJ22 | – | – |
| – | – | – | – | 3VA9404-0JC23 | – |
| – | – | – | – | 3VA9404-0JJ23 | – |
| – | – | – | – | – | 3VA9604-0JC43 |
| – | – | – | – | – | 3VA9604-0JJ43 |
| – | – | – | – | – | 3VA9604-0JC44 |
| – | – | – | – | – | 3VA9604-0JJ44 |
| 3VA9114-0JF60 | | – | – | – | – |
| – | – | 3VA9214-0JF60 | 3VA9224-0JF60 | – | – |
| – | – | – | – | 3VA9304-0JF60 | – |
| 3VA9154-0JC12 | | – | – | – | – |
| – | – | 3VA9254-0JC13 | 3VA9264-0JC13 | – | – |
| – | – | 3VA9254-0JC22 | 3VA9264-0JC22 | – | – |
| – | – | – | – | 3VA9484-0JC23 | – |
| 3VA9154-0JF60 | | – | – | – | – |
| – | – | 3VA9254-0JF60 | 3VA9264-0JF60 | – | – |
| – | – | – | – | 3VA9384-0JF60 | – |
| | | | | | |
| | | | | | |
| – | 3VA9111-0WD10 | – | – | – | – |
| – | 3VA9111-0WD20 | – | – | – | – |
| 3VA9111-0WD30 | 3VA9111-0WD30 | 3VA9211-0WD30 | 3VA9221-0WD30 | 3VA9481-0WD30 | 3VA9601-0WD30 |
| 3VA9111-0WD40 | 3VA9111-0WD40 | 3VA9211-0WD40 | 3VA9221-0WD40 | 3VA9481-0WD40 | 3VA9601-0WD40 |
| – | – | – | – | – | 3VA9601-0WE30 [6] |
| – | – | – | – | – | 3VA9601-0WE40 [6] |
| – | 3VA9111-0WF20 | – | – | – | – |
| 3VA9111-0WF30 | 3VA9111-0WF30 | 3VA9211-0WF30 | 3VA9221-0WF30 | 3VA9481-0WF30 | 3VA9601-0WF30 |
| 3VA9111-0WF40 | 3VA9111-0WF40 | 3VA9211-0WF40 | 3VA9221-0WF40 | 3VA9481-0WF40 | 3VA9601-0WF40 |
| 3VA9111-0WG30 | 3VA9111-0WG30 | 3VA9211-0WG30 | 3VA9221-0WG30 | 3VA9401-0WG30 | – |
| 3VA9111-0WG40 | 3VA9111-0WG40 | 3VA9211-0WG40 | 3VA9221-0WG40 | 3VA9401-0WG40 | – |
| | | | | | |
| | | | | | |
| 3VA9113-0KB01 | 3VA9113-0KB01 | 3VA9213-0KB01 | 3VA9123-0KB01 | 3VA9353-0KB01 | – |
| 3VA9114-0KB01 | 3VA9114-0KB01 | 3VA9214-0KB01 | 3VA9124-0KB01 | 3VA9354-0KB01 | – |

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# Connection technology



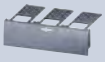

① For mounting onto the circuit breaker
② For mounting on plug-in and withdrawable units

**For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3va-configurator**

2

## Terminal covers for plug-in or withdrawable sockets

- For touch protection in the termination area
- Of the plug-in or withdrawable socket
- For mounting onto the plug-in or withdrawable socket









| Version | Number of poles | Mounting location | | 3VA10 | 3VA11 |
|---|---|---|---|---|---|
| Short | 3P | – | ② | – | 3VA9153-0KB03 |
| | 4P | – | ② | – | 3VA9154-0KB03 |
| Extended [1] | 3P | – | ② | – | 3VA9153-0KB04 |
| | | – | ② | – | 3VA9154-0KB04 |
| Broadened [1] | 3P | – | ② | – | 3VA9153-0KB05 |
| | 4P | – | ② | – | 3VA9154-0KB05 |

## Insulating plates





| Version | Number of poles | Mounting location | | 3VA10 | 3VA11 |
|---|---|---|---|---|---|
| Standard | 2P | ① | – | – | 3VA9111-0WJ20 |
| | 3P | ① | – | 3VA9111-0WJ30 | 3VA9111-0WJ30 |
| | 4P | ① | – | 3VA9111-0WJ40 | 3VA9111-0WJ40 |
| Broadened | 3P | ① | – | 3VA9111-0WK30 | 3VA9111-0WK30 |
| | 4P | ① | – | 3VA9111-0WK40 | 3VA9111-0WK40 |

## Phase barriers



| Mounting location | | Scope of supply | 3VA10 / 3VA11 |
|---|---|---|---|
| ① | ② | 2 phase barriers | 3VA9152-0WA00 |
| – | ② | 2 phase barriers | – |

## Protective sleeve for insulation of rear connections



| Mounting location | Scope of supply | 3VA10 / 3VA11 |
|---|---|---|
| ② | 3 protective sleeves | – |

## DC insulation plates for 3VA1 for fixed-mounted molded case circuit breakers



| Number of poles | 3VA10 / 3VA11 |
|---|---|
| 3P | 3VA9113-0SG10 |
| 4P | 3VA9114-0SG10 |

## Side plates for 3VA1 for fixed-mounted molded case circuit breakers



| Number of poles | Mounting | 3VA10 | 3VA11 |
|---|---|---|---|
| 2P | On 2-pole molded case circuit breakers | – | 3VA9112-0SG20 |

[1] Including insulating plate



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| 3VA12 | 3VA20<br>3VA21<br>3VA22 | 3VA13<br>3VA14<br>3VA23<br>3VA24 | 3VA15<br>3VA25 | 3VA26 |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| 3VA9253-0KB03 | 3VA9163-0KB03 | 3VA9353-0KB03 | 3VA9603-0KB03 | – |
| 3VA9254-0KB03 | 3VA9164-0KB03 | 3VA9354-0KB03 | – | – |
| 3VA9253-0KB04 | 3VA9163-0KB04 | 3VA9353-0KB04 | – | – |
| 3VA9254-0KB04 | 3VA9164-0KB04 | 3VA9354-0KB04 | – | – |
| 3VA9253-0KB05 | 3VA9163-0KB05 | 3VA9353-0KB05 | – | – |
| 3VA9254-0KB05 | 3VA9164-0KB05 | 3VA9354-0KB05 | – | – |
| | | | | |
| | | | | |
| – | – | – | – | – |
| 3VA9211-0WJ30 | 3VA9221-0WJ30 | 3VA9481-0WJ30 | – | – |
| 3VA9211-0WJ40 | 3VA9221-0WJ40 | 3VA9481-0WJ40 | – | – |
| 3VA9211-0WK30 | 3VA9221-0WK30 | 3VA9481-0WK30 | – | – |
| 3VA9211-0WK40 | 3VA9221-0WK40 | 3VA9481-0WK40 | – | – |
| | | | | |
| | | | | |
| 3VA9252-0WA00 | 3VA9262-0WA00 | 3VA9482-0WA00 | 3VA9602-0WA00 | 3VA9602-0WA00 |
| – | – | – | 3VA9602-0WA05 | 3VA9602-0WA05 |
| | | | | |
| | | | | |
| – | – | – | 3VA9603-0WH05 | – |
| | | | | |
| | | | | |
| – | – | – | – | – |
| – | – | – | – | – |
| | | | | |
| | | | | |
| – | – | – | – | – |

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# Plug-in and withdrawable technology



**Thanks to plug-in and withdrawable technology:**

- Molded case circuit breakers can be replaced quickly and easily for overhauls or servicing
- Electrical isolation and clearly visible isolating distance
- The socket can be interlocked to prevent the 3VA molded case circuit breaker from being plugged in or moved in
- Identical connection technology for all molded case circuit breakers, whether they are plug-in, withdrawable or fixed-mounted units

**In addition, withdrawable technology offers:**

- Transmission of the position of the molded case circuit breaker via communication (CONNECT, TEST, DISCONNECT)
- The ability to test the auxiliary and control circuit connections in the test position of the withdrawable unit, without contacted main current paths
- Transmission of the state of the molded case circuit breaker (ON, OFF, TRIP) via the COM060 communications module

**For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3va-configurator**

| | | 3VA11 | 3VA12 | 3VA20<br>3VA21<br>3VA22 | 3VA13<br>3VA14<br>3VA23<br>3VA24 | 3VA15<br>3VA25<br>3VA26 |
|---|---|---|---|---|---|---|
| **Withdrawable units, complete kits** | | | | | | |
|  | • **Scope of supply:**<br>– Withdrawable socket<br>– Withdrawable unit, conversion kit<br>– Mounting screw kit<br>• **Note:** The crank for the withdrawable unit must be ordered separately. | | | | | |
| | **Number of poles** | | | | | |
| | 3P | – | 3VA9213-0KD00 | 3VA9123-0KD00 | 3VA9323-0KD00 | – |
| | 4P | – | 3VA9214-0KD00 | 3VA9124-0KD00 | 3VA9324-0KD00 | – |
| **Withdrawable units, conversion kits** | | | | | | |
|  | • **Scope of supply:**<br>– Screw-fastened terminal covers for molded case circuit breakers<br>– Side panels<br>– Plug-in contacts<br>– Cable cages<br>– Autotrip plunger<br>• **Note:** The crank for the withdrawable unit must be ordered separately. | | | | | |
| | **Number of poles** | | | | | |
| | 3P | – | 3VA9213-0KD10 | 3VA9123-0KD10 | 3VA9323-0KD10 | – |
| | 4P | – | 3VA9214-0KD10 | 3VA9124-0KD10 | 3VA9324-0KD10 | – |



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| | 3VA11 | 3VA12 | 3VA20<br>3VA21<br>3VA22 | 3VA13<br>3VA14<br>3VA23<br>3VA24 | 3VA15<br>3VA25<br>3VA26 |
|---|---|---|---|---|---|
| **Plug-in units, complete kits** | | | | | |
|  • **Scope of supply:**<br>– Plug-in socket<br>– Plug-in unit, conversion kit<br>– Mounting screw kit<br>• **Note on 3VA9603-0KP00:**<br>– An undervoltage release (UVR) (article number 3VA9908-0BB..) is required in the circuit breaker in order to provide the protection trip specified in the standard for unplugging the circuit breaker under load. The required UVR voltage version must be ordered in addition. | | | | | |
| **Number of poles** | | | | | |
| 3P | 3VA9113-0KP00 | 3VA9213-0KP00 | 3VA9123-0KP00 | 3VA9323-0KP00 | 3VA9603-0KP00 |
| 4P | 3VA9114-0KP00 | 3VA9214-0KP00 | 3VA9124-0KP00 | 3VA9324-0KP00 | – |
| **Plug-in units, conversion kits** | | | | | |
|  • **Scope of supply:**<br>– Screw-fastened terminal covers for molded case circuit breakers<br>– Plug-in contacts<br>– Cable cages<br>– Autotrip plunger | | | | | |
| **Number of poles** | | | | | |
| 3P | 3VA9113-0KP10 | 3VA9213-0KP10 | 3VA9123-0KP10 | 3VA9323-0KP10 | – |
| 4P | 3VA9114-0KP10 | 3VA9214-0KP10 | 3VA9124-0KP10 | 3VA9324-0KP10 | – |
| **Plug-in units, conversion kits with blade contacts** | | | | | |
|  • **Scope of supply:**<br>– 6 × blade contacts<br>– Guide frame for circuit breaker<br>– 2 × cover for blade contacts<br>– Position signaling switch<br>– Connecting cable for auxiliary circuits | | | | | |
| **Number of poles** | | | | | |
| 3P | – | – | – | – | 3VA9603-0KP10 |
| **Cable cages for plug-in/withdrawable units (spare part)** | | | | | |
|  • For routing of the required cables from the internal accessories on the back of the circuit breaker | | | | | |
| **Number of poles** | | | | | |
| 3P/4P | 3VA9157-0KB02 | 3VA9257-0KB02 | 3VA9167-0KB02 | 3VA9367-0KB02 | – |
| **Door feedthroughs** | | | | | |
|  | | | | | |
| | – | 3VA9257-0KT00 | 3VA9167-0KT00 | 3VA9367-0KT00 | – |

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# Plug-in and withdrawable technology



**For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3va-configurator**

| | | | | | |
|---|---|---|---|---|---|
| | | | | 3VA13 | |
| | | | 3VA20 | 3VA14 | 3VA15 |
| | | | 3VA21 | 3VA23 | 3VA25 |
| | 3VA11 | 3VA12 | 3VA22 | 3VA24 | 3VA26 |
| **Autotrip plungers (spare part)** | | | | | |
|  **Version** | | | | | |
| Plug-in unit | 3VA9157-0KP81 | 3VA9257-0KP81 | 3VA9267-0KP81 | 3VA9457-0KP81 | – |
| Withdrawable unit | – | 3VA9257-0KD81 | 3VA9267-0KD81 | 3VA9457-0KD81 | – |



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## Accessories

| | | 3VA11 | 3VA12 | 3VA20 3VA21 3VA22 | 3VA13 3VA14 3VA23 3VA24 | 3VA15 3VA25 3VA26 |
|---|---|---|---|---|---|---|
| **Communications interface for withdrawable unit** | | | | | | |
|  | **Scope of supply** | | | | | |
| | Set of cables with three special position signaling switches, 3VA9987-0KC10 connecting cables | 3VA9987-0KC00 | 3VA9987-0KC00 | 3VA9987-0KC00 | 3VA9987-0KC00 | – |
| **Position signaling switches for withdrawable unit and plug-in unit** | | | | | | |
|  | • **Note on 3VA9603-0KB00:** 4 position signaling switches can be installed in the plug-in base. | | | | | |
| | | 3VA9987-0KB00 | 3VA9987-0KB00 | 3VA9987-0KB00 | 3VA9987-0KB00 | 3VA9603-0KB00 |
| **Connecting cables** | | | | | | |
|  | **Use** | | | | | |
| | Connection of position signaling switches for communication with COM060 | 3VA9987-0KC10 | 3VA9987-0KC10 | 3VA9987-0KC10 | 3VA9987-0KC10 | – |
| | For auxiliary circuits | – | – | – | – | 3VA9603-0KP80 |
| **Cranks for withdrawable units** | | | | | | |
|  | **Version** **Scope of supply** | | | | | |
| | Insulated Including crank holder | 3VA9987-0KD81 | 3VA9987-0KD81 | 3VA9987-0KD81 | 3VA9987-0KD81 | – |
| **Auxiliary circuit connectors** | | | | | | |
|  | • Each auxiliary circuit connector is designed for 4 cables. | | | | | |
| | **Version** | | | | | |
| | For all withdrawable units | 3VA9987-0KD80 | 3VA9987-0KD80 | 3VA9987-0KD80 | 3VA9987-0KD80 | – |
| | For all plug-in units | 3VA9987-0KP80 | 3VA9987-0KP80 | 3VA9987-0KP80 | 3VA9987-0KP80 | – |
| **Cylinder locks** | | | | | | |
|  | • **Scope of supply:** – 1 lock with 2 keys<br>• For locking or interlocking<br>• **Note:** Not for 3VA15/3VA25! | | | | | |
| | **Key** **Lock number** | | | | | |
| | 1 1 | 3VA9980-0VL10 | 3VA9980-0VL10 | 3VA9980-0VL10 | 3VA9980-0VL10 | – |
| | 3 3 | 3VA9980-0VL30 | 3VA9980-0VL30 | 3VA9980-0VL30 | 3VA9980-0VL30 | – |
| | 4 4 | 3VA9980-0VL40 | 3VA9980-0VL40 | 3VA9980-0VL40 | 3VA9980-0VL40 | – |
| **Cylinder lock adapters for withdrawable units** | | | | | | |
|  | • To prevent unauthorized withdrawal or insertion of the circuit breaker into the withdrawable unit<br>• Circuit breaker can be locked in the CONNECT, TEST and DISCONNECT positions | | | | | |
| | **Use** | | | | | |
| | For fitting a cylinder lock in the right-hand side wall of the withdrawable unit | 3VA9980-0LF40 | 3VA9980-0LF40 | 3VA9980-0LF40 | 3VA9980-0LF40 | – |

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# Residual current devices RCD

## According to IEC 60947-2 annex B (Type A, Type B) and according to DIN VDE 0664-400 (Type B+)

**For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3va-configurator**



### Residual current devices (RCD) for switch disconnectors and molded case circuit breakers

- Mounted onto the side (left)





| Number of poles | Type | Sensitivity [3] | Rated residual response current $I_{\Delta n}$ | Limit value of non-tripping time $\Delta t$ | Rated operational voltage $U_e$ | Fault current frequency | Pre-alarm | | | Trip alarm | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | COM | TRIP | | COM |
| 3-pole | RCD510 | Type A | 0.03 ... 5 A | 0 ... 3 s | 127 ... 480 V AC | 50/60 Hz | 1 | – | – | ■ | ■ | – |
| 4-pole | RCD310 | Type A | 0.03 ... 5 A | Instantaneous | 127 ... 480 V AC | 50/60 Hz | 1 | – | – | ■ | ■ | – |
| | RCD510 | Type A | 0.03 ... 5 A | 0 ... 3 s | 127 ... 480 V AC | 50/60 Hz | 1 | – | – | ■ | ■ | – |

### Residual current devices (RCD) for molded case circuit breakers

- Mounted below (under trip unit)





| Number of poles | Type | Sensitivity [3] | Rated residual response current $I_{\Delta n}$ | Limit value of non-tripping time $\Delta t$ | Rated operational voltage $U_e$ | Fault current frequency | Pre-alarm | | | Trip alarm | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | COM | TRIP | | COM |
| 3-pole | RCD520 | Type A | 0.03 ... 5 A | 0 ... 3 s | 127 ... 480 V AC | 50/60 Hz | 1 | – | – | ■ | ■ | – |
| | RCD520B [1][4] | Type B | 0.03 ... 5 A | 0 ... 10 s | 127 ... 690 V AC | 0 ... 100 kHz | 1 | ■ | – | ■ | ■ | – |
| | | Type B+ | 0.03 ... 0.3 A | | | | | | | | | |
| | RCD820 [2] | Type A | 0.03 ... 30 A [5] | 0 ... 10 s | 127 ... 690 V AC | 50/60 Hz | 2 | ■ | ■ | ■ | ■ | ■ |
| 4-pole | RCD320 | Type A | 0.03 ... 5 A | Instantaneous | 127 ... 480 V AC | 50/60 Hz | 1 | – | – | ■ | ■ | – |
| | RCD520 | Type A | 0.03 ... 5 A | 0 ... 3 s | 127 ... 480 V AC | 50/60 Hz | 1 | – | – | ■ | ■ | – |
| | RCD520B [4] | Type B | 0.03 ... 5 A | 0 ... 10 s | 127 ... 690 V AC | 0 ... 100 kHz | 1 | ■ | – | ■ | ■ | – |
| | | Type B+ | 0.03 ... 0.3 A | | | | | | | | | |
| | RCD820 [2] | Type A | 0.03 ... 30 A [5] | 0 ... 10 s | 127 ... 690 V AC | 50/60 Hz | 2 | ■ | ■ | ■ | ■ | ■ |

### Residual current releases (spare part)



| Version | Scope of supply |
|---|---|
| For RCD310 or RCD510 | RCR, RCR-RCD cables |

### RCD820 - 3VA2 ETU connecting cables (spare part)

- Connecting cable between the RCD820 and the electronic trip unit (ETU) of a 3VA2



| Version | Scope of supply |
|---|---|
| For RCD820 | 1 × RCD-ETU cable |

[1] 3-pole version in 4-pole enclosure
[2] With energy infeed from below, the required auxiliary switch (AUX) must be ordered separately
[3] Type A: pulse current sensitive, type B/B+: universal current sensitive
[4] Sensitivity selectable for type B/B+
[5] $I_{\Delta n}$ = 30 A: type AC
[6] If the molded case circuit breaker has no box terminals as connections, a set of box terminals must be ordered additionally for the taps below the thermal-magnetic trip units.
[7] 1 set of box terminals is included in scope of supply of the RCD510 (3VA921.-0RS20).

**Modular residual current devices type A/B (according to IEC 60947-2 annex M), see monitoring devices, from page 11/1 onwards**



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| | | | 3VA11 | 3VA12 | 3VA20<br>3VA21 | 3VA22 | 3VA23 | 3VA24 | 3VA10<br>3VA13<br>3VA14<br>3VA15<br>3VA25<br>3VA26 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| Monitoring mode (tripping can be disabled as an option) | Remote test/ remote reset | Communication-capable | | | | | | | |
| ■ | – | – | 3VA9113-0RS20 [6] | 3VA9213-0RS20 [7] | – | – | – | – | – |
| ■ | – | – | 3VA9114-0RS10 [6] | – | – | – | – | – | – |
| ■ | – | – | 3VA9114-0RS20 [6] | 3VA9214-0RS20 [7] | – | – | – | – | – |
| | | | | | | | | | |
| Monitoring mode (tripping can be disabled as an option) | Remote test/ remote reset | Communication-capable | | | | | | | |
| – | – | – | 3VA9113-0RL20 | 3VA9213-0RL20 | – | – | – | – | – |
| ■ | – | – | 3VA9113-0RL21 | – | – | – | – | – | – |
| ■ | ■ | ■ | – | – | 3VA9123-0RL30 | 3VA9223-0RL30 | 3VA9323-0RL30 | 3VA9423-0RL30 | – |
| – | – | – | 3VA9114-0RL10 | – | – | – | – | – | – |
| – | – | – | 3VA9114-0RL20 | 3VA9214-0RL20 | – | – | – | – | – |
| ■ | – | – | 3VA9114-0RL21 | – | – | – | – | – | – |
| ■ | ■ | ■ | – | – | 3VA9124-0RL30 | 3VA9224-0RL30 | 3VA9324-0RL30 | 3VA9424-0RL30 | – |
| | | | | | | | | | |
| | | | 3VA9988-0BR10 | 3VA9988-0BR10 | – | – | – | – | – |
| | | | | | | | | | |
| | | | – | – | 3VA9927-0RC00 | 3VA9927-0RC00 | 3VA9927-0RC00 | 3VA9927-0RC00 | – |

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# Communication



| Metering function [1] | | | ETU 5-series | ETU 8-series | Display in ETU | Display DSP800 | Communication COM800/COM100 |
|---|---|---|---|---|---|---|---|
| **Current** | | | | | | | |
| Phase and neutral conductor currents | $I_1$, $I_2$, $I_3$, $I_N$ | A | ■ | ■ | □ | □ | ■ |
| Residual current to ground | $I_g$ | A | ■ | ■ | □ | □ | ■ |
| Phase with highest load | | A | ■ | ■ | □ | □ | ■ |
| Average value over the three phase currents | $I_{LAVG} = (I_1 + I_2 + I_3)/3$ | A | – | ■ | – | □ | ■ |
| Asymmetry of the phase currents | $I_{nba}$ | % | – | ■ | – | □ | ■ |
| THD of the 3 phases | $THDI_1$, $THDI_2$, $THDI_3$ | % | – | ■ | – | □ | ■ |
| **Voltage** | | | | | | | |
| Phase voltages incl. average value | $U_{12}$, $U_{23}$, $U_{31}$, $U_{phavg}$ | V | – | ■ | □ | □ | ■ |
| Voltages to N conductor incl. average value | $U_{1N}$, $U_{2N}$, $U_{3N}$, $U_{Navg}$ | V | – | ■ | – | □ | ■ |
| Voltage unbalance | | % | – | ■ | – | □ | ■ |
| THD phase/phase and phase/N | $THDI_1$, $THDI_2$, $THDI_3$ | % | – | ■ | – | □ | ■ |
| **Power** | | | | | | | |
| Active power, total and per phase | $P_1$, $P_2$, $P_3$, $P_{tot}$ | kW | – | ■ | □ ($P_{tot}$) | □ | ■ |
| Apparent power, total and per phase | $S_1$, $S_2$, $S_3$, $S_{tot}$ | kVA | – | ■ | – | □ | ■ |
| Reactive power, total and per phase | $Q_1$, $Q_2$, $Q_3$, $Q_{tot}$ | kVAr | – | ■ | □ | □ | ■ |
| Power factor of the fundamental | $P_{F1}$, $P_{F2}$, $P_{F3}$, $P_{Favg}$ | | – | ■ | □ ($PF_{avg}$) | □ | ■ |
| **Energy** | | | | | | | |
| Active energy, infeed and feedback | $E_p$ | kWh | – | ■ | □ | □ | ■ |
| Reactive energy, infeed and feedback | $E_q$ | kVArh | – | ■ | – | □ | ■ |
| Apparent energy | $E_s$ | kVAh | – | ■ | – | □ | ■ |
| **Frequency** | | | | | | | |
| Present frequency | $f$ | Hz | – | ■ | □ | □ | ■ |
| **Min/max pointer function** | | | | | | | |
| Min./max. current, voltage, power | With time stamp | – | – | – | – | – | ■ |
| **Condition Monitoring** [2] | | | | | | | |
| Operating cycles counter | CLOSE-OPEN cycle | | ■ | ■ | – | – | ■ |
| Operating hours | | h | ■ | ■ | – | – | ■ |
| Trip counter | Differentiated by trip causes | | ■ | ■ | – | – | ■ |
| Health indicator [3] | Incl. contact state | % | ■ | ■ | ■ | – | ■ |
| Remaining life time [3] | | Time | ■ | ■ | – | – | ■ |

■ Available □ Displayable – Not available

[1] Depending on ETU version
[2] Only available with continuous external power supply and COM060 and COM800/100 communication interfaces
[3] Firmware 4.4 or higher of ETU, COM060, COM800/100 required

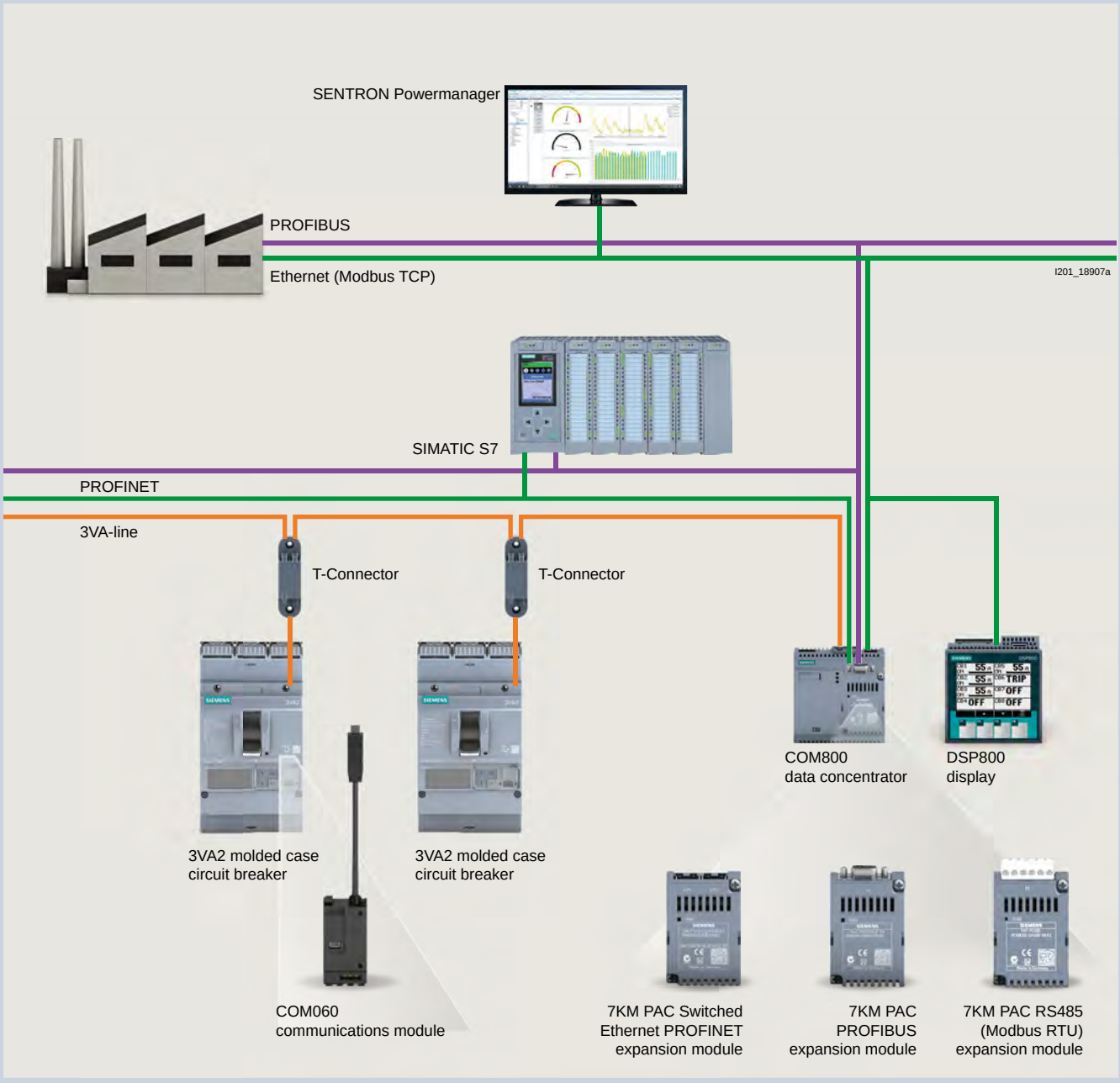
| | 3VA20 3VA21 3VA22 | 3VA23 3VA24 3VA25 3VA26 |
|---|---|---|
| **COM060 communications modules** | | |
|  • For mounting in the right-hand accessories compartment of the 3VA2 molded case circuit breaker (including ETU power supply)<br>• Including a T-Connector | | |
| **Use** | | |
| Communication to the COM800/COM100 data concentrator via 3VA line | 3VA9187-0TB10 | 3VA9387-0TB10 |
| **SLC adapters (spare part)** | | |
|  **Scope of supply** | | |
| 5 units | 3VA9187-0TB60 | 3VA9387-0TB60 |
| **24 V modules** | | |
|  • 24 V DC<br>• For mounting in the right-hand accessories compartment of the 3VA2 | | |
| **Use** | | |
| Optional energy supply for the ETU, also includes continuous operation of the ETU display and the metering function of the ETU 8-series | 3VA9187-0TB50 | 3VA9387-0TB50 |

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# Communication



## Data concentrator

**COM800 data concentrators**



| Version | Article No. |
|---|---|
| Central communications module for connection of up to eight 3VA2 molded case circuit breakers via the 3VA line, Ethernet 10/100 Mbps interface module socket for inserting an optional PROFIBUS DP or PROFINET module, 2 terminating resistors | 3VA9987-0TA10 |

**COM100 data concentrators**



| Version | Article No. |
|---|---|
| Central communications module for connection of a 3VA2 molded case circuit breaker via the 3VA line, Ethernet 10/100 Mbps interface module socket for inserting an optional PROFIBUS DP or PROFINET module, 2 terminating resistors | 3VA9987-0TA20 |

**7KM PAC PROFIBUS DP expansion modules**



| Use | Article No. |
|---|---|
| Used for connecting the COM800/COM100 data concentrator, and the 3VA molded case circuit breakers connected to it, to PROFIBUS DPV1. Supplies the state and measured variables of the 3VA molded case circuit breaker for the PROFIBUS DP master. Receives information (e.g. commands) from the PROFIBUS DP master and transmits them to the 3VA molded case circuit breaker. | 7KM9300-0AB01-0AA0 |

**7KM PAC Switched Ethernet PROFINET expansion modules**



| Use | Article No. |
|---|---|
| Used for connecting the COM800/COM100 data concentrator, and the connected 3VA molded case circuit breakers, to PROFINET via two Ethernet interfaces. Supplies the state and measured variables of the 3VA molded case circuit breakers to PROFINET via the PROFINET IO, PROFIenergy and Modbus TCP protocols. | 7KM9300-0AE02-0AA0 |

**7KM PAC RS485 Modbus RTU expansion modules**



| Use | Article No. |
|---|---|
| Used for connecting the COM800/COM100 data concentrator, and the 3VA molded case circuit breakers connected to it, to Modbus RTU. Supplies the state and measured variables of the 3VA molded case circuit breaker for the Modbus RTU master. Receives information (e.g. commands) from the Modbus RTU master and transmits them to the 3VA molded case circuit breaker. | 7KM9300-0AM00-0AA0 |

## Interfaces

**Interfaces to IEC 61850**

- The SICAM A8000 smart data concentrator connects the circuit breakers from the SENTRON portfolio via the Modbus TCP/IP protocol and transmits data via communication protocols (e.g.: IEC 61850, IEC 60870-5-104, IEC 60870-5-101, Modbus and DNP) to higher-level systems.





| Type | Processor assembly | Article No. |
|---|---|---|
| SICAM CP-8021 [1] | – | 6MF2802-1AA00 |
| SICAM CP-8031 [2] | – | 6MF2803-1AA00 |
| SICAM CP-8050 [3] | – | 6MF2805-0AA00 |
| SICAM PS-8620 | 24 ... 60 V DC (12 W) | 6MF2862-0AA00 |
| SICAM PS-8622 | 110 ... 220 V DC (12 W) | 6MF2862-2AA00 |

[1] Dimensioned for device quantities of max. 1 × 3WA and 1 × 3VA
[2] Dimensioned for device quantities of 1 × 3WA and 8 × 3VA
[3] Dimensioned for device quantities of 3 × 3WA and 8 × 3VA or 2 × 3WA and 8 × 3VA and 1 × PAC4200

You will find further information at:
www.siemens.com/sicam-a8000
For the SICAM CP-8021, SICAM CP-8031 and SICAM CP-8050, predefined modules were created to reduce commissioning work to a minimum.
The modules can be obtained free of charge via SiePortal www.siemens.com/lowvoltage/product-support (109816057).

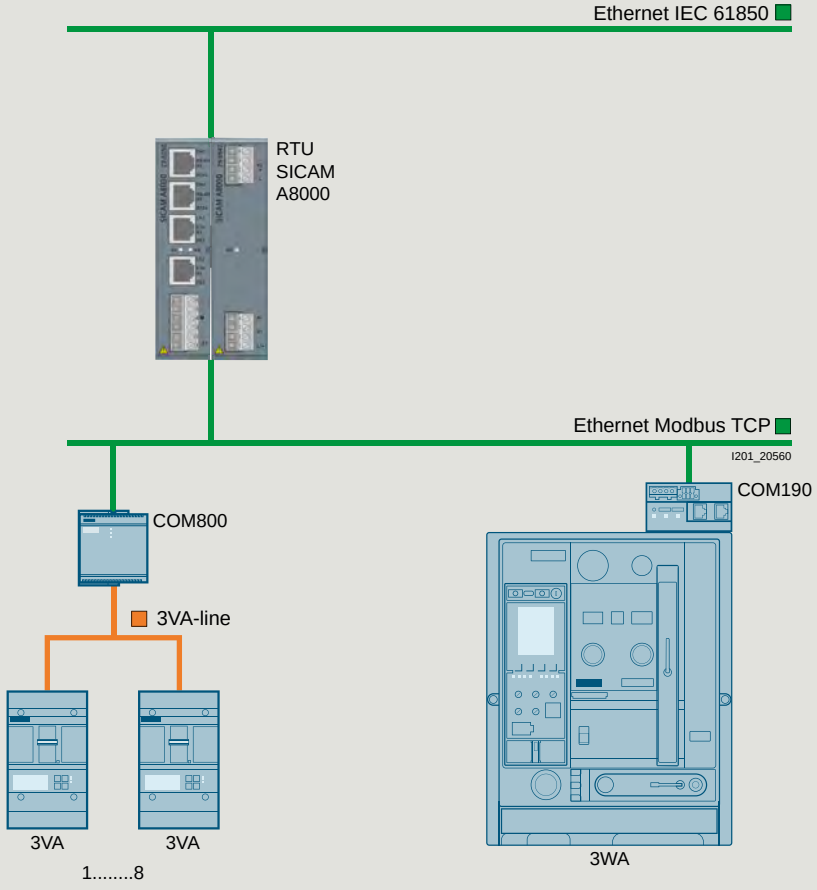


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# Communication



## Accessories for communication

**T-connectors (spare part)**



| Use | Article No. |
|---|---|
| Provides a stub connection to the COM060 and loops through to the next circuit breaker. | 3VA9987-0TG10 |

**DIN-rail adapters**



| Use | Article No. |
|---|---|
| For snapping the T-Connector onto a DIN rail. | 3VA9987-0TG11 |

**Prefabricated connecting cables, T-connector – T-connector or T-connector – COM800/COM100**



| Length | Article No. |
|---|---|
| 0.4 m | 3VA9987-0TC10 |
| 1 m | 3VA9987-0TC20 |
| 2 m | 3VA9987-0TC30 |
| 4 m | 3VA9987-0TC40 |

**Prefabricated connecting cables for extending the COM060 – T-connector stub connection**



| Length | Article No. |
|---|---|
| 0.4 m | 3VA9987-0TF20 |
| 0.8 m | 3VA9987-0TF10 |

**Additional bus terminating resistors (spare part)**



| Use | Article No. |
|---|---|
| For COM800 and COM060 | 3VA9987-0TE10 |

**Voltage tap to external N conductors (spare part)**



| Use | Article No. |
|---|---|
| Cable for connection of the star point for the metering function of the 8-series ETU, length 1.5 m | 3VA9987-0UC10 |

**External current transformer for N conductors**



| Use | Rated current | Article No. |
|---|---|---|
| For 3VA2 3-pole molded case circuit breakers, for 5 and 8-series ETUs, including connecting cables | 25 ... 150 A | 3VA9007-0NA10 |
| | 160 ... 350 A | 3VA9107-0NA10 |
| | 400 ... 630 A | 3VA9307-0NA10 |

**External current transformers as straight-through transformers**



| Rated current | Article No. |
|---|---|
| 25 ... 150 A | 3VA9077-0NA10 |
| 160 ... 350 A | 3VA9177-0NA10 |
| 400 ... 630 A | 3VA9377-0NA10 |
| 600 ... 1250 A | 3VA9677-0NA10 |

**Connecting cables for external current transformers for N conductors (spare part)**



| Article No. |
|---|
| 3VA9907-0NB10 |

## Display

**DSP800 displays**



| Use | Article No. |
|---|---|
| For displaying the status and measured values of up to eight devices<br>• 3VA2 via COM800/100<br>• 3VA27<br>• 3WL10<br>• 3WL11-13<br>• PAC3200T | 3VA9987-0TD10 |

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## External function box

**EFB300 external function boxes**



- 4 digital outputs for information output
- 1 digital input
- ZSI functionality
- S0 interface
- Including cable 1.5 m in length

| Use | Article No. |
|---|---|
| For connection to the ETU of 3VA2 molded case circuit breakers | 3VA9987-0UA10 |

**Connecting cables for EFB300**



| Length | Use | Article No. |
|---|---|---|
| 1.5 m | For 3VA2 with EFB | 3VA9987-0UB10 |
| 3.0 m | For 3VA2 with EFB | 3VA9987-0UB20 |
| | For 3VA2 with EFB and RCD820 | 3VA9987-0UB30 |

## Test devices

**TD300 test devices**



| Use | Connection | Article No. |
|---|---|---|
| For activation of the ETU and initiation of a test tripping operation | On the front interface of the ETU | 3VA9987-0MA10 |

**TD400 test devices** [1)]



- Energy supply via batteries or the USB-C interface
- USB-C interface for connecting a PC with SENTRON Powerconfig
- Bluetooth interface for connection to a PC, smartphone or tablet
- ETU parameterization
- Including adapter and connecting cable to 3VA2 molded case circuit breaker and IEC 3WL (ETU release 2)
- Including case

| Connection | Article No. |
|---|---|
| On the front interface of the ETU (3VA and IEC 3WL ETU release 2) | 3VW9011-0AT40 |

**TD500 test devices**



- USB interface for connecting a PC with SENTRON Powerconfig
- Including external power supply
- Including connecting cable to 3VA2 molded case circuit breaker

| Use | Connection | Article No. |
|---|---|---|
| Initiation of various test tripping operations (LSING), ETU parameterization | On the front interface of the ETU | 3VA9987-0MB10 |

**External power supplies for TD500 (spare part)**



| Voltage | Article No. |
|---|---|
| 110 ... 240 V | 3VA9987-0MX10 |

**Connecting cables for connecting TD500 to 3VA2 molded case circuit breakers (spare part)**



| | Article No. |
|---|---|
| | 3VA9987-0MY10 |

[1)] A country-specific radio license is required to operate the Bluetooth interface. Before activating the Bluetooth function, ensure that the license is available: www.siemens.com/lowvoltage/certificates

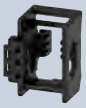
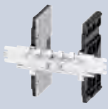
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# Locking, blocking and interlocking



| | | | 3VA11 | 3VA12 | 3VA20<br>3VA21<br>3VA22 |
|---|---|---|---|---|---|
| **Locking** | | | | | |
| • The locking provisions make it possible to lock the 3VA molded case circuit breakers in either the OFF or the ON operating position. | | | | | |
| **Version** | | | | | |
|  Cylinder lock | Key 1 (lock number 1) | | | 3VA9980-0VL10 | |
| | Key 3 (lock number 3) | | | 3VA9980-0VL30 | |
| | Key 4 (lock number 4) | | | 3VA9980-0VL40 | |
|  Adapter kit for mounting the cylinder lock (type RONIS) in the accessories compartment of the molded case circuit breaker | | | 3VA9157-0LF10 | 3VA9257-0LF10 | 3VA9167-0LF10 |
|  Locking provision for handle operating mechanism | | | 3VA9088-0LB10 | | 3VA9388-0LB10 |
| **Interlocking** | | | | | |
| • Using interlocking technology, it is possible to mutually interlock two or more molded case circuit breakers.<br>• The interlock system is designed to ensure that no more than one molded case circuit breaker can be operated at a time.<br>• The following methods of interlocking can be used on 3VA molded case circuit breakers:<br>– Front interlock<br>– Rear interlock | | | | | |
| **Version** | | | | | |
|  Cylinder lock | Key 1 (lock number 1) | | | 3VA9980-0VL10 | |
| | Key 3 (lock number 3) | | | 3VA9980-0VL30 | |
| | Key 4 (lock number 4) | | | 3VA9980-0VL40 | |
|  Sliding bar interlock | | | 3VA9158-0VF30 | 3VA9258-0VF30 | 3VA9168-0VF30 |
|  Handle interlocking module with Bowden cable | | | 3VA9157-0VF10 | 3VA9257-0VF10 | 3VA9167-0VF10 |
|  Bowden cable | | Length 0.6 m | | 3VA9980-0VC10 | |
| | | Length 1.0 m | | 3VA9980-0VC20 | |
| | | Length 1.5 m | | 3VA9980-0VC30 | |
|  Rear interlock with rod | | Circuit breaker, fixed-mounted | | 3VA9088-0VM10 | |
| | | Plug-in/withdrawable technology | | 3VA9088-0VM30 | |
|  Mounting frame for rear interlock with rod | | Mounting rails | | 3VA9088-0VK10 | |
|  | | Mounting plate | 3VA9158-0VK20 | 3VA9258-0VK20 | 3VA9268-0VK20 |

[1] With mounting frame for rear interlock.
Can be used with breaker 3VA15 from "E02" and 3VA25 from "E05" (Line protection CB with TMTU, 3-Series ETU and 5-Series ETU)

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3VA13
3VA14 | 3VA15
3VA23 | 3VA25
3VA24 | 3VA26

## Locking

| | | Use in | Locking in OFF position | Locking in ON position | Front mounting | Rear mounting | Interlocked breakers |
|---|---|---|---|---|---|---|---|
| 3VA9980-0VL10<br>3VA9980-0VL30<br>3VA9980-0VL40 | | Breakers, motor operators, manual operators, withdrawable technology | ■ | ■ | ■ | – | – |
| 3VA9367-0LF10 | 3VA9587-0LF10 | Circuit breaker | ■ | ■ | ■ | – | – |
| 3VA9388-0LB10 | 3VA9588-0LB10 | Circuit breaker | ■ | ■ | ■ | – | – |

## Interlocking

| | | Use in | Locking in OFF position | Locking in ON position | Front mounting | Rear mounting | Interlocked breakers |
|---|---|---|---|---|---|---|---|
| 3VA9980-0VL10<br>3VA9980-0VL30<br>3VA9980-0VL40 | | Breakers, manual operators | ■ | ■ | ■ | – | Unlimited |
| 3VA9368-0VF30 | – | Circuit breaker | – | – | ■ | – | 3 |
| 3VA9367-0VF10 | 3VA9587-0VF10 | Circuit breaker | – | – | ■ | – | 3 |
| 3VA9980-0VC10<br>3VA9980-0VC20<br>3VA9980-0VC30 | | | | | | | |
| 3VA9088-0VM10 | 3VA9588-0VM10 [1] | Circuit breaker, fixed-mounted, plug-in/withdrawable technology | – | – | – | ■ | 2 |
| 3VA9088-0VM30 | – | | | | | | |
| 3VA9088-0VK10 | – | Fixed-mounted | – | – | – | ■ | |
| 3VA9468-0VK20 | – | | | | | | |

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# Cover frame and mounting



| | | 3VA10<br>3VA11 | 3VA12 |
|---|---|---|---|
| **Cover frames for door cut-outs for molded case circuit breakers** | | | |
|  | | | |
| **Number of poles** | **Door cut-out with trip unit** | | |
| 3P | No | 3VA9053-0SB10 | 3VA9253-0SB10 |
| | Yes | 3VA9053-0SB20 | 3VA9253-0SB20 |
| 4P | No | 3VA9054-0SB10 | 3VA9254-0SB10 |
| | Yes | 3VA9054-0SB20 | 3VA9254-0SB20 |
| **Cover frames for motor operators** | | | |
|  | | | |
| **Use** | | | |
| MO320 motor operator | | 3VA9053-0SB20 | 3VA9257-0SB30 |
| Motor operator with SEO520 stored energy mechanism | | – | – |
| **Cover frames for RCD320, RCD520 and RCD820 residual current devices** | | | |
|  | | | |
| **Number of poles** | | | |
| 3P | | 3VA9053-0SB10 | 3VA9253-0SB10 |
| 4P | | 3VA9054-0SB10 | 3VA9254-0SB10 |
| **Cover frames for front mounted rotary operators** | | | |
|  | | | |
| | | 3VA9053-0SB10 | 3VA9253-0SB10 |
| **Cover frames for door feedthroughs** | | | |
|  | | | |
| | | – | 3VA9253-0SB20 |
| **Labeling plates for cover frame** | | | |
|  | | | |
| | | 3VA9087-0SX10 | |
| **DIN-rail adapter for 3VA1 molded case circuit breakers** | | | |
|  | | | |
| **Number of poles** | | | |
| 1P | | 3VA9181-0SH10 [1] | – |
| 2P | | 3VA9182-0SH10 | – |
| 3P and 4P | | 3VA9187-0SH10 | – |
| 3P and 4P in connection with RCD310 or RCD510 | | 3VA9187-0SH20 | – |
| **Mounting screw kits** | | | |
|  | | | |
| **Use** | **Number of poles** | | |
| For fixed-mounted circuit breakers | 1P | 3VA9111-0SS10 | – |
| | 2P and 3P (apart from 125 A/160 A with 55 kA and 70 kA) | 3VA9116-0SS10 | |
| | 3P (125 A/160 A with 55 kA and 70 kA) and 4P | 3VA9114-0SS10 | |
| | 3P | – | – |
| | 4P | – | – |
| | 3P and 4P | – | – |
| For plug-in units | – | 3VA9114-0SS10 | |
| For plug-in and withdrawable technology | – | – | 3VA9114-0SS10 |

[1] For 1-pole 3VA11 molded case circuit breakers up to 25 kA

Adapters for 60 mm busbar system (8US), see page 13/26



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| 3VA20<br>3VA21<br>3VA22 | 3VA13<br>3VA14<br>3VA23<br>3VA24 | 3VA15<br>3VA25<br>3VA26 |
|---|---|---|
| | | |
| | | |
| 3VA9163-0SB10 | 3VA9383-0SB10 | 3VA9503-0SB10 |
| 3VA9163-0SB20 | 3VA9363-0SB20 | 3VA9503-0SB20 |
| 3VA9164-0SB10 | 3VA9384-0SB10 | 3VA9504-0SB10 |
| 3VA9164-0SB20 | 3VA9364-0SB20 | 3VA9504-0SB20 |
| | | |
| | | |
| 3VA9257-0SB30 | 3VA9377-0SB30 | – |
| 3VA9167-0SB30 | 3VA9377-0SB30 | – |
| | | |
| | | |
| 3VA9253-0SB10 | 3VA9303-0SB40 | – |
| 3VA9254-0SB10 | 3VA9304-0SB40 | – |
| | | |
| | | |
| 3VA9163-0SB10 | 3VA9383-0SB10 | 3VA9503-0SB50 |
| | | |
| | | |
| 3VA9253-0SB20 | 3VA9353-0SB20 | – |
| | | |
| | | |
| | 3VA9087-0SX10 | |
| | | |
| | | |
| – | – | – |
| – | – | – |
| – | – | – |
| – | – | – |
| | | |
| | | |
| – | – | – |
| – | – | – |
| – | – | – |
| 3VA9126-0SS10 | – | – |
| 3VA9124-0SS10 | – | – |
| – | 3VA9328-0SS10 | 3VA9517-0SS10 |
| – | – | 3VA9603-0SS10 |
| 3VA9124-0SS10 | 3VA9328-0SS10 | – |

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# System overview

**For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3va27-configurator**



## Molded case circuit breakers

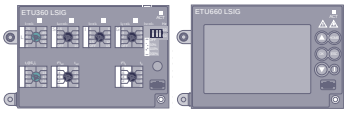


Handle



Stored energy mechanism

## Trip units



Electronic trip unit (ETU)

## Accessories



Communications module



Rating plugs



Breaker Connect module



Test devices and breaker data adapters

## Main conductor connections



Rear vertical/ horizontal



Rear broadened



Front extended



Front broadened



Cable lug

## Accessories



Phase barriers



Terminal cover

## Motors



Spring charging motor

## Accessories



Mechanical operating cycles counter (MOC)

## Auxiliary releases/closing coils



Undervoltage release (UVR)/ Shunt trip (ST)



Closing coil (CC)/ Remote reset magnet (RR)

**Note:**
You will find a detailed range of accessories in the Accessories and spare parts section.

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## Auxiliary switches



Trip alarm switch



Ready-to-close signaling switch (RTC)



Auxiliary switch ON/OFF (AUX)



Trip alarm switch (S24)



Trip alarm switch (TAS)

## Other accessories



Interlocking sets



Locking provision



Locking mechanism



Door sealing frame



Protective cover



Mechanical interlock



Manual operator

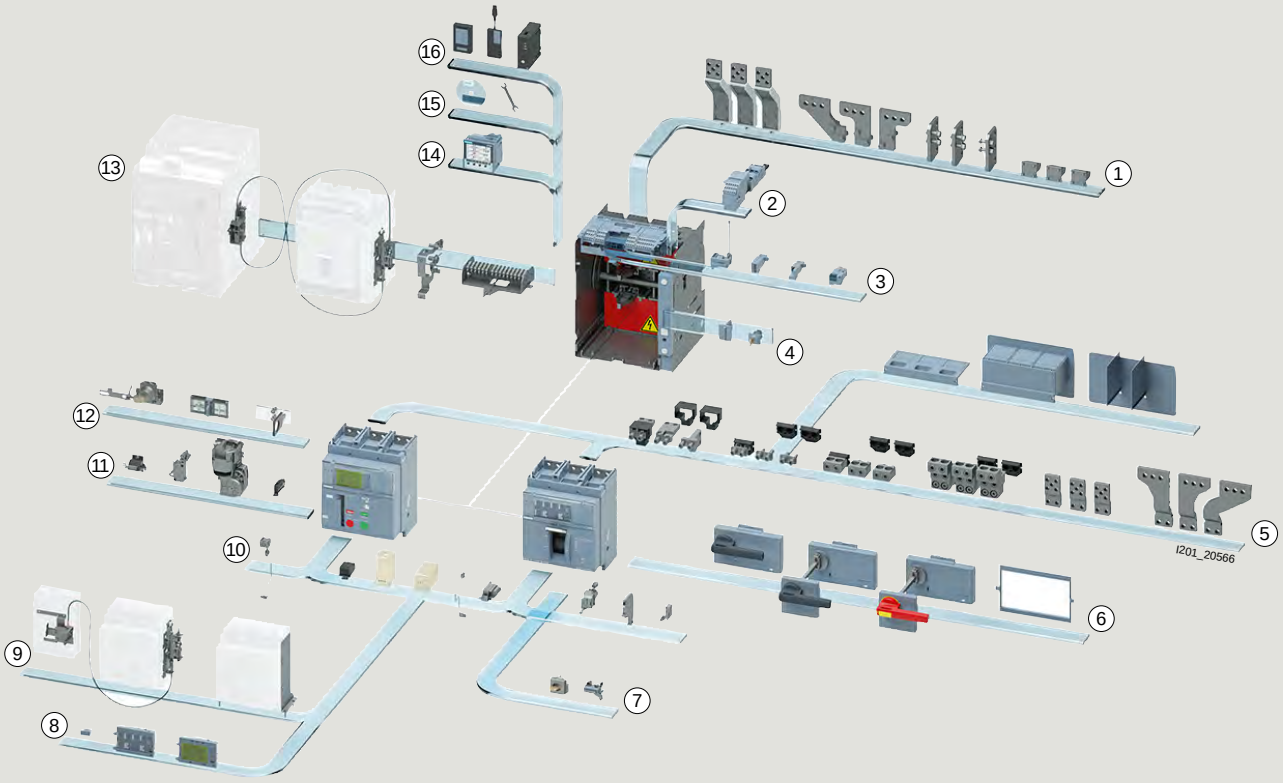
**Note:**
You will find a detailed range of accessories in the Accessories and spare parts section.

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# System overview




1 Connection technology for guide frame
2 Position signaling switch
3 Communication modules
4 Locking for guide frame
5 Connection technology for fixed-mounted circuit breaker
6 Manual operators
7 Sliding bar interlock
8 Electronic trip units (ETUs)
9 Interocking for fixed-mounted circuit breaker
10 Auxiliary and alarm switches/auxiliary releases
11 Spring charging motor and accessories
12 Accessories for locking, blocking, and interlocking for synchronizable spring charging motor (SEO)
13 Interlocking for guide frame/external accessories
14 DSP800 display
15 SENTRON Powerconfig software
16 Test devices

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# Structure of the article numbers

## Basic configuration with handle operating mechanism

**The structure shown below is intended as an overview of each position and its meaning. For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3va27-configurator**

| | 6 | 7 | | 8 | 9 | 10 | 11 | 12 | | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **3VA27** | ■ | ■ | – | ■ | ■ | ■ | ■ | ■ | – | □ | □ | □ | □ |



## Molded case circuit breakers and ETUs

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Max. rated current $I_{n\,max}$** | 800 A | | | | 8 | 0 | | |
| | 1000 A | | | | 1 | 0 | | |
| | 1250 A | | | | 1 | 2 | | |
| | 1600 A | | | | 1 | 6 | | |
| **Short-circuit breaking capacity $I_{cu} = I_{cs}$ at 415 V** | Handle operating mechanism | 55 kA | | 5 | | | | |
| | | 85 kA | | 6 | | | | |
| | | 110 kA | | 7 | | | | |
| **Molded case switches** | Without metering function, without communications interface | Without trip unit | | | A | A | | |
| **Circuit breakers, ETU 3-series** | Without metering function, without communications interface | With trip unit | ETU320 LI (N) [1] | | A | B | | |
| | | | ETU350 LSI (N) [1] | | A | C | | |
| | | | ETU360 LSIG (N) [1] | | A | D | | |
| **Circuit breakers, ETU 6-series** | | With trip unit | ETU650 LSI (N) [1] | | | E | | |
| | | | ETU660 LSIG (N) [1] | | | F | | |
| | Without a communications interface | Without metering function | | | A | | | |
| | With a communications interface | Without metering function | | | B | | | |
| | | Metering function Basic | Voltage tap on bottom | | C | | | |
| | | | Voltage tap on top | | D | | | |
| | | Metering function Advanced | Voltage tap on bottom | | E | | | |
| | | | Voltage tap on top | | F | | | |

[1] Neutral conductor protection for 3-pole breakers with an external neutral conductor transformer or 4-pole breakers

| | | | | |
|---|---|---|---|---|
| **Number of poles** | Fixed-mounted | 3-pole | | 0 |
| | | 4-pole | Neutral left | 1 |
| | | | Neutral right | 2 |
| | Withdrawable | 3-pole | | 3 |
| | | 4-pole | Neutral left | 4 |
| | | | Neutral right | 5 |

## Connections

| | | | |
|---|---|---|---|
| **Type of mounting** | Withdrawable | Withdrawable circuit breaker without guide frame (guide frame must be ordered separately) | 0 |
| | Fixed-mounted breaker/ withdrawable breaker | Rear vertical connection | 1 |
| | | Rear horizontal connection | 2 |
| | | Front main connection | 3 |
| | | Front-accessible, extended main connection | 5 |
| | | Front-accessible, broadened main connection | 6 |
| | | Rear broadened bus connectors | 7 |

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**3VA27** 6 7 – 8 9 10 11 12 – 13 14 15 16

## Alarm switch combinations

| | | |
|---|---|---|
| **Alarm switches** | Without | 0 |
| | With trip alarm switch TAS<br>and trip alarm switch S25 | 1 |
| | With two leading changeover switches S26 | 2 |
| | With trip alarm switch TAS<br>and trip alarm switch S25<br>and two leading changeover switches S26 | 3 |

## Auxiliary releases, closing coils

| | | |
|---|---|---|
| **Closing coil (CC),<br>remote reset magnet (RR)** | Without | A |

| | | | |
|---|---|---|---|
| **2nd auxiliary release** | Without 2nd auxiliary release | | A |
| | With undervoltage release (UVR) | 24 V AC/DC | B |
| | | 30 V AC/DC | C |
| | | 48 V AC/DC | D |
| | | 60 V AC/DC | E |
| | | 110 ... 120 V AC/DC | F |
| | | 120 ... 127 V AC/DC | G |
| | | 220 ... 240 V AC/DC | H |
| | | 240 ... 250 V AC/DC | J |
| | | 380 ... 400 V AC/DC | K |
| | | 415 ... 440 V AC/DC | L |
| | With undervoltage release (UVR),<br>delayable with external time-delay device<br>Scope of supply: UVR + time-delay device | 24 ... 30 V AC/DC | M |
| | | 110 ... 127 V AC/DC | N |
| | | 220 ... 250 V AC/DC | P |
| | With 2nd shunt trip (ST2) | 24 V AC/DC | Q |
| | | 30 V AC/DC | R |
| | | 48 V AC/DC | S |
| | | 60 V AC/DC | T |
| | | 110 ... 120 V AC/DC | U |
| | | 120 ... 127 V AC/DC | V |
| | | 220 ... 240 V AC/DC | W |
| | | 240 ... 250 V AC/DC | X |

| | | | |
|---|---|---|---|
| **1st auxiliary release** | Without 1st auxiliary release | | 0 |
| | Shunt trip (ST) | 24 V AC/DC | 1 |
| | | 30 V AC/DC | 2 |
| | | 48 V AC/DC | 3 |
| | | 60 V AC/DC | 4 |
| | | 110 ... 120 V AC/DC | 5 |
| | | 120 ... 127 V AC/DC | 6 |
| | | 220 ... 240 V AC/DC | 7 |
| | | 240 ... 250 V AC/DC | 8 |

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# Structure of the article numbers

## Basic configuration with stored energy mechanism

**The structure shown below is intended as an overview of each position and its meaning.
For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3va27-configurator**

| | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **3VA27** | | | – | | | | | – | | | |

## Molded case circuit breakers and ETUs

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Max. rated current $I_{n\,max}$** | 800 A | | | 8 | 0 | | | | |
| | 1000 A | | | 1 | 0 | | | | |
| | 1250 A | | | 1 | 2 | | | | |
| | 1600 A | | | 1 | 6 | | | | |
| **Short-circuit breaking capacity $I_{cu} = I_{cs}$ at 415 V** | Stored energy mechanism | 55 kA | | | | 1 | | | |
| | | 85 kA | | | | 2 | | | |
| | | 110 kA | | | | 3 | | | |
| **Molded case switches** | Without metering function, without communications interface | Without trip unit | | | | A | A | | |
| **Circuit breakers, ETU 3-series** | Without metering function, without communications interface | With trip unit | ETU320 LI | (N) [1] | | A | B | | |
| | | | ETU350 LSI | (N) [1] | | A | C | | |
| | | | ETU360 LSIG | (N) [1] | | A | D | | |
| **Circuit breakers, ETU 6-series** | | With trip unit | ETU650 LSI | (N) [1] | | | E | | |
| | | | ETU660 LSIG | (N) [1] | | | F | | |
| | Without a communications interface | Without metering function | | | | A | | | |
| | With a communications interface | Without metering function | | | | B | | | |
| | | Metering function Basic | Voltage tap on bottom | | | C | | | |
| | | | Voltage tap on top | | | D | | | |
| | | Metering function Advanced | Voltage tap on bottom | | | E | | | |
| | | | Voltage tap on top | | | F | | | |

[1] Neutral conductor protection for 3-pole breakers with an external neutral conductor transformer or 4-pole breakers

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Number of poles** | Fixed-mounted | 3-pole | | | | | 0 | | |
| | | 4-pole | Neutral left | | | | 1 | | |
| | | | Neutral right | | | | 2 | | |
| | Withdrawable | 3-pole | | | | | 3 | | |
| | | 4-pole | Neutral left | | | | 4 | | |
| | | | Neutral right | | | | 5 | | |

## Connections

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Type of mounting** | Withdrawable | Withdrawable circuit breaker without guide frame (guide frame must be ordered separately) | | | | | | 0 | |
| | Fixed-mounted breaker/ withdrawable breaker | Rear vertical connection | | | | | | 1 | |
| | | Rear horizontal connection | | | | | | 2 | |
| | | Front main connection | | | | | | 3 | |
| | | Front-accessible, extended main connection | | | | | | 5 | |
| | | Front-accessible, broadened main connection | | | | | | 6 | |
| | | Rear broadened bus connectors | | | | | | 7 | |

## Motor

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Operating mechanisms** | Manual operator | | | | | | | | 0 |
| | Spring charging motor | | 24 ... 30 V AC/DC | | | | | | 1 |
| | | | 48 ... 60 V AC/DC | | | | | | 2 |
| | | | 110 V AC/DC | | | | | | 3 |
| | | | 230 V AC/DC | | | | | | 4 |

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## Auxiliary releases, closing coils, remote reset magnets

| | | | 14 | 15 | 16 |
|---|---|---|---|---|---|
| **Closing coil (CC), remote reset magnet (RR)** | Without | | A | | |
| | Closing coil (CC) | 24 V AC/DC | B | | |
| | | 30 V AC/DC | C | | |
| | | 48 V AC/DC | D | | |
| | | 60 V AC/DC | E | | |
| | | 110 ... 120 V AC/DC | F | | |
| | | 120 ... 127 V AC/DC | G | | |
| | | 220 ... 240 V AC/DC | H | | |
| | | 240 ... 250 V AC/DC | J | | |
| | Closing coil (CC) and additional remote reset magnet (RR) | 24 V AC/DC | K | | |
| | | 110 V AC/DC | L | | |
| | | 220 V AC/DC | M | | |
| **2nd auxiliary release** | Without 2nd auxiliary release | | | A | |
| | With undervoltage release (UVR) | 24 V AC/DC | | B | |
| | | 30 V AC/DC | | C | |
| | | 48 V AC/DC | | D | |
| | | 60 V AC/DC | | E | |
| | | 110 ... 120 V AC/DC | | F | |
| | | 120 ... 127 V AC/DC | | G | |
| | | 220 ... 240 V AC/DC | | H | |
| | | 240 ... 250 V AC/DC | | J | |
| | | 380 ... 400 V AC/DC | | K | |
| | | 415 ... 440 V AC/DC | | L | |
| | With undervoltage release (UVR), delayable with external time-delay device Scope of supply: UVR + time-delay device | 24 ... 30 V AC/DC | | M | |
| | | 110 ... 127 V AC/DC | | N | |
| | | 220 ... 250 V AC/DC | | P | |
| | With 2nd shunt trip (ST2) | 24 V AC/DC | | Q | |
| | | 30 V AC/DC | | R | |
| | | 48 V AC/DC | | S | |
| | | 60 V AC/DC | | T | |
| | | 110 ... 120 V AC/DC | | U | |
| | | 120 ... 127 V AC/DC | | V | |
| | | 220 ... 240 V AC/DC | | W | |
| | | 240 ... 250 V AC/DC | | X | |
| **1st auxiliary release** | Without 1st auxiliary release | | | | 0 |
| | Shunt trip (ST) | 24 V AC/DC | | | 1 |
| | | 30 V AC/DC | | | 2 |
| | | 48 V AC/DC | | | 3 |
| | | 60 V AC/DC | | | 4 |
| | | 110 ... 120 V AC/DC | | | 5 |
| | | 120 ... 127 V AC/DC | | | 6 |
| | | 220 ... 240 V AC/DC | | | 7 |
| | | 240 ... 250 V AC/DC | | | 8 |

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# Accessory options

**For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3va27-configurator**

To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

**3VA27..-.....-.... -Z**



## Accessories for basic configuration

### Mounting options for fixed-mounted circuit breakers

- In the basic configuration, the fixed-mounted circuit breaker is mounted onto the rear panel. Floor mounting is possible as an option. The device must additionally be modified if it is to be extended to include functionalities such as external auxiliary switches or mechanical interlocking mechanism.[1)]

| | | | | Order code |
|---|---|---|---|---|
| **Mounting options for fixed-mounted circuit breakers**[1)] | Floor mounting | Mounting support standard | WL, 3VA | A07 |
| | | Mounting support extended[2)] | WL, 3VA | S56 |
| | Rear panel mounting onto mounting plate | Side wall extended[2)] | WL, 3VA | S57 |

## Accessories for electronic trip units ETU

### Rating plugs

- As standard, the electronic trip units are equipped with a rating plug for setting the rated current $I_n$, which is equal to the maximum rated circuit breaker current (< $I_{n\ max}$). The rated current of the selected rating plug must be less than or equal to $I_{n\ max}$.
- To downrate the circuit breaker, a rated current smaller than $I_{n\ max}$ is selected for the rating plug via a Z option.
- Other functions can also be activated using rating plugs (L = OFF or Rc protection).

| | | | | | Order code |
|---|---|---|---|---|---|
| **Rating plug** | For setting the rated current $I_n$ | For all ETUs | 400 A | WL, 3VA | B04 |
| | | | 630 A | WL, 3VA | B06 |
| | | | 800 A | WL, 3VA | B08 |
| | | | 1000 A | WL, 3VA | B10 |
| | | | 1200 A | WL, 3VA | B12 |
| | For setting the rated current $I_n$, with overload protection L = OFF | For 6-series ETUs | 400 A | WL, 3VA | L04 |
| | | | 630 A | WL, 3VA | L06 |
| | | | 800 A | WL, 3VA | L08 |
| | | | 1000 A | WL, 3VA | L10 |
| | | | 1250 A | WL, 3VA | L12 |
| | | | 1600 A | WL, 3VA | L16 |
| | For setting the rated current $I_n$, For enabling the residual current protective function. The residual current function is only possible with the MF Advanced metering function. | For ETU660 only | 400 A | WL, 3VA | G04 |
| | | | 630 A | WL, 3VA | G06 |
| | | | 800 A | WL, 3VA | G08 |
| | | | 1250 A | WL, 3VA | G12 |

### Communications modules

- Up to 2 different communication modules can be used at the same time.
- When using an IOM040 digital I/O module (Z option K56), only 1 communication module can be used.

| | | | | Order code |
|---|---|---|---|---|
| **Communications modules** | COM040 | PROFIBUS | WL, 3VA | F02 |
| | COM041 | PROFINET | WL, 3VA | F03 |
| | COM043 | Modbus TCP | WL, 3VA | F11 |
| | COM042 | Modbus RTU | WL, 3VA | F12 |

### Breaker Connect modules

- When a circuit breaker with a communications interface is ordered, a Breaker Connect module for external 24 V DC power supply of the electronic components is also supplied ready installed as standard.
- By means of this Z option, the Breaker Connect module for 24 V DC is replaced by a Breaker Connect module for 110 ... 240 V AC/DC.

| | | | | Order code |
|---|---|---|---|---|
| **Breaker Connect module** | 110 ... 240 V AC/DC | | WL, 3VA | F26 |

### I/O modules internal

| | | | | Order code |
|---|---|---|---|---|
| **I/O modules internal** | IOM040 digital I/O module | 2 inputs, 2 outputs | WL, 3VA | K56 |

WL For molded case circuit breakers with stored energy mechanism

3VA For molded case circuit breakers with handle operating mechanism

[1)] These functionalities can be applied directly to the frame of the withdrawable circuit breaker, without any modification of the side wall.

[2)] Not possible in connection with or as an alternative to the mounting support, standard (A07).



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To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

**3VA27..-.....-.... -Z**

| | | | | | | Order code |
|---|---|---|---|---|---|---|
| **Accessories for motors** | | | | | | |
| **Mechanical operating cycles counter, 5-digit** | | | | – | | C01 |
| **Auxiliary switches and signaling switches** | | | | | | |
| • Auxiliary and signaling switches for currents > 100 mA and up to 400 V AC are installed as standard. | | | | | | |
| • For currents < 100 mA for PLC connections, these auxiliary and signaling switches can be replaced. | | | | | | |
| • The auxiliary/signaling switches for 24 V DC digital signals are designed for | | | | | | |
| – a minimum load above 1 mA at 5 V DC, and | | | | | | |
| – a maximum breaking capacity of 100 mA at 24 V DC. | | | | | | |
| **Position signaling switches for guide frames** [1] | | 2 CO \| 2 CO \| 2 CO (connected \| test \| disconnected position) | | | | K55 |
| **Signaling switch** | Ready-to-close signaling switch | | 1 CO digital 24 V DC | – | | K50 |
| | Trip alarm switch (S24) | | 1 CO digital 24 V DC | | | K53 |
| | Spring charge signaling switch (S21) | | 1 CO digital 24 V DC | – | | K54 |
| **Auxiliary switch** | On/Off AUX | 4 CO digital 24 V DC | | | | K51 |
| | | 2 CO 400 V AC, and 2 CO digital 24 V DC | | | | K52 |
| **Locking, blocking and interlocking** | | | | | | |
| **Locking provisions** [1] | To prevent movement of the withdrawable circuit breaker | Cylinder lock | Made by RONIS | | | R78 |
| | | For no more than 3 padlocks, 8 mm | | | | R65 |
| **Locking mechanism** | To prevent movement to disconnected position | | | | | R79 |
| **Locking provision** | Against unauthorized closing in the operator panel (safe OFF) | Cylinder lock, made by RONIS | | – | | S08 |
| | | For no more than 3 padlocks, plastic 4 mm | | – | | S22 |
| | | For no more than 1 padlock, metal 7 mm | | – | | S23 |
| | | For no more than 2 padlocks, metal 8 mm | | – | | S07 |
| **Interlocking set** | For mechanical ON and/or OFF on the operator panel | For no more than 3 padlocks, plastic 4 mm | | – | | S42 |
| | | For no more than 1 padlock, metal 7 mm | | – | | S43 |
| | | For no more than 2 padlocks, metal 8 mm | | – | | S44 |
| **Protective cover** | For mechanical ON/OFF, not lockable | | | – | | S41 |
| **Door sealing frame IP30** | IP3x | | | | | T30 |

For molded case circuit breakers with stored energy mechanism

For molded case circuit breakers with handle operating mechanism

[1] Can be used both for individual orders of the guide frame and complete orders (circuit breaker + guide frame).

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# Guide frames





## Guide frames for ordering separately without circuit breakers

- Guide frames without breakers up to 1600 A
- **Note:** All CB bus modules for communication COM04x/IOM300/Breaker Connect module, as well as COMPSS signaling switches are configured without frames in the withdrawable circuit breaker and defined there by means of Z options, and are included with the breaker. PSS Standard is always included in the frame and can be changed to an electronics-capable signal by means of a Z option.

| Number of poles | Connection type | 3VA27 Article No. |
|---|---|---|
| 3-pole | Rear vertical | 3VW8116-7AA01 |
| | Rear horizontal | 3VW8116-7AB01 |
| | Front straight bus connectors extended | 3VW8116-7AE01 |
| | Broadened bus connectors | 3VW8116-7AF01 |
| | Rear broadened bus connectors | 3VW8116-7AG01 |
| 4-pole | Rear vertical | 3VW8116-7BA01 |
| | Rear horizontal | 3VW8116-7BB01 |
| | Front straight bus connectors extended | 3VW8116-7BE01 |
| | Broadened bus connectors | 3VW8116-7BF01 |
| | Rear broadened bus connectors | 3VW8116-7BG01 |

To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

**3VW8....-.....-.... -Z**

Order code

## Locking, blocking and interlocking

| | | | | | Order code |
|---|---|---|---|---|---|
| **Locking provision** | To prevent movement of the withdrawable circuit breaker | Cylinder lock, made by RONIS | ≋ | ◢ | R78 |
| | | For no more than 3 padlocks, 8 mm | ≋ | ◢ | R65 |
| **Locking mechanism** | To prevent movement to disconnected position (only in combination with R78 or R65) | | ≋ | ◢ | R79 |

## Auxiliary/signaling switches

| | | | | | Order code |
|---|---|---|---|---|---|
| **Position signaling switch PSS for guide frame** | For 24 V DC digital signals, for minimum currents | 2 CO \| 2 CO \| 2 CO (connected \| test \| disconnected position) | ≋ | ◢ | K55 |

Auxiliary and signaling switches for currents > 100 mA and up to 400 V AC are installed as standard.
For currents < 100 mA for PLC connections, these auxiliary and signaling switches can be modified.
The auxiliary/signaling switches for 24 V DC digital signals are designed for

- a minimum load above 1 mA at 5 V DC, and
- a maximum breaking capacity of 100 mA at 24 V DC.

≋ For molded case circuit breakers with stored energy mechanism

◢ For molded case circuit breakers with handle operating mechanism



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# Electronic trip unit ETU and accessories



## Electronic trip units (ETU)

| Version | With communications/ metering function, enhanced protective functions | Type | Protective function | | 3VA27 Article No. |
|---|---|---|---|---|---|
| With rotary coding switches | No | ETU320 | LIN | | 3VW9011-5AA00 |
| | | ETU350 | LSIN | | 3VW9012-5AA00 |
| | | ETU360 | LSING | | 3VW9012-7AA00 |
| With display | Yes | ETU650 | LSIN | | 3VW9017-5AA00 |
| | | ETU660 | LSING | | 3VW9017-7AA00 |

## Metering functions for ETU650 or ETU660

| Description | Protective function/version | Arrangement | | 3VA27 Article No. |
|---|---|---|---|---|
| Metering function | MF Basic | – | | 3VW9011-0AT01 |
| | MF Advanced | – | | 3VW9011-0AT04 |
| Set of cables for voltage tap for MF | For 4-pole circuit breakers with N conductor right | Top or bottom | | 3VW9011-0AT08 |
| | For 4-pole circuit breakers with N conductor left | Top | | 3VW9011-0AT75 |
| | | Bottom | | 3VW9011-0AT76 |
| | For 3-pole circuit breakers | Top | | 3VW9011-0AT72 |
| | | Bottom | | 3VW9011-0AT73 |

## External current transformers for N conductors

| Accessory for | Use | | 3VA27 Article No. |
|---|---|---|---|
| ETU320, ETU350, ETU360, ETU650, ETU660 | Only for 3-pole circuit breakers | | 3VW9011-0AA30 |

## External current transformers for grounded transformer neutral points

| Accessory for | $G_{ret}$ (Ground return) | | 3VA27 Article No. |
|---|---|---|---|
| ETU660 | 100 A | | 3VW9011-0GF30 |
| | 250 A | | 3VW9011-0GF31 |

## Summation current transformers external Rc-CT for residual current measurement

- Only with MF Advanced metering function and Rc rating plug

| Accessory for | Use | | 3VA27 Article No. |
|---|---|---|---|
| ETU660 | For external residual current measurement | | 3VW9011-0RC30 |

## Remote reset magnets RR for the circuit breakers including tripped signaling

- Remote reset magnet (RR) for resetting the circuit breaker after tripping as a result of overcurrent conditions

| Accessory for | Voltage | | | 3VA27 Article No. |
|---|---|---|---|---|
| ETU320, ETU350, ETU360, ETU650, ETU660 | 24 V DC | | – | 3VW9011-0AK03 |
| | 110 V AC/DC | | – | 3VW9011-0AK05 |
| | 250 V AC/DC | | – | 3VW9011-0AK06 |

## Spare part batteries for electronic trip unit ETU

| Accessory for | | | 3VA27 Article No. |
|---|---|---|---|
| ETU320, ETU350, ETU360, ETU650, ETU660 | | | 3VW9011-0AT38 |

For molded case circuit breakers with stored energy mechanism

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# Electronic trip unit ETU and accessories



## Rating plugs




- Only one module is possible per circuit breaker.

| Accessory for | Version | Rated current $I_n$ | 3VA27 | Article No. |
|---|---|---|---|---|
| ETU320, ETU350, ETU360, ETU650, ETU660 | Rating plugs for setting (< $I_{n\,max}$) the rated current $I_n$ | 400 A | | 3VW9011-0AA53 |
| | | 630 A | | 3VW9011-0AA55 |
| | | 800 A | | 3VW9011-0AA56 |
| | | 1000 A | | 3VW9011-0AA57 |
| | | 1250 A | | 3VW9011-0AA58 |
| | | 1600 A | | 3VW9011-0AA61 |
| ETU 6-series | Rating plug without overload protection (L = OFF) and for setting (< $I_{n\,max}$) the rated current $I_n$ | 400 A | | 3VW9011-0LF53 |
| | | 630 A | | 3VW9011-0LF55 |
| | | 800 A | | 3VW9011-0LF56 |
| | | 1000 A | | 3VW9011-0LF57 |
| | | 1250 A | | 3VW9011-0LF58 |
| | | 1600 A | | 3VW9011-0LF61 |
| ETU660 | Rating plug Rc for ETU660 for enabling of the residual current protective function and setting (< $I_{n\,max}$) of the rated current $I_n$. A residual current function is only possible with the MF advanced metering function. | 400 A | | 3VW9011-0RC53 |
| | | 630 A | | 3VW9011-0RC55 |
| | | 800 A | | 3VW9011-0RC56 |
| | | 1250 A | | 3VW9011-0RC58 |

## CB bus modules - communications modules



- Contains the communications module
- Up to 2 different communications modules can be used at the same time.
- When using a digital I/O module IOM040 (Z option K56), only 1 communications module can be used.
- Can only be used with ETU of the 6-series and require a Breaker Connect module for connection to the circuit breaker. This can also be configured directly on the device by means of a Z option if the communications interface to the ETU 6-series is selected.

| Communications module | Protocol | 3VA27 | Article No. |
|---|---|---|---|
| COM040 | PROFIBUS | | 3VW9011-0AT15 |
| COM041 | PROFINET | | 3VW9011-0AT14 |
| COM043 | Modbus TCP | | 3VW9011-0AT16 |
| COM042 | Modbus RTU | | 3VW9011-0AT17 |

## CB bus modules - I/O modules external IOM300



- For snapping onto DIN rail

| Accessory for | Maximum switching current per contact | Inputs | Outputs | 3VA27 | Article No. |
|---|---|---|---|---|---|
| ETU 6-series | • 2 A at ≤ 30 V DC<br>• 0.8 A at 50 V DC<br>• 0.2 A at 150 V DC<br>• 4 A at 250 V AC | 11 | 10 | | 3VW9011-0AT20 |

## CB bus modules - I/O modules internal IOM040



- When using a digital I/O module IOM040, only 1 communication module can be used.

| Accessory for | Maximum switching current per contact | Inputs | Outputs | 3VA27 | Article No. |
|---|---|---|---|---|---|
| ETU 6-series | • 2 A at ≤ 30 V DC<br>• 0.8 A at 50 V DC<br>• 0.2 A at 150 V DC<br>• 4 A at 250 V AC | 2 | 2 | | 3VW9011-0AT30 |

For molded case circuit breakers with stored energy mechanism

For molded case circuit breakers with handle operating mechanism



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| | | | 3VA27 |
|---|---|---|---|
| **Actuator modules COM ACT** | | | |
|  • For switching the circuit breaker on/off remotely via communication.<br>• Actuation of the closing coil (CC) and the 1st shunt trip (ST).<br>• Can only be used in combination with a communications module, spring charging motor, closing coil and 1st shunt trip.<br>• Automatically included if the communications interface of the ETU 6-series is selected in the basic circuit breaker configuration. | | | |
| **Accessory for** | | | **Article No.** |
| ETU 6-series | | – | 3VW9011-0AT10 |
| **Breaker Connect modules** | | | |
|  • For external power supply for the electronics components | | | |
| **Voltage** | | | **Article No.** |
| 110 ... 240 V AC/DC | | | 3VW9011-0AT06 |
| 24 ... 48 V DC | | | 3VW9011-0AT07 |
| **Auxiliary contact signals for communications interface** | | | |
|  • Auxiliary contacts for signaling the readiness to close or for position signaling switches of the withdrawable positions.<br>• Can only be used in combination with communications module.<br>• Can be combined with standard position signaling switches or ready-to-close signaling contacts.<br>• **Note:** Both signaling switches are automatically included in the basic circuit breaker (COM PSS only with withdrawable versions) if the communications interface of the ETU 6-series is selected. | | | |
| **Function** | | | **Article No.** |
| Ready-to-close signaling switch for communication (COM RTC) | | – | 3VW9011-0AT11 |
| Position signaling switch COM PSS (for withdrawable breaker only) | | | 3VW9011-0AT12 |
| **Test devices and breaker data adapters** | | | |
|  • Usable for all ETU 3-series and 6-series | | | |
| **Description** | **Type** | | **Article No.** |
| Test device<br>• For the trip test via ETU and tripping solenoid including release<br>• Activation of the ETU and the tripping solenoid by means of a battery built into the test device<br>• On activation in the ETU 6-series, the parameters can be configured on the display | TD310 | | 3VW9011-0AT32 |
| Breaker data adapter<br>• As gateway for parameterization of the ETU with SENTRON Powerconfig<br>• For generation of a report of the set parameters with powerservice | TD410 | | 3VW9011-0AT34 |
| Test device and breaker data adapter<br>• As gateway for parameterization of the ETU with SENTRON Powerconfig<br>– Testing a tripping operation using SENTRON Powerconfig<br>• For use with the powerservice software<br>– Testing of the basic protective functions LSING<br>– Testing of the enhanced protective functions<br>– Test data storage<br>– Readout of ETU buffer<br>– Generation of a report of the set parameters | TD420 | | 3VW9011-0AT33 |

For molded case circuit breakers with stored energy mechanism

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# Accessories for connection and insulation



## Front main connections acc. to IEC 60947-2

- Acc. to IEC 60947-2 for 3VA27 up to 1600 A (depending on application conditions)
- To be ordered separately for top and bottom











| Mounting | Version | Mounting onto | Number of poles/quantity | Article No. |
|---|---|---|---|---|
| Fixed-mounted | Front main connections | – | 3-pole/3 units | 3VW9011-0AL01 |
| | | | 4-pole/4 units | 3VW9011-0AL02 |
| | Extended main terminals, including insulation plate and phase barriers, standard | Front main connections | 3-pole/3 units | 3VW9011-0AL77 |
| | | | 4-pole/4 units | 3VW9011-0AL78 |
| | Broadened main terminals, including insulation plate and extended phase barriers | Front main connections, top | 3-pole/3 units | 3VW9011-0AL73 |
| | | Front main connections, bottom | 3-pole/3 units | 3VW9011-0AL75 |
| | | Front main connections, top/bottom | 4-pole/4 units | 3VW9011-0AL74 |
| Withdrawable | Front-accessible terminals for main circuit connection | Guide frame flange | 3-pole/3 units | 3VW9011-0AN01 |
| | | | 4-pole/4 units | 3VW9011-0AN02 |
| | Broadened main circuit connections | Front-accessible terminals for main circuit connection | 3-pole/3 units | 3VW9011-0AN73 |
| | | | 4-pole/4 units | 3VW9011-0AN74 |

## Rear terminals for main circuit connections acc. to IEC 60947-2

- Acc. to IEC 60947-2 for 3VA27 up to 1600 A (depending on application conditions)
- To be ordered separately for top and bottom







| Mounting | Version | Mounting onto | Number of poles/quantity | Article No. |
|---|---|---|---|---|
| Fixed-mounted | Rear terminals for main circuit connection, rotatable for horizontal/vertical connection, including terminal cover | – | 3-pole/3 units | 3VW9011-0AL32 |
| | | | 4-pole/4 units | 3VW9011-0AL33 |
| Withdrawable | Rear terminals for main circuit connection, rotatable for horizontal/vertical connection, including terminal cover | – | 3-pole/3 units | 3VW9011-0AN32 |
| | | | 4-pole/4 units | 3VW9011-0AN33 |
| | Broadened main terminals | Rear horizontal main connections | 3-pole/3 units | 3VW9011-0AN75 |
| | | | 4-pole/4 units | 3VW9011-0AN76 |

## Cu/Al cable connections acc. to IEC 60947-2

- Acc. to IEC 60947-2 for 3VA27 up to 1600 A (depending on application conditions)
- To be ordered separately for top and bottom





| Mounting | Version | Mounting onto | Number of poles/quantity | Article No. |
|---|---|---|---|---|
| Fixed-mounted | Circular conductor terminals 4 × 240 mm² for front cable connection [1], including insulation plate and high, extended terminal cover | Front main connections | 3-pole/3 units | 3VW9011-0AL71 |
| | | | 4-pole/4 units | 3VW9011-0AL72 |
| Withdrawable | Set of circular conductor connection pieces 4 × 240 mm² for cable lugs for rear cable connection | Rear vertical main connections | 3-pole/3 units | 3VW9011-0AN71 |
| | | | 4-pole/4 units | 3VW9011-0AN72 |

[1] For connecting Al cables up to 1000 A

For molded case circuit breakers with stored energy mechanism

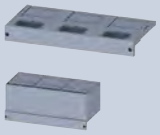
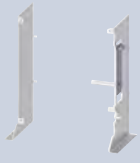
For molded case circuit breakers with handle operating mechanism

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| | | | 3VA27 |
|---|---|---|---|
| **Auxiliary supply connectors in push-in version** | | | |
|  | • Control wire tap in push-in version for upgrading fixed-mounted circuit breakers and guide frames.<br>• The device is always fitted at the factory with the exact number of control wire taps required. | | |
| **Version** | | | **Article No.** |
| Push-in | | | 3VW9011-0AB11 |
| **Terminal covers for fixed-mounted circuit breakers** | | | |
| | • Finger-proof for front main connections for fixed-mounted versions<br>• Necessary isolation measures are always supplied with the corresponding connection technology and do not need to be ordered separately. | | |
| **Version** | **Number of poles/quantity** | | **Article No.** |
|  Standard | 3-pole/2 units | | 3VW9723-0WD30 |
| | 4-pole/2 units | | 3VW9724-0WD40 |
| Extended | 3-pole/2 units | | 3VW9723-0WF30 |
| | 4-pole/2 units | | 3VW9724-0WF40 |
| **Phase barriers for fixed-mounted circuit breakers** | | | |
|  | • Necessary isolation measures are always supplied with the corresponding connection technology and do not need to be ordered separately.<br>• For operational voltages > 440 V AC the use of phase barriers is mandatory; up to 440 V AC their use is optional. | | |
| **Height** | **Number of poles/quantity** | | **Article No.** |
| 100 mm (standard) | 3-pole/4 units | | 3VW9723-0WA00 |
| | 4-pole/6 units | | 3VW9724-0WA10 |
| 200 mm (extended) | 3-pole/4 units | | 3VW9723-0WA01 |
| | 4-pole/6 units | | 3VW9724-0WA11 |
| **Supports for mounting the fixed-mounted circuit breakers on the floor** | | | |
| | • For fixed-mounted versions only | | |
| **Version** | **Use** | | **Article No.** |
|  Mounting support standard (circuit breaker feet) (= Z option A07) | | | 3VW9011-0BB51 |
|  Mounting support extended (circuit breaker feet) including mechanical transmission of switch position on circuit breaker side panel (= Z option S56) | • Fixation for external auxiliary switches AUX 15 CO (3VW9011-0AG15)<br>• Locking mechanism for control cabinet door, direct (for 3VW9011-0BB10)<br>• Locking mechanism for control cabinet door, Bowden cable (for 3VW9011-0BB16),<br>• Mechanical interlock to 3WA/3WL/3VA (for 3VW9011-0BB21) | | 3VW9011-0BB52 |
| **Extension kits for modification of the side wall of the fixed-mounted circuit breakers** | | | |
|  | • For fixed-mounted versions only<br>• Rear fixation on mounting plate<br>• For modification for mechanical transmission of switch position on circuit breaker side panel (= Z option S57) | | |
| **Version** | **Use** | | **Article No.** |
| Extension kit for side wall | • Fixation for external auxiliary switches AUX 15 CO (3VW9011-0AG15)<br>• Locking mechanism for control cabinet door, direct (for 3VW9011-0BB10)<br>• Locking mechanism for control cabinet door, Bowden cable (for 3VW9011-0BB16),<br>• Mechanical interlock to 3WA/3WL/3VA (for 3VW9011-0BB21) | | 3VW9011-0BB53 |

For molded case circuit breakers with stored energy mechanism

For molded case circuit breakers with handle operating mechanism

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# Motor operators and manual operators



## Spring charging motor (MO)



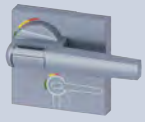
| Description | Voltage | | | Article No. |
|---|---|---|---|---|
| For automatic charging of the stored energy mechanism | 24 ... 30 V AC/DC | ≋ | – | 3VW9011-0AF01 |
| | 48 ... 60 V AC/DC | ≋ | – | 3VW9011-0AF02 |
| | 100 ... 130 V AC/DC | ≋ | – | 3VW9011-0AF03 |
| | 220 ... 250 V AC/DC | ≋ | – | 3VW9011-0AF04 |

## Mechanical operating cycles counter MOC




| Description | Version | | | Article No. |
|---|---|---|---|---|
| Only possible in combination with a spring charging motor. | 5 digits | ≋ | – | 3VW9011-0AH07 |

## Manual operators for handle operating mechanism

| Description | Version | Color | Degree of protection | | | Article No. |
|---|---|---|---|---|---|---|
|  Front mounted rotary operator incl. door sealing frame | Standard | Gray | IP30 | – | ◢ | 3VW9727-0EK11 |
| | EMERGENCY-OFF | Yellow-red | IP30 | – | ◢ | 3VW9727-0EK15 |
|  Door mounted rotary operator | Standard | Gray | IP30 | – | ◢ | 3VW9727-0FK21 |
| | EMERGENCY-OFF | Yellow-red | IP30 | – | ◢ | 3VW9727-0FK25 |
|  | Basic without handle | | IP30 | – | ◢ | 3VW9727-0GK00 |
|  | Shaft stub | | IP30 | – | ◢ | 8UD1900-3WD00 |
|  | Handle | Gray | IP30 | – | ◢ | 8UD1861-0AB11 |
| | | Yellow-red | IP30 | – | ◢ | 8UD1861-0AB15 |

≋ For molded case circuit breakers with stored energy mechanism

◢ For molded case circuit breakers with handle operating mechanism

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# Auxiliary releases, closing coils



## Closing coils CC/shunt trips ST



- **Note:**
  - For molded case circuit breakers with handle operating mechanism, the products can only be used as closing shunt trips ST.
  - For molded case circuit breakers with stored energy mechanism, the products can be used as closing coils CC and shunt trips ST.

| Voltage | Article No. |
|---|---|
| 24 V AC/DC | 3VW9011-0AD01 |
| 30 V AC/DC | 3VW9011-0AD02 |
| 48 V AC/DC | 3VW9011-0AD03 |
| 60 V AC/DC | 3VW9011-0AD04 |
| 110 ... 120 V AC/DC | 3VW9011-0AD05 |
| 120 ... 127 V AC/DC | 3VW9011-0AD06 |
| 220 ... 240 V AC/DC | 3VW9011-0AD07 |
| 240 ... 250 V AC/DC | 3VW9011-0AD08 |
| 380 ... 400 V AC | 3VW9011-0AD17 |
| 415 ... 440 V AC | 3VW9011-0AD18 |

## TD320 function test units for closing coils/shunt trips



- The TD320 test unit allows the operational availability and functions of the closing coils and shunt trips with a rated operational voltage between 24 V and 250 V (AC and DC) to be tested.
- The operational availability test is performed cyclically at intervals of 30 seconds.
- The unit has visual indicators in the form of LEDs on the front in order to display the following states:
  - LED POWER ON LIT: Correct function of the YO/YC test device
  - LED DEACTIVATION LIT: Power supply failure, wire break
  - LED SHORT-CIRCUIT LIT: Winding short-circuit
  - LED DEACTIVATION and SHORT-CIRCUIT FLASHING: Incorrect power supply
  - LED DEACTIVATION and SHORT-CIRCUIT OFF: Closing coil/shunt trips OK

| Description | | Article No. |
|---|---|---|
| For all closing coils/shunt trips | – | 3VW9011-0AT31 |

## Auxiliary/signaling switches



- The auxiliary/signaling switches for 24 V DC digital signals are designed for
  - a minimum load above 1 mA at 5 V DC, and
  - a maximum breaking capacity of 100 mA at 24 V DC
- For external auxiliary switches ON/OFF AUX 15 CO, a 3VW9011-0AG1x fixation must be ordered in addition, and for fixed-mounted circuit breakers a 3VW9011-0BB5x side wall modification

| Description | Contacts | | Article No. |
|---|---|---|---|
| Ready-to-close signal RTC | 1 CO standard | – | 3VW9011-0AH01 |
| | 1 CO digital | – | 3VW9011-0AH02 |
| Auxiliary switch ON/OFF AUX | 4 CO standard | ✓ | 3VW9011-0AG01 |
| | 4 CO digital | ✓ | 3VW9011-0AG02 |
| | 2 CO standard + 2 CO digital | ✓ | 3VW9011-0AG03 |
| External auxiliary switch ON/OFF AUX | 15 CO standard | ✓ | 3VW9011-0AG05 |
| | 15 CO digital | ✓ | 3VW9011-0AG06 |
| Trip alarm switch S24 | 1 CO standard | ✓ | 3VW9011-0AH14 |
| | 1 CO digital | ✓ | 3VW9011-0AH15 |
| Spring charge signaling switch S21 | 1 CO standard | – | 3VW9011-0AH10 |
| | 1 CO digital | – | 3VW9011-0AH08 |
| Position signaling switches PSS (only with withdrawable versions) | 2 CO \| 2 CO \| 2 CO (connected \| test \| disconnected position) standard | ✓ | 3VW9011-0AH11 |
| | 2 CO \| 2 CO \| 2 CO (connected \| test \| disconnected position) digital | ✓ | 3VW9011-0AH12 |

For molded case circuit breakers with stored energy mechanism

For molded case circuit breakers with handle operating mechanism

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# Auxiliary releases, closing coils



## Auxiliary/signaling switches for handle operating mechanism



- Auxiliary and signaling switches are each offered in two versions:
  - Standard version for currents > 100 mA and up to 400/250 V AC, minimum load above 100 mA at 24 V DC, and maximum breaking capacity 5 A at 250 V AC
  - Digital version for currents < 100 mA for PLC connections, minimum load above 1 mA at 5 V DC, and maximum breaking capacity 100 mA at 24 V DC
- For external auxiliary switches ON/OFF AUX 15 CO, a 3VW9011-0AG1x fixation must be ordered in addition, and for fixed-mounted circuit breakers a 3VW9011-0BB5x side wall modification.

| Description | Contacts | | | 3VA27<br>Article No. |
|---|---|---|---|---|
| Trip alarm switch TAS signals the trip position irrespective of the tripping reason | 1 CO standard | – | ✓ | 3VW9727-0AB11 |
| | 1 CO digital | – | ✓ | 3VW9727-0AB13 |
| Trip alarm switch via auxiliary release S25 signals tripping operations via auxiliary releases (UVR, ST) in UVR/ST2 pocket | 1 CO standard | – | ✓ | 3VW9727-0AB41 |
| | 1 CO digital | – | ✓ | 3VW9727-0AB43 |
| Leading changeover switch S26 (2 units) | 1 NO standard, 250 V AC | – | ✓ | 3VW9727-0AA21 |

## Fixation for external auxiliary switches AUX 15 CO



- External auxiliary switches ON/OFF AUX 15 CO must be ordered separately.

| Version | | | 3VA27<br>Article No. |
|---|---|---|---|
| For fixed-mounted circuit breakers with rear panel or floor mounting (in combination with Z option S56 or S57) | ≋ | ✓ | 3VW9011-0AG15 |
| For guide frames | ≋ | ✓ | 3VW9011-0AG17 |

## Undervoltage releases UVR



| Voltage | | | 3VA27<br>Article No. |
|---|---|---|---|
| 24 V AC/DC | ≋ | ✓ | 3VW9011-0AE01 |
| 30 V AC/DC | ≋ | ✓ | 3VW9011-0AE02 |
| 48 V AC/DC | ≋ | ✓ | 3VW9011-0AE03 |
| 60 V AC/DC | ≋ | ✓ | 3VW9011-0AE04 |
| 110 ... 120 V AC/DC | ≋ | ✓ | 3VW9011-0AE05 |
| 120 ... 127 V AC/DC | ≋ | ✓ | 3VW9011-0AE06 |
| 220 ... 240 V AC/DC | ≋ | ✓ | 3VW9011-0AE07 |
| 240 ... 250 V AC/DC | ≋ | ✓ | 3VW9011-0AE08 |
| 380 ... 400 V AC | ≋ | ✓ | 3VW9011-0AE17 |
| 415 ... 440 V AC | ≋ | ✓ | 3VW9011-0AE18 |

## External time-delay devices for undervoltage releases



- With adjustable delay time from 0.5 to 3 s.
- Suitable for mounting onto DIN rail.

| Voltage | | | 3VA27<br>Article No. |
|---|---|---|---|
| 24 ... 30 V AC/DC | ≋ | ✓ | 3VW9011-0AE10 |
| 48 V AC/DC | ≋ | ✓ | 3VW9011-0AE11 |
| 60 V AC/DC | ≋ | ✓ | 3VW9011-0AE15 |
| 110 ... 127 V AC/DC | ≋ | ✓ | 3VW9011-0AE12 |
| 220 ... 250 V AC/DC | ≋ | ✓ | 3VW9011-0AE13 |

≋ For molded case circuit breakers with stored energy mechanism

✓ For molded case circuit breakers with handle operating mechanism

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# Locking provisions and interlocks



| | | | | 3VA27 |
|---|---|---|---|---|
| **Locking provision to prevent movement of the withdrawable circuit breaker** | | | | |
|  | **Version** | | | **Article No.** |
| | RONIS cylinder lock (spare part for R78) | ≡ | ✓ | 3VW9011-0BA80 |
| | Padlock 8 mm (spare part for R65), for no more than 3 padlocks | ≡ | ✓ | 3VW9011-0BA87 |
| **Locking mechanisms to prevent movement of the withdrawable circuit breakers in disconnected position** | | | | |
|  | • Only possible as a supplement in conjunction with R78 (3VW9011-0BA80) and/or R65 (3VW9011-0BA87). | | | |
| | **Description** | | | **Article No.** |
| | Locking mechanism (spare part for R79) | ≡ | ✓ | 3VW9011-0BA84 |
| **Locking provisions in OFF position** | | | | |
|  | • For fixed-mounted and withdrawable versions<br>• Against unauthorized closing in the operator panel (safe OFF)<br>• The disconnector unit fulfills the requirements for main circuit breakers according to EN 60204-1 | | | |
| | **Description** | | | **Article No.** |
| | Cylinder lock, made by RONIS (spare part for S08) | ≡ | – | 3VW9011-0BA33 |
| **Locking provisions in OFF position** | | | | |
|  | • For fixed-mounted and withdrawable versions<br>• Against unauthorized closing in the operator panel (safe OFF)<br>• The disconnector unit fulfills the requirements for main circuit breakers according to EN 60204-1 | | | |
| | **Description** | **Version** | | **Article No.** |
| | Padlock 4 mm (spare part for S22) | Plastic for no more than 3 locks | ≡ – | 3VW9011-0BA41 |
| | Padlock 7 mm (spare part for S23) | Metal for no more than 1 lock | ≡ – | 3VW9011-0BA42 |
| | Padlock 8 mm (spare part for S07) | Metal for no more than 2 locks | ≡ – | 3VW9011-0BA44 |
| **Locking provision in OFF position for handle operating mechanism with rotary operators** | | | | |
|  | • Against unauthorized closing in the case of molded case circuit breakers with rotary operator | | | |
| | **Description** | | | **Article No.** |
| | For RONIS | | – ✓ | 3VW9727-0VL10 |
| **Locking provision in OFF position for handle operating mechanism without rotary operators** | | | | |
| | • Against unauthorized closing in the operator panel in the case of molded case circuit breakers without rotary operator | | | |
| | **Description** | | | **Article No.** |
|  | For padlocks | | – ✓ | 3VW9727-0LB10 |
|  | For RONIS | | – ✓ | 3VW9727-0LF10 |
| **Interlocking sets for mechanical Open and/or Close on the operator panels** | | | | |
|  | **Description** | **Version** | | **Article No.** |
| | Padlock 4 mm (spare part for S42) | Plastic for no more than 3 locks | ≡ – | 3VW9011-0BA22 |
| | Padlock 7 mm (spare part for S43) | Metal for no more than 1 lock | ≡ – | 3VW9011-0BA23 |
| | Padlock 8 mm (spare part for S44) | Metal for no more than 2 locks | ≡ – | 3VW9011-0BA24 |

≡ For molded case circuit breakers with stored energy mechanism

✓ For molded case circuit breakers with handle operating mechanism

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# Locking provisions and interlocks



## Protective covers for mechanical ON/OFF



- Mechanical ON/OFF to protect against unintentional actuation on the operator panel.
- Not lockable.

| Description | | | 3VA27 Article No. |
|---|---|---|---|
| Not lockable (spare part for S41) | ≋ | – | 3VW9011-0BA21 |

## Mechanical interlock



- Mechanical interlock with Bowden cable 2 m
- For fixed-mounted versions, an additional support 3VW9011-0BB52 (option S56) or extension kit 3VW9011-0BB53 (option S57) must be ordered

| Mounting | Mounting | | | 3VA27 Article No. |
|---|---|---|---|---|
| Fixed-mounted | Rear panel or floor mounting | ≋ | ◢ | 3VW9011-0BB21 |
| Withdrawable | Mounting onto guide frame | ≋ | ◢ | 3VW9011-0BB22 |

## Bowden cables, separate

- One required for each circuit breaker

| Type | 3VA27 Article No. |
|---|---|
| 1000 mm | 3VW9011-0BB23 |
| 2000 mm | 3WL9111-0BB45-0AA0 |
| 3000 mm | 3WL9111-0BB46-0AA0 |

## Locking mechanisms to prevent opening of the control cabinet doors in ON position



- To prevent opening of the control cabinet door in ON position
- It additionally prevents the circuit breaker from being closed when the control cabinet door is open.

| Mounting | Version | | | 3VA27 Article No. |
|---|---|---|---|---|
| Fixed mounted on side panel or floor | Direct fixed interlocking | ≋ | ◢ | 3VW9011-0BB10 |
| | Locking with Bowden cable | ≋ | ◢ | 3VW9011-0BB16 |
| Withdrawable | Direct fixed interlocking | ≋ | ◢ | 3VW9011-0BB14 |
| | Locking with Bowden cable | ≋ | ◢ | 3VW9011-0BB18 |

## Door sealing frames IP30



- For IP4x and higher, you must order the protective cover IP54 3VW9011-0AP03 or 3VW9011-0AP13.

| Description | Mounting | Version | | | 3VA27 Article No. |
|---|---|---|---|---|---|
| Spare part for Z option T30. | Fixed-mounted | IP3x | ≋ | ◢ | 3VW9011-0AP01 |
| | Withdrawable | IP3x | ≋ | – | 3VW9011-0AP02 |
| | | | – | ◢ | 3VW9011-0AP04 |

## Protective covers IP54



- Protective cover/hood IP54 lockable for fixed-mounted circuit breakers and withdrawable breakers
- For implementing degrees of protection IP4x and IP54 when installing in switchboard door.
- Cannot be combined with IP30 door sealing frame and door mounted rotary operator.

| Description | Version | | | 3VA27 Article No. |
|---|---|---|---|---|
| Lock with unique key | IP54 | ≋ | ◢ | 3VW9011-0AP03 |
| Lock with standard key | IP54 | ≋ | ◢ | 3VW9011-0AP13 |

≋ For molded case circuit breakers with stored energy mechanism

◢ For molded case circuit breakers with handle operating mechanism



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# 3VL up to 1600 A, IEC






3VL molded case circuit breaker

## *Product Discontinuation*

The 3VL molded case circuit breaker up to 1600 A IEC can only be ordered as a spare part since 10/2020, and will be removed from the order portfolio from 10/2025 onwards.

**Documents available for downloading:**
You can find comprehensive information on the 3VL molded case circuit breaker in the catalog extract.

3VL molded case circuit breakers
**www.siemens.com/lowvoltage/catalogs (109769073)**

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## Protecting electrical installations from damage

The number of electrical loads is constantly increasing, which places an ever greater load on the electrical installation.

In the event of an overload or short-circuit, miniature circuit breakers safely cut off the connected circuit and reliably protect electrical installations and equipment from damage. Miniature circuit breakers with measuring and communication functions create transparency right down to the final circuit and increase system availability.

Miniature circuit breakers from the SENTRON portfolio are also simple to mount and install. The devices have a uniform design and, with the appropriate accessories, can be expanded by many additional functions.

For industry, buildings or infrastructure – with our versatile portfolio, you will find a suitable miniature circuit breaker for any application.

**Note:**
Products bearing our Siemens EcoTech label are identified by this clickable symbol in the catalog:

Siemens EcoTech

www.siemens.com/lowvoltage/SiemensEcoTech

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# Miniature Circuit Breakers




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# A multitude of additional information ...

## Information + ordering

### All the important things at a glance

For information about miniature circuit breakers, please visit our websites
**www.siemens.com/mcb**
**www.siemens.com/circuit-protection**

### Your product in detail

The SiePortal platform (knowledge base) provides comprehensive information
**www.siemens.com/lowvoltage/product-support**

- Technology Primer
  – Miniature circuit breakers **(109482304)**

The relevant tender specifications can be found at
**www.siemens.com/tenderspecifications**

Use our conversion tool for quick and easy conversion to Siemens products **www.siemens.com/conversion-tool**

### Siemens YouTube channel

- Miniature circuit breakers (general) **sie.ag/59PC9j**

### Everything you need for your order

Refer to SiePortal to find an overview of your products (product catalog)

- Miniature circuit breakers **sie.ag/41HWeiL**

Direct forwarding to the individual products in SiePortal by clicking on the article number in the catalog or entering this web address incl. article number
**www.siemens.com/product_catalog_SIEP?Article No.**

### Smart Control Panel Design

With the Smart Control Panel Design in the TIA Selection Tool, it is possible to design and dimension the electrical equipment of a machine in conformity with the standards – from the suitable switching devices to the correctly dimensioned cables
**www.siemens.com/controlpanel/cpd**

### The fast track to the experts

#### Contact persons in your region

We offer a comprehensive portfolio of services.
You can find your local contacts at
**www.siemens.com/lowvoltage/components/contact**

You will find further information on services at
**www.siemens.com/service-offers**

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at
**www.siemens.com/support-request**

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# … can be found in our online services

## Commissioning + operation

### Your product in detail

The SiePortal platform (knowledge base) provides detailed technical information
**www.siemens.com/lowvoltage/product-support**

- Operating instructions
- Characteristic curves
- Certificates

Online Support app available for download from the **App Store** and **Play Store**
You will find further information at
**www.siemens.com/support-app**

Provision of 3D data (step and u3d data formats)

- SiePortal (product catalog)
  **www.siemens.com/lowvoltage/product-catalog**
- Image database
  **www.siemens.com/lowvoltage/picturedb**

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
**www.siemens.com/cax**

### Manuals

Manuals can be found in SiePortal at
**www.siemens.com/lowvoltage/manuals**

- Configuration Manual
  – Miniature circuit breakers **(45302792)**
- Installation Manual
  – Circuit protection devices with communication and measuring function **(109791805)**
- System Manual
  – Circuit protection devices with communication and measuring function **(109791806)**

### Face-to-face or online training

Our training courses can be found at
**www.siemens.com/sitrain-lowvoltage**

- SENTRON circuit protection devices with measuring and communication function (WT-LVBCOM)
- Basic principles of electrical engineering (WT-LVBGET)
- Protection concept (WT-LVBPC)

### Technical overview – Miniature circuit breakers

#### The fast way to get you to our online services

This page provides you with comprehensive information and links on miniature circuit breakers
**www.siemens.com/lowvoltage/product-support (109769082)**

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# Devices for all applications



## Miniature circuit breakers for basic applications



**Ideal for standard applications**

The 5SL miniature circuit breakers are the new standard with B and C tripping characteristics for applications up to 63 A. They can be used as main control switches to disconnect or isolate equipment.

The 5SL devices are mainly installed in meter panels and small distribution boards to protect circuits for lamps, cookers and even machines, for example, in residential or commercial buildings.

## Miniature circuit breakers for advanced applications



**Ideal for industrial applications**

For circuits with motors or large lamps, semiconductors or strong pulse-generating equipment such as transformers and solenoid valves – the 5SY and 5SP devices are optimized for industrial applications and are proven in use.

The 5SY devices offer you top quality and functionality for installation in complex buildings and industry. With a rated breaking capacity of up to 25 kA, they are able to handle the most challenging requirements at a rated current of 0.3 to 80 A.

**Special features**

- Dual-chamber terminals
- Simple to detach without tools using sliding catches
- Separate switching position indication
- A wide range of accessories
- 5SL60 available as communication-capable miniature circuit breaker

## Circuit breakers for equipment for advanced applications



**Ideal for devices in industry**

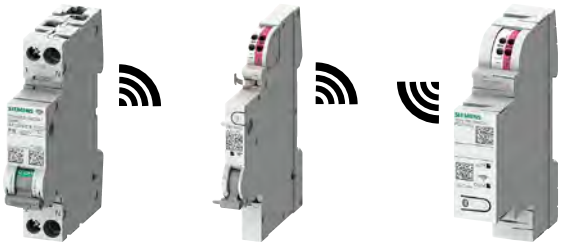
Circuit breakers for equipment from Siemens offer optimum protection for all applications in AC and DC control circuits in industrial applications and plant engineering.

Thermomagnetic 5SY17 circuit breakers for equipment are used to protect solenoid valves, servo motors, signal lamps or even PLC inputs. Everywhere where loads have to be precisely protected from overloads and short-circuits.

Electronic 5SK9 circuit breakers for equipment are optimally suited to protecting, for example, relays, programmable controllers, motors, sensors, actuators and valves. A current analysis in conjunction with fast tripping in the event of a fault avoid the danger of overloading the switched-mode power supply.

## 5SL6 COM miniature circuit breakers and 5ST3 COM auxiliary switches/fault signal contacts with measuring and communication functions

The new communication-capable protective devices and auxiliary components record measured values and status information and transmit this data wirelessly to higher-level systems.



5SL6 COM

see page 3/40

5ST3 COM

see page 3/54

SENTRON Powercenter 1000

see page 10/26

- Recording of energy and active power, current, voltage, line frequency and temperature
- Measurement of residual currents in various frequency ranges
- Integrated status acquisition, operating hours counter and trip counter
- Higher system availability through early response to warning messages
- Convenient integration into new and existing systems thanks to compact mounting widths of 1 MW
- Fast parameterization and commissioning with the SENTRON Powerconfig mobile app or the SENTRON Powerconfig software
- Wireless transmission of measurement data from up to 24 communication-capable devices to the SENTRON Powercenter 1000 data transceiver

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# System overview

## Basic units and accessories

### Miniature circuit breakers for basic applications


5SL3


5SL6


5SL4


5SJ6...-.KS


5SL30


5SL60


5SP3

### Miniature circuit breakers for advanced applications


5SY6


5SY4


5SP4


5SP5


5SY5


5SY7


5SY8


5SJ4..HG..


5SL6 COM (EM)


5SL6 COM (RCM/EM)

### Circuit breakers for equipment for advanced applications


5SY17


5SK9

### Electrical accessories


Auxiliary switches (AS)


Fault signal contacts (FC)


Auxiliary switches and fault signal contacts (AS+FC)/(AS+FC) COM


Shunt trips (ST)


Undervoltage releases (UR)


Remote control auxiliaries (RCA)/(RCA) COM new


5SM6 arc fault detection units

### Mechanical accessories


Rotary operating mechanisms


Spacers


Terminal covers


Wall enclosures


Molded-plastic enclosures


Holders for front panel installation


Intermediate frames

### Busbars and accessories


Compact busbars


Standard busbars


Terminals


Touch protection


End caps


Series connectors


Distribution blocks

**Note:**
You will find a detailed range of accessories with the basic units and in the Accessories section.

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# Miniature circuit breakers

## For basic applications for buildings and infrastructure







| | | | 5SL3 | 5SL6 | 5SL4 |
|---|---|---|---|---|---|
| **Standards** | | | | | |
| Standards | | | IEC/EN 60898-1 | IEC/EN 60898-1 | IEC/EN 60898-1 |
| **Basic data** | | | | | |
| Breaking capacity $I_{cn}$ for AC (230/400 V) | | kA | 4.5 | 6 | 10 |
| Rated current | | A | 0.3 ... 63 | 0.3 ... 63 | 0.3 ... 63 |
| Number of poles | | | 1P \| 2P \| 3P \| 4P \| 1P+N \| 3P+N | 1P \| 2P \| 3P \| 4P \| 1P+N \| 3P+N | 1P \| 2P \| 3P \| 4P \| 1P+N \| 3P+N |
| Tripping characteristic | | | B \| C | B \| C | B \| C \| D |
| **Approvals** | | | | | |
| General product approvals | | | VDE, CEBEC, TSE | VDE, CEBEC, TSE | VDE, CEBEC, IMQ |
| Marine classifications | | | – | – | – |
| **Voltage/frequency** | | | | | |
| Rated voltage AC | | V | 230/400 | 230/400 | 230/400 |
| Max. operational voltage AC | | V | 250/440 | 250/440 | 250/440 |
| Rated voltage DC per phase pole | | V | 60 | 60 | 60 |
| Max. operational voltage DC per phase pole | | V | 62.5 [1) 2)] | 62.5 [1) 2)] | 62.5 [1) 2)] |
| Rated impulse voltage $U_{imp}$ | | kV | 4 | 4 | 4 |
| Rated frequency $f_n$ | | Hz | 50/60 | 50/60 | 50/60 |
| **Connection** | | | | | |
| Dual-chamber terminal | | | – | – | – |
| Conductor cross-section 1 wire | Solid/stranded | $mm^2$ | 0.75 ... 35 | 0.75 ... 35 | 0.75 ... 35 |
| | Finely stranded with end sleeve | $mm^2$ | 0.75 ... 25 | 0.75 ... 25 | 0.75 ... 25 |
| | Finely stranded without end sleeve | $mm^2$ | 1 ... 35 | 1 ... 35 | 1 ... 35 |
| Conductor cross-section 2 wires (same cross-section and same conductor type) | Solid/stranded | $mm^2$ | 0.75 ... 10 | 0.75 ... 10 | 0.75 ... 10 |
| | Finely stranded with end sleeve | $mm^2$ | 0.75 ... 4 | 0.75 ... 4 | 0.75 ... 4 |
| | Finely stranded without end sleeve | $mm^2$ | 1 ... 4 | 1 ... 4 | 1 ... 4 |
| Conductor cross-section 1-wire + busbar (pin thickness 1.5 mm) | Solid/stranded | $mm^2$ | 10 ... 25 | 10 ... 25 | 10 ... 25 |
| | Finely stranded with non-insulated end sleeve | $mm^2$ | 6 ... 25 | 6 ... 25 | 6 ... 25 |
| | Finely stranded with insulated end sleeve | $mm^2$ | 6 ... 16 | 6 ... 16 | 6 ... 16 |
| **Ambient conditions** | | | | | |
| Ambient temperature [3)] | | °C | –25 ... +45 [4)] | –25 ... +45 [4)] | –25 ... +55 [5)] |
| Storage temperature | | °C | –40 ... +75 [6)] | –40 ... +75 [6)] | –40 ... +75 [6)] |
| Shock acc. to IEC 60068-2-27 150 $m/s^2$ at 11 ms half-sine | | | – | – | – |
| Resistance to vibrations acc. to IEC 60068-2-6: 5 ... 25 Hz (±1 mm) and at 25 ... 150 Hz (50 $m/s^2$) | | | – | – | – |
| Resistant to shock and vibrations acc. to EN 61373 and EN 50155 "1B" (railway engineering) | | | – | – | – |
| Fire behavior of materials acc. to EN 45545-2 (fire protection on railway vehicles) | | | – | – | – |
| Degree of pollution for overvoltage category | | | 2/III | 2/III | 2/III |
| **Further information** | | | | | |
| | | | See page 3/12 | See page 3/14 | See page 3/16 |

1) Except for characteristic C: 0.3 A ... 1 A and characteristic D: 0.3 A ... 2 A
2) The operating voltage of 62.5 V DC per pole takes into account a battery charging voltage with a peak value of 72 V
3) The device properties specified, for example, in the product standards, such as service life, breaking capacity and surface temperature, cannot be guaranteed at the specified ambient temperatures that lie outside the specified product standards.
4) Periodically +55 °C, max. 95% humidity
5) Max. 95% humidity
6) Max. 85% rel. humidity, > 45 °C max. 0.056kg/$m^3$ abs. humidity



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| 5SJ6...-.KS | 5SL30 | 5SL60 | 5SP3 |
|---|---|---|---|
| IEC/EN 60898-1 | IEC/EN 60898-1 | IEC/EN 60898-1 | DIN VDE 0641-21 |
| 6 | 4.5 | 6 | 25 |
| 10 ... 20 | 2 ... 40 | 2 ... 40 | 16 ... 63 |
| 1P \| 2P \| 3P \| 1P+N | 1P+N | 1P+N | 1P \| 2P \| 3P \| 4P |
| B \| C | C | B \| C | E |
| VDE | VDE, IMQ, NF, CCC | VDE, IMQ, NF, CCC | VDE |
| – | – | DNV-GL | – |
| 230/400 | 230 | 230 | 230/400 |
| 250/440 | 250 | 250 | 250/440 |
| 60 | 60 | 60 | – |
| 60 | 62.5 [1) 2)] | 62.5 [1) 2)] | – |
| 4 | 4 | 4 | 6 |
| 50/60 | 50/60 | 50/60 | 50/60 |
| Plug-in terminal on outgoing side | – | – | – |
| 1.5 ... 4 (top) \| 0.75 ... 25 (bottom) | 0.75 ... 16 | 0.75 ... 16 | 2.5 ... 50 (bottom) |
| 1.5 ... 2.5 (top) \| 0.75 ... 25 (bottom) | 0.75 ... 10 | 0.75 ... 10 | 2.5 ... 50 (bottom) |
| 1.5 ... 4 | 0.75 ... 16 | 0.75 ... 16 | 2.5 ... 16 (top) |
| – | 0.75 ... 4 | 0.75 ... 4 | – |
| – | 0.75 ... 1.5 | 0.75 ... 1.5 | – |
| – | 0.75 ... 4 | 0.75 ... 4 | – |
| – | – | – | – |
| – | 6 ... 10 | 6 ... 10 | – |
| – | 6 ... 10 | 6 ... 10 | – |
| –25 ... +45 [4)] | –25 ... +60 [6)] | –25 ... +60 [6)] | –25 ... +55 |
| –40 ... +75 [6)] | –40 ... +75 | –40 ... +75 | –40 ... +70 |
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |
| 2/III | 2/III | 2/III | 3/IV |
| See page 3/18 | See page 3/20 | See page 3/22 | See page 3/24 |

System overview, page 3/5

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# Miniature circuit breakers

## For advanced applications for buildings and infrastructure and for industry and mechanical engineering







| | | | | 5SL6 COM | 5SY6 | 5SY4 |
|---|---|---|---|---|---|---|
| **Standards** | | | | | | |
| Standards | | | | IEC/EN 60898-1 | IEC/EN 60898-1<br>IEC/EN 60947-2<br>UL 1077 | IEC/EN 60898-1<br>IEC/EN 60947-2<br>UL 1077 |
| **Basic data** | | | | | | |
| Breaking capacity $I_{cn}$ | For AC (230/400 V) acc. to IEC/EN 60898-1 | | kA | 6 | 6 | 10 |
| | For DC (220/440 V) acc. to IEC/EN 60898-2 | | kA | – | – | – |
| | Acc. to UL1077 and CSA C22.2 No.235 | | | – | Supplementary protector, OC, FW 0, OL 0, TC 3 at 50 °C | Supplementary protector, OC, FW 0, OL 0, TC 3 at 50 °C |
| | | | SC | – | U2: see Certificate of Compliance | U2: see Certificate of Compliance |
| Rated breaking capacity $I_{cu}$ | Acc. to IEC/EN 60947-2 AC at $U_e$ 230 V \| at $U_e$ 400 V (1P, 1P+N) \| (2P, 3P, 4P, 3P+N) | $I_n$ 0.3 ... 2 A | kA | – | 30 \| 30 | 35 \| 35 |
| | | $I_n$ 3 ... 6 A | kA | – | 30 \| 30 | 35 \| 35 |
| | | $I_n$ 8 ... 10 A | kA | – | 15 \| 15 | 20 \| 20 |
| | | $I_n$ 13 ... 32 A | kA | – | 15 \| 15 | 20 \| 20 |
| | | $I_n$ 35 ... 40 A | kA | – | 10 \| 10 | 15 \| 15 |
| | | $I_n$ 50 ... 63 A | kA | – | 10 \| 10 | 15 \| 15 |
| | | $I_n$ 80 ... 125 A | kA | – | – \| – | 10 \| 10 |
| | Acc. to IEC/EN 60947-2 DC at $U_e$ 220 V \| at $U_e$ 440 V (1P) \| (2P, 3P, 4P) | | kA | – | – | – |
| Rated current | | | A | 2 ... 32 | 0.3 ... 63 | 0.3 ... 80 |
| Number of poles | | | | 1P+N | 1P \| 2P \| 3P \| 4P \| 1P+N \| 3P+N | 1P \| 2P \| 3P \| 4P \| 1P+N \| 3P+N |
| Tripping characteristic | | | | B \| C | B \| C | A \| B \| C \| D |
| **Approvals** | | | | | | |
| General product approvals | | | | VDE, RED | VDE, IMQ, CCC, cULus | VDE, IMQ, CCC, cULus |
| Marine classifications | | | | – | DNV-GL, LR, BV, RINA, ABS | DNV-GL, LR, BV, RINA, ABS |
| **Voltage/frequency** | | | | | | |
| Rated voltage AC | | | V | 230 | 230/400 | 230/400 |
| | Acc. to UL 489, UL 1077, CSA C22.2 No.235 | | V | – | 277/480 | 277/480 |
| Max. operational voltage AC | | | V | 250 | 250/440 | 250/440 |
| Rated voltage DC per phase pole | | | V | – | 60 | 60 |
| Max. operational voltage DC per phase pole | | | V | – | 72 [1] | 72 [1] |
| Rated impulse voltage $U_{imp}$ | | | kV | 4 | 4 | 4 |
| Rated frequency $f_n$ | | | Hz | 50/60 | 50/60 | 50/60 |
| **Connection** | | | | | | |
| Dual-chamber terminal | | | | – | ■ | ■ |
| Conductor cross-section 1 wire | Solid/stranded | | $mm^2$ | 0.75 ... 16 | 0.75 ... 35 | 0.75 ... 35 |
| | Finely stranded with end sleeve | | $mm^2$ | 0.75 ... 10 | 0.75 ... 25 | 0.75 ... 25 |
| | Conductors (Cu 60/75 °C $I_n \leq 40$ A; 60 °C $I_n > 40$ A) | | | – | AWG 18 ... 4 | AWG 18 ... 4 |
| Terminal tightening torque | | | Nm | 1.2 ... 2 max. | 2.5 ... 3.5 max. | 2.5 ... 3.5 max. |
| | | | lb-in | 11 ... 18 | 22 ... 26 | 22 ... 26 |
| **Ambient conditions** | | | | | | |
| Ambient temperature [7] | | | °C | –25 ... +60 [5] | –25 ... +55 [4] | –40 ... +70 [3] |
| Storage temperature | | | °C | –40 ... +75 | –40 ... +75 [3] | –40 ... +75 [3] |
| Shock acc. to IEC 60068-2-27 150 $m/s^2$ at 11 ms half-sine | | | | – | ■ | ■ |
| Resistance to vibrations acc. to IEC 60068-2-6: 5 ... 25 Hz (±1mm) and at 25 ... 150 Hz (50 $m/s^2$) | | | | – | ■ | ■ |
| Resistant to shock and vibrations acc. to EN 61373 and EN 50155 "1B" (railway engineering) | | | | ■ | – | ■ |
| Fire behavior of materials acc. to EN 45545-2 (fire protection on railway vehicles) | | | | ■ | – | ■ |
| Degree of pollution for overvoltage category | | | | 2/ III | 3/III | 3/III |
| **Additional functions** | | | | | | |
| Measuring and communication function [8] | | | | ■ | – | – |
| **Further information** | | | | | | |
| | | | | See page 3/40 | See page 3/24 | See page 3/26 |

[1] Exempt: C/D 0.3 A ... 0.5 A
[2] 5SY54.. 4-pole, degree of pollution 2 for overvoltage category II
[3] 95% humidity up to 55 °C, 55% humidity up to 70 °C, 30% humidity up to 75 °C
[4] Max. 95% humidity
[5] Max. 85% rel. humidity, > 45 °C max. 0.056kg/$m^3$ abs. humidity
[6] When used with a busbar at the front or 2 conductors, the terminal area at the rear is restricted, see notes on the Internet

System overview, page 3/5

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| 5SP4 | 5SP5 | 5SY5 | 5SY7 | 5SY8 | 5SJ4..HG.. |
|---|---|---|---|---|---|
| IEC/EN 60898-1<br>UL 1077 | IEC/EN 60947-2 | IEC/EN 60898-2<br>UL 1077 | IEC/EN 60898-1<br>IEC/EN 60947-2<br>UL 1077 | IEC/EN 60947-2<br>UL 1077 | IEC/EN 60947-2<br>UL 489 |
| 10 | – | 10 | 15 | 25 | – |
| – | – | 10 | – | – | – |
| Supplementary protector, OC, FW 0, OL 0, TC 3 at 50 °C | – | Supplementary protector, OC, FW 0, OL 0, TC 3 at 50 °C | Supplementary protector, OC, FW 0, OL 0, TC 3 at 50 °C | Supplementary protector, OC, FW 0, OL 0, TC 3 at 50 °C | – |
| U2: see Certificate of Compliance | – | U2: see Certificate of Compliance | U2: see Certificate of Compliance | U2: see Certificate of Compliance | – |
| – \| – | – \| – | – \| – | 50 \| 50 | 70 \| 70 | 10 |
| – \| – | – \| – | – \| – | 40 \| 40 | 50 \| 50 | 10 |
| – \| – | – \| – | – \| – | 30 \| 30 | 40 \| 40 | 10 |
| – \| – | – \| – | – \| – | 25 \| 25 | 30 \| 30 | 10 |
| – \| – | – \| – | – \| – | 20 \| 20 | 25 \| 25 | 10 |
| – \| – | – \| – | – \| – | 15 \| 15 | 20 \| 20 | 10 |
| 10 \| 10 | – \| – | – \| – | – \| – | – \| – | – |
| – | 10 | 15 | – | – | – |
| 80 ... 125 | 80 ... 125 | 0.3 ... 63 | 0.3 ... 63 | 0.3 ... 63 | 0.3 ... 63 |
| 1P \| 2P \| 3P \| 4P | 1P \| 2P | 1P \| 2P \| 4P | 1P \| 2P \| 3P \| 4P \| 1P+N \| 3P+N | 1P \| 2P \| 3P \| 4P \| 1P+N \| 3P+N | 1P \| 2P \| 3P |
| B \| C \| D | – | B \| C | B \| C \| D | C \| D | B \| C \| D |
| VDE, CCC, cULus | – | VDE, CCC, cULus | VDE, IMQ, CCC, cULus | cULus | VDE, CCC, UL |
| LR | – | ABS | DNV-GL, LR, BV, RINA, ABS | ABS | – |
| 230/400 | – | 230/400 | 230/400 | 230/400 | 230/400 |
| 277/480 | – | – | 277/480 | 277/480 | 240/415 (5SJ4..HG40/41)<br>277/480 (5SJ4..HG42) |
| 250/440 | – | 250/440 | 250/440 | 250/440 | 250/440 |
| 60 | 220 | 220 | 60 | 60 | 60 |
| 72 | 250 | 250 | 72 [1] | 72 [1] | 60 |
| 4 | 4 | 4 | 4 | 4 | 4 |
| 50/60 | 50/60 | 50/60 | 50/60 | 50/60 | 50/60 |
| – | – | ■ | ■ | ■ | ■ |
| 10 ... 50 | 10 ... 50 | 0.75 ... 35 | 0.75 ... 35 | 0.75 ... 35 | 0.75 ... 25 (16) [6] |
| 10 ... 35 | 10 ... 35 | 0.75 ... 25 | 0.75 ... 25 | 0.75 ... 25 | 0.75 ... 25 (10) |
| AWG 3 ... 1 | AWG 3 ... 1 | AWG 18 ... 4 | AWG 18 ... 4 | AWG 18 ... 4 | AWG 18 ... 4 (5) |
| 2.5 ... 3.5 max. | 2.5 ... 3.5 max. | 2.5 ... 3.5 max. | 2.5 ... 3.5 max. | 2.5 ... 3.5 max. | 2.5 ... 3.5 max. |
| 22 ... 31 | 22 ... 31 | 22 ... 26 | 22 ... 26 | 22 ... 26 | 22 ... 26 |
| –25 ... +55 [4] | –25 ... +55 [4] | –40 ... +70 [3] | –40 ... +70 [3] | –25 ... +55 [4] | –25 ... +55 [4] |
| –40 ... +75 [3] | –40 ... +75 [3] | –40 ... +75 [3] | –40 ... +75 [3] | –40 ... +75 [3] | –40 ... +75 [3] |
| – | – | ■ | ■ | – | ■ |
| ■ | – | ■ | ■ | ■ | ■ |
| – | – | ■ | ■ | – | – |
| ■ | – | ■ | ■ | – | – |
| 3/III | 3/III | 3/III [4] | 3/III | 3/III | 3/III |
| – | – | – | – | – | – |
| See page 3/28 | See page 3/30 | See page 3/32 | See page 3/34 | See page 3/36 | See page 3/38 |

[7] The device properties specified, for example, in the product standards, such as service life, breaking capacity and surface temperature, cannot be guaranteed at the specified ambient temperatures that lie outside the specified product standards.

[8] Please note the country-specific radio licenses of the products at www.siemens.com/lowvoltage/certificates (109801197)

System overview, page 3/5

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# Circuit breakers for equipment

## For advanced applications for industry and mechanical engineering



| | | | 5SY17 |
|---|---|---|---|
| **Standards** | | | |
| Standards | | | IEC/EN 60934<br>UL 1077 |
| **Basic data** | | | |
| Breaking capacity $I_{cn}$ | At rated voltage | kA | 3 |
| Rated current | | A | 0.5 ... 16 |
| Number of poles | | | 1P+AS |
| DC tripping | Magnetic | | F1 (2.5 ... 4 × $I_n$) \| F2 (4 ... 7 × $I_n$) |
| | Thermal | | 1.05 × holding current \| 1.35 × tripping current \| TC3 1.35 × $I_n$ |
| | Electronic | | – |
| **Approvals** | | | |
| General product approvals | | | CCC, cULus |
| **Voltage/frequency** | | | |
| Rated voltage AC | Acc. to IEC/DIN EN 60934 | V | 230 |
| | Acc. to UL 1077 | V | 277 |
| Min. operational voltage AC | | V | 12 [1] |
| Max. operational voltage AC | | V | 250 |
| Rated voltage DC per phase pole | | V | 60 |
| Min. operational voltage DC per phase pole | | V | 12 [1] |
| Max. operational voltage DC per phase pole | | V | 62.5 [2] |
| Rated impulse voltage $U_{imp}$ | | kV | 4 |
| Rated frequency $f_n$ | | Hz | 50/60 |
| **Auxiliary switch** | | | |
| MIn. operational voltage (AC) | | V | 12 |
| Max. operational voltage (AC) | | V | 250 |
| MIn. operational voltage (DC) | | V | 12 |
| Max. operational voltage (DC) | | V | 60 |
| Utilization category AC-12 | | | 6 A at 230 V AC |
| Utilization category AC-14 | | | 6 A at 230 V AC |
| Utilization category DC-13 | | | 1 A at 60 V DC |
| **Connection** | | | |
| Dual-chamber terminal | | | – |
| Conductor cross-section 1 wire | Solid/stranded | mm² | 0.75 ... 16 |
| | Finely stranded with end sleeve | mm² | 0.75 ... 10 |
| | Finely stranded with insulated end sleeve | mm² | 0.75 ... 10 |
| | Finely stranded without end sleeve | mm² | 0.75 ... 16 |
| | Conductor cross-section AWG | | – |
| 2-wire (same cross-section) | Solid/stranded | mm² | 0.75 ... 4 |
| | Finely stranded with end sleeve | mm² | 0.75 ... 2.5 |
| | Finely stranded with insulated end sleeve | mm² | 0.75 ... 1.5 |
| | Finely stranded without end sleeve | mm² | 0.75 ... 4 |
| Terminal tightening torque | | Nm | 2.0 ... 2.5 max. |
| | | lb-in | 17.7 ... 22.1 |
| **Ambient conditions** | | | |
| Ambient temperature | | °C | –25 ... +60 [3] |
| Storage temperature | | °C | –40 ... +70 |
| Shock acc. to IEC 60068-2-27 150 m/s² at 11 ms half-sine | | | – |
| Resistance to vibrations acc. to IEC 60068-2-6: 5 ... 25 Hz (±1mm) and at 25 ... 150 Hz (50 m/s²) | | | – |
| Resistant to shock and vibrations acc. to EN 61373 and EN 50155 "1B" (railway engineering) | | | ■ |
| Fire behavior of materials acc. to EN 45545-2 (fire protection on railway vehicles) | | | ■ |
| Degree of pollution for overvoltage category | Acc. to IEC | | 2/III |
| **Further information** | | | |
| | | | See page 3/46 |

[1] At a minimum current of 100 mA

[2] The operating voltage of 62.5 V DC per pole takes into account a battery charging voltage with a peak value of 72 V

[3] Max. 85% rel. humidity, > 45 °C max. 0.056kg/m³ abs. humidity

[4] Max. 95% humidity



System overview, page 3/5

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## 5SK9

| |
|---|
| |
| EN 61000-6-2, EN 61000-6-3, EN 60068-2-78, EN 50178, EN 60068-2-6, EN 60068-2-27, UL 508, UL 2367 |
| |
| – |
| 1 ... 8 |
| 1P+AS |
| – |
| – |
| Overload 1.2 × $I_n$/1s \| Short-circuit 2 × $I_n$/< 10 ms |
| |
| cULus |
| |
| – |
| – |
| – |
| – |
| 24 |
| – |
| 30 |
| 0.5 |
| – |
| |
| – |
| – |
| – |
| – |
| – |
| – |
| – |
| |
| – |
| 0.2 ... 4 |
| 0.2 ... 2.5 |
| 0.2 ... 2.5 |
| – |
| AWG 24 ... 12 |
| – |
| – |
| – |
| – |
| – |
| – |
| |
| –25 ... +60 [4] |
| –40 ... +70 |
| – |
| – |
| – |
| – |
| – |
| |
| See page 3/47 |

System overview, page 3/5

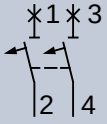
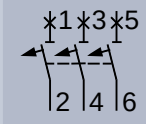
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# 5SL3 miniature circuit breakers

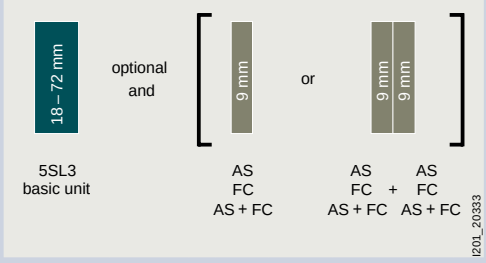
## 4.5 kA



| | 1P | 1P+N | 2P | 3P |
|---|---|---|---|---|
| **Rated voltage $U_n$** | 230/400 V AC | 230 V AC | 400 V AC | 400 V AC |
| **Mounting width** | 1 MW | 2 MW | 2 MW | 3 MW |
| |  |  |  |  |

| Rated current $I_n$ | Characteristic | | Characteristic | | Characteristic | | Characteristic | |
|---|---|---|---|---|---|---|---|---|
| | B | C | B | C | B | C | B | C |
| 0.3 A | – | 5SL3114-7 | – | 5SL3514-7 | – | 5SL3214-7 | – | – |
| 0.5 A | – | 5SL3105-7 | – | 5SL3505-7 | – | 5SL3205-7 | – | – |
| 1 A | – | 5SL3101-7 | – | 5SL3501-7 | – | 5SL3201-7 | – | 5SL3301-7 |
| 1.6 A | – | 5SL3115-7 | – | 5SL3515-7 | – | 5SL3215-7 | – | – |
| 2 A | – | 5SL3102-7 | – | 5SL3502-7 | – | 5SL3202-7 | – | 5SL3302-7 |
| 3 A | – | 5SL3103-7 | – | 5SL3503-7 | – | 5SL3203-7 | – | 5SL3303-7 |
| 4 A | – | 5SL3104-7 | – | 5SL3504-7 | – | 5SL3204-7 | – | 5SL3304-7 |
| 6 A | 5SL3106-6 | 5SL3106-7 | 5SL3506-6 | 5SL3506-7 | 5SL3206-6 | 5SL3206-7 | 5SL3306-6 | 5SL3306-7 |
| 8 A | – | 5SL3108-7 | – | 5SL3508-7 | – | 5SL3208-7 | – | – |
| 10 A | 5SL3110-6 | 5SL3110-7 | 5SL3510-6 | 5SL3510-7 | 5SL3210-6 | 5SL3210-7 | 5SL3310-6 | 5SL3310-7 |
| 13 A | 5SL3113-6 | 5SL3113-7 | 5SL3513-6 | 5SL3513-7 | 5SL3213-6 | 5SL3213-7 | – | – |
| 16 A | 5SL3116-6 | 5SL3116-7 | 5SL3516-6 | 5SL3516-7 | 5SL3216-6 | 5SL3216-7 | 5SL3316-6 | 5SL3316-7 |
| 20 A | 5SL3120-6 | 5SL3120-7 | 5SL3520-6 | 5SL3520-7 | 5SL3220-6 | 5SL3220-7 | 5SL3320-6 | 5SL3320-7 |
| 25 A | 5SL3125-6 | 5SL3125-7 | 5SL3525-6 | 5SL3525-7 | 5SL3225-6 | 5SL3225-7 | 5SL3325-6 | 5SL3325-7 |
| 32 A | 5SL3132-6 | 5SL3132-7 | 5SL3532-6 | 5SL3532-7 | 5SL3232-6 | 5SL3232-7 | 5SL3332-6 | 5SL3332-7 |
| 40 A | 5SL3140-6 | 5SL3140-7 | 5SL3540-6 | 5SL3540-7 | 5SL3240-6 | 5SL3240-7 | 5SL3340-6 | 5SL3340-7 |
| 50 A | 5SL3150-6 | 5SL3150-7 | 5SL3550-6 | 5SL3550-7 | 5SL3250-6 | 5SL3250-7 | 5SL3350-6 | 5SL3350-7 |
| 63 A | 5SL3163-6 | 5SL3163-7 | 5SL3563-6 | 5SL3563-7 | 5SL3263-6 | 5SL3263-7 | 5SL3363-6 | 5SL3363-7 |

## Mounting concept




| | | |
|---|---|---|
| AS | Auxiliary switches | See page 3/50 |
| FC | Fault signal contacts | See page 3/52 |
| AS+FC | Auxiliary switches and fault signal contacts | See page 3/53 |

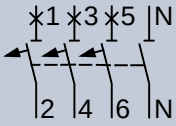
Quick selection guide, page 3/6

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| 3P+N | | 4P | |
|---|---|---|---|
| 400 V AC | | 400 V AC | |
| 4 MW | | 4 MW | |
|  | |  | |
| **Characteristic** | | **Characteristic** | |
| **B** | **C** | **B** | **C** |
| – | – | – | – |
| – | – | – | – |
| – | 5SL3601-7 | – | 5SL3401-7 |
| – | – | – | – |
| – | 5SL3602-7 | – | 5SL3402-7 |
| – | 5SL3603-7 | – | 5SL3403-7 |
| – | 5SL3604-7 | – | 5SL3404-7 |
| 5SL3606-6 | 5SL3606-7 | – | 5SL3406-7 |
| – | 5SL3608-7 | – | – |
| 5SL3610-6 | 5SL3610-7 | – | 5SL3410-7 |
| 5SL3613-6 | 5SL3613-7 | – | 5SL3413-7 |
| 5SL3616-6 | 5SL3616-7 | – | 5SL3416-7 |
| 5SL3620-6 | 5SL3620-7 | – | 5SL3420-7 |
| 5SL3625-6 | 5SL3625-7 | – | 5SL3425-7 |
| 5SL3632-6 | 5SL3632-7 | – | 5SL3432-7 |
| 5SL3640-6 | 5SL3640-7 | – | 5SL3440-7 |
| 5SL3650-6 | 5SL3650-7 | – | 5SL3450-7 |
| 5SL3663-6 | 5SL3663-7 | – | 5SL3463-7 |

## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

| Fault signal contacts (FC) | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3020 |
| 2 NO | 5ST3021 |
| 2 NC | 5ST3022 |
| **Auxiliary switches and fault signal contacts (AS+FC)** | **Article No.** |
| 1 CO (AS) + 1 CO (FC) | 5ST3062 |
| 5ST3 COM (AS+FC) | 5ST3062-0MC |

Quick selection guide, page 3/6

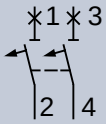
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# 5SL6 miniature circuit breakers

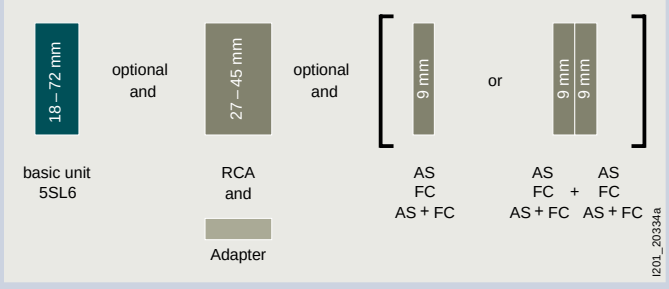
## 6 kA



| | 1P | 1P+N | 2P |
|---|---|---|---|
| **Rated voltage $U_n$** | 230/400 V AC | 230 V AC | 400 V AC |
| **Mounting width** | 1 MW | 2 MW | 2 MW |
| |  |  |  |

| Rated current $I_n$ | Characteristic | | Characteristic | | Characteristic | |
|---|---|---|---|---|---|---|
| | B | C | B | C | B | C |
| 0.3 A | – | 5SL6114-7 | – | 5SL6514-7 | – | 5SL6214-7 |
| 0.5 A | – | 5SL6105-7 | – | 5SL6505-7 | – | 5SL6205-7 |
| 1 A | – | 5SL6101-7 | – | 5SL6501-7 | – | 5SL6201-7 |
| 1.6 A | – | 5SL6115-7 | – | 5SL6515-7 | – | 5SL6215-7 |
| 2 A | 5SL6102-6 | 5SL6102-7 | – | 5SL6502-7 | – | 5SL6202-7 |
| 3 A | – | 5SL6103-7 | – | 5SL6503-7 | – | 5SL6203-7 |
| 4 A | 5SL6104-6 | 5SL6104-7 | – | 5SL6504-7 | – | 5SL6204-7 |
| 6 A | 5SL6106-6 | 5SL6106-7 | 5SL6506-6 | 5SL6506-7 | 5SL6206-6 | 5SL6206-7 |
| 8 A | – | 5SL6108-7 | – | 5SL6508-7 | – | 5SL6208-7 |
| 10 A | 5SL6110-6 | 5SL6110-7 | 5SL6510-6 | 5SL6510-7 | 5SL6210-6 | 5SL6210-7 |
| 13 A | 5SL6113-6 | 5SL6113-7 | 5SL6513-6 | 5SL6513-7 | 5SL6213-6 | 5SL6213-7 |
| 16 A | 5SL6116-6 | 5SL6116-7 | 5SL6516-6 | 5SL6516-7 | 5SL6216-6 | 5SL6216-7 |
| 20 A | 5SL6120-6 | 5SL6120-7 | 5SL6520-6 | 5SL6520-7 | 5SL6220-6 | 5SL6220-7 |
| 25 A | 5SL6125-6 | 5SL6125-7 | 5SL6525-6 | 5SL6525-7 | 5SL6225-6 | 5SL6225-7 |
| 32 A | 5SL6132-6 | 5SL6132-7 | 5SL6532-6 | 5SL6532-7 | 5SL6232-6 | 5SL6232-7 |
| 40 A | 5SL6140-6 | 5SL6140-7 | 5SL6540-6 | 5SL6540-7 | 5SL6240-6 | 5SL6240-7 |
| 50 A | 5SL6150-6 | 5SL6150-7 | 5SL6550-6 | 5SL6550-7 | 5SL6250-6 | 5SL6250-7 |
| 63 A | 5SL6163-6 | 5SL6163-7 | 5SL6563-6 | 5SL6563-7 | 5SL6263-6 | 5SL6263-7 |

## Mounting concept




| | | |
|---|---|---|
| AS | Auxiliary switches | See page 3/50 |
| FC | Fault signal contacts | See page 3/52 |
| AS+FC | Auxiliary switches and fault signal contacts | See page 3/53 |
| RCA | Remote control auxiliaries | See page 3/58 |



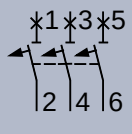
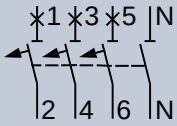
Quick selection guide, page 3/6

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| 3P | | 3P+N | | 4P | |
|---|---|---|---|---|---|
| 400 V AC | | 400 V AC | | 400 V AC | |
| 3 MW | | 4 MW | | 4 MW | |
|  | |  | |  | |
| **Characteristic** | | **Characteristic** | | **Characteristic** | |
| **B** | **C** | **B** | **C** | **B** | **C** |
| – | 5SL6314-7 | – | 5SL6614-7 | – | 5SL6414-7 |
| – | 5SL6305-7 | – | 5SL6605-7 | – | 5SL6405-7 |
| – | 5SL6301-7 | – | 5SL6601-7 | – | 5SL6401-7 |
| – | 5SL6315-7 | – | 5SL6615-7 | – | 5SL6415-7 |
| – | 5SL6302-7 | – | 5SL6602-7 | – | 5SL6402-7 |
| – | 5SL6303-7 | – | 5SL6603-7 | – | 5SL6403-7 |
| – | 5SL6304-7 | – | 5SL6604-7 | – | 5SL6404-7 |
| 5SL6306-6 | 5SL6306-7 | 5SL6606-6 | 5SL6606-7 | 5SL6406-6 | 5SL6406-7 |
| – | 5SL6308-7 | – | 5SL6608-7 | – | 5SL6408-7 |
| 5SL6310-6 | 5SL6310-7 | 5SL6610-6 | 5SL6610-7 | 5SL6410-6 | 5SL6410-7 |
| 5SL6313-6 | 5SL6313-7 | 5SL6613-6 | 5SL6613-7 | 5SL6413-6 | 5SL6413-7 |
| 5SL6316-6 | 5SL6316-7 | 5SL6616-6 | 5SL6616-7 | 5SL6416-6 | 5SL6416-7 |
| 5SL6320-6 | 5SL6320-7 | 5SL6620-6 | 5SL6620-7 | 5SL6420-6 | 5SL6420-7 |
| 5SL6325-6 | 5SL6325-7 | 5SL6625-6 | 5SL6625-7 | 5SL6425-6 | 5SL6425-7 |
| 5SL6332-6 | 5SL6332-7 | 5SL6632-6 | 5SL6632-7 | 5SL6432-6 | 5SL6432-7 |
| 5SL6340-6 | 5SL6340-7 | 5SL6640-6 | 5SL6640-7 | 5SL6440-6 | 5SL6440-7 |
| 5SL6350-6 | 5SL6350-7 | 5SL6650-6 | 5SL6650-7 | 5SL6450-6 | 5SL6450-7 |
| 5SL6363-6 | 5SL6363-7 | 5SL6663-6 | 5SL6663-7 | 5SL6463-6 | 5SL6463-7 |

## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

| Fault signal contacts (FC) | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3020 |
| 2 NO | 5ST3021 |
| 2 NC | 5ST3022 |

| Auxiliary switches and fault signal contacts (AS+FC) | Article No. |
|---|---|
| 1 CO (AS) + 1 CO (FC) | 5ST3062 |
| 5ST3 COM (AS+FC) | 5ST3062-0MC |

| Remote control auxiliaries (RCA) | | Article No. |
|---|---|---|
| Basic | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3053 |
| | 177 ... 270 V AC | 5ST3054 |
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/ IR test | 100 ... 240 V AC | 5ST3073-0MC new |

| Adapters for remote control auxiliaries (RCA) | Article No. |
|---|---|
| 1 ... 2 MW | 5ST3820-6 |
| 3 ... 4 MW | 5ST3820-7 |

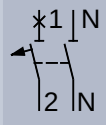
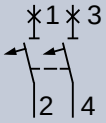
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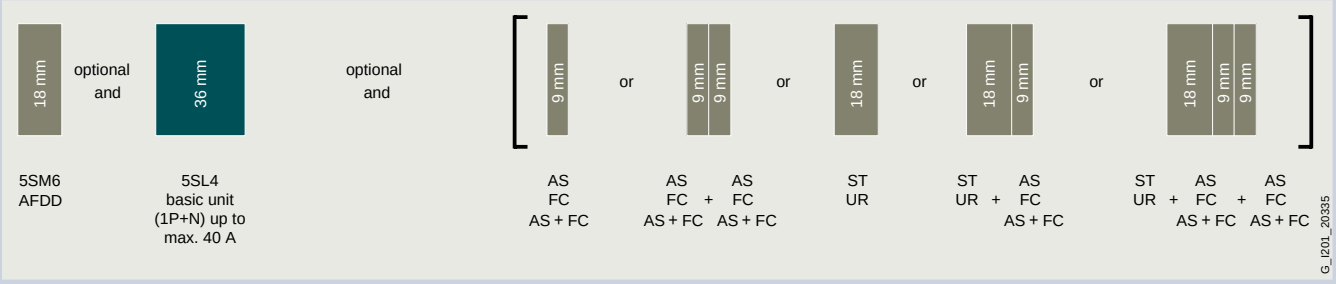
# 5SL4 miniature circuit breakers

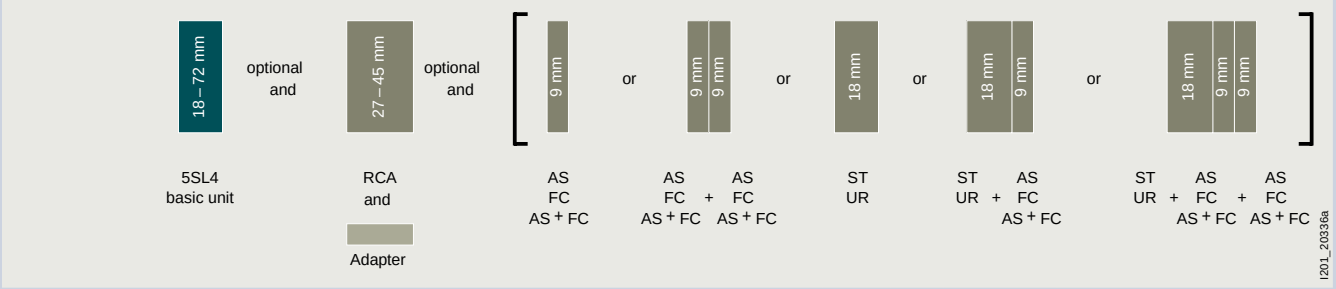
## 10 kA

| | 1P | 1P+N | 2P |
|---|---|---|---|
| **Rated voltage $U_n$** | 230/400 V AC | 230 V AC | 400 V AC |
| **Mounting width** | 1 MW | 2 MW | 2 MW |
| |  |  |  |

| Rated current $I_n$ | Characteristic B | C | D | Characteristic B | C | D | Characteristic B | C | D |
|---|---|---|---|---|---|---|---|---|---|
| 0.3 A | – | 5SL4114-7 | 5SL4114-8 | – | 5SL4514-7 | 5SL4514-8 | – | 5SL4214-7 | 5SL4214-8 |
| 0.5 A | – | 5SL4105-7 | 5SL4105-8 | – | 5SL4505-7 | 5SL4505-8 | – | 5SL4205-7 | 5SL4205-8 |
| 1 A | 5SL4101-6 | 5SL4101-7 | 5SL4101-8 | 5SL4501-6 | 5SL4501-7 | 5SL4501-8 | 5SL4201-6 | 5SL4201-7 | 5SL4201-8 |
| 1.6 A | – | 5SL4115-7 | 5SL4115-8 | – | 5SL4515-7 | 5SL4515-8 | – | 5SL4215-7 | 5SL4215-8 |
| 2 A | 5SL4102-6 | 5SL4102-7 | 5SL4102-8 | 5SL4502-6 | 5SL4502-7 | 5SL4502-8 | 5SL4202-6 | 5SL4202-7 | 5SL4202-8 |
| 3 A | 5SL4103-6 | 5SL4103-7 | 5SL4103-8 | 5SL4503-6 | 5SL4503-7 | 5SL4503-8 | 5SL4203-6 | 5SL4203-7 | 5SL4203-8 |
| 4 A | 5SL4104-6 | 5SL4104-7 | 5SL4104-8 | 5SL4504-6 | 5SL4504-7 | 5SL4504-8 | 5SL4204-6 | 5SL4204-7 | 5SL4204-8 |
| 6 A | 5SL4106-6 | 5SL4106-7 | 5SL4106-8 | 5SL4506-6 | 5SL4506-7 | 5SL4506-8 | 5SL4206-6 | 5SL4206-7 | 5SL4206-8 |
| 8 A | 5SL4108-6 | 5SL4108-7 | 5SL4108-8 | 5SL4508-6 | 5SL4508-7 | 5SL4508-8 | 5SL4208-6 | 5SL4208-7 | 5SL4208-8 |
| 10 A | 5SL4110-6 | 5SL4110-7 | 5SL4110-8 | 5SL4510-6 | 5SL4510-7 | 5SL4510-8 | 5SL4210-6 | 5SL4210-7 | 5SL4210-8 |
| 13 A | 5SL4113-6 | 5SL4113-7 | 5SL4113-8 | 5SL4513-6 | 5SL4513-7 | 5SL4513-8 | 5SL4213-6 | 5SL4213-7 | 5SL4213-8 |
| 16 A | 5SL4116-6 | 5SL4116-7 | 5SL4116-8 | 5SL4516-6 | 5SL4516-7 | 5SL4516-8 | 5SL4216-6 | 5SL4216-7 | 5SL4216-8 |
| 20 A | 5SL4120-6 | 5SL4120-7 | 5SL4120-8 | 5SL4520-6 | 5SL4520-7 | 5SL4520-8 | 5SL4220-6 | 5SL4220-7 | 5SL4220-8 |
| 25 A | 5SL4125-6 | 5SL4125-7 | 5SL4125-8 | 5SL4525-6 | 5SL4525-7 | 5SL4525-8 | 5SL4225-6 | 5SL4225-7 | 5SL4225-8 |
| 32 A | 5SL4132-6 | 5SL4132-7 | 5SL4132-8 | 5SL4532-6 | 5SL4532-7 | 5SL4532-8 | 5SL4232-6 | 5SL4232-7 | 5SL4232-8 |
| 40 A | 5SL4140-6 | 5SL4140-7 | 5SL4140-8 | 5SL4540-6 | 5SL4540-7 | 5SL4540-8 | 5SL4240-6 | 5SL4240-7 | 5SL4240-8 |
| 50 A | 5SL4150-6 | 5SL4150-7 | 5SL4150-8 | 5SL4550-6 | 5SL4550-7 | 5SL4550-8 | 5SL4250-6 | 5SL4250-7 | 5SL4250-8 |
| 63 A | 5SL4163-6 | 5SL4163-7 | 5SL4163-8 | 5SL4563-6 | 5SL4563-7 | 5SL4563-8 | 5SL4263-6 | 5SL4263-7 | 5SL4263-8 |

## Mounting concept



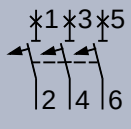
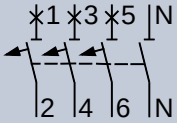

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| AFDD | Arc fault detection units | See page 3/61 | AS+FC | Auxiliary switches and fault signal contacts | See page 3/53 | UR | Undervoltage releases | See page 3/57 |
| AS | Auxiliary switches | See page 3/50 | ST | Shunt trips | See page 3/56 | RCA | Remote control auxiliaries | See page 3/58 |
| FC | Fault signal contacts | See page 3/52 | | | | | | |

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| 3P | 3P+N | 4P |
|---|---|---|
| 400 V AC | 400 V AC | 400 V AC |
| 3 MW | 4 MW | 4 MW |
|  |  |  |

| Characteristic | | | Characteristic | | | Characteristic | | |
|---|---|---|---|---|---|---|---|---|
| B | C | D | B | C | D | B | C | D |
| – | 5SL4314-7 | 5SL4314-8 | – | 5SL4614-7 | 5SL4614-8 | – | 5SL4414-7 | 5SL4414-8 |
| – | 5SL4305-7 | 5SL4305-8 | – | 5SL4605-7 | 5SL4605-8 | – | 5SL4405-7 | 5SL4405-8 |
| 5SL4301-6 | 5SL4301-7 | 5SL4301-8 | 5SL4601-6 | 5SL4601-7 | 5SL4601-8 | 5SL4401-6 | 5SL4401-7 | 5SL4401-8 |
| – | 5SL4315-7 | 5SL4315-8 | – | 5SL4615-7 | 5SL4615-8 | – | 5SL4415-7 | 5SL4415-8 |
| 5SL4302-6 | 5SL4302-7 | 5SL4302-8 | 5SL4602-6 | 5SL4602-7 | 5SL4602-8 | 5SL4402-6 | 5SL4402-7 | 5SL4402-8 |
| 5SL4303-6 | 5SL4303-7 | 5SL4303-8 | 5SL4603-6 | 5SL4603-7 | 5SL4603-8 | 5SL4403-6 | 5SL4403-7 | 5SL4403-8 |
| 5SL4304-6 | 5SL4304-7 | 5SL4304-8 | 5SL4604-6 | 5SL4604-7 | 5SL4604-8 | 5SL4404-6 | 5SL4404-7 | 5SL4404-8 |
| 5SL4306-6 | 5SL4306-7 | 5SL4306-8 | 5SL4606-6 | 5SL4606-7 | 5SL4606-8 | 5SL4406-6 | 5SL4406-7 | 5SL4406-8 |
| 5SL4308-6 | 5SL4308-7 | 5SL4308-8 | 5SL4608-6 | 5SL4608-7 | 5SL4608-8 | 5SL4408-6 | 5SL4408-7 | 5SL4408-8 |
| 5SL4310-6 | 5SL4310-7 | 5SL4310-8 | 5SL4610-6 | 5SL4610-7 | 5SL4610-8 | 5SL4410-6 | 5SL4410-7 | 5SL4410-8 |
| 5SL4313-6 | 5SL4313-7 | 5SL4313-8 | 5SL4613-6 | 5SL4613-7 | 5SL4613-8 | 5SL4413-6 | 5SL4413-7 | 5SL4413-8 |
| 5SL4316-6 | 5SL4316-7 | 5SL4316-8 | 5SL4616-6 | 5SL4616-7 | 5SL4616-8 | 5SL4416-6 | 5SL4416-7 | 5SL4416-8 |
| 5SL4320-6 | 5SL4320-7 | 5SL4320-8 | 5SL4620-6 | 5SL4620-7 | 5SL4620-8 | 5SL4420-6 | 5SL4420-7 | 5SL4420-8 |
| 5SL4325-6 | 5SL4325-7 | 5SL4325-8 | 5SL4625-6 | 5SL4625-7 | 5SL4625-8 | 5SL4425-6 | 5SL4425-7 | 5SL4425-8 |
| 5SL4332-6 | 5SL4332-7 | 5SL4332-8 | 5SL4632-6 | 5SL4632-7 | 5SL4632-8 | 5SL4432-6 | 5SL4432-7 | 5SL4432-8 |
| 5SL4340-6 | 5SL4340-7 | 5SL4340-8 | 5SL4640-6 | 5SL4640-7 | 5SL4640-8 | 5SL4440-6 | 5SL4440-7 | 5SL4440-8 |
| 5SL4350-6 | 5SL4350-7 | 5SL4350-8 | 5SL4650-6 | 5SL4650-7 | 5SL4650-8 | 5SL4450-6 | 5SL4450-7 | 5SL4450-8 |
| 5SL4363-6 | 5SL4363-7 | 5SL4363-8 | 5SL4663-6 | 5SL4663-7 | 5SL4663-8 | 5SL4463-6 | 5SL4463-7 | 5SL4463-8 |

## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

| Fault signal contacts (FC) | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3020 |
| 2 NO | 5ST3021 |
| 2 NC | 5ST3022 |

| Auxiliary switches and fault signal contacts (AS+FC) | Article No. |
|---|---|
| 1 CO (AS) + 1 CO (FC) | 5ST3062 |
| 5ST3 COM (AS+FC) | 5ST3062-0MC |

| Shunt trips (ST) | Article No. |
|---|---|
| 110 ... 415 V AC, 110 ... 220 V DC | 5ST3030 |
| 24 ... 48 V AC/DC | 5ST3031 |
| 12 V DC | 5ST3031-0XX01 |

| Undervoltage releases (UR) | | Article No. |
|---|---|---|
| With integrated auxiliary switch | 230 V AC | 5ST3040 |
| | 110 V DC | 5ST3041 |
| | 24 V DC | 5ST3042 |
| Without integrated auxiliary switch | 230 V AC | 5ST3043 |
| | 110 V DC | 5ST3044 |
| | 24 V DC | 5ST3045 |

| Remote control auxiliaries (RCA) | | Article No. |
|---|---|---|
| Basic | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3053 |
| | 177 ... 270 V AC | 5ST3054 |
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/IR test | 100 ... 240 V AC | 5ST3073-0MC new |

| Adapters for remote control auxiliaries (RCA) | Article No. |
|---|---|
| 1 ... 2 MW | 5ST3820-6 |
| 3 ... 4 MW | 5ST3820-7 |

| Arc fault detection units (AFDD) | | Article No. |
|---|---|---|
| For basic units 1P+N (2 MW), not in combination with RCA | $I_n$ up to 16 A | 5SM6021-2 |
| | $I_n$ up to 40 A | 5SM6024-2 |

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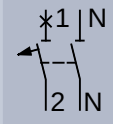
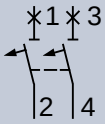
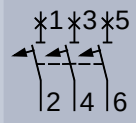


# 5SJ6...-.KS miniature circuit breakers

## 6 kA – plug-in terminal on outgoing side





| | 1P | 1P+N | 2P | 3P |
|---|---|---|---|---|
| **Rated voltage $U_n$** | 230/400 V AC | 230/400 V AC | 230/400 V AC | 230/400 V AC |
| **Mounting width** | 1 MW | 2 MW | 2 MW | 3 MW |
| |  |  |  |  |

| Rated current $I_n$ | Characteristic | | Characteristic | | Characteristic | | Characteristic | |
|---|---|---|---|---|---|---|---|---|
| | B | C | B | C | B | C | B | C |
| 10 A | 5SJ6110-6KS | 5SJ6110-7KS | 5SJ6510-6KS | 5SJ6510-7KS | 5SJ6210-6KS | 5SJ6210-7KS | 5SJ6310-6KS | 5SJ6310-7KS |
| 13 A | 5SJ6113-6KS | 5SJ6113-7KS | 5SJ6513-6KS | 5SJ6513-7KS | 5SJ6213-6KS | 5SJ6213-7KS | 5SJ6313-6KS | 5SJ6313-7KS |
| 16 A | 5SJ6116-6KS | 5SJ6116-7KS | 5SJ6516-6KS | 5SJ6516-7KS | 5SJ6216-6KS | 5SJ6216-7KS | 5SJ6316-6KS | 5SJ6316-7KS |
| 20 A | 5SJ6120-6KS | 5SJ6120-7KS | 5SJ6520-6KS | 5SJ6520-7KS | 5SJ6220-6KS | 5SJ6220-7KS | 5SJ6320-6KS | 5SJ6320-7KS |

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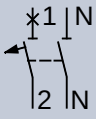
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# 5SL30 miniature circuit breakers

## 1P+N 4.5 kA compact miniature circuit breakers

| | 1P+N (N pole right) | 1P+N (N pole left) |
|---|---|---|
| **Rated voltage $U_n$** | 230 V AC | 230 V AC |
| **Mounting width** | 2 MW | 2 MW |
| |  |  |

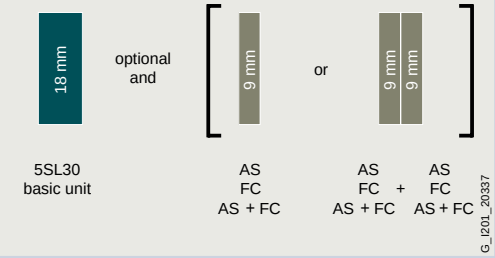




3

| Rated current $I_n$ | Characteristic C | Characteristic C |
|---|---|---|
| 2 A | 5SL3002-7 | 5SL3002-7KL |
| 4 A | 5SL3004-7 | 5SL3004-7KL |
| 6 A | 5SL3006-7 | 5SL3006-7KL |
| 8 A | 5SL3008-7 | 5SL3008-7KL |
| 10 A | 5SL3010-7 | 5SL3010-7KL |
| 13 A | 5SL3013-7 | 5SL3013-7KL |
| 16 A | 5SL3016-7 | 5SL3016-7KL |
| 20 A | 5SL3020-7 | 5SL3020-7KL |
| 25 A | 5SL3025-7 | 5SL3025-7KL |
| 32 A | 5SL3032-7 | 5SL3032-7KL |
| 40 A | 5SL3040-7 | 5SL3040-7KL |

## Mounting concept




| | | |
|---|---|---|
| AS | Auxiliary switches | See page 3/50 |
| FC | Fault signal contacts | See page 3/52 |
| AS+FC | Auxiliary switches and fault signal contacts | See page 3/53 |

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## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

| Fault signal contacts (FC) | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3020 |
| 2 NO | 5ST3021 |
| 2 NC | 5ST3022 |
| **Auxiliary switches and fault signal contacts (AS+FC)** | **Article No.** |
| 1 CO (AS) + 1 CO (FC) | 5ST3062 |
| 5ST3 COM (AS+FC) | 5ST3062-0MC |

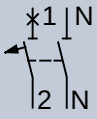
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# 5SL60 miniature circuit breakers

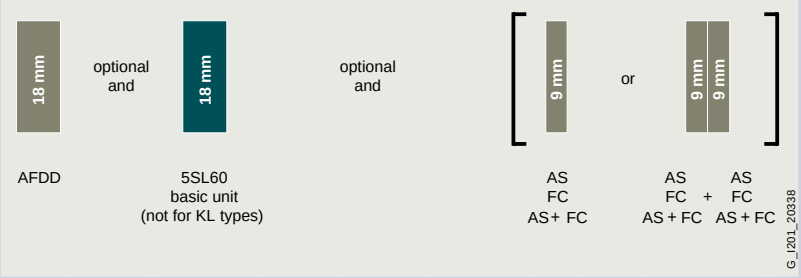
## 1P+N 6 kA compact miniature circuit breakers

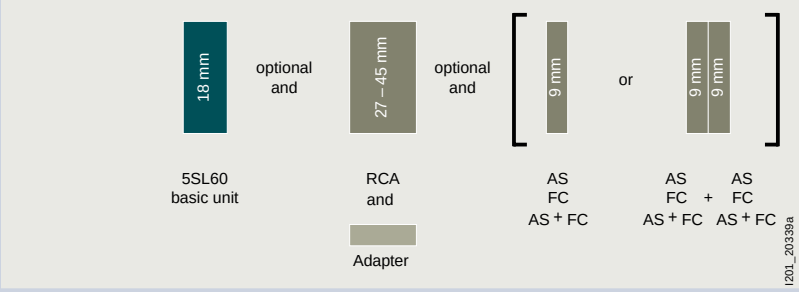
| | 1P+N (N pole right) | 1P+N (N pole left) |
|---|---|---|
| Rated voltage $U_n$ | 230 V AC | 230 V AC |
| Mounting width | 1 MW | 1 MW |
| |  |  |



| Rated current $I_n$ | Characteristic | | Characteristic |
|---|---|---|---|
| | B | C | C |
| 2 A | – | 5SL6002-7 | 5SL6002-7KL |
| 4 A | – | 5SL6004-7 | 5SL6004-7KL |
| 6 A | 5SL6006-6 | 5SL6006-7 | 5SL6006-7KL |
| 8 A | – | 5SL6008-7 | 5SL6008-7KL |
| 10 A | 5SL6010-6 | 5SL6010-7 | 5SL6010-7KL |
| 13 A | 5SL6013-6 | 5SL6013-7 | 5SL6013-7KL |
| 16 A | 5SL6016-6 | 5SL6016-7 | 5SL6016-7KL |
| 20 A | 5SL6020-6 | 5SL6020-7 | 5SL6020-7KL |
| 25 A | 5SL6025-6 | 5SL6025-7 | 5SL6025-7KL |
| 32 A | 5SL6032-6 | 5SL6032-7 | 5SL6032-7KL |
| 40 A | 5SL6040-6 | 5SL6040-7 | 5SL6040-7KL |

## Mounting concept




| | | |
|---|---|---|
| AFDD | Arc fault detection units | See page 3/61 |
| AS | Auxiliary switches | See page 3/50 |
| FC | Fault signal contacts | See page 3/52 |
| AS+FC | Auxiliary switches and fault signal contacts | See page 3/53 |
| RCA | Remote control auxiliaries | See page 3/58 |

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## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

| Fault signal contacts (FC) | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3020 |
| 2 NO | 5ST3021 |
| 2 NC | 5ST3022 |

| Auxiliary switches and fault signal contacts (AS+FC) | Article No. |
|---|---|
| 1 CO (AS) + 1 CO (FC) | 5ST3062 |
| 5ST3 COM (AS+FC) | 5ST3062-0MC |

| Remote control auxiliaries (RCA) | | Article No. |
|---|---|---|
| Basic | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3053 |
| | 177 ... 270 V AC | 5ST3054 |
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/ IR test | 100 ... 240 V AC | 5ST3073-0MC new |

| Adapters for remote control auxiliaries (RCA) | Article No. |
|---|---|
| 1 MW | 5ST3820-6 |

| Arc fault detection units (AFDD) | | Article No. |
|---|---|---|
| For basic units 1P+N (1 MW), not for KL types | $I_n$ up to 16 A | 5SM6011-2 |
| | $I_n$ up to 40 A | 5SM6014-2 |

Quick selection guide, page 3/6

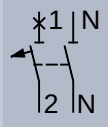
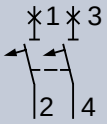
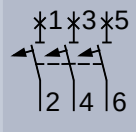
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# 5SY6 miniature circuit breakers

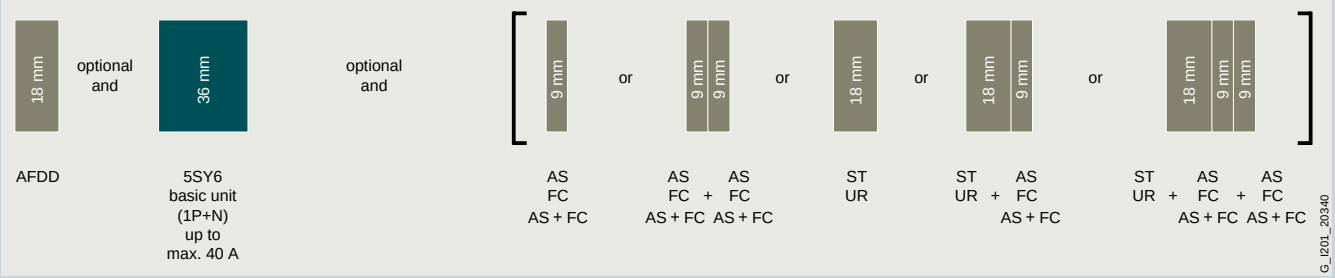
## 6 kA

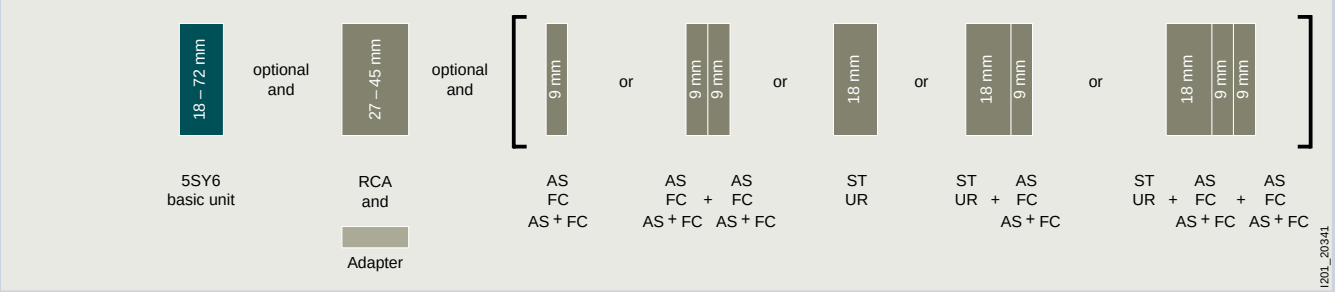


| | 1P | 1P+N | 2P | 3P |
|---|---|---|---|---|
| **Rated voltage $U_n$** | 230/400 V AC | 230 V AC | 400 V AC | 400 V AC |
| **Mounting width** | 1 MW | 2 MW | 2 MW | 3 MW |
| |  |  |  |  |

| Rated current $I_n$ | Characteristic B | Characteristic C | Characteristic B | Characteristic C | Characteristic B | Characteristic C | Characteristic B | Characteristic C |
|---|---|---|---|---|---|---|---|---|
| 0.3 A | – | 5SY6114-7 | – | 5SY6514-7 | – | 5SY6214-7 | – | 5SY6314-7 |
| 0.5 A | – | 5SY6105-7 | – | 5SY6505-7 | – | 5SY6205-7 | – | 5SY6305-7 |
| 1 A | – | 5SY6101-7 | – | 5SY6501-7 | – | 5SY6201-7 | – | 5SY6301-7 |
| 1.6 A | – | 5SY6115-7 | – | 5SY6515-7 | – | 5SY6215-7 | – | 5SY6315-7 |
| 2 A | 5SY6102-6 | 5SY6102-7 | – | 5SY6502-7 | – | 5SY6202-7 | – | 5SY6302-7 |
| 3 A | – | 5SY6103-7 | – | 5SY6503-7 | – | 5SY6203-7 | – | 5SY6303-7 |
| 4 A | 5SY6104-6 | 5SY6104-7 | – | 5SY6504-7 | – | 5SY6204-7 | – | 5SY6304-7 |
| 5 A | – | 5SY6111-7 | – | – | – | 5SY6211-7 | – | 5SY6311-7 |
| 6 A | 5SY6106-6 | 5SY6106-7 | 5SY6506-6 | 5SY6506-7 | 5SY6206-6 | 5SY6206-7 | 5SY6306-6 | 5SY6306-7 |
| 8 A | – | 5SY6108-7 | – | 5SY6508-7 | – | 5SY6208-7 | – | 5SY6308-7 |
| 10 A | 5SY6110-6 | 5SY6110-7 | 5SY6510-6 | 5SY6510-7 | 5SY6210-6 | 5SY6210-7 | 5SY6310-6 | 5SY6310-7 |
| 13 A | 5SY6113-6 | 5SY6113-7 | 5SY6513-6 | 5SY6513-7 | 5SY6213-6 | 5SY6213-7 | 5SY6313-6 | 5SY6313-7 |
| 15 A | – | 5SY6118-7 | – | – | – | 5SY6218-7 | – | 5SY6318-7 |
| 16 A | 5SY6116-6 | 5SY6116-7 | 5SY6516-6 | 5SY6516-7 | 5SY6216-6 | 5SY6216-7 | 5SY6316-6 | 5SY6316-7 |
| 20 A | 5SY6120-6 | 5SY6120-7 | 5SY6520-6 | 5SY6520-7 | 5SY6220-6 | 5SY6220-7 | 5SY6320-6 | 5SY6320-7 |
| 25 A | 5SY6125-6 | 5SY6125-7 | 5SY6525-6 | 5SY6525-7 | 5SY6225-6 | 5SY6225-7 | 5SY6325-6 | 5SY6325-7 |
| 30 A | – | 5SY6130-7 | – | – | – | 5SY6230-7 | – | 5SY6330-7 |
| 32 A | 5SY6132-6 | 5SY6132-7 | 5SY6532-6 | 5SY6532-7 | 5SY6232-6 | 5SY6232-7 | 5SY6332-6 | 5SY6332-7 |
| 40 A | 5SY6140-6 | 5SY6140-7 | 5SY6540-6 | 5SY6540-7 | 5SY6240-6 | 5SY6240-7 | 5SY6340-6 | 5SY6340-7 |
| 50 A | 5SY6150-6 | 5SY6150-7 | 5SY6550-6 | 5SY6550-7 | 5SY6250-6 | 5SY6250-7 | 5SY6350-6 | 5SY6350-7 |
| 63 A | 5SY6163-6 | 5SY6163-7 | 5SY6563-6 | 5SY6563-7 | 5SY6263-6 | 5SY6263-7 | 5SY6363-6 | 5SY6363-7 |

## Mounting concept




AFDD Arc fault detection units See page 3/61
AS Auxiliary switches See page 3/50
FC Fault signal contacts See page 3/52
AS+FC Auxiliary switches and fault signal contacts See page 3/53
ST Shunt trips See page 3/56
UR Undervoltage releases See page 3/57
RCA Remote control auxiliaries See page 3/58

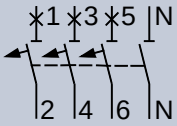
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| 3P+N | | 4P | |
|---|---|---|---|
| 400 V AC | | 400 V AC | |
| 4 MW | | 4 MW | |
|  | |  | |
| **Characteristic** | | **Characteristic** | |
| **B** | **C** | **B** | **C** |
| – | 5SY6614-7 | – | 5SY6414-7 |
| – | 5SY6605-7 | – | 5SY6405-7 |
| – | 5SY6601-7 | – | 5SY6401-7 |
| – | 5SY6615-7 | – | 5SY6415-7 |
| – | 5SY6602-7 | – | 5SY6402-7 |
| – | 5SY6603-7 | – | 5SY6403-7 |
| – | 5SY6604-7 | – | 5SY6404-7 |
| – | – | – | – |
| 5SY6606-6 | 5SY6606-7 | 5SY6406-6 | 5SY6406-7 |
| – | 5SY6608-7 | – | 5SY6408-7 |
| 5SY6610-6 | 5SY6610-7 | 5SY6410-6 | 5SY6410-7 |
| 5SY6613-6 | 5SY6613-7 | 5SY6413-6 | 5SY6413-7 |
| – | – | – | – |
| 5SY6616-6 | 5SY6616-7 | 5SY6416-6 | 5SY6416-7 |
| 5SY6620-6 | 5SY6620-7 | 5SY6420-6 | 5SY6420-7 |
| 5SY6625-6 | 5SY6625-7 | 5SY6425-6 | 5SY6425-7 |
| – | – | – | – |
| 5SY6632-6 | 5SY6632-7 | 5SY6432-6 | 5SY6432-7 |
| 5SY6640-6 | 5SY6640-7 | 5SY6440-6 | 5SY6440-7 |
| 5SY6650-6 | 5SY6650-7 | 5SY6450-6 | 5SY6450-7 |
| 5SY6663-6 | 5SY6663-7 | 5SY6463-6 | 5SY6463-7 |

## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |
| **Fault signal contacts (FC)** | | **Article No.** |
| 1 NO + 1 NC | | 5ST3020 |
| 2 NO | | 5ST3021 |
| 2 NC | | 5ST3022 |
| **Auxiliary switches and fault signal contacts (AS+FC)** | | **Article No.** |
| 1 CO (AS) + 1 CO (FC) | | 5ST3062 |
| 5ST3 COM (AS+FC) | | 5ST3062-0MC |
| **Shunt trips (ST)** | | **Article No.** |
| 110 ... 415 V AC, 110 ... 220 V DC | | 5ST3030 |
| 24 ... 48 V AC/DC | | 5ST3031 |
| 12 V DC | | 5ST3031-0XX01 |

| Undervoltage releases (UR) | | Article No. |
|---|---|---|
| With integrated auxiliary switch | 230 V AC | 5ST3040 |
| | 110 V DC | 5ST3041 |
| | 24 V DC | 5ST3042 |
| Without integrated auxiliary switch | 230 V AC | 5ST3043 |
| | 110 V DC | 5ST3044 |
| | 24 V DC | 5ST3045 |
| **Remote control auxiliaries (RCA)** | | **Article No.** |
| Basic | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3053 |
| | 177 ... 270 V AC | 5ST3054 |
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/IR test | 100 ... 240 V AC | 5ST3073-0MC new |
| **Adapters for remote control auxiliaries (RCA)** | | **Article No.** |
| 1 ... 2 MW | | 5ST3820-1 |
| 3 ... 4 MW | | 5ST3820-2 |
| **Arc fault detection units (AFDD)** | | **Article No.** |
| For basic units 1P+N (2 MW), not in combination with RCA | $I_n$ up to 16 A | 5SM6021-2 |
| | $I_n$ up to 40 A | 5SM6024-2 |

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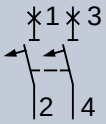
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# 5SY4 miniature circuit breakers

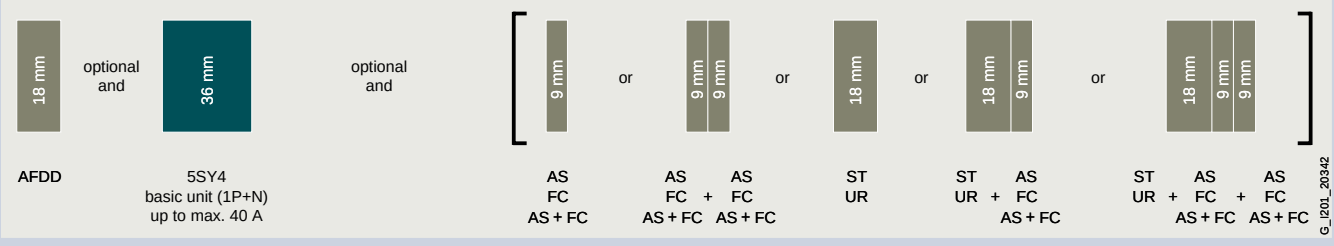
## 10 kA

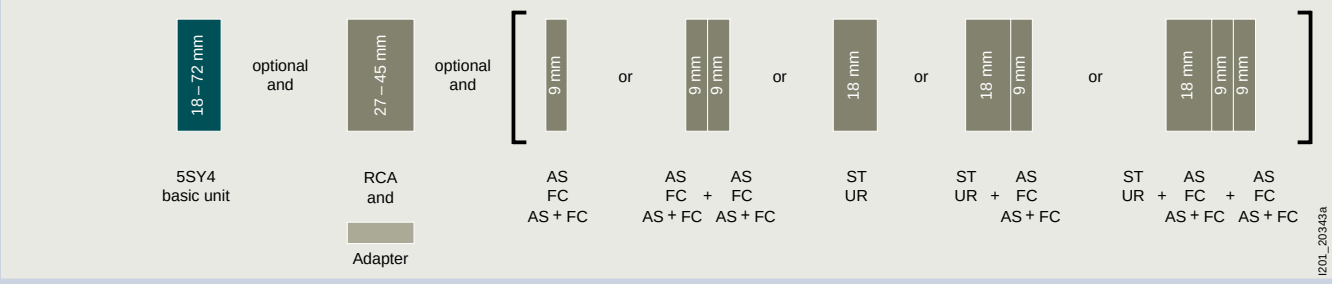


| | 1P | 1P+N | 2P |
|---|---|---|---|
| **Rated voltage $U_n$** | 230/400 V AC | 230 V AC | 400 V AC |
| **Mounting width** | 1 MW | 2 MW | 2 MW |
| |  |  |  |

| Rated current $I_n$ | Characteristic | | | | Characteristic | | | | Characteristic | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | A | B | C | D | A | B | C | D |
| 0.3 A | – | – | 5SY4114-7 | 5SY4114-8 | – | – | 5SY4514-7 | 5SY4514-8 | – | – | 5SY4214-7 | 5SY4214-8 |
| 0.5 A | 5SY4105-5 | – | 5SY4105-7 | 5SY4105-8 | – | – | 5SY4505-7 | 5SY4505-8 | 5SY4205-5 | – | 5SY4205-7 | 5SY4205-8 |
| 1 A | 5SY4101-5 | 5SY4101-6 | 5SY4101-7 | 5SY4101-8 | 5SY4501-5 | – | 5SY4501-7 | 5SY4501-8 | 5SY4201-5 | 5SY4201-6 | 5SY4201-7 | 5SY4201-8 |
| 1.6 A | 5SY4115-5 | 5SY4115-6 | 5SY4115-7 | 5SY4115-8 | 5SY4515-5 | 5SY4515-6 | 5SY4515-7 | 5SY4515-8 | 5SY4215-5 | 5SY4215-6 | 5SY4215-7 | 5SY4215-8 |
| 2 A | 5SY4102-5 | 5SY4102-6 | 5SY4102-7 | 5SY4102-8 | 5SY4502-5 | – | 5SY4502-7 | 5SY4502-8 | 5SY4202-5 | 5SY4202-6 | 5SY4202-7 | 5SY4202-8 |
| 3 A | 5SY4103-5 | 5SY4103-6 | 5SY4103-7 | 5SY4103-8 | 5SY4503-5 | – | 5SY4503-7 | 5SY4503-8 | 5SY4203-5 | 5SY4203-6 | 5SY4203-7 | 5SY4203-8 |
| 4 A | 5SY4104-5 | 5SY4104-6 | 5SY4104-7 | 5SY4104-8 | 5SY4504-5 | 5SY4504-6 | 5SY4504-7 | 5SY4504-8 | 5SY4204-5 | 5SY4204-6 | 5SY4204-7 | 5SY4204-8 |
| 5 A | – | – | 5SY4111-7 | – | – | – | – | – | – | – | 5SY4211-7 | – |
| 6 A | 5SY4106-5 | 5SY4106-6 | 5SY4106-7 | 5SY4106-8 | 5SY4506-5 | 5SY4506-6 | 5SY4506-7 | 5SY4506-8 | 5SY4206-5 | 5SY4206-6 | 5SY4206-7 | 5SY4206-8 |
| 8 A | 5SY4108-5 | 5SY4108-6 | 5SY4108-7 | 5SY4108-8 | 5SY4508-5 | – | 5SY4508-7 | 5SY4508-8 | 5SY4208-5 | 5SY4208-6 | 5SY4208-7 | 5SY4208-8 |
| 10 A | 5SY4110-5 | 5SY4110-6 | 5SY4110-7 | 5SY4110-8 | 5SY4510-5 | 5SY4510-6 | 5SY4510-7 | 5SY4510-8 | 5SY4210-5 | 5SY4210-6 | 5SY4210-7 | 5SY4210-8 |
| 13 A | 5SY4113-5 | 5SY4113-6 | 5SY4113-7 | 5SY4113-8 | 5SY4513-5 | 5SY4513-6 | 5SY4513-7 | 5SY4513-8 | 5SY4213-5 | 5SY4213-6 | 5SY4213-7 | 5SY4213-8 |
| 15 A | – | – | 5SY4118-7 | – | – | – | – | – | – | – | 5SY4218-7 | – |
| 16 A | 5SY4116-5 | 5SY4116-6 | 5SY4116-7 | 5SY4116-8 | 5SY4516-5 | 5SY4516-6 | 5SY4516-7 | 5SY4516-8 | 5SY4216-5 | 5SY4216-6 | 5SY4216-7 | 5SY4216-8 |
| 20 A | 5SY4120-5 | 5SY4120-6 | 5SY4120-7 | 5SY4120-8 | 5SY4520-5 | 5SY4520-6 | 5SY4520-7 | 5SY4520-8 | 5SY4220-5 | 5SY4220-6 | 5SY4220-7 | 5SY4220-8 |
| 25 A | 5SY4125-5 | 5SY4125-6 | 5SY4125-7 | 5SY4125-8 | 5SY4525-5 | 5SY4525-6 | 5SY4525-7 | 5SY4525-8 | 5SY4225-5 | 5SY4225-6 | 5SY4225-7 | 5SY4225-8 |
| 30 A | – | – | 5SY4130-7 | – | – | – | – | – | – | – | 5SY4230-7 | – |
| 32 A | 5SY4132-5 | 5SY4132-6 | 5SY4132-7 | 5SY4132-8 | 5SY4532-5 | 5SY4532-6 | 5SY4532-7 | 5SY4532-8 | 5SY4232-5 | 5SY4232-6 | 5SY4232-7 | 5SY4232-8 |
| 35 A | – | – | 5SY4135-7 | – | – | – | – | – | – | – | 5SY4235-7 | – |
| 40 A | 5SY4140-5 | 5SY4140-6 | 5SY4140-7 | 5SY4140-8 | 5SY4540-5 | 5SY4540-6 | 5SY4540-7 | 5SY4540-8 | 5SY4240-5 | 5SY4240-6 | 5SY4240-7 | 5SY4240-8 |
| 45 A | – | – | 5SY4145-7 | – | – | – | – | – | – | – | 5SY4245-7 | – |
| 50 A | 5SY4150-5 | 5SY4150-6 | 5SY4150-7 | 5SY4150-8 | 5SY4550-5 | 5SY4550-6 | 5SY4550-7 | 5SY4550-8 | 5SY4250-5 | 5SY4250-6 | 5SY4250-7 | 5SY4250-8 |
| 60 A | – | – | 5SY4160-7 | – | – | – | – | – | – | – | 5SY4260-7 | – |
| 63 A | 5SY4163-5 | 5SY4163-6 | 5SY4163-7 | 5SY4163-8 | 5SY4563-5 | 5SY4563-6 | 5SY4563-7 | 5SY4563-8 | 5SY4263-5 | 5SY4263-6 | 5SY4263-7 | 5SY4263-8 |
| 80 A | – | 5SY4180-6 | 5SY4180-7 | – | – | – | 5SY4580-7 | – | – | 5SY4280-6 | 5SY4280-7 | – |

## Mounting concept



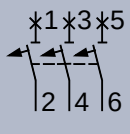
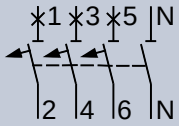




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| 3P | | | | 3P+N | | | | 4P | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 400 V AC | | | | 400 V AC | | | | 400 V AC | | | |
| 3 MW | | | | 4 MW | | | | 4 MW | | | |
|  | | | |  | | | |  | | | |
| **Characteristic** | | | | **Characteristic** | | | | **Characteristic** | | | |
| **A** | **B** | **C** | **D** | **A** | **B** | **C** | **D** | **A** | **B** | **C** | **D** |
| – | – | 5SY4314-7 | 5SY4314-8 | – | – | 5SY4614-7 | 5SY4614-8 | – | – | 5SY4414-7 | 5SY4414-8 |
| 5SY4305-5 | – | 5SY4305-7 | 5SY4305-8 | – | – | 5SY4605-7 | 5SY4605-8 | – | – | 5SY4405-7 | 5SY4405-8 |
| 5SY4301-5 | 5SY4301-6 | 5SY4301-7 | 5SY4301-8 | 5SY4601-5 | – | 5SY4601-7 | 5SY4601-8 | 5SY4401-5 | – | 5SY4401-7 | 5SY4401-8 |
| 5SY4315-5 | 5SY4315-6 | 5SY4315-7 | 5SY4315-8 | 5SY4615-5 | – | 5SY4615-7 | 5SY4615-8 | 5SY4415-5 | – | 5SY4415-7 | 5SY4415-8 |
| 5SY4302-5 | 5SY4302-6 | 5SY4302-7 | 5SY4302-8 | 5SY4602-5 | – | 5SY4602-7 | 5SY4602-8 | 5SY4402-5 | – | 5SY4402-7 | 5SY4402-8 |
| 5SY4303-5 | 5SY4303-6 | 5SY4303-7 | 5SY4303-8 | 5SY4603-5 | – | 5SY4603-7 | 5SY4603-8 | 5SY4403-5 | – | 5SY4403-7 | 5SY4403-8 |
| 5SY4304-5 | 5SY4304-6 | 5SY4304-7 | 5SY4304-8 | 5SY4604-5 | – | 5SY4604-7 | 5SY4604-8 | 5SY4404-5 | – | 5SY4404-7 | 5SY4404-8 |
| – | – | 5SY4311-7 | – | – | – | – | – | – | – | – | – |
| 5SY4306-5 | 5SY4306-6 | 5SY4306-7 | 5SY4306-8 | 5SY4606-5 | 5SY4606-6 | 5SY4606-7 | 5SY4606-8 | 5SY4406-5 | 5SY4406-6 | 5SY4406-7 | 5SY4406-8 |
| 5SY4308-5 | 5SY4308-6 | 5SY4308-7 | 5SY4308-8 | 5SY4608-5 | – | 5SY4608-7 | 5SY4608-8 | 5SY4408-5 | – | 5SY4408-7 | 5SY4408-8 |
| 5SY4310-5 | 5SY4310-6 | 5SY4310-7 | 5SY4310-8 | 5SY4610-5 | 5SY4610-6 | 5SY4610-7 | 5SY4610-8 | 5SY4410-5 | 5SY4410-6 | 5SY4410-7 | 5SY4410-8 |
| 5SY4313-5 | 5SY4313-6 | 5SY4313-7 | 5SY4313-8 | 5SY4613-5 | 5SY4613-6 | 5SY4613-7 | 5SY4613-8 | 5SY4413-5 | 5SY4413-6 | 5SY4413-7 | 5SY4413-8 |
| – | – | 5SY4318-7 | – | – | – | – | – | – | – | – | – |
| 5SY4316-5 | 5SY4316-6 | 5SY4316-7 | 5SY4316-8 | 5SY4616-5 | 5SY4616-6 | 5SY4616-7 | 5SY4616-8 | 5SY4416-5 | 5SY4416-6 | 5SY4416-7 | 5SY4416-8 |
| 5SY4320-5 | 5SY4320-6 | 5SY4320-7 | 5SY4320-8 | 5SY4620-5 | 5SY4620-6 | 5SY4620-7 | 5SY4620-8 | 5SY4420-5 | 5SY4420-6 | 5SY4420-7 | 5SY4420-8 |
| 5SY4325-5 | 5SY4325-6 | 5SY4325-7 | 5SY4325-8 | 5SY4625-5 | 5SY4625-6 | 5SY4625-7 | 5SY4625-8 | 5SY4425-5 | 5SY4425-6 | 5SY4425-7 | 5SY4425-8 |
| – | – | 5SY4330-7 | – | – | – | – | – | – | – | – | – |
| 5SY4332-5 | 5SY4332-6 | 5SY4332-7 | 5SY4332-8 | 5SY4632-5 | 5SY4632-6 | 5SY4632-7 | 5SY4632-8 | 5SY4432-5 | 5SY4432-6 | 5SY4432-7 | 5SY4432-8 |
| – | – | 5SY4335-7 | – | – | – | – | – | – | – | – | – |
| 5SY4340-5 | 5SY4340-6 | 5SY4340-7 | 5SY4340-8 | 5SY4640-5 | 5SY4640-6 | 5SY4640-7 | 5SY4640-8 | 5SY4440-5 | 5SY4440-6 | 5SY4440-7 | 5SY4440-8 |
| – | – | 5SY4345-7 | – | – | – | – | – | – | – | – | – |
| 5SY4350-5 | 5SY4350-6 | 5SY4350-7 | 5SY4350-8 | 5SY4650-5 | 5SY4650-6 | 5SY4650-7 | 5SY4650-8 | 5SY4450-5 | 5SY4450-6 | 5SY4450-7 | 5SY4450-8 |
| – | – | 5SY4360-7 | – | – | – | – | – | – | – | – | – |
| 5SY4363-5 | 5SY4363-6 | 5SY4363-7 | 5SY4363-8 | 5SY4663-5 | 5SY4663-6 | 5SY4663-7 | 5SY4663-8 | 5SY4463-5 | 5SY4463-6 | 5SY4463-7 | 5SY4463-8 |
| – | 5SY4380-6 | 5SY4380-7 | – | – | – | 5SY4680-7 | – | – | 5SY4480-6 | 5SY4480-7 | – |

## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

| Fault signal contacts (FC) | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3020 |
| 2 NO | 5ST3021 |
| 2 NC | 5ST3022 |

| Auxiliary switches and fault signal contacts (AS+FC) | Article No. |
|---|---|
| 1 CO (AS) + 1 CO (FC) | 5ST3062 |
| 5ST3 COM (AS+FC) | 5ST3062-0MC |

| Shunt trips (ST) | Article No. |
|---|---|
| 110 ... 415 V AC, 110 ... 220 V DC | 5ST3030 |
| 24 ... 48 V AC/DC | 5ST3031 |
| 12 V DC | 5ST3031-0XX01 |

| Arc fault detection units (AFDD) | | Article No. |
|---|---|---|
| For basic units 1P+N (2 MW) | $I_n$ up to 16 A | 5SM6021-2 |
| | $I_n$ up to 40 A | 5SM6024-2 |

| Undervoltage releases (UR) | | Article No. |
|---|---|---|
| With integrated auxiliary switch | 230 V AC | 5ST3040 |
| | 110 V DC | 5ST3041 |
| | 24 V DC | 5ST3042 |
| Without integrated auxiliary switch | 230 V AC | 5ST3043 |
| | 110 V DC | 5ST3044 |
| | 24 V DC | 5ST3045 |

| Remote control auxiliaries (RCA) | | Article No. |
|---|---|---|
| Basic | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3053 |
| | 177 ... 270 V AC | 5ST3054 |
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/IR test | 100 ... 240 V AC | 5ST3073-0MC new |

| Adapters for remote control auxiliaries (RCA) | Article No. |
|---|---|
| 1 ... 2 MW | 5ST3820-1 |
| 3 ... 4 MW | 5ST3820-2 |

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# 5SP4 miniature circuit breakers

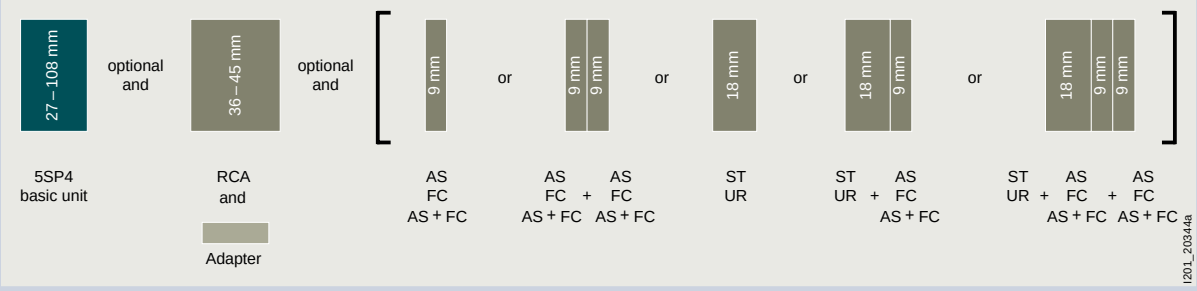
## 10 kA



| | 1P | 2P |
|---|---|---|
| **Rated voltage $U_n$** | 230/400 V AC | 400 V AC |
| **Mounting width** | 1.5 MW | 3 MW |
| |  |  |

| Rated current $I_n$ | Characteristic | | | Characteristic | | |
|---|---|---|---|---|---|---|
| | B | C | D | B | C | D |
| 80 A | 5SP4180-6 | 5SP4180-7 | 5SP4180-8 | 5SP4280-6 | 5SP4280-7 | 5SP4280-8 |
| 100 A | 5SP4191-6 | 5SP4191-7 | 5SP4191-8 | 5SP4291-6 | 5SP4291-7 | 5SP4291-8 |
| 125 A | 5SP4192-6 | 5SP4192-7 | – | 5SP4292-6 | 5SP4292-7 | – |

## Mounting concept




| | | |
|---|---|---|
| AS | Auxiliary switches | See page 3/50 |
| FC | Fault signal contacts | See page 3/52 |
| AS+FC | Auxiliary switches and fault signal contacts | See page 3/53 |
| ST | Shunt trips | See page 3/56 |
| UR | Undervoltage releases | See page 3/57 |
| RCA | Remote control auxiliaries | See page 3/58 |

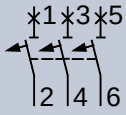


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| 3P | | | 4P | | |
|---|---|---|---|---|---|
| 400 V AC | | | 400 V AC | | |
| 4.5 MW | | | 6 MW | | |
|  | | |  | | |
| **Characteristic** | | | **Characteristic** | | |
| **B** | **C** | **D** | **B** | **C** | **D** |
| 5SP4380-6 | 5SP4380-7 | 5SP4380-8 | 5SP4480-6 | 5SP4480-7 | 5SP4480-8 |
| 5SP4391-6 | 5SP4391-7 | 5SP4391-8 | 5SP4491-6 | 5SP4491-7 | 5SP4491-8 |
| 5SP4392-6 | 5SP4392-7 | – | 5SP4492-6 | 5SP4492-7 | – |

## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |
| **Fault signal contacts (FC)** | | **Article No.** |
| 1 NO + 1 NC | | 5ST3020 |
| 2 NO | | 5ST3021 |
| 2 NC | | 5ST3022 |
| **Auxiliary switches and fault signal contacts (AS+FC)** | | **Article No.** |
| 1 CO (AS) + 1 CO (FC) | | 5ST3062 |
| 5ST3 COM (AS+FC) | | 5ST3062-0MC |
| **Shunt trips (ST)** | | **Article No.** |
| 110 ... 415 V AC, 110 ... 220 V DC | | 5ST3030 |
| 24 ... 48 V AC/DC | | 5ST3031 |
| 12 V DC | | 5ST3031-0XX01 |

| Undervoltage releases (UR) | | Article No. |
|---|---|---|
| With integrated auxiliary switch | 230 V AC | 5ST3040 |
| | 110 V DC | 5ST3041 |
| | 24 V DC | 5ST3042 |
| Without integrated auxiliary switch | 230 V AC | 5ST3043 |
| | 110 V DC | 5ST3044 |
| | 24 V DC | 5ST3045 |
| **Remote control auxiliaries (RCA)** | | **Article No.** |
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/IR test | 100 ... 240 V AC | 5ST3073-0MC new |
| **Adapters for remote control auxiliaries (RCA)** | | **Article No.** |
| 1.5 MW | | 5ST3820-1 |
| 3 ... 6 MW | | 5ST3820-2 |

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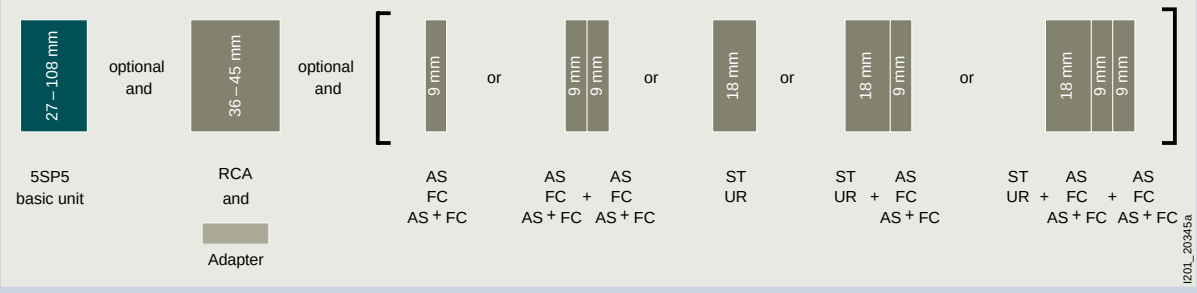
# 5SP5 miniature circuit breakers

## 10 kA

| | 1P | 2P |
|---|---|---|
| **Rated voltage $U_n$** | 220 V DC | 440 V DC |
| **Mounting width** | 1.5 MW | 3 MW |
| |  |  |
| **Rated current $I_n$** | | |
| 80 A | 5SP5180-7CC | 5SP5280-7CC |
| 100 A | 5SP5191-7CC | 5SP5291-7CC |
| 125 A | 5SP5192-7CC | 5SP5292-7CC |

3

## Mounting concept




| | | |
|---|---|---|
| AS | Auxiliary switches | See page 3/50 |
| FC | Fault signal contacts | See page 3/52 |
| AS+FC | Auxiliary switches and fault signal contacts | See page 3/53 |
| ST | Shunt trips | See page 3/56 |
| UR | Undervoltage releases | See page 3/57 |
| RCA | Remote control auxiliaries | See page 3/58 |



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## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

| Fault signal contacts (FC) | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3020 |
| 2 NO | 5ST3021 |
| 2 NC | 5ST3022 |

| Auxiliary switches and fault signal contacts (AS+FC) | Article No. |
|---|---|
| 1 CO (AS) + 1 CO (FC) | 5ST3062 |
| 5ST3 COM (AS+FC) | 5ST3062-0MC |

| Shunt trips (ST) | Article No. |
|---|---|
| 110 ... 415 V AC, 110 ... 220 V DC | 5ST3030 |
| 24 ... 48 V AC/DC | 5ST3031 |
| 12 V DC | 5ST3031-0XX01 |

| Undervoltage releases (UR) | | Article No. |
|---|---|---|
| With integrated auxiliary switch | 230 V AC | 5ST3040 |
| | 110 V DC | 5ST3041 |
| | 24 V DC | 5ST3042 |
| Without integrated auxiliary switch | 230 V AC | 5ST3043 |
| | 110 V DC | 5ST3044 |
| | 24 V DC | 5ST3045 |

| Remote control auxiliaries (RCA) | | Article No. |
|---|---|---|
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/IR test | 100 ... 240 V AC | 5ST3073-0MC new |

| Adapters for remote control auxiliaries (RCA) | Article No. |
|---|---|
| 1.5 MW | 5ST3820-1 |
| 3 ... 6 MW | 5ST3820-2 |

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# 5SY5 miniature circuit breakers

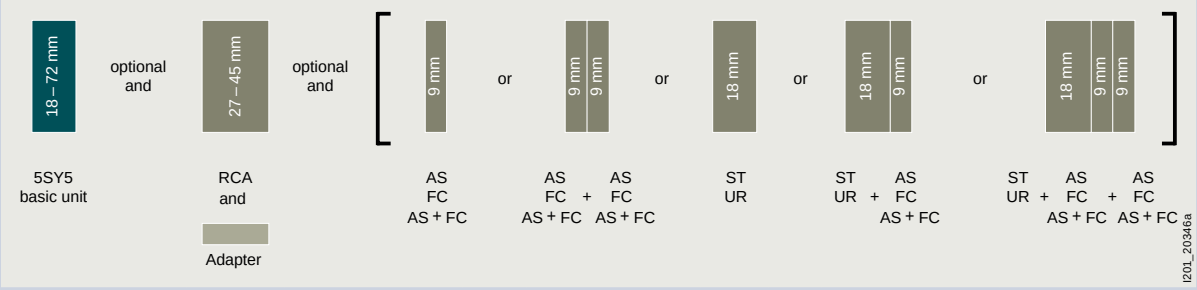
## 10 kA



| | 1P | 2P | 4P |
|---|---|---|---|
| **Rated voltage $U_n$** | 230/400 V AC, 220 V DC | 400 V AC, 440 V DC | 400 V AC, 880 V DC |
| **Mounting width** | 1 MW | 2 MW | 4 MW |
| |  |  |  |

| Rated current $I_n$ | Characteristic | | Characteristic | | Characteristic | |
|---|---|---|---|---|---|---|
| | B | C | B | C | B | C |
| 0.3 A | – | 5SY5114-7 | – | 5SY5214-7 | – | 5SY5414-7 |
| 0.5 A | – | 5SY5105-7 | – | 5SY5205-7 | – | 5SY5405-7 |
| 1 A | – | 5SY5101-7 | – | 5SY5201-7 | – | 5SY5401-7 |
| 1.6 A | – | 5SY5115-7 | – | 5SY5215-7 | – | 5SY5415-7 |
| 2 A | 5SY5102-6 | 5SY5102-7 | 5SY5202-6 | 5SY5202-7 | – | 5SY5402-7 |
| 3 A | – | 5SY5103-7 | – | 5SY5203-7 | – | 5SY5403-7 |
| 4 A | 5SY5104-6 | 5SY5104-7 | 5SY5204-6 | 5SY5204-7 | – | 5SY5404-7 |
| 6 A | 5SY5106-6 | 5SY5106-7 | 5SY5206-6 | 5SY5206-7 | 5SY5406-6 | 5SY5406-7 |
| 8 A | 5SY5108-6 | 5SY5108-7 | 5SY5208-6 | 5SY5208-7 | – | 5SY5408-7 |
| 10 A | 5SY5110-6 | 5SY5110-7 | 5SY5210-6 | 5SY5210-7 | 5SY5410-6 | 5SY5410-7 |
| 13 A | 5SY5113-6 | 5SY5113-7 | 5SY5213-6 | 5SY5213-7 | 5SY5413-6 | 5SY5413-7 |
| 16 A | 5SY5116-6 | 5SY5116-7 | 5SY5216-6 | 5SY5216-7 | 5SY5416-6 | 5SY5416-7 |
| 20 A | 5SY5120-6 | 5SY5120-7 | 5SY5220-6 | 5SY5220-7 | 5SY5420-6 | 5SY5420-7 |
| 25 A | 5SY5125-6 | 5SY5125-7 | 5SY5225-6 | 5SY5225-7 | 5SY5425-6 | 5SY5425-7 |
| 32 A | 5SY5132-6 | 5SY5132-7 | 5SY5232-6 | 5SY5232-7 | 5SY5432-6 | 5SY5432-7 |
| 40 A | 5SY5140-6 | 5SY5140-7 | 5SY5240-6 | 5SY5240-7 | 5SY5440-6 | 5SY5440-7 |
| 50 A | 5SY5150-6 | 5SY5150-7 | 5SY5250-6 | 5SY5250-7 | 5SY5450-6 | 5SY5450-7 |
| 63 A | 5SY5163-6 | 5SY5163-7 | 5SY5263-6 | 5SY5263-7 | 5SY5463-6 | 5SY5463-7 |

## Mounting concept




| | | |
|---|---|---|
| AS | Auxiliary switches | See page 3/50 |
| FC | Fault signal contacts | See page 3/52 |
| AS+FC | Auxiliary switches and fault signal contacts | See page 3/53 |
| ST | Shunt trips | See page 3/56 |
| UR | Undervoltage releases | See page 3/57 |
| RCA | Remote control auxiliaries | See page 3/58 |



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## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

| Fault signal contacts (FC) | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3020 |
| 2 NO | 5ST3021 |
| 2 NC | 5ST3022 |

| Auxiliary switches and fault signal contacts (AS+FC) | Article No. |
|---|---|
| 1 CO (AS) + 1 CO (FC) | 5ST3062 |
| 5ST3 COM (AS+FC) | 5ST3062-0MC |

| Shunt trips (ST) | Article No. |
|---|---|
| 110 ... 415 V AC, 110 ... 220 V DC | 5ST3030 |
| 24 ... 48 V AC/DC | 5ST3031 |
| 12 V DC | 5ST3031-0XX01 |

| Undervoltage releases (UR) | | Article No. |
|---|---|---|
| With integrated auxiliary switch | 230 V AC | 5ST3040 |
| | 110 V DC | 5ST3041 |
| | 24 V DC | 5ST3042 |
| Without integrated auxiliary switch | 230 V AC | 5ST3043 |
| | 110 V DC | 5ST3044 |
| | 24 V DC | 5ST3045 |

| Remote control auxiliaries (RCA) | | Article No. |
|---|---|---|
| Basic | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3053 |
| | 177 ... 270 V AC | 5ST3054 |
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/IR test | 100 ... 240 V AC | 5ST3073-0MC new |

| Adapters for remote control auxiliaries (RCA) | Article No. |
|---|---|
| 1 ... 2 MW | 5ST3820-1 |
| 4 MW | 5ST3820-2 |

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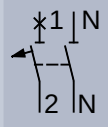
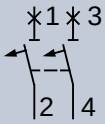
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# 5SY7 miniature circuit breakers

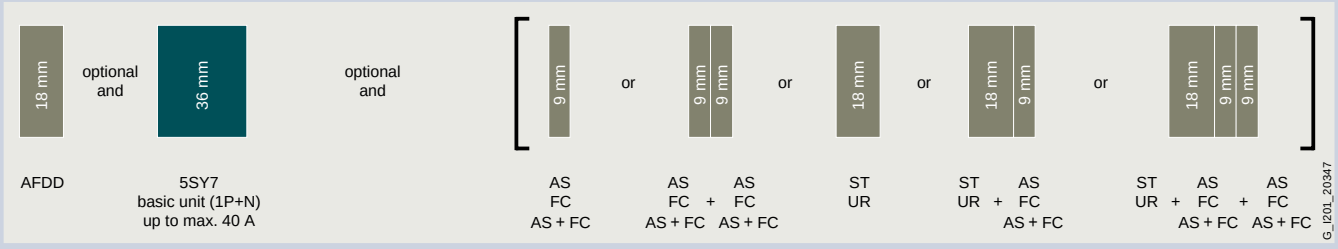
## 15 kA

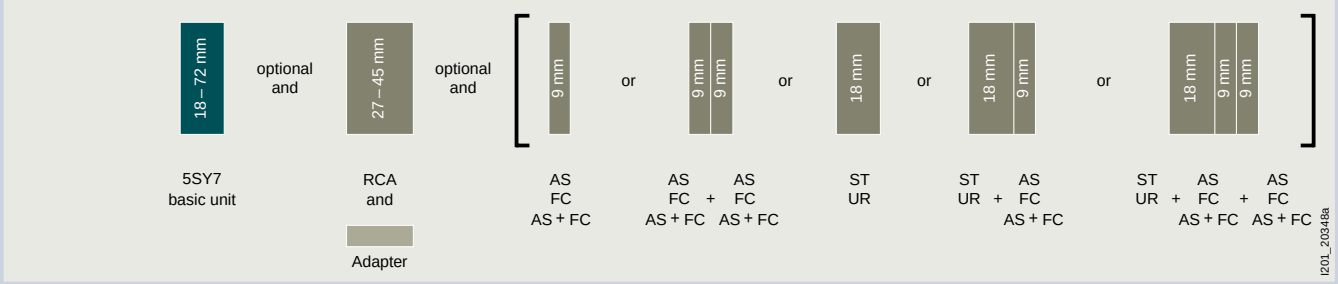


| | 1P | 1P+N | 2P |
|---|---|---|---|
| Rated voltage $U_n$ | 230/400 V AC | 230 V AC | 400 V AC |
| Mounting width | 1 MW | 2 MW | 2 MW |
| |  |  |  |

| Rated current $I_n$ | Main MCB, line side of meter | Characteristic B | C | D | Characteristic B | C | D | Characteristic B | C | D |
|---|---|---|---|---|---|---|---|---|---|---|
| 0.3 A | – | – | 5SY7114-7 | 5SY7114-8 | – | 5SY7514-7 | 5SY7514-8 | – | 5SY7214-7 | 5SY7214-8 |
| 0.5 A | – | – | 5SY7105-7 | 5SY7105-8 | – | 5SY7505-7 | 5SY7505-8 | – | 5SY7205-7 | 5SY7205-8 |
| 1 A | – | – | 5SY7101-7 | 5SY7101-8 | – | 5SY7501-7 | 5SY7501-8 | – | 5SY7201-7 | 5SY7201-8 |
| 1.6 A | – | – | 5SY7115-7 | 5SY7115-8 | – | 5SY7515-7 | 5SY7515-8 | – | 5SY7215-7 | 5SY7215-8 |
| 2 A | – | – | 5SY7102-7 | 5SY7102-8 | – | 5SY7502-7 | 5SY7502-8 | – | 5SY7202-7 | 5SY7202-8 |
| 3 A | – | – | 5SY7103-7 | 5SY7103-8 | – | 5SY7503-7 | 5SY7503-8 | – | 5SY7203-7 | 5SY7203-8 |
| 4 A | – | – | 5SY7104-7 | 5SY7104-8 | – | 5SY7504-7 | 5SY7504-8 | – | 5SY7204-7 | 5SY7204-8 |
| 6 A | – | 5SY7106-6 | 5SY7106-7 | 5SY7106-8 | 5SY7506-6 | 5SY7506-7 | 5SY7506-8 | 5SY7206-6 | 5SY7206-7 | 5SY7206-8 |
| | ■ | 5SY7106-6KK13 | – | – | – | – | – | – | – | – |
| 8 A | – | – | 5SY7108-7 | 5SY7108-8 | – | 5SY7508-7 | 5SY7508-8 | – | 5SY7208-7 | 5SY7208-8 |
| 10 A | – | 5SY7110-6 | 5SY7110-7 | 5SY7110-8 | 5SY7510-6 | 5SY7510-7 | 5SY7510-8 | 5SY7210-6 | 5SY7210-7 | 5SY7210-8 |
| | ■ | 5SY7110-6KK13 | – | – | – | – | – | – | – | – |
| 13 A | – | 5SY7113-6 | 5SY7113-7 | 5SY7113-8 | 5SY7513-6 | 5SY7513-7 | 5SY7513-8 | 5SY7213-6 | 5SY7213-7 | 5SY7213-8 |
| 16 A | – | 5SY7116-6 | 5SY7116-7 | 5SY7116-8 | 5SY7516-6 | 5SY7516-7 | 5SY7516-8 | 5SY7216-6 | 5SY7216-7 | 5SY7216-8 |
| 20 A | – | 5SY7120-6 | 5SY7120-7 | 5SY7120-8 | 5SY7520-6 | 5SY7520-7 | 5SY7520-8 | 5SY7220-6 | 5SY7220-7 | 5SY7220-8 |
| 25 A | – | 5SY7125-6 | 5SY7125-7 | 5SY7125-8 | 5SY7525-6 | 5SY7525-7 | 5SY7525-8 | 5SY7225-6 | 5SY7225-7 | 5SY7225-8 |
| 32 A | – | 5SY7132-6 | 5SY7132-7 | 5SY7132-8 | 5SY7532-6 | 5SY7532-7 | 5SY7532-8 | 5SY7232-6 | 5SY7232-7 | 5SY7232-8 |
| 40 A | – | 5SY7140-6 | 5SY7140-7 | 5SY7140-8 | 5SY7540-6 | 5SY7540-7 | 5SY7540-8 | 5SY7240-6 | 5SY7240-7 | 5SY7240-8 |
| 50 A | – | 5SY7150-6 | 5SY7150-7 | 5SY7150-8 | 5SY7550-6 | 5SY7550-7 | 5SY7550-8 | 5SY7250-6 | 5SY7250-7 | 5SY7250-8 |
| 63 A | – | 5SY7163-6 | 5SY7163-7 | 5SY7163-8 | 5SY7563-6 | 5SY7563-7 | 5SY7563-8 | 5SY7263-6 | 5SY7263-7 | 5SY7263-8 |

## Mounting concept



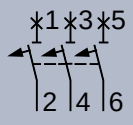
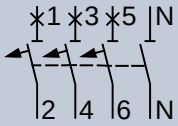

AFDD Arc fault detection units See page 3/61
AS Auxiliary switches See page 3/50
FC Fault signal contacts See page 3/52
AS+FC Auxiliary switches and fault signal contacts See page 3/53
ST Shunt trips See page 3/56
UR Undervoltage releases See page 3/57
RCA Remote control auxiliaries See page 3/58

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| 3P | | | 3P+N | | | 4P | | |
|---|---|---|---|---|---|---|---|---|
| 400 V AC | | | 400 V AC | | | 400 V AC | | |
| 3 MW | | | 4 MW | | | 4 MW | | |
|  | | |  | | |  | | |
| Characteristic | | | Characteristic | | | Characteristic | | |
| B | C | D | B | C | D | B | C | D |
| – | 5SY7314-7 | 5SY7314-8 | – | 5SY7614-7 | 5SY7614-8 | – | 5SY7414-7 | 5SY7414-8 |
| – | 5SY7305-7 | 5SY7305-8 | – | 5SY7605-7 | 5SY7605-8 | – | 5SY7405-7 | 5SY7405-8 |
| – | 5SY7301-7 | 5SY7301-8 | – | 5SY7601-7 | 5SY7601-8 | – | 5SY7401-7 | 5SY7401-8 |
| – | 5SY7315-7 | 5SY7315-8 | – | 5SY7615-7 | 5SY7615-8 | – | 5SY7415-7 | 5SY7415-8 |
| – | 5SY7302-7 | 5SY7302-8 | – | 5SY7602-7 | 5SY7602-8 | – | 5SY7402-7 | 5SY7402-8 |
| – | 5SY7303-7 | 5SY7303-8 | – | 5SY7603-7 | 5SY7603-8 | – | 5SY7403-7 | 5SY7403-8 |
| – | 5SY7304-7 | 5SY7304-8 | – | 5SY7604-7 | 5SY7604-8 | – | 5SY7404-7 | 5SY7404-8 |
| 5SY7306-6 | 5SY7306-7 | 5SY7306-8 | 5SY7606-6 | 5SY7606-7 | 5SY7606-8 | 5SY7406-6 | 5SY7406-7 | 5SY7406-8 |
| – | – | – | – | – | – | – | – | – |
| – | 5SY7308-7 | 5SY7308-8 | – | 5SY7608-7 | 5SY7608-8 | – | 5SY7408-7 | 5SY7408-8 |
| 5SY7310-6 | 5SY7310-7 | 5SY7310-8 | 5SY7610-6 | 5SY7610-7 | 5SY7610-8 | 5SY7410-6 | 5SY7410-7 | 5SY7410-8 |
| – | – | – | – | – | – | – | – | – |
| 5SY7313-6 | 5SY7313-7 | 5SY7313-8 | 5SY7613-6 | 5SY7613-7 | 5SY7613-8 | 5SY7413-6 | 5SY7413-7 | 5SY7413-8 |
| 5SY7316-6 | 5SY7316-7 | 5SY7316-8 | 5SY7616-6 | 5SY7616-7 | 5SY7616-8 | 5SY7416-6 | 5SY7416-7 | 5SY7416-8 |
| 5SY7320-6 | 5SY7320-7 | 5SY7320-8 | 5SY7620-6 | 5SY7620-7 | 5SY7620-8 | 5SY7420-6 | 5SY7420-7 | 5SY7420-8 |
| 5SY7325-6 | 5SY7325-7 | 5SY7325-8 | 5SY7625-6 | 5SY7625-7 | 5SY7625-8 | 5SY7425-6 | 5SY7425-7 | 5SY7425-8 |
| 5SY7332-6 | 5SY7332-7 | 5SY7332-8 | 5SY7632-6 | 5SY7632-7 | 5SY7632-8 | 5SY7432-6 | 5SY7432-7 | 5SY7432-8 |
| 5SY7340-6 | 5SY7340-7 | 5SY7340-8 | 5SY7640-6 | 5SY7640-7 | 5SY7640-8 | 5SY7440-6 | 5SY7440-7 | 5SY7440-8 |
| 5SY7350-6 | 5SY7350-7 | 5SY7350-8 | 5SY7650-6 | 5SY7650-7 | 5SY7650-8 | 5SY7450-6 | 5SY7450-7 | 5SY7450-8 |
| 5SY7363-6 | 5SY7363-7 | 5SY7363-8 | 5SY7663-6 | 5SY7663-7 | 5SY7663-8 | 5SY7463-6 | 5SY7463-7 | 5SY7463-8 |

## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |
| **Fault signal contacts (FC)** | | **Article No.** |
| 1 NO + 1 NC | | 5ST3020 |
| 2 NO | | 5ST3021 |
| 2 NC | | 5ST3022 |
| **Auxiliary switches and fault signal contacts (AS+FC)** | | **Article No.** |
| 1 CO (AS) + 1 CO (FC) | | 5ST3062 |
| 5ST3 COM (AS+FC) | | 5ST3062-0MC |
| **Shunt trips (ST)** | | **Article No.** |
| 110 ... 415 V AC, 110 ... 220 V DC | | 5ST3030 |
| 24 ... 48 V AC/DC | | 5ST3031 |
| 12 V DC | | 5ST3031-0XX01 |
| **Arc fault detection units (AFDD)** | | **Article No.** |
| For basic units 1P+N (2 MW) | $I_n$ up to 16 A | 5SM6021-2 |
| | $I_n$ up to 40 A | 5SM6024-2 |

| Undervoltage releases (UR) | | Article No. |
|---|---|---|
| With integrated auxiliary switch | 230 V AC | 5ST3040 |
| | 110 V DC | 5ST3041 |
| | 24 V DC | 5ST3042 |
| Without integrated auxiliary switch | 230 V AC | 5ST3043 |
| | 110 V DC | 5ST3044 |
| | 24 V DC | 5ST3045 |
| **Remote control auxiliaries (RCA)** | | **Article No.** |
| Basic | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3053 |
| | 177 ... 270 V AC | 5ST3054 |
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/IR test | 100 ... 240 V AC | 5ST3073-0MC new |
| **Adapters for remote control auxiliaries (RCA)** | | **Article No.** |
| 1 ... 2 MW | | 5ST3820-1 |
| 3 ... 4 MW | | 5ST3820-2 |

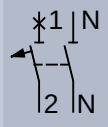
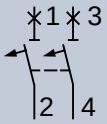
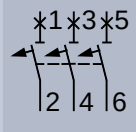
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# 5SY8 miniature circuit breakers

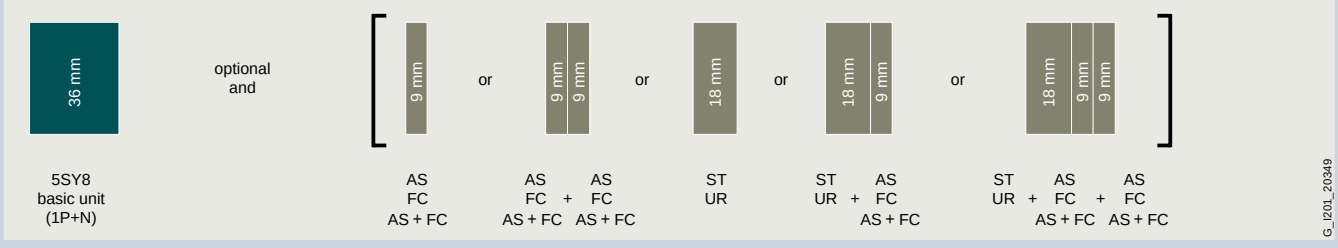
## 25 kA

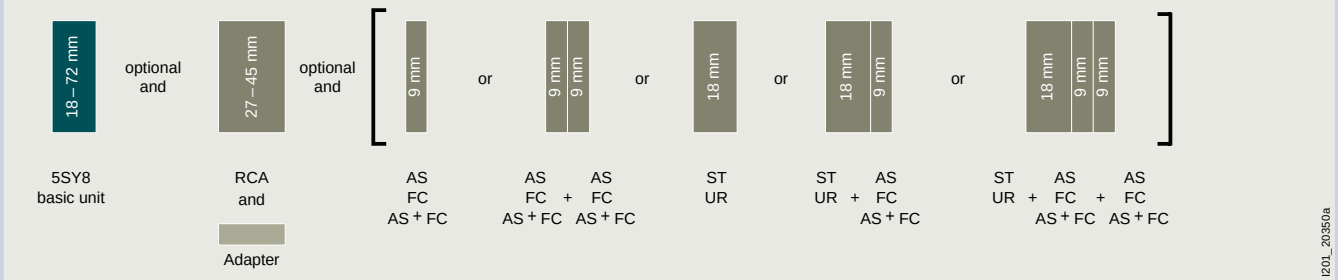
| | 1P | 1P+N | 2P | 3P |
|---|---|---|---|---|
| **Rated voltage $U_n$** | 230/400 V AC | 230 V AC | 400 V AC | 400 V AC |
| **Mounting width** | 1 MW | 2 MW | 2 MW | 3 MW |
| |  |  |  |  |



| Rated current $I_n$ | Characteristic C | Characteristic D | Characteristic C | Characteristic D | Characteristic C | Characteristic D | Characteristic C | Characteristic D |
|---|---|---|---|---|---|---|---|---|
| 0.3 A | 5SY8114-7 | 5SY8114-8 | 5SY8514-7 | 5SY8514-8 | 5SY8214-7 | 5SY8214-8 | 5SY8314-7 | 5SY8314-8 |
| 0.5 A | 5SY8105-7 | 5SY8105-8 | 5SY8505-7 | 5SY8505-8 | 5SY8205-7 | 5SY8205-8 | 5SY8305-7 | 5SY8305-8 |
| 1 A | 5SY8101-7 | 5SY8101-8 | 5SY8501-7 | 5SY8501-8 | 5SY8201-7 | 5SY8201-8 | 5SY8301-7 | 5SY8301-8 |
| 1.6 A | 5SY8115-7 | 5SY8115-8 | 5SY8515-7 | 5SY8515-8 | 5SY8215-7 | 5SY8215-8 | 5SY8315-7 | 5SY8315-8 |
| 2 A | 5SY8102-7 | 5SY8102-8 | 5SY8502-7 | 5SY8502-8 | 5SY8202-7 | 5SY8202-8 | 5SY8302-7 | 5SY8302-8 |
| 3 A | 5SY8103-7 | 5SY8103-8 | 5SY8503-7 | 5SY8503-8 | 5SY8203-7 | 5SY8203-8 | 5SY8303-7 | 5SY8303-8 |
| 4 A | 5SY8104-7 | 5SY8104-8 | 5SY8504-7 | 5SY8504-8 | 5SY8204-7 | 5SY8204-8 | 5SY8304-7 | 5SY8304-8 |
| 6 A | 5SY8106-7 | 5SY8106-8 | 5SY8506-7 | 5SY8506-8 | 5SY8206-7 | 5SY8206-8 | 5SY8306-7 | 5SY8306-8 |
| 8 A | 5SY8108-7 | 5SY8108-8 | 5SY8508-7 | 5SY8508-8 | 5SY8208-7 | 5SY8208-8 | 5SY8308-7 | 5SY8308-8 |
| 10 A | 5SY8110-7 | 5SY8110-8 | 5SY8510-7 | 5SY8510-8 | 5SY8210-7 | 5SY8210-8 | 5SY8310-7 | 5SY8310-8 |
| 12.5 A | – | – | – | – | – | – | – | – |
| 13 A | 5SY8113-7 | 5SY8113-8 | 5SY8513-7 | 5SY8513-8 | 5SY8213-7 | 5SY8213-8 | 5SY8313-7 | 5SY8313-8 |
| 16 A | 5SY8116-7 | 5SY8116-8 | 5SY8516-7 | 5SY8516-8 | 5SY8216-7 | 5SY8216-8 | 5SY8316-7 | 5SY8316-8 |
| 20 A | 5SY8120-7 | 5SY8120-8 | 5SY8520-7 | 5SY8520-8 | 5SY8220-7 | 5SY8220-8 | 5SY8320-7 | 5SY8320-8 |
| 25 A | 5SY8125-7 | 5SY8125-8 | 5SY8525-7 | 5SY8525-8 | 5SY8225-7 | 5SY8225-8 | 5SY8325-7 | 5SY8325-8 |
| 32 A | 5SY8132-7 | 5SY8132-8 | 5SY8532-7 | 5SY8532-8 | 5SY8232-7 | 5SY8232-8 | 5SY8332-7 | 5SY8332-8 |
| 40 A | 5SY8140-7 | 5SY8140-8 | 5SY8540-7 | 5SY8540-8 | 5SY8240-7 | 5SY8240-8 | 5SY8340-7 | 5SY8340-8 |
| 50 A | 5SY8150-7 | 5SY8150-8 | 5SY8550-7 | 5SY8550-8 | 5SY8250-7 | 5SY8250-8 | 5SY8350-7 | 5SY8350-8 |
| 63 A | 5SY8163-7 | 5SY8163-8 | 5SY8563-7 | 5SY8563-8 | 5SY8263-7 | 5SY8263-8 | 5SY8363-7 | 5SY8363-8 |

## Mounting concept




| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| AFDD | Arc fault detection units | See page 3/61 | AS+FC | Auxiliary switches and fault signal contacts | See page 3/53 | UR | Undervoltage releases | See page 3/57 |
| AS | Auxiliary switches | See page 3/50 | | | | RCA | Remote control auxiliaries | See page 3/58 |
| FC | Fault signal contacts | See page 3/52 | ST | Shunt trips | See page 3/56 | | | |

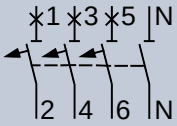
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| 3P+N | | 4P | |
|---|---|---|---|
| 400 V AC | | 400 V AC | |
| 4 MW | | 4 MW | |
|  | |  | |
| **Characteristic** | | **Characteristic** | |
| **C** | **D** | **C** | **D** |
| 5SY8614-7 | 5SY8614-8 | 5SY8414-7 | 5SY8414-8 |
| 5SY8605-7 | 5SY8605-8 | 5SY8405-7 | 5SY8405-8 |
| 5SY8601-7 | 5SY8601-8 | 5SY8401-7 | 5SY8401-8 |
| 5SY8615-7 | 5SY8615-8 | 5SY8415-7 | 5SY8415-8 |
| 5SY8602-7 | 5SY8602-8 | 5SY8402-7 | 5SY8402-8 |
| 5SY8603-7 | 5SY8603-8 | 5SY8403-7 | 5SY8403-8 |
| 5SY8604-7 | 5SY8604-8 | 5SY8404-7 | 5SY8404-8 |
| 5SY8606-7 | 5SY8606-8 | 5SY8406-7 | 5SY8406-8 |
| 5SY8608-7 | 5SY8608-8 | 5SY8408-7 | 5SY8408-8 |
| 5SY8610-7 | 5SY8610-8 | 5SY8410-7 | 5SY8410-8 |
| – | – | – | – |
| 5SY8613-7 | 5SY8613-8 | 5SY8413-7 | 5SY8413-8 |
| 5SY8616-7 | 5SY8616-8 | 5SY8416-7 | 5SY8416-8 |
| 5SY8620-7 | 5SY8620-8 | 5SY8420-7 | 5SY8420-8 |
| 5SY8625-7 | 5SY8625-8 | 5SY8425-7 | 5SY8425-8 |
| 5SY8632-7 | 5SY8632-8 | 5SY8432-7 | 5SY8432-8 |
| 5SY8640-7 | 5SY8640-8 | 5SY8440-7 | 5SY8440-8 |
| 5SY8650-7 | 5SY8650-8 | 5SY8450-7 | 5SY8450-8 |
| 5SY8663-7 | 5SY8663-8 | 5SY8463-7 | 5SY8463-8 |

## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |
| **Fault signal contacts (FC)** | | **Article No.** |
| 1 NO + 1 NC | | 5ST3020 |
| 2 NO | | 5ST3021 |
| 2 NC | | 5ST3022 |
| **Auxiliary switches and fault signal contacts (AS+FC)** | | **Article No.** |
| 1 CO (AS) + 1 CO (FC) | | 5ST3062 |
| 5ST3 COM (AS+FC) | | 5ST3062-0MC |
| **Shunt trips (ST)** | | **Article No.** |
| 110 ... 415 V AC, 110 ... 220 V DC | | 5ST3030 |
| 24 ... 48 V AC/DC | | 5ST3031 |
| 12 V DC | | 5ST3031-0XX01 |

| Undervoltage releases (UR) | | Article No. |
|---|---|---|
| With integrated auxiliary switch | 230 V AC | 5ST3040 |
| | 110 V DC | 5ST3041 |
| | 24 V DC | 5ST3042 |
| Without integrated auxiliary switch | 230 V AC | 5ST3043 |
| | 110 V DC | 5ST3044 |
| | 24 V DC | 5ST3045 |
| **Remote control auxiliaries (RCA)** | | **Article No.** |
| Basic | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3053 |
| | 177 ... 270 V AC | 5ST3054 |
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/IR test | 100 ... 240 V AC | 5ST3073-0MC new |
| **Adapters for remote control auxiliaries (RCA)** | | **Article No.** |
| 1 ... 2 MW | | 5ST3820-1 |
| 3 ... 4 MW | | 5ST3820-2 |

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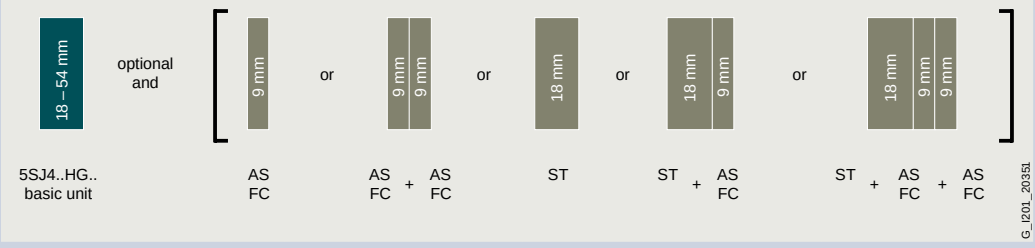
# 5SJ4..HG.. miniature circuit breakers

## According to UL 489, 14/10 kA



| | 1P "same polarity only" | | | 1P | | | |
|---|---|---|---|---|---|---|---|
| **Rated voltage $U_n$** | 240 V AC | 240 V AC | 240 V AC | 240 V AC | 480Y/277 V AC | 240 V AC | 480Y/277 V AC |
| **Mounting width** | 1 MW | | | 1 MW | | | |
| |  | | |  | | | |
| **Rated current $I_n$** | **Characteristic** | | | **Characteristic** | | | |
| | **B** | **C** | **D** | **C** | **C** | **D** | **D** |
| 0.3 A | – | 5SJ4114-7HG40 | 5SJ4114-8HG40 | 5SJ4114-7HG41 | 5SJ4114-7HG42 | 5SJ4114-8HG41 | 5SJ4114-8HG42 |
| 0.5 A | – | 5SJ4105-7HG40 | 5SJ4105-8HG40 | 5SJ4105-7HG41 | 5SJ4105-7HG42 | 5SJ4105-8HG41 | 5SJ4105-8HG42 |
| 1 A | – | 5SJ4101-7HG40 | 5SJ4101-8HG40 | 5SJ4101-7HG41 | 5SJ4101-7HG42 | 5SJ4101-8HG41 | 5SJ4101-8HG42 |
| 1.6 A | – | 5SJ4115-7HG40 | 5SJ4115-8HG40 | 5SJ4115-7HG41 | 5SJ4115-7HG42 | 5SJ4115-8HG41 | 5SJ4115-8HG42 |
| 2 A | – | 5SJ4102-7HG40 | 5SJ4102-8HG40 | 5SJ4102-7HG41 | 5SJ4102-7HG42 | 5SJ4102-8HG41 | 5SJ4102-8HG42 |
| 3 A | – | 5SJ4103-7HG40 | 5SJ4103-8HG40 | 5SJ4103-7HG41 | 5SJ4103-7HG42 | 5SJ4103-8HG41 | 5SJ4103-8HG42 |
| 4 A | – | 5SJ4104-7HG40 | 5SJ4104-8HG40 | 5SJ4104-7HG41 | 5SJ4104-7HG42 | 5SJ4104-8HG41 | 5SJ4104-8HG42 |
| 5 A | – | 5SJ4111-7HG40 | 5SJ4111-8HG40 | 5SJ4111-7HG41 | 5SJ4111-7HG42 | 5SJ4111-8HG41 | 5SJ4111-8HG42 |
| 6 A | 5SJ4106-6HG40 | 5SJ4106-7HG40 | 5SJ4106-8HG40 | 5SJ4106-7HG41 | 5SJ4106-7HG42 | 5SJ4106-8HG41 | 5SJ4106-8HG42 |
| 8 A | – | 5SJ4108-7HG40 | 5SJ4108-8HG40 | 5SJ4108-7HG41 | 5SJ4108-7HG42 | 5SJ4108-8HG41 | 5SJ4108-8HG42 |
| 10 A | 5SJ4110-6HG40 | 5SJ4110-7HG40 | 5SJ4110-8HG40 | 5SJ4110-7HG41 | 5SJ4110-7HG42 | 5SJ4110-8HG41 | 5SJ4110-8HG42 |
| 13 A | 5SJ4113-6HG40 | 5SJ4113-7HG40 | 5SJ4113-8HG40 | 5SJ4113-7HG41 | 5SJ4113-7HG42 | 5SJ4113-8HG41 | 5SJ4113-8HG42 |
| 15 A | 5SJ4118-6HG40 | 5SJ4118-7HG40 | 5SJ4118-8HG40 | 5SJ4118-7HG41 | 5SJ4118-7HG42 | 5SJ4118-8HG41 | 5SJ4118-8HG42 |
| 16 A | 5SJ4116-6HG40 | 5SJ4116-7HG40 | 5SJ4116-8HG40 | 5SJ4116-7HG41 | 5SJ4116-7HG42 | 5SJ4116-8HG41 | 5SJ4116-8HG42 |
| 20 A | 5SJ4120-6HG40 | 5SJ4120-7HG40 | 5SJ4120-8HG40 | 5SJ4120-7HG41 | 5SJ4120-7HG42 | 5SJ4120-8HG41 | 5SJ4120-8HG42 |
| 25 A | 5SJ4125-6HG40 | 5SJ4125-7HG40 | 5SJ4125-8HG40 | 5SJ4125-7HG41 | 5SJ4125-7HG42 | 5SJ4125-8HG41 | 5SJ4125-8HG42 |
| 30 A | 5SJ4130-6HG40 | 5SJ4130-7HG40 | 5SJ4130-8HG40 | 5SJ4130-7HG41 | 5SJ4130-7HG42 | 5SJ4130-8HG41 | 5SJ4130-8HG42 |
| 32 A | 5SJ4132-6HG40 | 5SJ4132-7HG40 | 5SJ4132-8HG40 | 5SJ4132-7HG41 | 5SJ4132-7HG42 | 5SJ4132-8HG41 | 5SJ4132-8HG42 |
| 35 A | 5SJ4135-6HG40 | 5SJ4135-7HG40 | 5SJ4135-8HG40 | 5SJ4135-7HG41 | 5SJ4135-7HG42 | 5SJ4135-8HG41 | – |
| 40 A | 5SJ4140-6HG40 | 5SJ4140-7HG40 | 5SJ4140-8HG40 | 5SJ4140-7HG41 | 5SJ4140-7HG42 | 5SJ4140-8HG41 | – |
| 45 A | 5SJ4145-6HG40 | 5SJ4145-7HG40 | 5SJ4145-8HG40 | 5SJ4145-7HG41 | – | 5SJ4145-8HG41 | – |
| 50 A | 5SJ4150-6HG40 | 5SJ4150-7HG40 | 5SJ4150-8HG40 | 5SJ4150-7HG41 | – | 5SJ4150-8HG41 | – |
| 60 A | 5SJ4160-6HG40 | 5SJ4160-7HG40 | 5SJ4160-8HG40 | 5SJ4160-7HG41 | – | 5SJ4160-8HG41 | – |
| 63 A | 5SJ4163-6HG40 | 5SJ4163-7HG40 | 5SJ4163-8HG40 | 5SJ4163-7HG41 | – | 5SJ4163-8HG41 | – |

## Mounting concept




AS Auxiliary switches See page 3/50
FC Fault signal contacts See page 3/52
ST Shunt trips See page 3/56

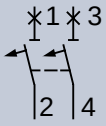
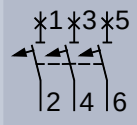
Quick selection guide, page 3/8

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| 2P | | | | 3P | | | |
|---|---|---|---|---|---|---|---|
| 240 V AC | 480Y/277 V AC | 240 V AC | 480Y/277 V AC | 240 V AC | 480Y/277 V AC | 240 V AC | 480Y/277 V AC |
| 2 MW | | | | 3 MW | | | |
|  | | | |  | | | |
| **Characteristic** | | | | **Characteristic** | | | |
| **C** | **C** | **D** | **D** | **C** | **C** | **D** | **D** |
| 5SJ4214-7HG41 | 5SJ4214-7HG42 | 5SJ4214-8HG41 | 5SJ4214-8HG42 | 5SJ4314-7HG41 | 5SJ4314-7HG42 | 5SJ4314-8HG41 | 5SJ4314-8HG42 |
| 5SJ4205-7HG41 | 5SJ4205-7HG42 | 5SJ4205-8HG41 | 5SJ4205-8HG42 | 5SJ4305-7HG41 | 5SJ4305-7HG42 | 5SJ4305-8HG41 | 5SJ4305-8HG42 |
| 5SJ4201-7HG41 | 5SJ4201-7HG42 | 5SJ4201-8HG41 | 5SJ4201-8HG42 | 5SJ4301-7HG41 | 5SJ4301-7HG42 | 5SJ4301-8HG41 | 5SJ4301-8HG42 |
| 5SJ4215-7HG41 | 5SJ4215-7HG42 | 5SJ4215-8HG41 | 5SJ4215-8HG42 | 5SJ4315-7HG41 | 5SJ4315-7HG42 | 5SJ4315-8HG41 | 5SJ4315-8HG42 |
| 5SJ4202-7HG41 | 5SJ4202-7HG42 | 5SJ4202-8HG41 | 5SJ4202-8HG42 | 5SJ4302-7HG41 | 5SJ4302-7HG42 | 5SJ4302-8HG41 | 5SJ4302-8HG42 |
| 5SJ4203-7HG41 | 5SJ4203-7HG42 | 5SJ4203-8HG41 | 5SJ4203-8HG42 | 5SJ4303-7HG41 | 5SJ4303-7HG42 | 5SJ4303-8HG41 | 5SJ4303-8HG42 |
| 5SJ4204-7HG41 | 5SJ4204-7HG42 | 5SJ4204-8HG41 | 5SJ4204-8HG42 | 5SJ4304-7HG41 | 5SJ4304-7HG42 | 5SJ4304-8HG41 | 5SJ4304-8HG42 |
| 5SJ4211-7HG41 | 5SJ4211-7HG42 | 5SJ4211-8HG41 | 5SJ4211-8HG42 | 5SJ4311-7HG41 | 5SJ4311-7HG42 | 5SJ4311-8HG41 | 5SJ4311-8HG42 |
| 5SJ4206-7HG41 | 5SJ4206-7HG42 | 5SJ4206-8HG41 | 5SJ4206-8HG42 | 5SJ4306-7HG41 | 5SJ4306-7HG42 | 5SJ4306-8HG41 | 5SJ4306-8HG42 |
| 5SJ4208-7HG41 | 5SJ4208-7HG42 | 5SJ4208-8HG41 | 5SJ4208-8HG42 | 5SJ4308-7HG41 | 5SJ4308-7HG42 | 5SJ4308-8HG41 | 5SJ4308-8HG42 |
| 5SJ4210-7HG41 | 5SJ4210-7HG42 | 5SJ4210-8HG41 | 5SJ4210-8HG42 | 5SJ4310-7HG41 | 5SJ4310-7HG42 | 5SJ4310-8HG41 | 5SJ4310-8HG42 |
| 5SJ4213-7HG41 | 5SJ4213-7HG42 | 5SJ4213-8HG41 | 5SJ4213-8HG42 | 5SJ4313-7HG41 | 5SJ4313-7HG42 | 5SJ4313-8HG41 | 5SJ4313-8HG42 |
| 5SJ4218-7HG41 | 5SJ4218-7HG42 | 5SJ4218-8HG41 | 5SJ4218-8HG42 | 5SJ4318-7HG41 | 5SJ4318-7HG42 | 5SJ4318-8HG41 | 5SJ4318-8HG42 |
| 5SJ4216-7HG41 | 5SJ4216-7HG42 | 5SJ4216-8HG41 | 5SJ4216-8HG42 | 5SJ4316-7HG41 | 5SJ4316-7HG42 | 5SJ4316-8HG41 | 5SJ4316-8HG42 |
| 5SJ4220-7HG41 | 5SJ4220-7HG42 | 5SJ4220-8HG41 | 5SJ4220-8HG42 | 5SJ4320-7HG41 | 5SJ4320-7HG42 | 5SJ4320-8HG41 | 5SJ4320-8HG42 |
| 5SJ4225-7HG41 | 5SJ4225-7HG42 | 5SJ4225-8HG41 | 5SJ4225-8HG42 | 5SJ4325-7HG41 | 5SJ4325-7HG42 | 5SJ4325-8HG41 | 5SJ4325-8HG42 |
| 5SJ4230-7HG41 | 5SJ4230-7HG42 | 5SJ4230-8HG41 | 5SJ4230-8HG42 | 5SJ4330-7HG41 | 5SJ4330-7HG42 | 5SJ4330-8HG41 | 5SJ4330-8HG42 |
| 5SJ4232-7HG41 | 5SJ4232-7HG42 | 5SJ4232-8HG41 | 5SJ4232-8HG42 | 5SJ4332-7HG41 | 5SJ4332-7HG42 | 5SJ4332-8HG41 | 5SJ4332-8HG42 |
| 5SJ4235-7HG41 | 5SJ4235-7HG42 | 5SJ4235-8HG41 | – | 5SJ4335-7HG41 | 5SJ4335-7HG42 | 5SJ4335-8HG41 | – |
| 5SJ4240-7HG41 | 5SJ4240-7HG42 | 5SJ4240-8HG41 | – | 5SJ4340-7HG41 | 5SJ4340-7HG42 | 5SJ4340-8HG41 | – |
| 5SJ4245-7HG41 | – | 5SJ4245-8HG41 | – | 5SJ4345-7HG41 | – | 5SJ4345-8HG41 | – |
| 5SJ4250-7HG41 | – | 5SJ4250-8HG41 | – | 5SJ4350-7HG41 | – | 5SJ4350-8HG41 | – |
| 5SJ4260-7HG41 | – | 5SJ4260-8HG41 | – | 5SJ4360-7HG41 | – | 5SJ4360-8HG41 | – |
| 5SJ4263-7HG41 | – | 5SJ4263-8HG41 | – | 5SJ4363-7HG41 | – | 5SJ4363-8HG41 | – |

## Accessories

| Auxiliary switches (AS) acc. to UL 489 | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3010-0HG |
| 2 NO | 5ST3011-0HG |
| 2 NC | 5ST3012-0HG |
| **Fault signal contacts (FC) acc. to UL 489** | **Article No.** |
| 1 NO + 1 NC | 5ST3020-0HG |
| 2 NO | 5ST3021-0HG |
| 2 NC | 5ST3022-0HG |
| **Shunt trips (ST) acc. to UL 489** | **Article No.** |
| 110 ... 415 V AC, 110 ... 220 V DC | 5ST3030-0HG |
| 24 ... 48 V AC/DC | 5ST3031-0HG |

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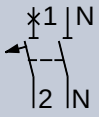
# 5SL6 COM miniature circuit breakers with measuring and communication function

Siemens EcoTech

## With energy monitoring (EM),1P+N 6 kA compact miniature circuit breakers



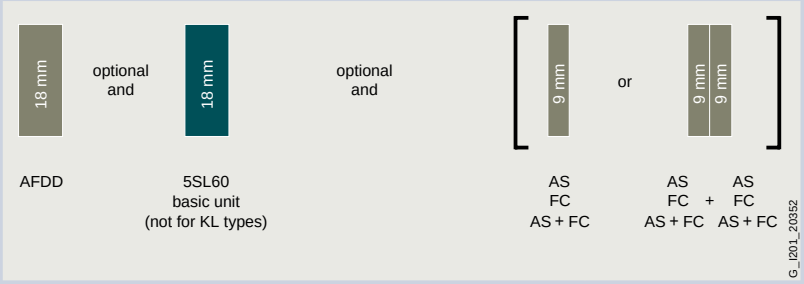
| | 1P+N (N pole right) |
|---|---|
| Rated voltage $U_n$ | 230 V AC |
| Mounting width | 1 MW |

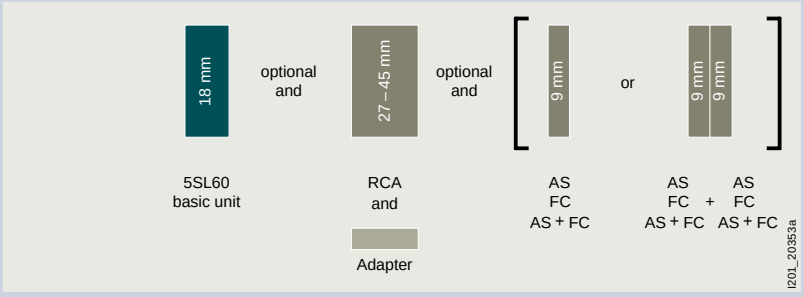



| Rated current $I_n$ | Characteristic B | C |
|---|---|---|
| 2 A | 5SL6002-6MC | 5SL6002-7MC |
| 4 A | 5SL6004-6MC | 5SL6004-7MC |
| 6 A | 5SL6006-6MC | 5SL6006-7MC |
| 8 A | – | 5SL6008-7MC |
| 10 A | 5SL6010-6MC | 5SL6010-7MC |
| 13 A | 5SL6013-6MC | 5SL6013-7MC |
| 16 A | 5SL6016-6MC | 5SL6016-7MC |
| 20 A | 5SL6020-6MC | 5SL6020-7MC |
| 25 A | 5SL6025-6MC | 5SL6025-7MC |
| 32 A | 5SL6032-6MC | 5SL6032-7MC |

**Note:**
Please note the country-specific radio licenses of the products at
www.siemens.com/lowvoltage/certificates (109801197)

## Mounting concept




| | | |
|---|---|---|
| AFDD | Arc fault detection units | See page 3/61 |
| AS | Auxiliary switches | See page 3/50 |
| FC | Fault signal contacts | See page 3/52 |
| AS+FC | Auxiliary switches and fault signal contacts | See page 3/53 |
| RCA | Remote control auxiliaries | See page 3/58 |

## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |
| **Fault signal contacts (FC)** | | **Article No.** |
| 1 NO + 1 NC | | 5ST3020 |
| 2 NO | | 5ST3021 |
| 2 NC | | 5ST3022 |
| **Auxiliary switches and fault signal contacts (AS+FC)** | | **Article No.** |
| 1 CO (AS) + 1 CO (FC) | | 5ST3062 |
| 5ST3 COM (AS+FC) | | 5ST3062-0MC |

| Remote control auxiliaries (RCA) | | Article No. |
|---|---|---|
| Basic | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3053 |
| | 177 ... 270 V AC | 5ST3054 |
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/ IR test | 100 ... 240 V AC | 5ST3073-0MC new |
| **Adapters for remote control auxiliaries (RCA)** | | **Article No.** |
| 1 MW | | 5ST3820-6 |
| **Arc fault detection units (AFDD)** | | **Article No.** |
| For basic units 1P+N (1 MW), not for KL types | $I_n$ up to 16 A | 5SM6011-2 |
| | $I_n$ up to 40 A | 5SM6014-2 |
| **Data transceiver (essential accessory)** | | **Article No.** |
| SENTRON Powercenter 1000 | | 7KN1110-0MC00 |

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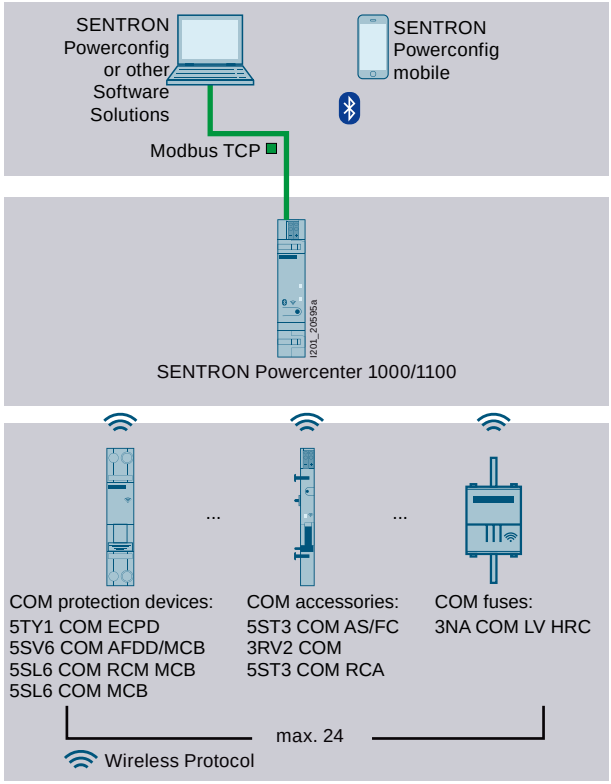
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## SENTRON Powercenter 1000/1100 data transceiver




- Wireless radio transmission of measured values and data to the SENTRON Powercenter 1000/1100 data transceiver
- Commissioning, parameter assignment, firmware updates and further processing of the data via the SENTRON Powercenter 1000/1100 data transceiver



| SENTRON Powercenter | Article No. |
|---|---|
| SENTRON Powercenter 1000 | 7KN1110-0MC00 |
| SENTRON Powercenter 1100 | 7KN1111-0MC00 |

**See page 10/26**

You will find further information at **www.siemens.com/lowvoltage/manuals**

Installation Manual – Circuit protection devices with communication and measuring function **(109791805)**

System Manual – Circuit protection devices with communication and measuring function **(109791806)**

## Monitoring functions with limit monitoring

- Switching state with trip monitoring: short-circuit, overload
- Counters incl. limit monitoring for:
  - Operating hours
  - Operating hours with load current
  - Operating cycles (ON/OFF)
  - Tripping operations
  - Short circuits
- Limit values for:
  - Overcurrent alarm 1 and alarm 2
  - Undercurrent alarm 1 and alarm 2
  - Temperature

| Measured values | Unit | Memory |
|---|---|---|
| Temperature | °C | 1 hour in 1-minute intervals; 7 days in 15-minute intervals |
| Average temperature | °C | – |
| Current | A | Min. and max. values over 10 days; 1 hour in 10-second intervals; 7 days in 15-minute intervals |
| Average current | A | – |
| Maximum current | A | – |
| Voltage | V | Min. and max. values over 10 days |
| Line frequency | Hz | Min. and max. values over 10 days |
| Active power | W | Min. and max. values over 10 days |
| Apparent power | VA | Min. and max. values over 10 days |
| Reactive power | Var | – |
| Power factor | | – |
| Active energy imported | Wh | 7 days in 15-minute intervals; 30 days in 1-day intervals |
| Active energy exported | Wh | – |
| Reactive energy imported | Varh | – |
| Reactive energy exported | Varh | – |

**Quick selection guide, page 3/8**

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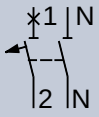


# 5SL6 COM miniature circuit breakers with measuring and communication function

## With residual current monitoring (RCM) and energy monitoring (EM), 1P+N 6 kA compact miniature circuit breakers



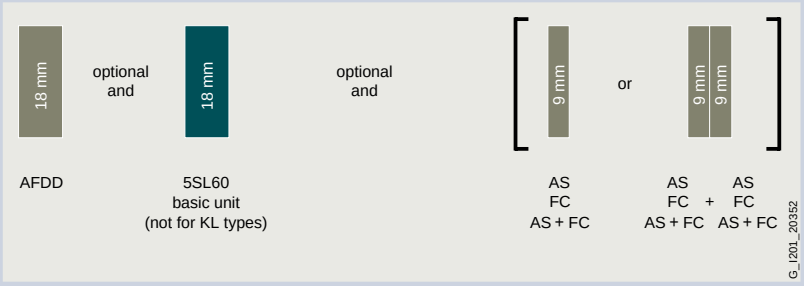
| | 1P+N (N pole right) |
|---|---|
| Rated voltage $U_n$ | 230 V AC |
| Mounting width | 1 MW |

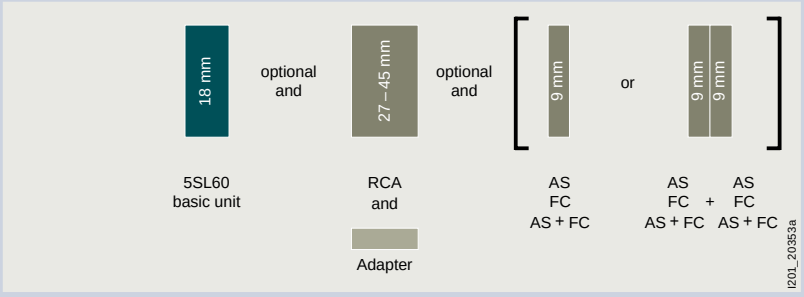



| Rated current $I_n$ | Characteristic B | C |
|---|---|---|
| 2 A | – | 5SL6002-7MF |
| 4 A | – | 5SL6004-7MF |
| 6 A | 5SL6006-6MF | 5SL6006-7MF |
| 8 A | – | 5SL6008-7MF |
| 10 A | 5SL6010-6MF | 5SL6010-7MF |
| 13 A | 5SL6013-6MF | 5SL6013-7MF |
| 16 A | 5SL6016-6MF | 5SL6016-7MF |
| 20 A | 5SL6020-6MF | 5SL6020-7MF |
| 25 A | 5SL6025-6MF | 5SL6025-7MF |
| 32 A | 5SL6032-6MF | 5SL6032-7MF |

**Note:**
Please note the country-specific radio licenses of the products at
www.siemens.com/lowvoltage/certificates (109801197)

## Mounting concept




| | | |
|---|---|---|
| AFDD | Arc fault detection units | See page 3/61 |
| AS | Auxiliary switches | See page 3/50 |
| FC | Fault signal contacts | See page 3/52 |
| AS+FC | Auxiliary switches and fault signal contacts | See page 3/53 |
| RCA | Remote control auxiliaries | See page 3/58 |

## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |
| **Fault signal contacts (FC)** | | **Article No.** |
| 1 NO + 1 NC | | 5ST3020 |
| 2 NO | | 5ST3021 |
| 2 NC | | 5ST3022 |
| **Auxiliary switches and fault signal contacts (AS+FC)** | | **Article No.** |
| 1 CO (AS) + 1 CO (FC) | | 5ST3062 |
| 5ST3 COM (AS+FC) | | 5ST3062-0MC |

| Remote control auxiliaries (RCA) | | Article No. |
|---|---|---|
| Basic | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3053 |
| | 177 ... 270 V AC | 5ST3054 |
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/IR test | 100 ... 240 V AC | 5ST3073-0MC new |
| **Adapters for remote control auxiliaries (RCA)** | | **Article No.** |
| 1 MW | | 5ST3820-6 |
| **Arc fault detection units (AFDD)** | | **Article No.** |
| For basic units 1P+N (1 MW), not for KL types | $I_n$ up to 16 A | 5SM6011-2 |
| | $I_n$ up to 40 A | 5SM6014-2 |
| **Data transceiver (essential accessory)** | | **Article No.** |
| SENTRON Powercenter 1000 | | 7KN1110-0MC00 |

Quick selection guide, page 3/8

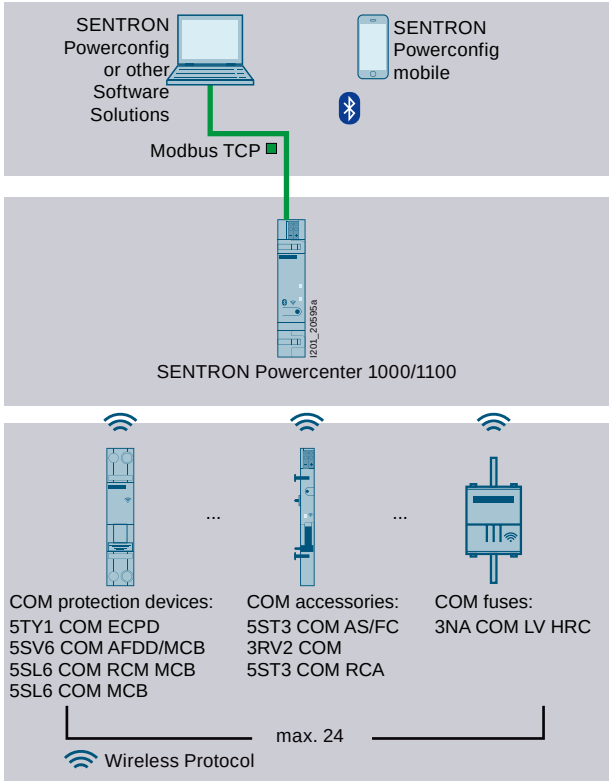
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## SENTRON Powercenter 1000/1100 data transceiver




- Wireless radio transmission of measured values and data to the SENTRON Powercenter 1000/1100 data transceiver
- Commissioning, parameter assignment, firmware updates and further processing of the data via the SENTRON Powercenter 1000/1100 data transceiver



| SENTRON Powercenter | Article No. |
|---|---|
| SENTRON Powercenter 1000 | 7KN1110-0MC00 |
| SENTRON Powercenter 1100 | 7KN1111-0MC00 |

**See page 10/26**

You will find further information at **www.siemens.com/lowvoltage/manuals**

Installation Manual – Circuit protection devices with communication and measuring function **(109791805)**

System Manual – Circuit protection devices with communication and measuring function **(109791806)**

## Monitoring functions with limit monitoring

- Switching state with trip monitoring: short-circuit, overload
- Counters incl. limit monitoring
  - Operating hours
  - Operating hours with load current
  - Operating cycles (ON/OFF)
  - Tripping operations
  - Short circuits
- Limit alarms
  - Overcurrent alarm 1 and alarm 2
  - Undercurrent alarm 1 and alarm 2
  - Overvoltage alarm 1 and alarm 2
  - Undervoltage alarm 1 and alarm 2
  - Temperature
  - Residual current pre-alarm (low-pass channels)
  - Residual current main alarm (low-pass channels)

| Measured values | Unit |
|---|---|
| Temperature | °C |
| Average temperature | °C |
| Current | A |
| Average current | A |
| Maximum current | A |
| Voltage | V |
| Line frequency | Hz |
| Active power | W |
| Apparent power | VA |
| Reactive power | Var |
| Power factor | |
| Active energy imported | Wh |
| Active energy exported | Wh |
| Reactive energy imported | Varh |
| Reactive energy exported | Varh |
| **Residual current measurement channels with adjustable measuring ranges** | **Unit** |
| Line frequency 50 Hz | mA |
| Harmonic of line frequency | mA |
| Low-pass filter (AC) | mA |
| Low-pass filter (AC + pulsating DC) | mA |
| Band-pass filter | mA |
| High-pass filter | mA |

Quick selection guide, page 3/8

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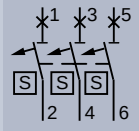


# 5SP3 selective main miniature circuit breakers (SHU)



## 25 kA, mounting on a 40 mm busbar



| | 1P | | | | 3 × 1P |
|---|---|---|---|---|---|
| **Rated voltage $U_n$** | 230/400 V AC | | | | 230/400 V AC |
| **Mounting width** | 1.5 MW | | | | 4.5 MW |
| |  | | | |  |
| **Rated current $I_n$** | **Characteristic E** | | | | **Characteristic E** |
| | **L1** | **L2** | **L3** | **L1 + L2 + L3** | |
| 16 A | 5SP3716-2KK01 | 5SP3716-2KK02 | 5SP3716-2KK03 | 5SP3716-2 | 5SP3816-2 |
| 20 A | 5SP3720-2KK01 | 5SP3720-2KK02 | 5SP3720-2KK03 | 5SP3720-2 | 5SP3820-2 |
| 25 A | 5SP3725-2KK01 | 5SP3725-2KK02 | 5SP3725-2KK03 | 5SP3725-2 | 5SP3825-2 |
| 35 A | 5SP3735-2KK01 | 5SP3735-2KK02 | 5SP3735-2KK03 | 5SP3735-2 | 5SP3835-2 |
| 40 A | 5SP3740-2KK01 | 5SP3740-2KK02 | 5SP3740-2KK03 | 5SP3740-2 | 5SP3840-2 |
| 50 A | 5SP3750-2KK01 | 5SP3750-2KK02 | 5SP3750-2KK03 | 5SP3750-2 | 5SP3850-2 |
| 63 A | 5SP3763-2KK01 | 5SP3763-2KK02 | 5SP3763-2KK03 | 5SP3763-2 | 5SP3863-2 |



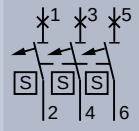
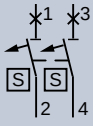
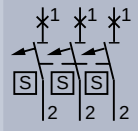
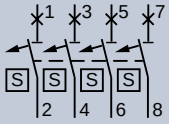
Quick selection guide, page 3/6

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## 25 kA, mounting on a DIN rail

| | 1P | 3 × 1P | 2P | 3P | 4P |
|---|---|---|---|---|---|
| **Rated voltage $U_n$** | 230/400 V AC | 230/400 V AC | 230/400 V AC | 230/400 V AC | 230/400 V AC |
| **Mounting width** | 1.5 MW | 4.5 MW | 3 MW | 4.5 MW | 6 MW |
| |  |  |  |  |  |
| **Rated current $I_n$** | **Characteristic E** | **Characteristic E** | **Characteristic E** | **Characteristic E** | **Characteristic E** |
| 16 A | 5SP3716-3 | 5SP3816-3 | 5SP3216-3 | 5SP3316-3 | 5SP3416-3 |
| 20 A | 5SP3720-3 | 5SP3820-3 | 5SP3220-3 | 5SP3320-3 | 5SP3420-3 |
| 25 A | 5SP3725-3 | 5SP3825-3 | 5SP3225-3 | 5SP3325-3 | 5SP3425-3 |
| 35 A | 5SP3735-3 | 5SP3835-3 | 5SP3235-3 | 5SP3335-3 | 5SP3435-3 |
| 40 A | 5SP3740-3 | 5SP3840-3 | 5SP3240-3 | 5SP3340-3 | 5SP3440-3 |
| 50 A | 5SP3750-3 | 5SP3850-3 | 5SP3250-3 | 5SP3350-3 | 5SP3450-3 |
| 63 A | 5SP3763-3 | 5SP3863-3 | 5SP3263-3 | 5SP3363-3 | 5SP3463-3 |



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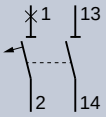


# 5SY17 circuit breakers for equipment

## Electromechanical



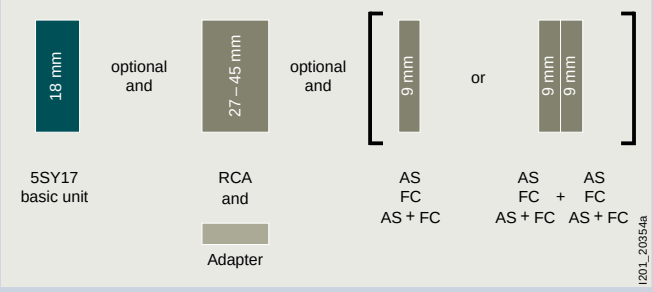
| | 1P+AS |
|---|---|
| Rated voltage $U_n$ | 230 V AC/12 ... 62.5 V DC |
| Mounting width | 1 MW (18 mm) |






| Rated current $I_n$ | Characteristic | |
|---|---|---|
| | F1 (quick) | F2 (slow) |
| 0.5 A | 5SY1705-2 | 5SY1705-4 |
| 1 A | 5SY1701-2 | 5SY1701-4 |
| 2 A | 5SY1702-2 | 5SY1702-4 |
| 4 A | 5SY1704-2 | 5SY1704-4 |
| 6 A | 5SY1706-2 | 5SY1706-4 |
| 8 A | 5SY1708-2 | 5SY1708-4 |
| 10 A | 5SY1710-2 | 5SY1710-4 |
| 16 A | 5SY1716-2 | 5SY1716-4 |

## Mounting concept




| | | |
|---|---|---|
| AS | Auxiliary switches | See page 3/50 |
| FC | Fault signal contacts | See page 3/52 |
| AS+FC | Auxiliary switches and fault signal contacts | See page 3/53 |
| RCA | Remote control auxiliaries | See page 3/58 |

## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

| Fault signal contacts (FC) | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3020 |
| 2 NO | 5ST3021 |
| 2 NC | 5ST3022 |

| Auxiliary switches and fault signal contacts (AS+FC) | Article No. |
|---|---|
| 1 CO (AS) + 1 CO (FC) | 5ST3062 |
| 5ST3 COM (AS+FC) | 5ST3062-0MC |

| Remote control auxiliaries (RCA) | | Article No. |
|---|---|---|
| Basic | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3053 |
| | 177 ... 270 V AC | 5ST3054 |
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/ IR test | 100 ... 240 V AC | 5ST3073-0MC new |

| Adapters for remote control auxiliaries (RCA) | Article No. |
|---|---|
| 1 MW | 5ST3820-6 |

Quick selection guide, page 3/10

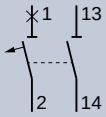
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# 5SK9 circuit breakers for equipment

## Electronic



| | 1P+AS |
|---|---|
| **Rated voltage $U_n$** | 24 V DC |
| **Mounting width** | 6.2 mm |
| |  |





| **Rated current $I_n$** | |
|---|---|
| 1 A | 5SK9101-1 |
| 2 A | 5SK9102-1 |
| 3 A | 5SK9103-1 |
| 4 A | 5SK9104-1 |
| 6 A | 5SK9106-1 |
| 8 A | 5SK9108-1 |

## Specific accessories

**Connecting combs**



| Type | Number of poles | Max. load current $I_{max}$ | Article No. |
|---|---|---|---|
| For parallel infeed | 2-pole | 32 A | 8WH9020-6CC10 |
| | 5-pole | 32 A | 8WH9020-6CF10 |
| For remote signal – group signal | 2-pole | 32 A | 8WH9020-6CC10 |

**Reducing combs for terminal blocks of 10 mm²**



| Type | Number of poles | Max. load current $I_{max}$ | Article No. |
|---|---|---|---|
| For bypassing the power supply | 2-pole | 40 A | 8WH9020-0AC10 |

**See general accessories,** from page 3/62 onwards

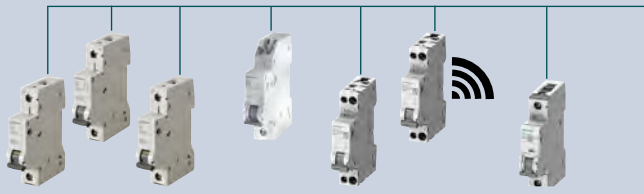
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# Overview of the modular system

## Miniature circuit breakers



| | | | | 5SL3 | 5SL6 | 5SL4 | 5SJ6...-.KS | 5SL30 | 5SL60/ 5SL6 COM | 5SY |
|---|---|---|---|---|---|---|---|---|---|---|
| **Auxiliary switches (AS)** | | | **Article No.** | | | | | | | |
|  | 1 NO + 1 NC | Standard | 5ST3010 | ■ | ■ | ■ | – | ■ | ■ | ■ |
| | | For low power | 5ST3013 | ■ | ■ | ■ | – | ■ | ■ | ■ |
| | | For low power (with diode) | 5ST3013-0XX01 | ■ | ■ | ■ | – | ■ | ■ | ■ |
| | 2 NO | Standard | 5ST3011 | ■ | ■ | ■ | – | ■ | ■ | ■ |
| | | For low power | 5ST3014 | ■ | ■ | ■ | – | ■ | ■ | ■ |
| | 2 NC | Standard | 5ST3012 | ■ | ■ | ■ | – | ■ | ■ | ■ |
| | | For low power | 5ST3015 | ■ | ■ | ■ | – | ■ | ■ | ■ |
| | 1 CO | Standard | 5ST3016 | ■ | ■ | ■ | – | ■ | ■ | ■ |
| | | | 5ST1010-0FP | – | – | – | – | – | – | – |
| **Fault signal contacts (FC)** | | | **Article No.** | | | | | | | |
|  | 1 NO + 1 NC | | 5ST3020 | ■ | ■ | ■ | – | ■ | ■ | ■ |
| | 2 NO | | 5ST3021 | ■ | ■ | ■ | – | ■ | ■ | ■ |
| | 2 NC | | 5ST3022 | ■ | ■ | ■ | – | ■ | ■ | ■ |
| **Auxiliary switches and fault signal contacts (AS+FC)** | | | **Article No.** | | | | | | | |
|  | 1 CO (AS) + 1 CO (FC) | Standard | 5ST3062 | ■ | ■ | ■ | – | ■ | ■ | ■ |
| | 5ST3 COM (AS+FC) | With measuring and communication functions | 5ST3062-0MC | ■ | ■ | ■ | – | ■ | ■ | ■ |
| **Shunt trips (ST)** | | | **Article No.** | | | | | | | |
|  | 110 ... 415 V AC, 110 ... 220 V DC | | 5ST3030 | – | – | ■ | – | – | – | ■ |
| | 24 ... 48 V AC/DC | | 5ST3031 | – | – | ■ | – | – | – | ■ |
| | 12 V DC | | 5ST3031-0XX01 | – | – | ■ | – | – | – | ■ |
| **Undervoltage releases (UR)** | | | **Article No.** | | | | | | | |
|  | With integrated auxiliary switch | 230 V AC | 5ST3040 | – | – | ■ | – | – | – | ■ |
| | | 110 V DC | 5ST3041 | – | – | ■ | – | – | – | ■ |
| | | 24 V DC | 5ST3042 | – | – | ■ | – | – | – | ■ |
| | Without integrated auxiliary switch | 230 V AC | 5ST3043 | – | – | ■ | – | – | – | ■ |
| | | 110 V DC | 5ST3044 | – | – | ■ | – | – | – | ■ |
| | | 24 V DC | 5ST3045 | – | – | ■ | – | – | – | ■ |
| **Remote control auxiliaries (RCA)** | | | **Article No.** | | | | | | | |
|  | Basic | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3053 | – | ■ | ■ | – | – | ■ | ■ |
| | | 177 ... 270 V AC | 5ST3054 | – | ■ | ■ | – | – | ■ | ■ |
| | Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 | – | ■ | ■ | – | – | ■ | ■ |
| | | 177 ... 270 V AC | 5ST3056 | – | ■ | ■ | – | – | ■ | ■ |
| | Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 | – | ■ | ■ | – | – | ■ | ■ |
| | | 177 ... 270 V AC | 5ST3058 | – | ■ | ■ | – | – | ■ | ■ |
|  | Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 | – | ■ | ■ | – | – | ■ | ■ |
| | | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 | – | ■ | ■ | – | – | ■ | ■ |
| | Communication-capable new | 100 ... 240 V AC | 5ST3072-0MC | – | ■ | ■ | – | – | ■ | ■ |
| | Communication-capable with RCD/IR test new | 100 ... 240 V AC | 5ST3073-0MC | – | ■ | ■ | – | – | ■ | ■ |
| **5SM6 arc fault detection units** | | | **Article No.** | | | | | | | |
|  | Rated current up to 16 A | Standard | 5SM6021-2 | – | – | □ | – | – | – | □ |
| | | For compact devices 1P+N in 1 MW | 5SM6011-2 | – | – | – | – | – | □ | – |
| | Rated current up to 40 A | Standard | 5SM6024-2 | – | – | □ | – | – | – | □ |
| | | For compact devices 1P+N in 1 MW | 5SM6014-2 | – | – | – | – | – | □ | – |
| **Standard busbars** | | | **Article No.** | | | | | | | |
|  | Cannot be cut | | 5ST36.. | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| | Can be cut | | 5ST37.. | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| **Compact busbars** | | | **Article No.** | | | | | | | |
|  | Cannot be cut | | 5ST36.. | □ | □ | □ | – | ■ | ■ | – |
| | Can be cut | | 5ST37.. | □ | □ | □ | – | ■ | ■ | – |

From page 3/12

■ Suitable for all versions □ Suitable for some versions

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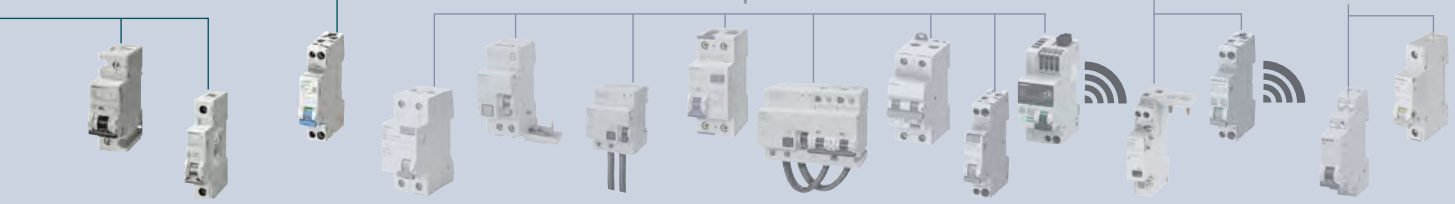


## Circuit breakers for equipment

## Residual current protective devices

## Arc fault detection devices

## Switching devices



| 5SP4/ 5SP5 | 5SJ4..HG.. | 5SY17 | 5SV (16 ... 80 A) | 5SM2 + MCB | 5SM2 + 5SP4 | 5SxU1 | 5SU1 (125 A) | 5SU1... FP/FR | 5SV1 | 5TY1 COM | 5SM6 | 5SV6/ 5SV6 COM | 5TE8 | 5TL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ■ | ...-0HG | ■ | ■ | ■ | ■ | ■ | ■ | – | ■ | – | □ | ■ | ■ | ■ |
| ■ | – | ■ | ■ | ■ | ■ | ■ | ■ | – | ■ | – | □ | ■ | ■ | ■ |
| ■ | – | ■ | ■ | ■ | ■ | ■ | ■ | – | ■ | – | □ | ■ | ■ | ■ |
| ■ | ...-0HG | ■ | ■ | ■ | ■ | ■ | ■ | – | ■ | – | □ | ■ | ■ | ■ |
| ■ | – | ■ | ■ | ■ | ■ | ■ | ■ | – | ■ | – | □ | ■ | ■ | ■ |
| ■ | ...-0HG | ■ | ■ | ■ | ■ | ■ | ■ | – | ■ | – | □ | ■ | ■ | ■ |
| ■ | – | ■ | ■ | ■ | ■ | ■ | ■ | – | ■ | – | □ | ■ | ■ | ■ |
| ■ | – | ■ | ■ | ■ | ■ | ■ | ■ | – | ■ | – | □ | ■ | ■ | ■ |
| – | – | – | – | – | – | – | – | ■ | – | – | – | – | – | – |
| ■ | ...-0HG | ■ | ■ | ■ | ■ | ■ | ■ | – | ■ | – | □ | ■ | – | – |
| ■ | ...-0HG | ■ | ■ | ■ | ■ | ■ | ■ | – | ■ | – | □ | ■ | – | – |
| ■ | ...-0HG | ■ | ■ | ■ | ■ | ■ | ■ | – | ■ | – | □ | ■ | – | – |
| ■ | – | ■ | ■ | ■ | ■ | ■ | ■ | – | ■ | – | □ | ■ | – | – |
| ■ | – | ■ | ■ | ■ | ■ | ■ | ■ | – | ■ | – | □ | ■ | – | – |
| ■ | ...-0HG | – | ■ | ■ | ■ | ■ | ■ | – | – | – | □ | – | – | – |
| ■ | ...-0HG | – | ■ | ■ | ■ | ■ | ■ | – | – | – | □ | – | – | – |
| ■ | – | – | ■ | ■ | ■ | ■ | ■ | – | – | – | □ | – | – | – |
| ■ | – | – | ■ | ■ | ■ | ■ | ■ | – | – | – | □ | – | – | – |
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| ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ | □ | ■ |
| ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ | □ | ■ |
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| From page 3/12 | | From page 3/46 | From page 4/14 | | | | | | | | From page 4/56 | | From page 5/6 | |

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# Electrical accessories



## Auxiliary switches (AS)

- Signals the contact position of the mounted device
- Version for the switching of small currents and voltages according to EN 61131-2 for control of programmable control systems (PLCs)
- Test button enables the testing of control circuits without the need to switch the mounted device



| For combining with basic units | | | | | | Contacts | Version | Mounting width (1 MW = 18 mm) | Article No. |
|---|---|---|---|---|---|---|---|---|---|
| Miniature circuit breakers | Circuit breakers for equipment | RCCBs | RCBOs | Arc fault detection devices | ON/OFF switches | | | | |
| **Auxiliary switches (AS)** | | | | | | | | | |
| 5SL, 5SY, 5SP4, 5SP5 | 5SY17 | 5SV (16 ... 80 A) | 5SU1 [1], 5SV1 | 5SV6 | 5TL1, 5TE8 | 1 NO + 1 NC | Standard | 0.5 MW | 5ST3010 |
| | | | | | | | For low power | 0.5 MW | 5ST3013 |
| | | | | | | | For low power (with diode) | 0.5 MW | 5ST3013-0XX01 |
| | | | | | | 2 NO | Standard | 0.5 MW | 5ST3011 |
| | | | | | | | For low power | 0.5 MW | 5ST3014 |
| | | | | | | 2 NC | Standard | 0.5 MW | 5ST3012 |
| | | | | | | | For low power | 0.5 MW | 5ST3015 |
| | | | | | | 1 CO | Standard | 0.5 MW | 5ST3016 |
| **Auxiliary switches (AS) with TEST button** | | | | | | | | | |
| 5SL, 5SY, 5SP4, 5SP5 | 5SY17 | 5SV (16 ... 80 A) | 5SU1 [1], 5SV1 | 5SV6 | 5TL1, 5TE8 | 1 NO + 1 NC | Standard | 0.5 MW | 5ST3010-2 |
| | | | | | | | For low power | 0.5 MW | 5ST3013-2 |
| | | | | | | 2 NO | Standard | 0.5 MW | 5ST3011-2 |
| | | | | | | | For low power | 0.5 MW | 5ST3014-2 |
| | | | | | | 2 NC | Standard | 0.5 MW | 5ST3012-2 |
| | | | | | | | For low power | 0.5 MW | 5ST3015-2 |
| **Auxiliary switches (AS) acc. to UL 489** | | | | | | | | | |
| 5SJ4...-.HG | – | – | – | | – | 1 NO + 1 NC | Standard | 0.5 MW | 5ST3010-0HG |
| | | | | | | 2 NO | Standard | 0.5 MW | 5ST3011-0HG |
| | | | | | | 2 NC | Standard | 0.5 MW | 5ST3012-0HG |

[1] 5ST3805-1 handle coupler required

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## Further technical specifications

| | | 5ST3010, 5ST3011, 5ST3012, 5ST3016 | 5ST3010-0HG, 5ST3011-0HG, 5ST3012-0HG | 5ST3010-2, 5ST3011-2, 5ST3012-2 | 5ST3013, 5ST3014, 5ST3015, 5ST3013-0XX01 [1] | 5ST3013-2, 5ST3014-2, 5ST3015-2 |
|---|---|---|---|---|---|---|
| **Standards** | | | | | | |
| Standards | IEC/EN | IEC/EN 62019, IEC/EN 60947-5-1 | – | IEC/EN 62019, IEC/EN 60947-5-1 | | |
| | UL, CSA | UL 1077, CSA C22.2 No. 235 | UL 489, CSA 22.2 No. 5-02 | – | UL 1077, CSA C22.2 No. 235 | – |
| **Contacts** | | | | | | |
| Minimum contact load | | 50 mA, 24 V | | | 1 mA, 5 V DC | 5 mA, 5 V DC |
| Maximum contact load | | – | | | 100 mA, 30 V DC | 50 mA, 30 V DC |
| Contact load acc. to IEC/EN 62019/IEC/EN 60947-5-1 | 230 V AC, AC-12 | – | | | | |
| | 230 V AC, AC-13 | 6 A/6 A | | | – | |
| | 400 V AC, AC-13 | 2 A/2 A | | | – | |
| | 230 V AC, AC-14 | 6 A/6 A | | | – | |
| | 400 V AC, AC-14 | 2 A/2 A | | | – | |
| | 24 V DC, DC-13 | 6 A/3 A | | | – | |
| | 30 V DC, DC-14 | – | | | 0.1 A | |
| | 60 V DC, DC-13 | 3 A/1.5 A | | | – | |
| | 110 V DC, DC-13 | 1 A/0.75 A | | | – | |
| | 220 V DC, DC-12 | – | | | | |
| | 220 V DC, DC-13 | 1 A/0.5 A | | | – | |
| Contact load acc. to UL | 120 V AC | – | 6 A | – | | |
| | 125 V AC | 3 A | – | | | |
| | 240 V AC | 4 A | | – | | |
| | 277 V AC | – | 3 A | – | | |
| | 480 V AC | 1.5 A | | – | | |
| | 60 V DC | – | 3 A | – | | |
| | 125 V DC | 1.1 A | 1 A | – | | |
| | 250 V DC | 0.55 A | – | | | |
| Service life, on average, with rated load | Actuations | 20000 | 12000 | 20000 | | |
| **Safety** | | | | | | |
| Short-circuit protection | | 5SY... 6A miniature circuit breaker or gG 6 A fuse | | | | |
| **Connections** | | | | | | |
| Conductor cross-sections | | 0.5 ... 2.5 $mm^2$ (AWG 22 ... 14) | | | | |
| Terminals | Max. tightening torque | 0.5 Nm (4.5 lb-in) | | | | |
| **Ambient conditions** | | | | | | |
| Permissible ambient temperature | | –40 ... +70 °C | | | | |
| Permissible storage temperature | | –40 ... +75 °C | | | | |
| Resistance to climate | Acc. to IEC 60068-2-30 | 28 cycles | | | | |
| Mounting position | | Any | | | | |
| Shock at 11 ms half-sine | Acc. to IEC 60068-2-27 | 150 $m/s^2$ | | | | |
| Resistance to vibrations at 5 ... 150 Hz | Acc. to IEC 60068-2-6 | 50 $m/s^2$ | | | | |

[1] No approvals

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# Electrical accessories



## Fault signal contacts (FC)

- Signals automatic tripping of the circuit protection device in the event of a fault, such as an overload or a short circuit
- If the fault signal contact is activated, the contact position does not change if the mounted circuit protection device is tripped manually
- Version with TEST and RESET buttons enables the testing of control circuits without operation of the circuit protection device
- Red RESET button in the operating handle indicates automatic tripping of the mounted circuit protection device



| For combining with basic units | | | | | Contacts | Mounting width (1 MW = 18 mm) | Article No. |
|---|---|---|---|---|---|---|---|
| Miniature circuit breakers | Circuit breakers for equipment | RCCBs | RCBOs | Arc fault detection devices | | | |
| **Fault signal contacts (FC)** | | | | | | | |
| 5SL, 5SY, 5SP4, 5SP5 | 5SY17 | 5SV (16 ... 80 A) | 5SU1 [1], 5SV1 | 5SV6 | 1 NO + 1 NC | 0.5 MW | 5ST3020 |
| | | | | | 2 NO | 0.5 MW | 5ST3021 |
| | | | | | 2 NC | 0.5 MW | 5ST3022 |
| **Fault signal contacts (FC) with TEST and RESET button** | | | | | | | |
| 5SL, 5SY, 5SP4, 5SP5 | 5SY17 | 5SV (16 ... 80 A) | 5SU1 [1], 5SV1 | 5SV6 | 1 NO + 1 NC | 0.5 MW | 5ST3020-2 |
| | | | | | 2 NO | 0.5 MW | 5ST3021-2 |
| | | | | | 2 NC | 0.5 MW | 5ST3022-2 |
| **Fault signal contacts (FC) acc. to UL 489** | | | | | | | |
| 5SJ4...-.HG | – | – | – | – | 1 NO + 1 NC | 0.5 MW | 5ST3020-0HG |
| | | | | | 2 NO | 0.5 MW | 5ST3021-0HG |
| | | | | | 2 NC | 0.5 MW | 5ST3022-0HG |

[1] 5ST3805-1 handle coupler required

## Further technical specifications

| | | 5ST3020, 5ST3021, 5ST3022 | 5ST3020-2, 5ST3021-2, 5ST3022-2 | 5ST3020-0HG, 5ST3021-0HG, 5ST3022-0HG |
|---|---|---|---|---|
| **Standards** | | | | |
| Standards | IEC/EN | IEC/EN 62019, IEC/EN 60947-5-1 | | |
| | UL, CSA | UL 1077, CSA C22.2 No. 235 | – | UL 489, CSA 22.2 No. 5-02 |
| **Contacts** | | | | |
| Minimum contact load | | 50 mA, 24 V | | |
| Contact load acc. to IEC/EN 62019/IEC/EN 60947-5-1 | 230 V AC, AC-13 | 6 A/6 A | | |
| | 400 V AC, AC-13 | 6 A/6 A | | |
| | 230 V AC, AC-14 | 2 A/2 A | | |
| | 400 V AC, AC-14 | 2 A/2 A | | |
| | 24 V DC, DC-13 | 6 A/3 A | | |
| | 60 V DC, DC-13 | 3 A/1.5 A | | |
| | 110 V DC, DC-13 | 1 A/0.75 A | | |
| | 220 V DC, DC-13 | 1 A/0.5 A | | |
| Contact load acc. to UL | 120 V AC | – | | 6 A |
| | 125 V AC | 3 A | – | |
| | 240 V AC | 4 A | – | |
| | 277 V AC | – | | 3 A |
| | 480 V AC | 1.5 A | – | |
| | 60 V DC | – | | 3 A |
| | 125 V DC | 1.1 A | – | 1 A |
| | 250 V DC | 0.55 A | – | |
| Service life, on average, with rated load | Actuations | 20000 | | 12000 |
| **Safety** | | | | |
| Short-circuit protection | | Miniature circuit breaker or gG 6 A fuse | | |
| **Connections** | | | | |
| Conductor cross-sections | | 0.5 ... 2.5 mm² (AWG 22 ... 14) | | |
| Terminals | Max. tightening torque | 0.5 Nm (4.5 lb-in) | | |
| **Ambient conditions** | | | | |
| Permissible ambient temperature | | –25 ... +55 °C | | |
| Permissible storage temperature | | –40 ... +75 °C | | |
| Resistance to climate | Acc. to IEC 60068-2-30 | 28 cycles | | |
| Mounting position | | Any | | |
| Shock at 11 ms half-sine | Acc. to IEC 60068-2-27 | 150 m/s² | | |
| Resistance to vibrations at 10 ... 150 Hz | Acc. to IEC 60068-2-6 | 50 m/s² | | |

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# Auxiliary switches and fault signal contacts (AS+FC)

- Combines the function of both switches in a width of only 0.5 MW (9 mm)
- Signals the contact position of the mounted circuit protection device
- Signals automatic tripping of the circuit protection device in the event of a fault, such as an overload, a short circuit or a fault current
- If the fault signal contact is activated, the contact position does not change if the mounted circuit protection device is tripped manually

| For combining with basic units | | | | | Contacts | Mounting width (1 MW = 18 mm) | Article No. |
|---|---|---|---|---|---|---|---|
| Miniature circuit breakers | Circuit breakers for equipment | RCCBs | RCBOs | Arc fault detection devices | | | |
| **Auxiliary switches and fault signal contacts (AS+FC)** | | | | | | | |
| 5SL, 5SY, 5SP4, 5SP5 | 5SY17 | 5SV (16 ... 80 A) | 5SU1 [1], 5SV1 | 5SV6 | 1 CO (AS) + 1 CO (FC) | 0.5 MW | 5ST3062 |

[1] 5ST3805-1 handle coupler required

## Further technical specifications

| | | 5ST3062 |
|---|---|---|
| **Standards** | | |
| Standards | IEC/EN | IEC/EN 62019, IEC/EN 60947-5-1 |
| | UL, CSA | UL 1077, CSA C22.2 No. 235 |
| **Contacts** | | |
| Minimum contact load | | 50 mA, 24 V |
| Maximum contact load | | – |
| Contact load acc. to IEC/EN 62019/IEC/EN 60947-5-1 | 230 V AC, AC-13 | 6 A/6 A |
| | 400 V AC, AC-14 | 2 A/2 A |
| Contact load acc. to IEC/EN 62019/IEC/EN 60947-5-1 | 24 V DC, DC-13 | 3 A/3 A |
| | 60 V DC, DC-13 | 3 A/1 A |
| | 110 V DC, DC-13 | 0.5 A/0.5 A |
| | 220 V DC, DC-13 | 0.5 A/0.3 A |
| Contact load acc. to UL | 125 V AC | 2 A |
| | 240 V AC | 1.5 A |
| | 480 V AC | 0.75 A |
| | 125 V DC | 0.5 A |
| | 250 V DC | 0.3 A |
| Service life, on average, with rated load | Actuations | 20000 |
| **Safety** | | |
| Short-circuit protection | | Miniature circuit breaker or gG 6 A fuse |
| **Connections** | | |
| Conductor cross-sections | | 0.5 ... 2.5 mm² (AWG 22 ... 14) |
| Terminals | Max. tightening torque | 0.5 Nm (4.5 lb-in) |
| **Ambient conditions** | | |
| Permissible ambient temperature | | –25 ... +55 °C |
| Permissible storage temperature | | –40 ... +75 °C |
| Resistance to climate | Acc. to IEC 60068-2-30 | 28 cycles |
| Mounting position | | Any |
| Shock at 11 ms half-sine | Acc. to IEC 60068-2-27 | 150 m/s² |
| Resistance to vibrations at 10 ... 150 Hz | Acc. to IEC 60068-2-6 | 50 m/s² |

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# Electrical accessories



## 5ST3 COM auxiliary switches and fault signal contacts (AS+FC) with measuring and communication functions

- Reports the switching state of the mounted standard circuit protection device (ON, tripped, manual OFF, tripped with locked handle)
- Measures the temperature of the device and counts operating cycles, trips and operating hours
- Communication via radio to SENTRON Powercenter 1000 data transceiver
- Plug-in terminals for 24 V DC power supply incl. daisy chain function
- Low space requirements of 0.5 MW (9 mm)



| For combining with basic units | | | | | | Mounting width (1 MW = 18 mm) | Article No. |
|---|---|---|---|---|---|---|---|
| Miniature circuit breakers | Circuit breakers for equipment | RCCBs | RCBOs | Arc fault detection devices | Communication | | |
| 5ST3 COM auxiliary switches and fault signal contacts (AS+FC) with measuring and communication functions | | | | | | | |
| 5SL, 5SY, 5SP4, 5SP5 | 5SY17 | 5SV (16 ... 80 A) | 5SU1 [1], 5SV1 | 5SV6 | Radio link to SENTRON Powercenter 1000 | 0.5 MW | 5ST3062-0MC |

[1] 5ST3805-1 handle coupler required

**Note:**
Please note the country-specific radio licenses of the products at
www.siemens.com/lowvoltage/certificates (109801197)

### Further technical specifications

| | | 5ST3062-0MC |
|---|---|---|
| **Standards** | | |
| Standards | IEC/EN | 60669-2-5 |
| | RED | 2014/53/EU |
| **Power supply** | | |
| Power supply | | 24 V DC ±20%, SELV |
| Conductor cross-sections | | 0.2 ... 1.5 mm² |
| Connection type | | Plug-in terminal |
| **Safety** | | |
| Degree of pollution for overvoltage category | | 2/II |
| Degree of protection | | IP40, with front cover |
| **Ambient conditions** | | |
| Permissible ambient temperature | | –25 ... +60 °C |
| Permissible storage temperature | | –40 ... +85 °C |
| Humidity | | 93% at 40 °C |
| Resistance to climate | Acc. to IEC 60068-2-30 | 28 cycles |
| Mounting position | | Any |
| Shock | | 150 m/s² |
| Resistance to vibrations at 10 ... 150 Hz | Acc. to IEC 60068-2-6 | 50 m/s² |
| Service life/endurance | | 10000 |
| **Communication** | | |
| Interface | SENTRON Powercenter 1000 | Radio link |
| Temperature | | Measuring accuracy of 2 °C with limit monitoring incl. storage (1 hour in 1-minute intervals and 7 days in 15-minute intervals) |
| Operating cycles counters | | Mechanical operation with limit monitoring |
| Trip counter | | Trip of the mounted circuit protection device with limit monitoring |
| Operating hours counter | | Operating hours with limit monitoring |



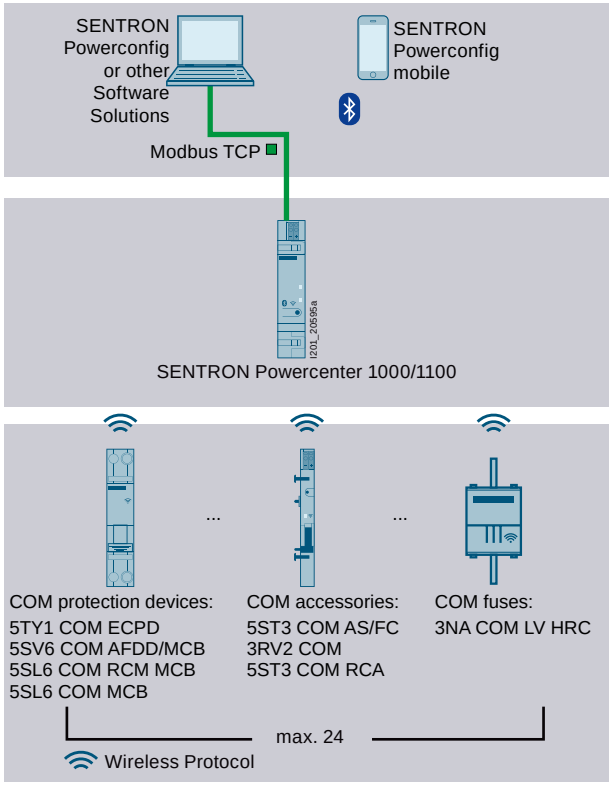
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## SENTRON Powercenter 1000/1100 data transceiver




- Wireless radio transmission of measured values and data to the SENTRON Powercenter 1000/1100 data transceiver
- Commissioning, parameter assignment, firmware updates and further processing of the data via the SENTRON Powercenter 1000/1100 data transceiver



| SENTRON Powercenter | Article No. |
|---|---|
| SENTRON Powercenter 1000 | 7KN1110-0MC00 |
| SENTRON Powercenter 1100 | 7KN1111-0MC00 |

**See page 10/26**

You will find further information at **www.siemens.com/lowvoltage/manuals**

Installation Manual – Circuit protection devices with communication and measuring function **(109791805)**

System Manual – Circuit protection devices with communication and measuring function **(109791806)**

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# Electrical accessories



## Shunt trips (ST)

- For remote-controlled tripping of the mounted device

| For combining with basic units<br>Miniature circuit breakers | RCCBs | RCBOs | Rated operational voltage $U_e$ | Mounting width<br>(1 MW = 18 mm) | Article No. |
|---|---|---|---|---|---|
| **Shunt trips (ST)** | | | | | |
| 5SL4, 5SY, 5SP4, 5SP5 | 5SV (16 ... 80 A) | 5SU1 [1] | 110 ... 415 V AC, 110 ... 220 V DC | 1 MW | 5ST3030 |
| | | | 24 ... 48 V AC/DC | 1 MW | 5ST3031 |
| | | | 12 V DC | 1 MW | 5ST3031-0XX01 |
| **Shunt trips (ST) acc. to UL 489** | | | | | |
| 5SJ4...-.HG | – | – | 110 ... 415 V AC, 110 ... 220 V DC | 1 MW | 5ST3030-0HG |
| | | | 24 ... 60 V AC/DC | 1 MW | 5ST3031-0HG |

[1] 5ST3805-1 handle coupler required

3

| Further technical specifications | | 5ST3030 | 5ST3031 | 5ST3031-0XX01 | 5ST3030-0HG | 5ST3031-0HG |
|---|---|---|---|---|---|---|
| **Standards** | | | | | | |
| Standards | IEC/EN | EN 60947-1 | | | IEC/EN 60947-1 | |
| | UL, CSA | – | | | UL 489, UL-File E321559,<br>CSA 22.2 No. 5-02 | |
| **Supply** | | | | | | |
| Primary operating range | | 0.7 ... 1.1 × $U_n$ | | | | |
| Rated frequency $f_n$ | | 50 ... 60 Hz | | – | 50 ... 60 Hz | |
| **Contacts** | | | | | | |
| Minimum contact load | | 50 mA, 24 V | | 1 mA, 5 V | 50 mA, 24 V | |
| Tripping operations | | Max. 2000 | | | | |
| Service life, on average,<br>with rated load | Actuations | 20000 | | | 12000 | |
| **Safety** | | | | | | |
| Short-circuit protection | | Miniature circuit breaker B/C 6 A or fuse gG 6 A | | | | |
| **Connections** | | | | | | |
| Conductor cross-sections | | 0.5 ... 2.5 mm² (AWG 22 ... 14) | | | | |
| Terminals | Max. tightening torque | 0.8 Nm (6.8 lb-in) | | | | |
| **Ambient conditions** | | | | | | |
| Permissible ambient temperature | | –25 ... +55 °C | | –40 ... +70 °C | –25 ... +55 °C | |
| Permissible storage temperature | | –40 ... +75 °C | | | | |
| Resistance to climate | Acc. to IEC 60068-2-30 | 28 cycles | | | | |
| Mounting position | | Any | | | | |
| Shock at 11 ms half-sine | Acc. to IEC 60068-2-27 | 150 m/s² | | | | |
| Resistance to vibrations<br>at 10 ... 150 Hz | Acc. to IEC 60068-2-6 | 50 m/s² | | | | |

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## Undervoltage releases (UR)

- Are integrated (e.g. in EMERGENCY-OFF loops), thus ensuring that the MCB trips in the event of an emergency. EMERGENCY-OFF is a function provided to disconnect the electricity supply to all or some parts of the installation in case of emergency, when there is a risk of electric shock or any other hazard caused by electrical power
- In addition, an undervoltage release also trips if the voltage is interrupted or too low, or prevents the MCB from closing
- Suitable for use with all devices that can be mounted for implementing EMERGENCY-OFF circuits
- In conjunction with 5SV residual current operated circuit breakers (RCCBs), not suitable for implementing EMERGENCY-STOP circuits



| For combining with basic units<br>Miniature circuit breakers | RCCBs | RCBOs | Rated operational voltage $U_e$ | Mounting width (1 MW = 18 mm) | Article No. |
|---|---|---|---|---|---|
| **With integrated auxiliary switch** | | | | | |
| 5SL4, 5SY, 5SP4, 5SP5 | 5SV (16 ... 80 A) | 5SU1 [1] | 230 V AC | 1 MW | 5ST3040 |
| | | | 110 V DC | 1 MW | 5ST3041 |
| | | | 24 V DC | 1 MW | 5ST3042 |
| **Without integrated auxiliary switch** | | | | | |
| 5SL4, 5SY, 5SP4, 5SP5 | 5SV (16 ... 80 A) | 5SU1 [1] | 230 V AC | 1 MW | 5ST3043 |
| | | | 110 V DC | 1 MW | 5ST3044 |
| | | | 24 V DC | 1 MW | 5ST3045 |

[1] 5ST3805-1 handle coupler required

## Further technical specifications

5ST304.

| | | |
|---|---|---|
| **Standards** | | |
| Standards | IEC/EN | EN 60947-1 |
| **Supply** | | |
| Primary operating range | | 0.85 ... 1.1 × $U_n$ |
| Rated frequency $f_n$ | | 50/60 Hz |
| **Contacts** | | |
| Minimum contact load | | 50 mA, 24 V |
| Tripping operations | | Max. 2000 |
| Service life, on average, with rated load | Actuations | 20000 |
| **Safety** | | |
| Short-circuit protection | | Miniature circuit breaker B/C 6 A or fuse gG 6 A |
| **Connections** | | |
| Conductor cross-sections | | 0.5 ... 2.5 mm² (AWG 22 ... 14) |
| Terminals | Max. tightening torque | 0.8 Nm (6.8 lb-in) |
| **Ambient conditions** | | |
| Permissible ambient temperature | | –25 ... +55 °C |
| Permissible storage temperature | | –40 ... +75 °C |
| Resistance to climate | Acc. to IEC 60068-2-30 | 28 cycles |
| Mounting position | | Any |
| Shock at 11 ms half-sine | Acc. to IEC 60068-2-27 | 150 m/s² |
| Resistance to vibrations at 10 ... 150 Hz | Acc. to IEC 60068-2-6 | 50 m/s² |

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# Electrical accessories



## 5ST3 remote control auxiliaries (RCA)

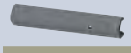
- For locations that are spread out over a wide area or not permanently attended
- Permits direct and immediate access to the installation even if it is remote or in a location that is hard to access
- Permits fast reconnection after a fault
- Version with ARD with automatic restart
- Versions with ARD and Power with integrated auxiliary switches and fault signal contacts



| Type | Display | Ambient temperature | Vibration and shock requirements | Rated operational voltage $U_e$ | Mounting width (1 MW = 18 mm) | Article No. |
|---|---|---|---|---|---|---|
| Basic | – | –25 °C ... +45 °C | – | 12 ... 30 V AC, 12 ... 48 V DC | 1.5 MW | 5ST3053 |
| | | | | 177 ... 270 V AC | 2 MW | 5ST3054 |
| Power | LED | –25 °C ... +45 °C | – | 12 ... 30 V AC, 12 ... 48 V DC | 2 MW | 5ST3055 |
| | | | | 177 ... 270 V AC | 2 MW | 5ST3056 |
| Power with ARD | LED | –25 °C ... +45 °C | – | 12 ... 30 V AC, 12 ... 48 V DC | 2 MW | 5ST3057 |
| | | | | 177 ... 270 V AC | 2 MW | 5ST3058 |
| Power with extended function | LED | –40 °C ... +70 °C | Acc. to IEC/EN 61373/ IEC/EN 50155 "1B" | 12 ... 30 V AC, 12 ... 48 V DC | 2 MW | 5ST3070 |
| | | | | 170 ... 277 V AC, 77 ... 286 V DC | 2 MW | 5ST3071 |
| With IR test before ARD new | LED | –40 °C ... +70 °C | – | 100 ... 240 V AC | 2.5 MW | 5ST3074 |

| Further technical specifications | 5ST3053 | 5ST3054 | 5ST3055 | 5ST3056 | 5ST3057 | 5ST3058 | 5ST3070 | 5ST3071 | 5ST3074 new |
|---|---|---|---|---|---|---|---|---|---|
| **Standards** | | | | | | | | | |
| Standards | IEC/EN 63024 (VDE 0640-21) | | | | | | | | |
| **Supply** | | | | | | | | | |
| Rated frequency $f_n$ | 50 ... 60 Hz | | | | | | | | |
| Rated power dissipation in standby | ≤ 1 VA | | | | | | | | ≦ 1.5 VA |
| **Contacts** | | | | | | | | | |
| Service life, on average, with rated load — Actuations | 10000 | | | | | | | | |
| Number of remote switching operations per minute | 2 | | | | | | | | 4 |
| Number of automatic reclose attempts | – | | | | 3 | | – | | 3 |
| Cable length in the control circuit | ≤ 1500 m | | | | | | | ≤ 1500 m (DC)/ ≤ 200 m (AC) | ≤ 1500 m |
| Sliding selector with locking device | – | ■ | | | | | | | |
| Integrated auxiliary switches | – | | 1CO; 2 A; 250 V | | | | | | – |
| Integrated fault signal contacts | – | | 1CO; 2 A; 250 V | | | | | | – |
| **Connections** | | | | | | | | | |
| Conductor cross-sections | 0.5 ... 1.5 mm² (AWG 14 ... 30) | | | | | | | | |
| Terminal tightening torque | 0.2 ... 0.25 Nm (2.0 lb-in) | | | | | | | | |
| **Ambient conditions** | | | | | | | | | |
| Permissible storage temperature | –40 ... +55 °C | | | | | | –40 ... +70 °C | | |
| Degree of protection | IP20 | | | | | | | | |
| Degree of pollution for overvoltage category | 3/II | | | | | | | | |

## Suitable adapters for combination with basic units



| Basic units | Mounting width 1 ... 2 MW | 3 ... 4 MW | 3 ... 6 MW | Article No. |
|---|---|---|---|---|
| 5SY4/5/6/7/8 | ■ | – | – | 5ST3820-1 |
| | – | ■ | – | 5ST3820-2 |
| 5SL3/4/6 | ■ | – | – | 5ST3820-6 |
| | – | ■ | – | 5ST3820-7 |
| 5SL60/5SY17 | ■ | – | – | 5ST3820-6 |
| 5SP4, 5SP5 | ■ | – | – | 5ST3820-1 |
| | – | – | ■ | 5ST3820-2 |

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# 5ST3 COM remote control auxiliaries (RCA) with communication function new

- For locations that are spread out over a wide area or not permanently attended
- Permit access to the installation even if it is remote or in a location that is hard to access
- Remote control via wired contact or communications interface to Powercenter 1000
- Permit fast reconnection after a fault
- With integrated and adjustable reclosing function (ARD)
- Versions with automatic and adjustable RCD/IR test function



| Type | Display | Ambient temperature | Vibration and shock requirements | Rated operational voltage $U_e$ | Mounting width (1 MW = 18 mm) | Article No. |
|---|---|---|---|---|---|---|
| Communication-capable | LED | –40 °C ... +70 °C | Acc. to IEC/EN 61373 | 100 ... 240 V AC | 2 MW | 5ST3072-0MC |
| Communication-capable with RCD/IR test | LED | –40 °C ... +70 °C | Acc. to IEC/EN 61373 | 100 ... 240 V AC | 2.5 MW | 5ST3073-0MC |

## Further technical specifications

| | | 5ST3072-0MC, 5ST3073-0MC |
|---|---|---|
| **Standards** | | |
| Standards | | IEC/EN 63024 |
| General product approvals | | RED2014/53/EU |
| **Basic data** | | |
| Rated frequency $f_n$ | | 50/60 Hz |
| Service life, on average, with rated load | Actuations | 10000 |
| Number of ARD attempts | | 3 (+3 adjustable) |
| **Contacts** | | |
| Conductor cross-sections | | 0.5 ... 1.5 mm² |
| Type of connection | | Screw terminals |
| **Ambient conditions** | | |
| Permissible storage temperature | | –40 ... +70 °C |
| **Communication function** | | |
| Interface | SENTRON Powercenter 1000 | Wireless |
| Metering values | | Circuit breaker status, temperature, operating cycles, trip counter, operating hours |
| Switching command | | Wired, via communication |
| Configuration | 5ST3072-0MC | Alarms, origin, switching command, ARD times |
| | 5ST3073-0MC | Alarms, origin, switching command, ARD times, test function |
| **Test function** | | |
| RCD test | | Measurement, tripping current, tripping time |
| IR measurement | Acc. to IEC/EN 63024 | Measurement, insulation resistance |
| Manual test start | | Wired, via communication |
| Automatic test start | | Adjustable time and repeat interval |

## Suitable adapters for combination with basic units



| Basic units | Mounting width | | | Article No. |
|---|---|---|---|---|
| | 1 ... 2 MW | 3 ... 4 MW | 3 ... 6 MW | |
| 5SY4/5/6/7/8 | ■ | – | – | 5ST3820-1 |
| | – | ■ | – | 5ST3820-2 |
| 5SL3/4/6 | ■ | – | – | 5ST3820-6 |
| | – | ■ | – | 5ST3820-7 |
| 5SL60/5SY17 | ■ | – | – | 5ST3820-6 |
| 5SP4, 5SP5 | ■ | – | – | 5ST3820-1 |
| | – | – | ■ | 5ST3820-2 |

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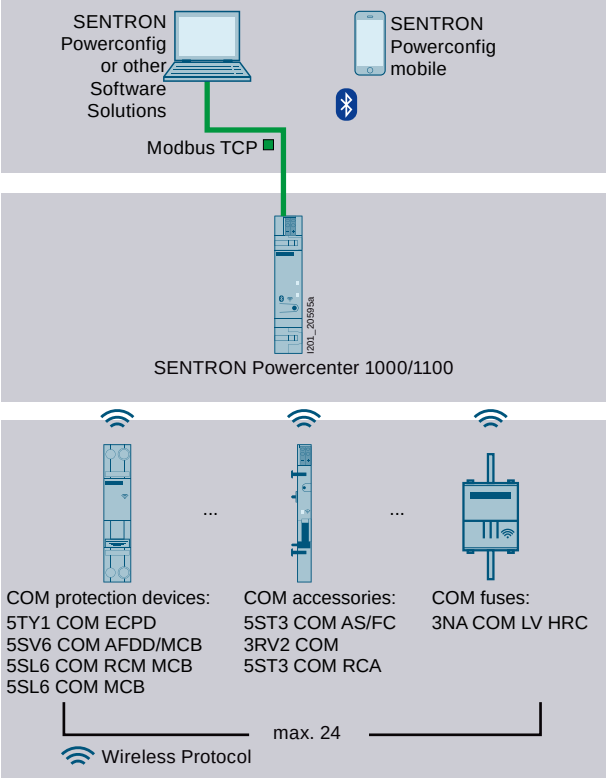


# Electrical accessories

## 5ST3 COM remote control auxiliaries (RCA) with communication function new



### SENTRON Powercenter 1000/1100 data transceiver




- Wireless radio transmission of measured values and data to the SENTRON Powercenter 1000/1100 data transceiver
- Commissioning, parameter assignment, firmware updates and further processing of the data via the SENTRON Powercenter 1000/1100 data transceiver



| SENTRON Powercenter | Article No. |
|---|---|
| SENTRON Powercenter 1000 | 7KN1110-0MC00 |
| SENTRON Powercenter 1100 | 7KN1111-0MC00 |

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You will find further information at www.siemens.com/lowvoltage/manuals

Installation Manual – Circuit protection devices with communication and measuring function (109791805)

System Manual – Circuit protection devices with communication and measuring function (109791806)



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# 5SM6 arc fault detection units (AFDD)

- Detects arcing faults
- Offers extremely effective protection against fires started by electrical faults
- Ensures adequate fire protection even in applications without residual current protective device

| For combining with basic units | | | Rated current $I_n$ | Mounting width (1 MW = 18 mm) | Article No. |
|---|---|---|---|---|---|
| Width of basic unit | Miniature circuit breakers | RCBOs | | | |
| 1 MW | 5SL60 1P+N (no KL types) | 5SV1 | Up to 16 A | 1 MW | 5SM6011-2 |
| | | | Up to 40 A | 1 MW | 5SM6014-2 |
| 2 MW | 5SY [1], 5SL4 (1P+N devices only, not compact) | 5SU1.5 | Up to 16 A | 1 MW | 5SM6021-2 |
| | | | Up to 40 A | 1 MW | 5SM6024-2 |

[1] Not suitable for use with 5SY5, 5SY8

## Further technical specifications

| | | 5SM6 |
|---|---|---|
| **Standards** | | |
| Standards | | IEC/EN 62606 |
| **Supply** | | |
| Rated voltage $U_n$ | | 230 V |
| Rated current $I_n$ | | Up to 16/40 A |
| Rated frequency | | 50 Hz |
| Power loss | | 0.6 W |
| **Contacts** | | |
| Number of poles | | 2-pole |
| Service life | Average number of operating cycles | > 10000 |
| **Safety** | | |
| Touch protection | Acc. to EN 50274 (VDE 0660-514) | Finger and back-of-hand safe |
| Degree of protection | Acc. to EN 60529 (VDE 0470-1) | IP20, with connected conductors |
| Overvoltage category | | III |
| Tripping in the event of overvoltage | | > 275 V |
| **Connections** | | |
| Terminal/conductor cross-sections | Solid and stranded | 0.75 ... 16 mm² |
| | Finely stranded with end sleeve | 0.75 ... 10 mm² |
| Terminal tightening torque | | 2.0 ... 2.5 Nm |
| Mains connection | | Bottom |
| **Ambient conditions** | | |
| Permissible ambient temperature | | –25 ... +40 °C |
| Permissible storage temperature | | –40 ... +75 °C |
| Resistance to climate at 95% relative humidity | Acc. to IEC 60068-2-30 | 28 cycles, 55 °C |
| Degree of pollution | | 2 |
| CFC and silicone-free | | Yes |
| Mounting position | | Any |

**See suitable busbars,** from page 3/64 onwards
**See suitable terminals and end caps,** from page 3/80 onwards

Quick selection guide, page 3/48

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# Mechanical accessories



## Mechanical rotary operating mechanisms complete with handle



- For 5SY, 5SP4, 5SP5, 5SL (but not for 5SL.0 1P+N in 1MW), 5TL1, 5TE2, 5TE8, 5SU1

| Types | Article No. |
|---|---|
| Handle black | 5ST3060 |
| Handle red/yellow | 5ST3061 |

## Terminal cover



- For miniature circuit breakers, but not for 5SL60..
- For additional covering of the screw openings per pole
- Lockable
- In the case of 5SY, also prevents removal of device from the DIN rail

| Article No. |
|---|
| 5ST3800 |

## Handle locking devices

- To prevent undesired mechanical ON/OFF switching
- Sealable and lockable





| For miniature circuit breakers | For padlocks with | Article No. |
|---|---|---|
| 5SY (but not for 5SY17), 5SP, 5TE8, 5SJ4...-.HG.. | Max. 3 mm shackle | 5ST3801 |
| 5SL, 5TL1 | 3 ... 6 mm shackle | 5ST3806 |

## Padlocks



- For 5ST3801 and 5ST3806 handle locking devices and 5ST3054 ... 58, 5ST3070 remote control auxiliaries, 5TY1 COM electronic circuit protection devices (ECPD)

| Article No. |
|---|
| 5ST3802 |

## Locking devices

- Comprising 5ST3801 or 5ST3806 handle locking device and 5ST3802 padlock

| For miniature circuit breakers | Comprising | Article No. |
|---|---|---|
| 5SP4, 5SP5, 5SY | 5ST3801 handle locking device, 5ST3802 padlock | 5ST3803 |
| 5SL, 5SV, 5TL1 | 5ST3806 handle locking device, 5ST3802 padlock | 5ST3807 |

## Spacers



- Can be placed on either side of the DIN rail. Two spacers allow for convenient cable routing

| Mounting width | Article No. |
|---|---|
| 0.5 MW | 5TG8240 |

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## Device labels



- For adhesive attachment
- For modular installation devices, e.g. 5SY, 5SL, 5TL1

| Types | Article No. |
|---|---|
| 15 × 6 mm, white (WIN 098) | 8WH8210-0AA35 |
| 15 × 6 mm, yellow (WIN 099) | 8WH8210-0AA36 |

## Terminal covers, gray



- For surface mounting, degree of protection IP40
- Sealable
- Can be used with 35 mm DIN rail

| For width up to | Article No. |
|---|---|
| 2.5 MW | 5SW3004 |
| 4.5 MW | 5SW3005 |

## Wall enclosures, gray



- For flush mounting, degree of protection IP40
- Can be used with 35 mm DIN rail

| For width up to | Article No. |
|---|---|
| 2.5 MW | 5SW3006 |
| 4.5 MW | 5SW3007 |

## Covers



- Can be assembled as mini distribution board
- Suitable for all devices
- Cover parts prepared for rail mounting of conventional label caps

| Comprising | Article No. |
|---|---|
| End plate | 5ST2134 |
| Angled profile | 5ST2135 |
| Flat profile as alternative | 5ST2136 |

## Holders for front panel installation



- Universal use for devices from 1 to 6 MW

| Cutout height | Cutout width | Article No. |
|---|---|---|
| $45^{+0.5}$ mm | 23, 41, 59, 77, 95 or 113 mm | 7LF9006 |

## Intermediate frames



- For 70 mm devices in 55 mm ALPHA SIMBOX small distribution boards

| Types | Article No. |
|---|---|
| 1-tier | 8GB4561 |
| 2-tier | 8GB4562 |
| 3-tier | 8GB4563 |
| 4-tier | 8GB4564 |

System overview, page 3/5

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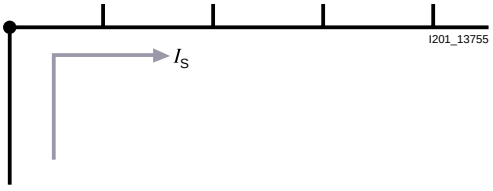


# Standard busbars

## General information

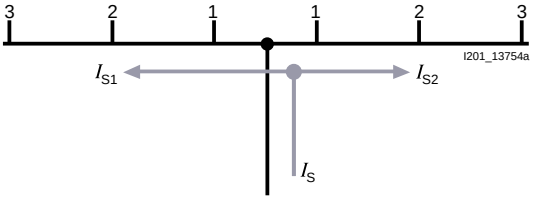
### Infeed

#### At the start or end of the busbar




Maximum busbar current $I_s$/phase
- Cross-section 10 mm²: 63 A
- Cross-section 16 mm²: 80 A

#### Along the busbar or midpoint infeed




Maximum busbar current $I_s$/phase
- Cross-section 10 mm²: 100 A
- Cross-section 16 mm²: 130 A



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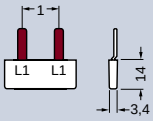
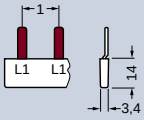
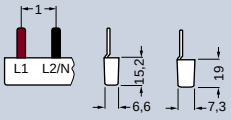
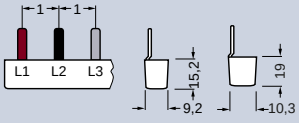
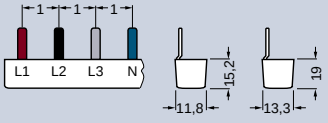
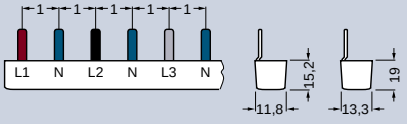
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# Fixed lengths, cannot be cut

## For miniature circuit breakers (MCBs)

| Pin spacing in MW (1 MW = 18 mm) | Application | No. of MW | Length | Conductor cross-section 10 mm² | 16 mm² |
|---|---|---|---|---|---|
| **1-phase** | | | | Article No. | Article No. |
|  | For 2 MCBs 1P | 2 MW | 33 mm | 5ST3600 | 5ST3630 |
|  | For 6 MCBs 1P | 6 MW | 105 mm | 5ST3601 | 5ST3631 |
| | For 12 MCBs 1P | 12 MW | 212 mm | 5ST3602 | 5ST3632 |
| **2-phase/1-phase + N** | | | | Article No. | Article No. |
|  | For 2 MCBs (2P/1P+N) | 4 MW | 76 mm | 5ST3606 | 5ST3636 |
| | For 3 MCBs (2P/1P+N) | 6 MW | 105 mm | 5ST3607 | 5ST3637 |
| | For 6 MCBs (2P/1P+N) | 12 MW | 210 mm | 5ST3608 | 5ST3638 |
| **3-phase** | | | | Article No. | Article No. |
|  | For 2 MCBs 3P | 6 MW | 102 mm | 5ST3613 | 5ST3643 |
| | For 3 MCBs 3P | 9 MW | 157.5 mm | 5ST3614 | 5ST3644 |
| | For 4 MCBs 3P | 12 MW | 210 mm | 5ST3615 | 5ST3645 |
| | For 14 MCBs 1P | 14 MW | 250 mm | 5ST3613-4 | – |
| | Combi pack: 20 × 5ST3613 + 10 × 5ST3614 + 50 × 5ST3615 + 50 × 5ST3655 | | | 5ST3656 | – |
| | Combi pack: 20 × 5ST3643 + 10 × 5ST3644 + 50 × 5ST3645 + 50 × 5ST3655 | | | – | 5ST3657 |
| **4-phase/3-phase + N** | | | | Article No. | Article No. |
|  | For 2 MCBs (4P/3P+N) | 8 MW | 138 mm/ 140 mm | 5ST3621 | 5ST3651 |
| | For 3 MCBs (4P/3P+N) | 12 MW | 210 mm | 5ST3622 | 5ST3652 |
|  | For 6 MCBs 1P+N | 12 MW | 210 mm | 5ST3623 | 5ST3653 |
| | For 7 MCBs 1P+N | 14 MW | 248 mm | 5ST3623-4 | – |

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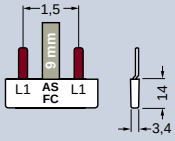
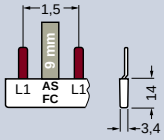
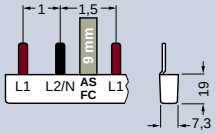
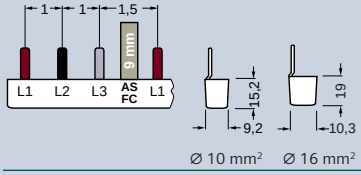
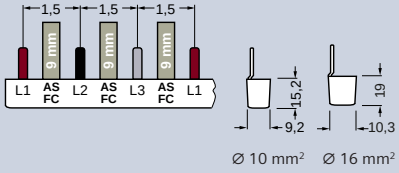
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# Standard busbars

## Fixed lengths, cannot be cut

### For MCBs equipped with auxiliary switch (AS) or fault signal contact (FC)

| Pin spacing in MW (1 MW = 18 mm) | Application | No. of MW | Length | Conductor cross-section 10 mm² | 16 mm² |
|---|---|---|---|---|---|
| **1-phase** | | | | Article No. | Article No. |
|  | For 2 MCBs 1P | 2 MW | 40 mm | 5ST3603 | 5ST3633 |
|  | For 6 MCBs 1P | 6 MW | 158 mm | 5ST3604 | 5ST3634 |
| | For 9 MCBs 1P | 9 MW | 237 mm | 5ST3605 | 5ST3635 |
| **2-phase/1-phase + N** | | | | Article No. | Article No. |
|  | For 2 MCBs (2P/1P+N) | 4 MW | 76 mm | 5ST3610 | 5ST3640 |
| | For 3 MCBs (2P/1P+N) | 6 MW | 121 mm | 5ST3611 | 5ST3641 |
| | For 5 MCBs (2P/1P+N) | 10 MW | 210 mm | 5ST3612 | 5ST3642 |
| **3-phase** | | | | Article No. | Article No. |
|  | For 2 MCBs 3P | 6 MW | 115 mm | 5ST3616 | 5ST3646 |
| | For 4 MCBs 3P | 12 MW | 237 mm | 5ST3617 | 5ST3647 |
|  | For 6 MCBs 1P | 9 MW | 156 mm/ 158 mm | 5ST3618 | 5ST3648 |
| | For 9 MCBs 1P | 12 MW | 227 mm | 5ST3620 | 5ST3650 |

## Accessories

| Terminals for 5ST36 and 5ST37 | | Article No. |
|---|---|---|
| For conductors 6 ... 25 mm² | Cable entry on the left | 5ST3768-4 |
| | Cable entry in the center | 5ST3768-3 |
| | Cable entry on the right | 5ST3768-5 |
| For conductors 6 ... 50 mm² | Cable entry on the left | 5ST3760-4 |
| | Cable entry in the center | 5ST3760-3 |
| | Cable entry on the right | 5ST3760-5 |

| Terminals for infeed at side | | Article No. |
|---|---|---|
| For conductors 6 ... 25 mm² | Short | 5ST3768 |
| | Short, IP20 | 5ST3771-2 |
| **Touch protection** | | **Article No.** |
| For free connections, yellow (RAL 1004) 5 × 1 pin | | 5ST3655 |

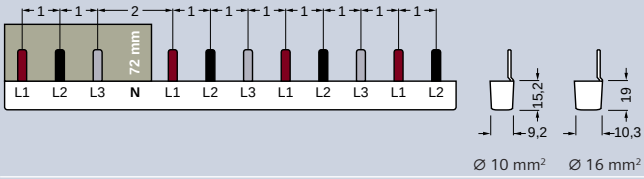
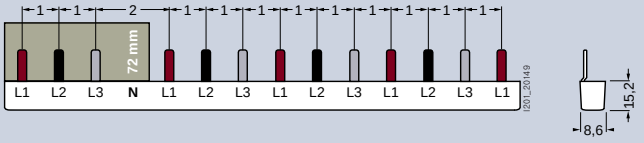
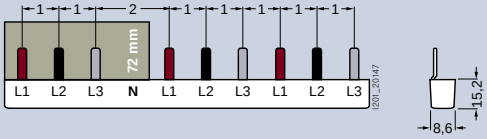
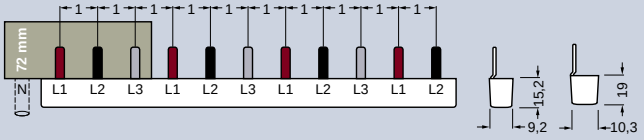
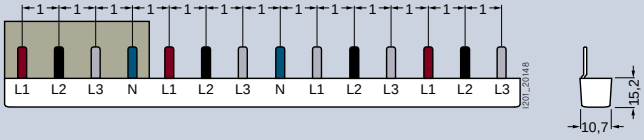
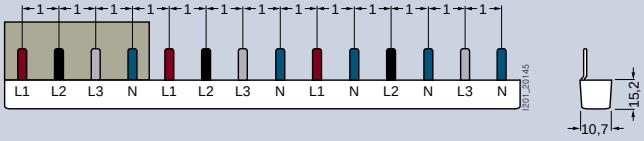
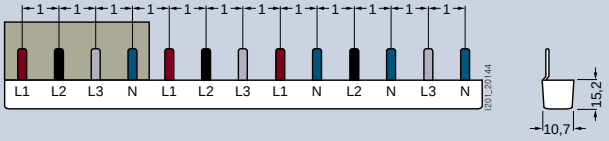
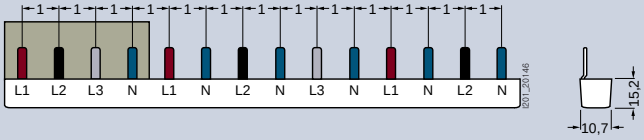
Quick selection guide, page 3/48

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## For MCBs with RCCB

| Pin spacing in MW (1 MW = 18 mm) | Application | No. of MW | Length | Conductor cross-section 10 mm² | 16 mm² |
|---|---|---|---|---|---|
| **3-phase** | | | | Article No. | Article No. |
|  | For 8 MCBs 1P with 1 RCCB 3P+N, N right | 12 MW | 210 mm | 5ST3624 | 5ST3654 |
|  | For 10 MCBs 1P with 1 RCCB 3P+N or for 1 RCCB 3P+N, 1 MCB 3P and 7 MCBs 1P | 14 MW | 249 mm | 5ST3624-4 | – |
|  | For 6 MCBs 1P with 1 RCCB 3P+N or for 1 RCCB 3P+N, 1 MCB 3P and 3 MCBs 1P | 10 MW | 176 mm | 5ST3624-1 | – |
|  | For 8 MCBs 1P with 1 RCCB 3P+N, N left | 11 MW | 192 mm | 5ST3667 | 5ST3668 |
| **4-phase/3-phase + N** | | | | Article No. | Article No. |
|  | For 1 RCCB 3P+N, 1 MCB 3P+N and 6 MCBs 1P | 14 MW | 248 mm | 5ST3724-4 | – |
|  | For 1 RCCB 3P+N, 1 MCB 3P+N and 3 MCBs 1P+N | 14 MW | 248 mm | 5ST3725-4 | – |
|  | For 1 RCCB 3P+N, 1 MCB 3P and 3 MCBs 1P+N | 13 MW | 230 mm | 5ST3725-3 | – |
|  | For 1 RCCB 3P+N and 5 MCBs 1P+N | 14 MW | 248 mm | 5ST3625-4 | – |

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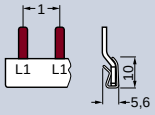
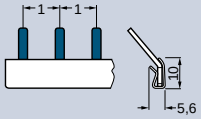
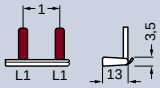
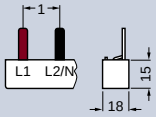
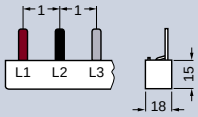
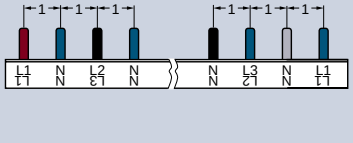
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# Standard busbars

## Can be cut

### For miniature circuit breakers (MCBs)

| Pin spacing in MW (1 MW = 18 mm) | Application | No. of MW | Length | End caps included | Color | Conductor cross-section 10 mm² | 16 mm² |
|---|---|---|---|---|---|---|---|
| **1-phase, straight** | | | | | | **Article No.** | **Article No.** |
|  | For MCBs 1P+N compact | 12 MW | 216 mm | ■ | Gray | 5ST3762 | – |
| | | | | | Blue | 5ST3687-0 | – |
| | | 56 MW | 1016 mm | – | Gray | 5ST3764 | – |
| | | | | | Blue | 5ST3787-0 | – |
| **1-phase, angled 45°** | | | | | | **Article No.** | **Article No.** |
|  | For MCBs 1P+N compact | 12 MW | 216 mm | ■ | Blue | 5ST3763 | – |
| | | 56 MW | 1016 mm | – | Blue | 5ST3765 | – |
| **1-phase, angled 90°** | | | | | | **Article No.** | **Article No.** |
|  | For MCBs 1P | 12 MW | 214 mm | ■ | | 5ST3730 | 5ST3700 |
| | | 56 MW | 1016 mm | – | | 5ST3731 | 5ST3701 |
| **2-phase/1-phase + N** | | | | | | **Article No.** | **Article No.** |
|  | For 2MW devices (2P/1P+N) | 12 MW | 214 mm | ■ | | 5ST3734 | 5ST3704 |
| | | 56 MW | 1016 mm | – | | 5ST3735 | 5ST3705 |
| **3-phase** | | | | | | **Article No.** | **Article No.** |
|  | For MCBs 3P | 12 MW | 214 mm | ■ | | 5ST3738 | 5ST3708 |
| | | 56 MW | 1016 mm | – | | 5ST3740 | 5ST3710 |
| **4-phase/3-phase + N** | | | | | | **Article No.** | **Article No.** |
|  | For MCBs 4P or 3P+N | 12 MW | 214 mm | ■ | | 5ST3745 | 5ST3715 |
| | | 56 MW | 1016 mm | – | | 5ST3746 | 5ST3716 |
|  Ø 10 mm² Ø 16 mm² | For RCCB/MCBs or MCBs 1P+N | 56 MW | 1000 mm | – | | 5ST3770-2 | 5ST3770-3 |

## Accessories

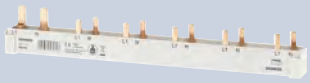
| Terminals for 5ST36 and 5ST37 | | Article No. |
|---|---|---|
| For conductors 6 ... 25 mm² | Cable entry on the left | 5ST3768-4 |
| | Cable entry in the center | 5ST3768-3 |
| | Cable entry on the right | 5ST3768-5 |
| For conductors 6 ... 50 mm² | Cable entry on the left | 5ST3760-4 |
| | Cable entry in the center | 5ST3760-3 |
| | Cable entry on the right | 5ST3760-5 |
| **Terminals for Infeed at side** | | **Article No.** |
| For conductors 6 ... 25 mm² | Short | 5ST3768 |
| | Short, IP20 | 5ST3771-2 |

| End caps | | Article No. |
|---|---|---|
| For 1-phase busbars (MCB 1P+N compact) | Gray | 5ST3766 |
| | Blue | 5ST3767 |
| | White | 5ST3748 |
| For 2 and 3-phase busbars | | 5ST3750 |
| **Touch protection** | | **Article No.** |
| For free connections, yellow (RAL 1004) 5 × 1 pin | | 5ST3655 |

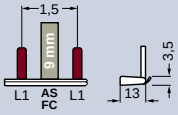
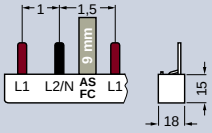
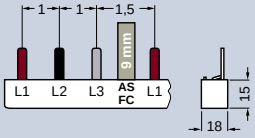
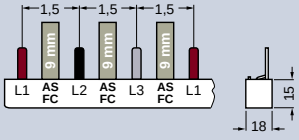
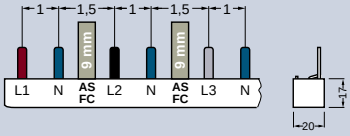
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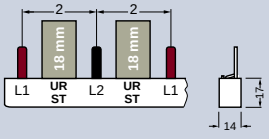




## For MCBs equipped with auxiliary switch (AS) or fault signal contact (FC)

| Pin spacing in MW (1 MW = 18 mm) | Application | No. of MW | Length | End caps included | Conductor cross-section 10 mm² | 16 mm² |
|---|---|---|---|---|---|---|
| **1-phase, angled 90°** | | | | | **Article No.** | **Article No.** |
|  | For MCBs 1P | 12 MW | 214 mm | ■ | 5ST3732 | 5ST3702 |
| | | 56 MW | 1016 mm | – | 5ST3733 | 5ST3703 |
| **2-phase/1-phase + N** | | | | | **Article No.** | **Article No.** |
|  | For 2 MW devices (2P/1P+N) | 12 MW | 214 mm | ■ | 5ST3736 | 5ST3706 |
| | | 56 MW | 1016 mm | – | 5ST3737 | 5ST3707 |
| **3-phase** | | | | | **Article No.** | **Article No.** |
|  | For MCBs 3P | 12 MW | 214 mm | ■ | 5ST3741 | 5ST3711 |
| | | 56 MW | 1016 mm | – | 5ST3742 | 5ST3712 |
|  | For MCBs 1P | 12 MW | 214 mm | ■ | 5ST3743 | 5ST3713 |
| | | 56 MW | 1016 mm | – | 5ST3744 | 5ST3714 |
| **4-phase/3-phase + N** | | | | | **Article No.** | **Article No.** |
|  | For MCBs 1P+N | 56 MW | 1016 mm | – | 5ST3746-2 | – |

## For MCBs equipped with undervoltage release (UR) or shunt trips (ST)

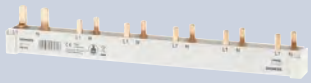
| Pin spacing in MW (1 MW = 18 mm) | Application | No. of MW | Length | End caps included | Conductor cross-section 10 mm² | 16 mm² |
|---|---|---|---|---|---|---|
| **2-phase** | | | | | **Article No.** | **Article No.** |
|  | For MCBs 1P with UR/ ST | 56 MW | 1016 mm | – | 5ST3735-2 | – |

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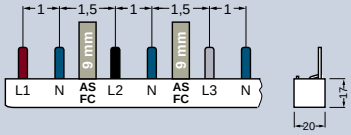
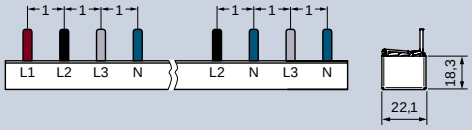


# Standard busbars



## Can be cut

### For MCBs with line-side RCCB or RCCBs equipped with AS/FC devices

| Pin spacing in MW (1 MW = 18 mm) | Application | No. of MW | Length | End caps included | Conductor cross-section 10 mm² | 16 mm² |
|---|---|---|---|---|---|---|
| 4-phase/3-phase + N | | | | | Article No. | Article No. |
|   | For RCCB/MCBs | 56 MW | 1016 mm | – | 5ST3746-2 | – |
|   | For 6 MCBs 1P+N with 1 RCCB 3P+N, N right | 16 MW | 292 mm | ■ | 5ST3770-4 | 5ST3770-5 |

## Accessories

| Terminals for 5ST36 and 5ST37 | | Article No. |
|---|---|---|
| For conductors 6 ... 25 mm² | Cable entry on the left | 5ST3768-4 |
| | Cable entry in the center | 5ST3768-3 |
| | Cable entry on the right | 5ST3768-5 |
| For conductors 6 ... 50 mm² | Cable entry on the left | 5ST3760-4 |
| | Cable entry in the center | 5ST3760-3 |
| | Cable entry on the right | 5ST3760-5 |

| End caps | Article No. |
|---|---|
| For 2 and 3-phase busbars | 5ST3750 |
| For 4-phase busbars | 5ST3718 |
| **Touch protection** | **Article No.** |
| For free connections, yellow (RAL 1004) 5 × 1 pin | 5ST3655 |

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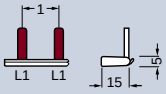
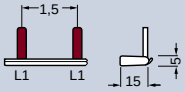
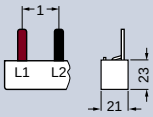
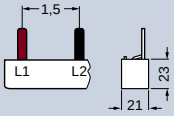
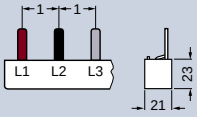
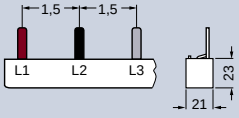
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# 5ST37 acc. to UL 508, can be cut

## For miniature circuit breakers (MCBs)

| Pin spacing in MW (1 MW = 18 mm) | Application | No. of MW | Length | Conductor cross-section 18 mm² | 25 mm² |
|---|---|---|---|---|---|
| **1-phase** | | | | **Article No.** | **Article No.** |
|  | For MCBs 1P<br>or fuse holders 10 × 38 mm/class CC | 56 MW | 1000 mm | 5ST3701-0HG | – |
|  | For MCBs 1P<br>or fuse holders 14 × 51 mm | 56 MW | 1000 mm | – | 5ST3701-2HG |
| **2-phase** | | | | **Article No.** | **Article No.** |
|  | For MCBs 2P<br>or fuse holders 10 × 38 mm/class CC | 56 MW | 1000 mm | 5ST3705-0HG | – |
|  | For MCBs 2P<br>or fuse holders 14 × 51 mm | 56 MW | 1000 mm | – | 5ST3705-2HG |
| **3-phase** | | | | **Article No.** | **Article No.** |
|  | For MCBs 3P<br>or fuse holders 10 × 38 mm/class CC | 56 MW | 1000 mm | 5ST3710-0HG | – |
|  | For MCBs 3P<br>or fuse holders 14 × 51 mm | 56 MW | 1000 mm | – | 5ST3710-2HG |

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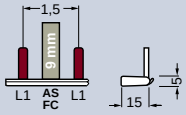
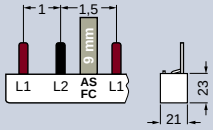
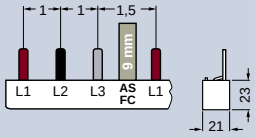
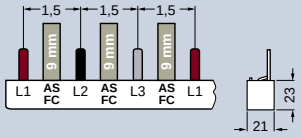


# Standard busbars



## 5ST37 acc. to UL 508, can be cut

### For MCBs equipped with auxiliary switch (AS) or fault signal contact (FC)

| Pin spacing in MW (1 MW = 18 mm) | Application | No. of MW | Length | Conductor cross-section 18 mm² | 25 mm² |
|---|---|---|---|---|---|
| **1-phase** | | | | Article No. | Article No. |
|  | For MCBs 1P | 56 MW | 1000 mm | 5ST3703-0HG | – |
| **2-phase** | | | | Article No. | Article No. |
|  | For MCBs 2P | 56 MW | 1000 mm | 5ST3707-0HG | – |
| **3-phase** | | | | Article No. | Article No. |
|  | For MCBs 3P | 56 MW | 1000 mm | 5ST3712-0HG | – |
|  | For MCBs 1P | 56 MW | 1000 mm | 5ST3714-0HG | – |

## Accessories

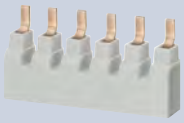
| Terminals according to UL 508 | | Article No. |
|---|---|---|
| For infeed at the device | 6 ... 35 mm² | 5ST3770-0HG |
| For infeed at the busbar | 2.5 ... 50 mm² | 5ST3770-1HG |
| **End caps according to UL 508** | | **Article No.** |
| For 1-phase busbars | | 5ST3748-0HG |
| For 2 and 3-phase busbars | | 5ST3750-0HG |

| Touch protection according to UL 508 | Article No. |
|---|---|
| For open terminals, yellow 5 × 1 pin | 5ST3655-0HG |

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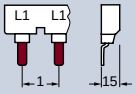
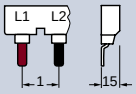
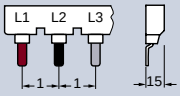
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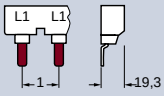
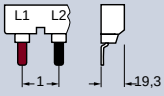
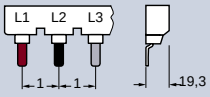
# 5ST3.. acc. to UL 489 specially for 5SJ4... -.HG..

## Fixed lengths, cannot be cut, for miniature circuit breakers (MCBs) [1)]

| Pin spacing in MW (1 MW = 18 mm) | Application | No. of MW | Length | Conductor cross-section 16 mm² |
|---|---|---|---|---|
| **1-phase** | | | | **Article No.** |
|  | For 6 MCBs 1P | 6 MW | 100 mm | 5ST3663-0HG |
| | For 12 MCBs 1P | 12 MW | 205 mm | 5ST3663-1HG |
| | For 18 MCBs 1P | 18 MW | 310 mm | 5ST3663-2HG |
| **2-phase** | | | | **Article No.** |
|  | For 3 MCBs 2P | 6 MW | 100 mm | 5ST3664-0HG |
| | For 6 MCBs 2P | 12 MW | 205 mm | 5ST3664-1HG |
| | For 9 MCBs 2P | 18 MW | 310 mm | 5ST3664-2HG |
| **3-phase** | | | | **Article No.** |
|  | For 2 MCBs 3P | 6 MW | 100 mm | 5ST3665-0HG |
| | For 4 MCBs 3P | 12 MW | 205 mm | 5ST3665-1HG |
| | For 6 MCBs 3P | 18 MW | 310 mm | 5ST3665-2HG |

[1)] All unassigned pins of the busbars that cannot be cut must be covered with 5ST3666-1HG touch protection covers.

## Can be cut, for MCBs

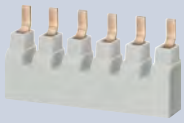
| Pin spacing in MW (1 MW = 18 mm) | Application | No. of MW | Length | Conductor cross-section 18 mm² |
|---|---|---|---|---|
| **1-phase** | | | | **Article No.** |
|  | For MCBs 1P | 56 MW | 1016 mm | 5ST3701-3HG |
| **2-phase** | | | | **Article No.** |
|  | For MCBs 2P | 56 MW | 1016 mm | 5ST3705-3HG |
| **3-phase** | | | | **Article No.** |
|  | For MCBs 3P | 56 MW | 1016 mm | 5ST3710-3HG |

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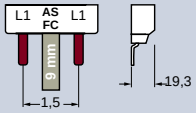
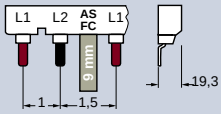
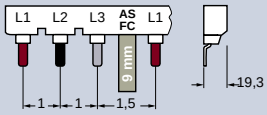
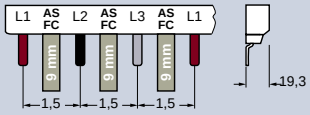


# Standard busbars



## 5ST3.. acc. to UL 489 specially for 5SJ4... -.HG..

### Can be cut, for MCBs equipped with auxiliary switch (AS) or fault signal contact (FC)

| Pin spacing in MW (1 MW = 18 mm) | Application | No. of MW | Length | Conductor cross-section 18 mm² |
|---|---|---|---|---|
| **1-phase** | | | | **Article No.** |
|  | For MCBs 1P | 56 MW | 1016 mm | 5ST3703-3HG |
| **2-phase** | | | | **Article No.** |
|  | For MCBs 2P | 56 MW | 1016 mm | 5ST3707-3HG |
| **3-phase** | | | | **Article No.** |
|  | For MCBs 3P | 56 MW | 1016 mm | 5ST3712-3HG |
|  | For MCBs 1P | 56 MW | 1016 mm | 5ST3714-3HG |

## Accessories

| Terminals according to UL 489 | | Article No. |
|---|---|---|
| For infeed at the 5SJ4... -.HG.. miniature circuit breaker | 2.5 ... 35 mm² | 5ST3666-0HG |
| | 6 ... 35 mm² | 5ST3770-3HG |
| For infeed at the busbar | 2.5 ... 50 mm² | 5ST3666-2HG |
| **End caps according to UL 489** | | **Article No.** |
| For 1, 2 and 3-phase busbars | | 5ST3750-3HG |

| Touch protection according to UL 489 | | Article No. |
|---|---|---|
| For open terminals, yellow 3 × 1 pin | For 5ST37..-.HG busbars that cannot be cut | 5ST3666-1HG |
| | For 5ST37..-3HG busbars that can be cut | 5ST3655-3HG |

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# Compact busbars

## General information

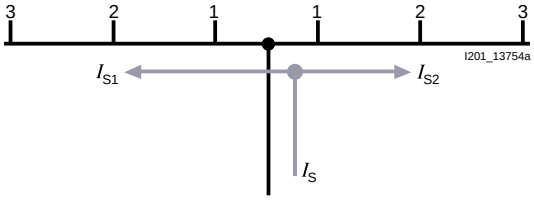
### Infeed

#### At the start or end of the busbar




Maximum busbar current $I_s$/phase
- Cross-section 10 mm²: 63 A
- Cross-section 16 mm²: 80 A

#### Along the busbar or midpoint infeed




Maximum busbar current $I_s$/phase
- Cross-section 10 mm²: 100 A
- Cross-section 16 mm²: 130 A



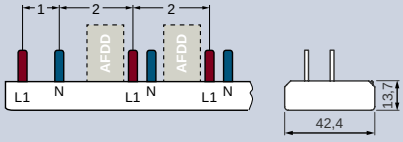
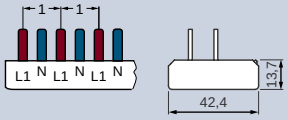
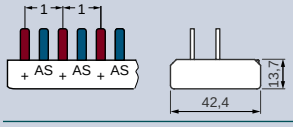
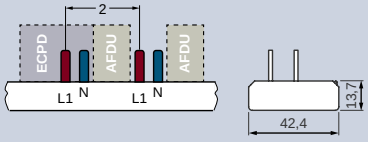
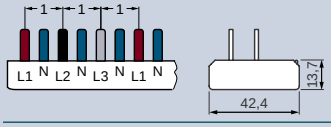
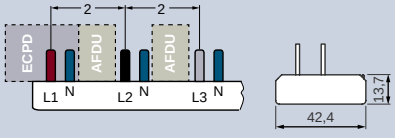
Quick selection guide, page 3/48

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# Compact busbars

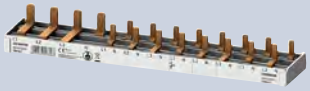
## 5ST36, fixed lengths, cannot be cut

| Pin spacing in MW (1 MW = 18 mm) | Application | No. of MW | Length | End caps included | Conductor cross-section 10 mm² |
|---|---|---|---|---|---|
| **2-phase/1-phase + N, for infeed via RCCB** | | | | | **Article No.** |
|  | For 1 × RCCB 1P+N and 5 × compact devices equipped with 5SM6 arc fault detection unit | 12 MW | 216 mm | ■ | 5ST3685-0 |
| **2-phase/1-phase + N** | | | | | **Article No.** |
|  | For compact devices | 6 MW | 113 mm | ■ | 5ST3674-6 |
| | | 9 MW | 166 mm | ■ | 5ST3674-7 |
| | | 12 MW | 218 mm | ■ | 5ST3674-0 |
|  | For 12 × 5SY17 CBE (circuit breaker for equipment) | 12 MW | 218 mm | ■ | 5ST3674-1 |
|  | For 6 × compact devices equipped with 5SM6 arc fault detection unit and 5TY1 COM electronic circuit protection devices (ECPD) | 12 MW | 200 mm | ■ | 5ST3676-0 |
| **4-phase/3-phase + N** | | | | | **Article No.** |
|  | For compact devices | 6 MW | 113 mm | ■ | 5ST3673-6 |
| | | 9 MW | 116 mm | ■ | 5ST3673-7 |
| | | 12 MW | 218 mm | ■ | 5ST3673-0 |
| | | 14 MW | 254 mm | ■ | 5ST3673-4 |
|  | For 6 × compact devices equipped with 5SM6 arc fault detection unit and 5TY1 COM electronic circuit protection devices (ECPD) | 11 MW | 200 mm | ■ | 5ST3675-0 |

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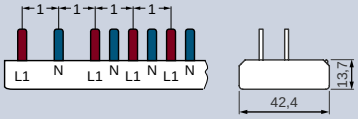
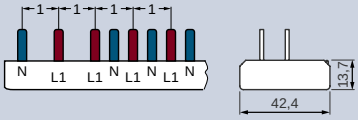
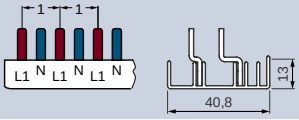
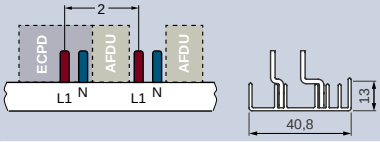
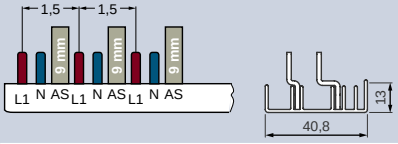
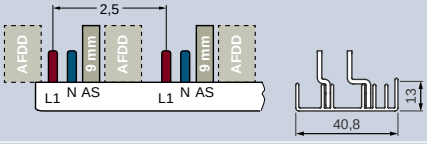
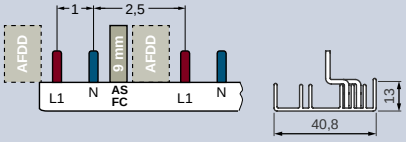
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## 5ST37, can be cut

| Pin spacing in MW (1 MW = 18 mm) | Application | No. of MW | Length | End caps included | Conductor cross-section 10 mm² |
|---|---|---|---|---|---|
| **2-phase/1-phase + N, for infeed via RCCB** | | | | | **Article No.** |
|  | For 1 × RCCB 1P+N and 10 × compact devices | 12 MW | 215 mm | ■ | 5ST3784-0 |
|  | For 1 × RCCB 1P+N (RCCB N left only) and 10 × compact devices | 12 MW | 215 mm | ■ | 5ST3784-0KL |
| **2-phase/1-phase + N** | | | | | **Article No.** |
|  | For compact devices | 60 MW | 1060 mm | – | 5ST3774-0 |
|  | For compact devices equipped with 5SM6 arc fault detection unit and 5TY1 COM electronic circuit protection devices (ECPD) | 59 MW | 1042 mm | – | 5ST3776-0 |
|  | For compact devices equipped with auxiliary switch | 59.5 MW | 1055 mm | – | 5ST3778-0 |
|  | For compact devices equipped with 5SM6 arc fault detection unit and auxiliary switch | 58.5 MW | 1036 mm | – | 5ST3780-0 |
|  | For 2 MW units (MCBs or RCBOs) with mounted 5SM6 arc fault detection unit and auxiliary switch | 54 MW | 956 mm | – | 5ST3786-0 |

## Accessories

| Terminals for infeed at side | | Article No. |
|---|---|---|
| For conductors 6 ... 25 mm² | Short, IP20 | 5ST3771-2 |

| End caps | Article No. |
|---|---|
| For 2 and 4-phase compact busbars | 5ST3788-0 |

| Touch protection | | Article No. |
|---|---|---|
| For free connections, yellow (RAL 1004) | For pins L1, N | 5ST3655 |
| | For pins L2, L3 | 5ST3655-0HG |

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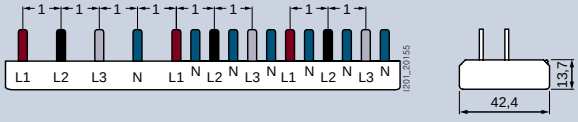
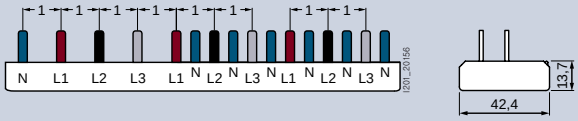
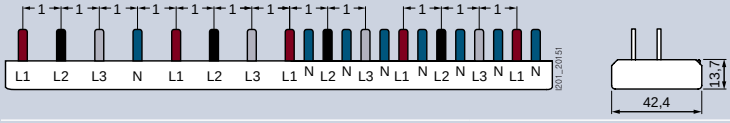
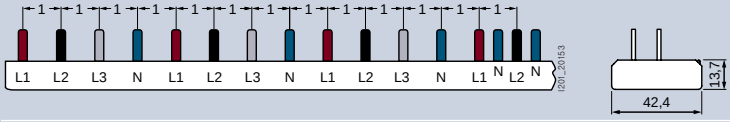
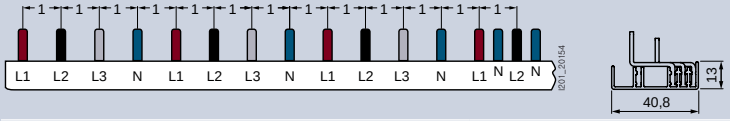
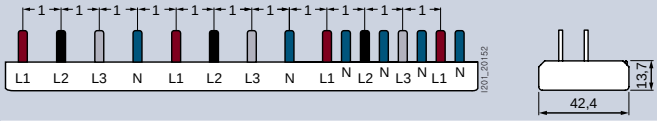
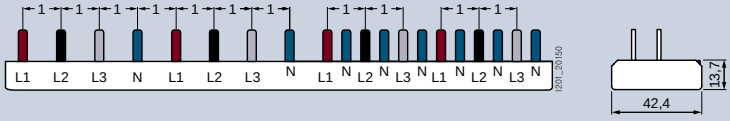
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# Compact busbars

## 5ST37, can be cut

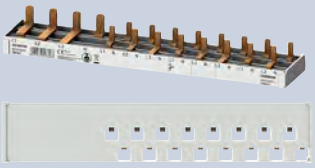


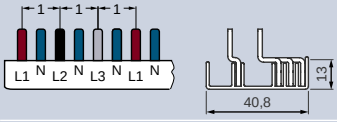
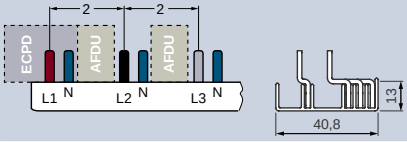
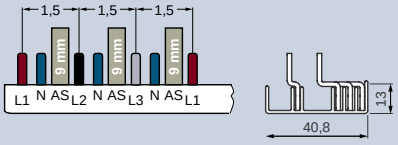
| Pin spacing in MW (1 MW = 18 mm) | Application | No. of MW | Length | End caps included | Conductor cross-section 10 mm² |
|---|---|---|---|---|---|
| **4-phase/3-phase + N, for infeed via RCCB** | | | | | **Article No.** |
|  | For 1 × RCCB 3P+N and 6 × compact devices | 10 MW | 181 mm | ■ | 5ST3783-1 |
| | For 1 × RCCB 3P+N and 8 × compact devices | 12 MW | 216 mm | ■ | 5ST3783-0 |
| | For 1 × RCCB 3P+N and 10 × compact devices | 14 MW | 251 mm | ■ | 5ST3783-4 |
|  | For 1 × RCCB 3P+N (RCCB N left only) and 6 × compact devices | 10 MW | 181 mm | ■ | 5ST3783-1KL |
| | For 1 × RCCB 3P+N (RCCB N left only) and 8 × compact devices | 12 MW | 216 mm | ■ | 5ST3783-0KL |
|  | For 1 × RCCB 3P+N, 1 × MCBs 3P and 7 × compact devices | 14 MW | 253 mm | ■ | 5ST3785-4 |
|  | For 1 × RCCB 3P+N, 2 × MCBs 3P+N and 12 × compact devices | 24 MW | 430 mm | ■ | 5ST3790-1 |
|  | For 1 × RCCB 3P+N, 2 × MCBs 3P+N and 45 × compact devices | 57 MW | 1009 mm | – | 5ST3790-2 |
|  | For 1 × RCCB 3P+N, 1 × MCBs 3P+N and 4 × compact devices | 12 MW | 217 mm | ■ | 5ST3795-0 |
|  | For 1 × RCCB 3P+N, 1 × MCBs 3P+N and 6 × compact devices | 14 MW | 253 mm | ■ | 5ST3795-4 |

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| Pin spacing in MW (1 MW = 18 mm) | Application | No. of MW | Length | End caps included | Conductor cross-section 10 mm² |
|---|---|---|---|---|---|
| **4-phase/3-phase + N** | | | | | **Article No.** |
|  | For compact devices | 60 MW | 1060 mm | – | 5ST3773-0 |
|  | For compact devices equipped with 5SM6 arc fault detection unit and 5TY1 COM electronic circuit protection devices (ECPD) | 59 MW | 1042 mm | – | 5ST3775-0 |
|  | For compact devices equipped with auxiliary switch | 59.5 MW | 1055 mm | – | 5ST3777-0 |

3

## Accessories

| Terminals for infeed at side | | Article No. |
|---|---|---|
| For conductors 6 ... 25 mm² | Short, IP20 | 5ST3771-2 |

| End caps | Article No. |
|---|---|
| For 2 and 4-phase compact busbars | 5ST3788-0 |

| Touch protection | | Article No. |
|---|---|---|
| For free connections, yellow (RAL 1004) | For pins L1, N | 5ST3655 |
| | For pins L2, L3 | 5ST3655-0HG |

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# Accessories for busbars

## General accessories



### Terminals

| | For conductors | Version | Cable entry | Infeed | Article No. |
|---|---|---|---|---|---|
|  | 6 ... 25 mm² | Short | – | Lateral | 5ST3768 |
| | | Short, IP20 | – | Lateral | 5ST3771-2 |
|  | 6 ... 25 mm² | – | Center | – | 5ST3768-3 |
| | | | Left | – | 5ST3768-4 |
| | | | Right | – | 5ST3768-5 |
|  | 6 ... 50 mm² | – | Center | – | 5ST3760-3 |
| | | | Left | – | 5ST3760-4 |
| | | | Right | – | 5ST3760-5 |
|  | 2.5 ... 50 mm² | – | – | Busbar | 5ST3770-1HG |
|  | 6 ... 35 mm² | – | – | Device | 5ST3770-0HG |
|  | 2.5 ... 35 mm² | For 5SJ4... -.HG.. | – | Miniature circuit breaker | 5ST3666-0HG |
| | 6 ... 35 mm² | For 5ST37..-3HG that can be cut | – | Miniature circuit breaker | 5ST3770-3HG |
|  | 2.5 ... 50 mm² | – | – | Busbar | 5ST3666-2HG |

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| 5ST36 | 5ST37 | 5ST37 (acc. to UL 508) | 5ST3.. (acc. to UL 489) | 5ST3 compact |
|---|---|---|---|---|
| | | | | |
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# Accessories for busbars

## General accessories



### Touch protection



| Version | Scope of supply | Version | Article No. |
|---|---|---|---|
| For free connections, yellow (RAL 1004) | 5 × 1 pin | – | 5ST3655 |
| | | | 5ST3655-0HG |
| | 3 × 1 pin | – | 5ST3666-1HG |
| | | – | 5ST3655-3HG |
| For conductors 10 mm² | 20 × 5ST3613 + 10 × 5ST3614 + 50 × 5ST3615 + 50 × 5ST3655 | – | 5ST3656 |
| For conductors 16 mm² | 20 × 5ST3643 + 10 × 5ST3644 + 50 × 5ST3645 + 50 × 5ST3655 | For 5ST337..-3HG | 5ST3657 |

### End caps









| Version | Color | Article No. |
|---|---|---|
| For 1-phase busbars | Gray | 5ST3748 |
| For 2 and 3-phase busbars | Gray | 5ST3750 |
| For 4-phase busbars | Gray | 5ST3718 |
| For 1, 2 and 3-phase busbars | Gray | 5ST3750-3HG |
| – | Gray | 5ST3766 |
| | Blue | 5ST3767 |
| For 1-phase busbars | Gray | 5ST3748-0HG |
| For 2 and 3-phase busbars | Gray | 5ST3750-0HG |
| For 2 and 4-phase compact busbars | Gray | 5ST3788-0 |

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| 5ST36 | 5ST37 | 5ST37 (acc. to UL 508) | 5ST3.. (acc. to UL 489) | 5ST3 compact |
|---|---|---|---|---|
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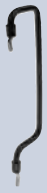


# Accessories for busbars

## General accessories



### Series connectors





| Conductor cross-section | Length of cable | Color | Number of phases | Article No. |
|---|---|---|---|---|
| 10 mm² | 125 mm | N conductor blue | 1 | 5ST3781-0 |
| | | Cable black | 1 | 5ST3791-0 |
| | | | 3 | 5ST3793-0 |
| | 150 mm | N conductor blue | 1 | 5ST3781-1 |
| | | Cable black | 1 | 5ST3791-1 |
| | | | 3 | 5ST3793-1 |
| 16 mm² | 125 mm | N conductor blue | 1 | 5ST3782-0 |
| | | Cable black | 1 | 5ST3792-0 |
| | | | 3 | 5ST3794-0 |
| | 150 mm | N conductor blue | 1 | 5ST3782-1 |
| | | Cable black | 1 | 5ST3792-1 |
| | | | 3 | 5ST3794-1 |
| | 200 mm | N conductor blue | 1 | 5ST3781-2 |
| | | Cable black | 1 | 5ST3791-2 |
| | | | 3 | 5ST3793-2 |
| | | 3 × cables black and 1 × N conductor blue | 3 + N | 5ST3793-3 |



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| 5ST36 | 5ST37 | 5ST37 (acc. to UL 508) | 5ST3.. (acc. to UL 489) | 5ST3 compact |
|---|---|---|---|---|
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System overview, page 3/5

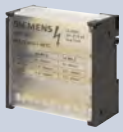
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# Distribution blocks for DIN-rail mounting

## Acc. to IEC

**Distribution blocks acc. to IEC**

| | Number of poles | Rated operational voltage $U_e$ | Rated current $I_n$ | Mounting width | Article No. |
|---|---|---|---|---|---|
|  | 4-pole | 690 V AC | 80 A | 5 MW | 5ST2501 |
|  | | | 125 A | 5.5 MW | 5ST2502 |
|  | | | 160 A | 9 MW | 5ST2503 |



| Further technical specifications | | | 5ST2501 | 5ST2502 | 5ST2503 |
|---|---|---|---|---|---|
| **Standards** | | | | | |
| Standards | | | IEC 60947-7-1 | | |
| **Supply** | | | | | |
| Rated operational voltage AC | | | 690 V | | |
| Max. rated current | | | 80 A | 125 A | 160 A |
| **Conductor cross-section** | | | | | |
| Inputs per pole | Solid/stranded | | 1 × 2.5 ... 16 mm² | 1 × 6 ... 35 mm² | 1 × 10 ... 50 mm² |
| | Finely stranded with end sleeve | | 1 × 1.5 ... 10 mm² | 1 × 6 ... 25 mm² | 1 × 10 ... 35 mm² |
| Outputs per pole | Solid/stranded | | 8 × 1.5 ... 10 mm² | 5 × 1.5 ... 6 mm²<br>2 × 4 ... 16 mm² | 8 × 2.5 ... 16 mm²<br>3 × 10 ... 35 mm² |
| | Finely stranded with end sleeve | | 8 × 1.5 ... 10 mm² | 5 × 1.5 ... 6 mm² (small)<br>2 × 4 ... 10 mm² (large) | 8 × 1.5 ... 16 mm² (small)<br>3 × 10 ... 25 mm² (large) |
| **Tightening torque** | | | | | |
| Inputs | Screw terminals | | 13.5 lb-in (1.5 Nm) | | 3.5 ... 5 lb-in (2 Nm) |
| | Tools | | PZ2 | | |
| Outputs | Screw terminals | Large | 13.5 lb-in (1.5 Nm) | | |
| | | Small | – | 7.2 lb-in (0.8 Nm) | 13.5 lb-in (1.5 Nm) |
| | Tools | Large | PZ1 | PZ2 | |
| | | Small | – | PZ1 | PZ2 |
| **Safety** | | | | | |
| Rated peak withstand current $I_{pk}$ | | | 21.6 kA | 24 kA | 20 kA |
| Rated short-time withstand current $I_{cw}$ (1 s) | | | 3 kA | 4.2 kA | 6.2 kA |
| **Ambient conditions** | | | | | |
| Permissible ambient temperature | | | –25 ... +70 °C | | |
| Degree of protection | Acc. to EN 60529 | | IP20 | | |
| Approved cable | | | Copper | | |

System overview, page 3/5

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# According to IEC and UL

**Distribution blocks acc. to IEC and UL**



| Number of poles | Rated operational voltage $U_e$ | Rated current $I_n$ | Mounting width | Article No. |
|---|---|---|---|---|
| 1-pole | 600 V AC | 80 A | 1.5 MW | 5ST2504 |
| | | 125 A | 1.5 MW | 5ST2505 |
| | | 160 A | 2 MW | 5ST2507 |
| | | 250 A | 2.5 MW | 5ST2508 |
| | | 350 A | 2.5 MW | 5ST2511 |

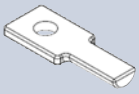
**Connector for 5ST2505 distribution board**




- Touch protection
- 20 mm²
- 32 mm²

| Version | Article No. |
|---|---|
| 1-phase | 5ST2506 |

**Terminal lug for ring terminal ends**



| Types | Article No. |
|---|---|
| For 5ST2508 distribution block | 5ST2510 |
| For 5ST2511 distribution block | 5ST2512 |

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# Distribution blocks for DIN-rail mounting

## According to IEC and UL (continued)



| Further technical specifications | | | 5ST2504 | 5ST2505 | 5ST2507 | 5ST2508 | 5ST2511 |
|---|---|---|---|---|---|---|---|
| **Standards** | | | | | | | |
| Standards | | | UL 1059/UL 486E/IEC 60947-7-1<br>UL File No. E80027/XCFR2<br>C22.2 No. 158 -1987/XCFR8 | | | | |
| **Supply** | | | | | | | |
| Rated operational voltage | | UL | 600 V AC | | | | |
| | | IEC | 1000/1500 V AC/DC | | | | |
| Max. rated current | | UL | 80 A | 115 A | 160 A | 230 A | 310 A |
| | | IEC | 80 A | 125 A | 160 A | 250 A | 400 A |
| **Conductor cross-section** | | | | | | | |
| Inputs per pole | Solid/stranded | Large | 3 × 2.5 … 25 mm² | 10 … 35 mm² | 10 … 70 mm² | 35 … 120 mm² | 95 … 185 mm² |
| | | | AWG 3 × 14 … 4 | AWG 1 × 8 … 2 | AWG 1 × 8 … 2/0 | AWG 1 × 2 … 4/0 | AWG 1 × 3/0 … 350 MCM |
| | | Small | – | 2.5 … 25 mm² | – | | |
| | | | – | AWG 1 × 14 … 6 | – | | |
| | Finely stranded with end sleeve | Large | 3 × 2.5 … 16 mm² | 10 … 35 mm² | 10 … 50 mm² | 35 … 95 mm² | 95 … 150 mm² |
| | | | AWG 3 × 14 … 6 | AWG 1 × 8 … 2 | AWG 1 × 8 … 1 | AWG 1 × 2 … 3/0 | AWG 3/0 … 300 MCM |
| | | Small | – | 2.5 … 25 mm² | – | | |
| | | | – | AWG 1 × 14 … 6 | – | | |
| Outputs per pole | Solid/stranded | Top | 2.5 … 6 mm² | 2.5 … 16 mm² | | 2.5 … 10 mm² | 2 × 2.5… 35 mm² |
| | | | AWG 4 × 14 … 10 | AWG 6 × 14 … 4 | | AWG 4 × 16 … 8 | AWG 2 × 14 … 2 |
| | | Center | – | | | 2.5 … 16 mm² | 5 × 2.5 … 16 mm² |
| | | | – | | | AWG 5 × 14 … 6 | |
| | | Bottom | 2.5 … 6 mm² | – | | 2 × 2.5… 35 mm² | 4 × 2.5 … 10 mm² |
| | | | AWG 4 × 14 … 10 | – | | AWG 2 × 14 … 2 | AWG 4 × 14 … 8 |
| | Finely stranded with end sleeve | Top | 2.5 … 6 mm² | 2.5 … 16 mm² | | 2 × 2.5… 25 mm² | |
| | | | AWG 4 × 14 … 10 | AWG 6 × 14 … 6 | AWG 6 × 14 … 4 | AWG 2 × 14 … 4 | |
| | | Bottom | 2.5 … 6 mm² | – | | 2 × 2.5… 25 mm² | 4 × 2.5 … 25 mm² |
| | | | AWG 4 × 14 … 10 | – | | AWG 2 × 14 … 4 | AWG 5 × 14 … 4 |
| **Tightening torque** | | | | | | | |
| Inputs | Screw terminals | | 13.2 … 26.5 lb-in (1.5 … 3 Nm) | 31 … 44 lb-in (3.5 … 5 Nm) | 44 … 53 lb-in (5 … 6 Nm) | 170 … 186 lb-in (19 … 21 Nm) | 222 lb-in (25 Nm) |
| | Tools | | PZ2 | Allen key 4 mm | Allen key 5 mm | Allen key 6 mm | Allen key 8 mm |
| Outputs | Screw terminals | Large | 13.2 … 26.5 lb-in (1.5 … 3 Nm) | 17.7 … 26.5 lb-in (2 … 3 Nm) | 13.2 … 26.5 lb-in (1.5 … 3 Nm) | 31 … 62 lb-in (3.5 … 7 Nm) | |
| | | Small | 7 … 13.2 lb-in (0.8 … 1.5 Nm) | – | | 18 … 27 lb-in (2 … 3 Nm) | |
| | Tools | Large | PZ2 | | | Standard screwdriver | |
| | | Small | PZ1 | PZ2 | | Standard screwdriver | |
| **Safety** | | | | | | | |
| Rated peak withstand current $I_{pk}$ | | | 2.7 kA | 30 kA | | 51 kA | |
| Rated short-time withstand current $I_{cw}$ (1 s) | | | 1.9 kA | 4.2 kA | 11 kA | 21 kA | |
| Overcurrent protection class | | | J | | | | |
| Short circuit current rating (SCCR) | RMS Sym A | | 100 kA | | | | |
| Electrical isolation | Creepage distances | | 1/2" (12.7 mm) | | | | |
| | Clearances | | 3/8" (9.5 mm) | | | | |
| **Ambient conditions** | | | | | | | |
| Permissible ambient temperature | | | –25 … +70 °C | | | | |
| Degree of protection | Acc. to EN 60529 | | IP20 | | | | |
| Fire class | | | UL 94V-0 | | | | |
| Approved cable | | | Copper | | | | |

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# SIKclip wiring system



**SIKclip busbar**



| Length | Article No. |
|---|---|
| 12 MW | 5ST2520 |
| 24 MW | 5ST2521 |
| 36 MW | 5ST2522 |

**Connecting cables with plug**



| Length | Conductor cross-section | Color | Article No. |
|---|---|---|---|
| 120 mm | 6 mm² | Black | 5ST2523 |
| | | Blue | 5ST2524 |
| | 10 mm² | Black | 5ST2525 |
| | | Blue | 5ST2526 |
| 200 mm | 6 mm² | Black | 5ST2527 |
| | | Blue | 5ST2528 |
| | 10 mm² | Black | 5ST2530 |
| | | Blue | 5ST2531 |

**Crimp connector**



- For connection to cables 4/6 mm²

| Article No. |
|---|
| 5ST2532 |

**Mounting brackets**



- For mounting on the rear of the DIN rail (pair)

| Article No. |
|---|
| 5ST2533 |

## Further technical specifications

| | 5ST25.. |
|---|---|
| **Standards** | |
| Test specifications | EN 60947-1, EN 61439-1 |
| **Rated values** | |
| Rated operational voltage $U_n$ | 400 V AC |
| Max. rated current $I_n$ | 250 A |
| Max. rated output current $I_n$ (at 40 °C ambient temperature) | 63 A |
| Rated insulation voltage | 660 V AC |
| Test voltage (50 Hz) | 2.5 kV |
| **Ambient conditions** | |
| Degree of protection | IP20 |
| Connecting cables | 40 A (6 mm²), 63 A (10 mm²) |
| Connecting cable type | H07VK |
| Ambient temperature | −5 ... +60 °C |

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## More safety for humans, plants and assets

The number of electrical consumers in residential homes and commercial buildings has increased dramatically in recent decades.

Modern appliances often have quite different characteristics in terms of current consumption than earlier equipment due, for example, to the use of frequency converters in washing machines, or switched-mode power supply units in TVs, PCs or LED lights.

There are also decentralized power generators like photovoltaic systems or charging devices for electric vehicles.

All of this requires new protection strategies for electrical installations. This also includes appropriate residual current protective devices or residual current operated circuit breakers that will cut the current immediately and safely in the event of a fault.

**Note:**
Products bearing our Siemens EcoTech label are identified by this clickable symbol in the catalog:

Siemens EcoTech

www.siemens.com/lowvoltage/SiemensEcoTech

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# Residual Current Protective Devices/ Arc Fault Detection Devices (AFDDs)




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# A multitude of additional information ...

## Information + ordering

### All the important things at a glance

For information about residual current protective devices/arc fault detection devices, please visit our websites
**www.siemens.com/rccb**
**www.siemens.com/circuit-protection**

### Your product in detail

The SiePortal platform (knowledge base) provides comprehensive information
**www.siemens.com/lowvoltage/product-support**

- Technology Primer
  - Residual current protective devices **(109482301)**

The relevant tender specifications can be found at
**www.siemens.com/tenderspecifications**

Use our conversion tool for quick and easy conversion to Siemens products **www.siemens.com/conversion-tool**

### Siemens YouTube channel

- Residual current protective devices (general)
  **sie.ag/58TyMb**

### Everything you need for your order

Refer to SiePortal to find an overview of your products (product catalog)

- Residual current protective devices **sie.ag/2m55Y7j**
- Arc fault detection devices **sie.ag/6Chm71**

Direct forwarding to the individual products in SiePortal by clicking on the article number in the catalog or entering this web address incl. article number
**www.siemens.com/product_catalog_SIEP?Article No.**

### Smart Control Panel Design

With the Smart Control Panel Design in the TIA Selection Tool, it is possible to design and dimension the electrical equipment of a machine in conformity with the standards – from the suitable switching devices to the correctly dimensioned cables
**www.siemens.com/controlpanel/cpd**

### The fast track to the experts

#### Contact persons in your region

We offer a comprehensive portfolio of services.
You can find your local contacts at
**www.siemens.com/lowvoltage/components/contact**

You will find further information on services at
**www.siemens.com/service-offers**

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at
**www.siemens.com/support-request**

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# … can be found in our online services

## Commissioning + operation

### Your product in detail

The SiePortal platform (knowledge base) provides detailed technical information
**www.siemens.com/lowvoltage/product-support**

- Operating instructions
- Characteristic curves
- Certificates

Online Support app available for download from the **App Store** and **Play Store**
You will find further information at
**www.siemens.com/support-app**

Provision of 3D data (step and u3d data formats)

- SiePortal (product catalog)
  **www.siemens.com/lowvoltage/product-catalog**
- Image database
  **www.siemens.com/lowvoltage/picturedb**

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
**www.siemens.com/cax**

### Manuals

Manuals can be found in SiePortal at
**www.siemens.com/lowvoltage/manuals**

- Configuration Manual
  - Residual current protective devices/arc fault detection devices **(45303255)**
- Installation Manual
  - Circuit protection devices with communication and measuring function **(109791805)**
- System Manual
  - Circuit protection devices with communication and measuring function **(109791806)**

### Face-to-face or online training

Our training courses can be found at
**www.siemens.com/sitrain-lowvoltage**

- 5SM6/5SV6 arc fault detection devices (WT-LVBAFDD)
- SENTRON circuit protection devices with measuring and communication function (WT-LVBCOM)
- Basic principles of electrical engineering (WT-LVBGET)
- Protection concept (WT-LVBPC)

### Technical overview – Residual current protective devices/arc fault detection devices

#### The fast way to get you to our online services

This page provides you with comprehensive information and links on residual current protective devices/ arc fault detection devices

**www.siemens.com/lowvoltage/product-support (109769082)**

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# System overview

## Basic units and accessories

### Basic units


5SV3 RCCBs


5SM3 RCCBs


5SM2 RC units


5SU1 RCBOs


5SV1 RCBOs


5TY1 COM electronic circuit protection devices (ECPD) new


5SM6 arc fault detection units and 5SV6 AFDD/MCB and 5SV6 COM AFDD/MCB

4

### Electrical accessories


Auxiliary switches (AS)


Fault signal contacts (FC)


Auxiliary switches and fault signal contacts (AS+FC)/(AS+FC) COM


Shunt trips (ST)


Undervoltage releases (UR)


Remote control auxiliaries (RCA)/(RCA) COM new

### Mechanical accessories


Locking devices


Handle couplers


Touch protection


Wall enclosures


Molded-plastic enclosures


Terminal covers

### Busbars and accessories


Compact busbars


Standard busbars


Terminals


Touch protection


End caps

### RCCB protective socket outlets


In molded-plastic enclosure


For mounting on device box

**Note:**
You will find a detailed range of accessories with the basic units and in the Accessories section.

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# Introduction

## Residual current protective devices



Selection criteria

### Equipment, power, ambient conditions

#### Design

| |
|---|
| RCCBs |
| RCBOs |
| Electronic circuit protection devices (ECPD) |
| FI-Block (RC unit) |

#### Number of pole

| |
|---|
| 1P+N |
| 2P |
| 3P |
| 3P+N |
| 4P |

#### Rated current $I_n$

0.3 ... 125 A

#### Types and waveform

| | | | | | 6 mA | 10 mA | | |
|---|---|---|---|---|---|---|---|---|
| Type AC | ■ | – | – | – | – | – | – |
| Type A | ■ | ■ | ■ | ■ | – | – | – |
| Type F | ■ | ■ | ■ | ■ | ■ | ■ | – |
| Type B | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Type B+ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |

#### Version

| | |
|---|---|
| SIGRES | With active condensation protection for use in severe ambient conditions |
| [G]/[K] | Super resistant, 10 ms short-term delayed devices with increased immunity to false triggering due to transient disruptions |
| [S] | As an upstream group switch for selective shutdown against downstream RCCBs |
| 500 V | With their creepage distances and clearances designed for power grids up to 500 V alternating voltage |
| 50 ... 400 Hz | Meet the triggering conditions up to 400 Hz due to low decrease in sensitivity with increasing frequency |

### Protection objective, equipment directives VDE 0100-410, VDE 0100-530, VDE 0100-7xx, VDS 3501, shutdown conditions according to VDE 0100-410

#### Rated residual current $I_{\Delta n}$ (protection objective)

| |
|---|
| Additional protection $I_{\Delta n} \leq 30$ mA |
| Error protection $I_{\Delta n} > 30$ mA |
| Fire protection $I_{\Delta n} \leq 300$ mA |

#### Characteristic CB (for residual current operated circuit breakers)

| |
|---|
| A |
| B |
| C |
| D |

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# RCCBs



| Types | | | 5SV | | |
|---|---|---|---|---|---|
| | | | Instantaneous | SIGRES, instantaneous | Short-time delayed [G]/[K] |
| Type AC | | | ■ | – | – |
| Type A | | | ■ | ■ | ■ |
| Type F | | | – | – | – |
| Type B/B+ | | | – | – | – |
| **Peak withstand current 8/20 µs** | | | | | |
| Type A | | kA | > 1 | | > 3 |
| Type F | | kA | – | – | > 3 |
| Type B/B+ | | kA | – | – | – |
| **Minimum operational voltage for operation of test equipment** | | | | | |
| 30-mA devices | | V AC | 195 | | |
| Non-30-mA devices | | V AC | 100 | | |
| 24 V devices | | V AC | 20 | | |
| **Terminal conductor cross-sections** | | | | | |
| 1 conductor | Solid/stranded | $mm^2$ | 0.75 ... 35 | | |
| | Finely stranded with end sleeve | $mm^2$ | 0.75 ... 25 | | |
| | Finely stranded without end sleeve | $mm^2$ | 1 ... 35 | | |
| 2 conductors, same cross-section, same conductor type | Solid/stranded | $mm^2$ | 0.75 ... 10 | | |
| | Finely stranded with end sleeve | $mm^2$ | 0.75 ... 4 | | |
| | Finely stranded without end sleeve | $mm^2$ | 1 ... 4 | | |
| 1 conductor + busbar (pin thickness 1.5 mm) | Solid/stranded | $mm^2$ | 10 ... 25 | | |
| | Finely stranded with non-insulated end sleeve | $mm^2$ | 6 ... 25 | | |
| | Finely stranded with insulated end sleeve | $mm^2$ | 6 ... 16 | | |
| Terminal tightening torque | | Nm | 2.5... 3.5 | | |
| **Poles** | | | | | |
| Number of poles | | | 1P+N \| 3P+N | | |
| Rated voltage $U_n$ | | V AC | 24 ... 125 \| 230 \| 400 \| 500 | | |
| Operating frequency | | Hz | 50 \| 50 ... 400 \| 50/60 | | |
| **Standards** | | | | | |
| | | | IEC/EN 61008 (VDE 0664-10), IEC/EN 61008-2-1 (VDE 0664-11), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40), ÖVE EN 61008,ÖVE/ÖNORM E 8601 | | |
| | | | | | |
| Rated residual current $I_{\Delta n}$ | | mA | 10, 30, 100, 300, 500, 1000 | | |
| Rated current $I_n$ | | A | 16 ... 80 | | |
| Rated breaking capacity $I_{cn}$ | | kA | – | | |
| Connection | | | N right \| N left | | |
| Service life | Average number of operating cycles | | > 10000 | | |
| Test button test cycles | | | Half-yearly [1] \| SIGRES annually [2] [3] | | |
| Degree of protection | Acc. to EN 60529 (VDE 0470-1) | | IP20, if the distribution board is installed, with connected conductors | | |
| Touch protection | Acc. to EN 50274 (VDE 0660-514) | | Finger and back-of-hand safe | | |
| Temperature | Storage temperature | °C | –40 ... +75 °C | | |
| | Ambient temperature | °C | –25 ... +45, marked with | | |
| Resistance to climate | Acc. to IEC 60068-2-30 | | 28 cycles (55 °C; 95% rel. humidity) | | |
| CFC and silicone-free | | | ■ | | |
| Mains connection | | | Top \| bottom \| SIGRES on top only | | |
| Overvoltage category \| Degree of pollution | | | III \| 2 | | |
| **Further information** | | | | | |
| | | | See page 4/14 | | |

[1] Extension to annual test interval under certain conditions, see SiePortal for details
[2] Requirement: no pollution with noxious gases (in particular, phosphorous)
[3] Extension to four-yearly test interval under certain conditions, see SiePortal for details



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| 5SV | | | SIQUENCE 5SV3 | | | 5SM3 |
|---|---|---|---|---|---|---|
| Super resistant [K] | Selective [S] | SIGRES, selective [S] | SIGRES, super resistant [K] | SIGRES, super resistant [K], 6 mA DC | SIGRES, selective [S] | Instantaneous |
| – | – | – | – | – | – | ■ |
| ■ | ■ | ■ | – | ■ | – | ■ |
| ■ | ■ | – | – | ■ | – | – |
| – | – | – | ■ | ■ | ■ | – |
| | | | | | | |
| > 3 | | > 5 | – | > 1 | – | > 1 |
| > 3 | – | – | – | > 3 | – | – |
| – | – | – | > 3 | > 3 | > 5 | – |
| | | | | | | |
| 195 | | | 70 | | | 195 |
| 100 | | | 70 | | | 195 |
| 20 | | | – | | | – |
| | | | | | | |
| 0.75 ... 35 | | | 0.75 ... 35 | | | 1.5 ... 50 (2 MW) |
| 0.75 ... 25 | | | 0.75 ... 25 | | | – |
| 1 ... 35 | | | 1 ... 35 | | | – |
| 0.75 ... 10 | | | 0.75 ... 10 | | | – |
| 0.75 ... 4 | | | 0.75 ... 4 | | | – |
| 1 ... 4 | | | 1 ... 4 | | | – |
| 10 ... 25 | | | 0.75 ... 35 | | | – |
| 6 ... 25 | | | 0.75 ... 25 | | | – |
| 6 ... 16 | | | 1 ... 35 | | | – |
| 2.5... 3.5 | | | 2.5 ... 3.0 | | | 3.0... 3.5 |
| | | | | | | |
| 1P+N \| 3P+N | | | 1P+N \| 3P+N | | | 1P+N |
| 24 ... 125 \| 230 \| 400 \| 500 | | | 230 \| 400 | | | 230 |
| 50/60 | | | 50/60 | | | 50 |
| | | | | | | |
| IEC/EN 61008 (VDE 0664-10), IEC/EN 61008-2-1 (VDE 0664-11), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40), ÖVE EN 61008,ÖVE/ÖNORM E 8601 | | | IEC/EN 62423 (VDE 0664-40), IEC/EN 61543 (VDE 0664-30), DIN VDE 0664-400 (Type B+ only) | | | IEC/EN 61008-1 (VDE 0664-10), IEC/EN 61008-2-1 (VDE 0664-11), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40) |
| | | | | | | |
| 10, 30, 100, 300, 500, 1000 | | | 30, 300, 500 | | | 30, 100, 300 |
| 16 ... 80 | | | 16 ... 80 | | | 100 ... 125 |
| – | | | – | | | – |
| N right \| N left | | | N right | | | N right |
| > 10000 | | | > 10000 | | | > 10000 |
| Half-yearly [1] \| SIGRES annually [2] [3] | | | Annually [2] [3] | | | Half-yearly |
| IP20, if the distribution board is installed, with connected conductors | | | IP20, if the distribution board is installed, with connected conductors | | | IP20, if the distribution board is installed, with connected conductors |
| Finger and back-of-hand safe | | | Finger and back-of-hand safe | | | Finger and back-of-hand safe |
| –40 ... +75 °C | | | –40 ... +75 °C | | | –40 ... +75 °C |
| –25 ... +45, marked with ⎔ | | | –25 ... +45, marked with ⎔ | | | –25 ... +45, marked with ⎔ |
| 28 cycles (55 °C; 95% rel. humidity) | | | 28 cycles (55 °C; 95% rel. humidity) | | | 28 cycles (55 °C; 95% rel. humidity) |
| ■ | | | ■ | | | ■ |
| Top \| bottom \| SIGRES on top only | | | Top \| bottom \| SIGRES on top only | | | Top \| bottom |
| III \| 2 | | | III \| 2 | | | III \| 2 |
| | | | | | | |
| See page 4/14 | | | See page 4/28 | | | See page 4/32 |

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# RC units



| | | | 5SM2 (0.3 ... 63 A) |
|---|---|---|---|
| **Types** | | | **Instantaneous** |
| Type AC | | | ■ |
| Type A | | | ■ |
| Type F | | | – |
| **Peak withstand current 8/20 µs** | | | |
| Type A | | kA | > 1 |
| Type F | | kA | – |
| **Minimum operational voltage for test equipment** | | | |
| 30-mA devices | | V AC | 195 |
| Non-30-mA devices | | V AC | 195 |
| **Terminal conductor cross-sections** | | | |
| Solid/stranded | | $mm^2$ | 1.0 ... 25 |
| Terminal tightening torque | | Nm | 2.5 ... 3.0 |
| **Poles** | | | |
| Number of poles | | | 2P \| 3P \| 4P |
| Rated voltage $U_n$ | | V AC | 230 \| 400 |
| Operating frequency | | Hz | 50 \| 50/60 |
| **Standards** | | | |
| | | | IEC/EN 61009-1 (VDE 0664-20), IEC/EN 61009-2-1 (VDE 0664-21), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40) |
| | | | |
| Rated residual current $I_{\Delta n}$ | | mA | 10, 30, 100, 300, 500, 1000 |
| Rated current $I_n$ | | A | 0.3 ... 63 |
| Service life | Average number of operating cycles | | > 10000 |
| Test button test cycles | | | Half-yearly [1] |
| Degree of protection | Acc. to EN 60529 (VDE 0470-1) | | IP20, if the distribution board is installed, with connected conductors |
| Touch protection | Acc. to EN 50274 (VDE 0660-514) | | Finger and back-of-hand safe |
| Temperature | Storage temperature | °C | –40 ... +75 °C |
| | Ambient temperature | °C | –25 ... +45, marked with |
| Resistance to climate | Acc. to IEC 60068-2-30 | | 28 cycles (55 °C; 95% rel. humidity) |
| CFC and silicone-free | | | ■ |
| Mains connection | | | Top \| bottom |
| Overvoltage category \| Degree of pollution | | | III \| 2 |
| **Further information** | | | |
| | | | See page 4/34 |

[1] Extension to annual test interval under certain conditions, see SiePortal for details
[2] Requirement: no pollution with noxious gases (in particular, phosphorous)
[3] Extension to four-yearly test interval under certain conditions, see SiePortal for details


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| 5SM2 (0.3 ... 63 A) | | | 5SM2 (80 ... 100 A) | |
|---|---|---|---|---|
| **Super resistant [K]** | **Selective [S]** | **SIGRES, instantaneous** | **Instantaneous** | **Selective [S]** |
| ■ | ■ | – | ■ | ■ |
| ■ | ■ | ■ | ■ | ■ |
| ■ | – | – | – | – |
| | | | | |
| > 3 | > 5 | > 1 | > 1 | > 5 |
| > 3 | – | – | – | – |
| | | | | |
| 195 | | | 195 | |
| 195 | | | 195 | |
| | | | | |
| 1.0 ... 25 | | | 6.0 ... 50 | |
| 2.5 ... 3.0 | | | 2.5 ... 3.0 | |
| | | | | |
| 2P \| 3P \| 4P | | 4P | 2P \| 4P | |
| 230 \| 400 | | | 230 \| 400 | |
| 50 \| 50/60 | | | 50 \| 50/60 | |
| | | | | |
| IEC/EN 61009-1 (VDE 0664-20), IEC/EN 61009-2-1 (VDE 0664-21), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40) | | | IEC/EN 61009-1 (VDE 0664-20), IEC/EN 61009-2-1 (VDE 0664-21), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40) | |
| | | | | |
| 30 | 300, 500, 1000 | 30, 300 | 30, 300 | 300, 1000 |
| 0.3 ... 63 | | | 80 ... 100 | |
| > 10000 | | | > 10000 | |
| Half-yearly [1] | | Yearly [2] [3] | Half-yearly [1] | |
| IP20, if the distribution board is installed, with connected conductors | | | IP20, if the distribution board is installed, with connected conductors | |
| Finger and back-of-hand safe | | | Finger and back-of-hand safe | |
| –40 ... +75 °C | | | –40 ... +75 °C | |
| –25 ... +45, marked with | | | –25 ... +45, marked with | |
| 28 cycles (55 °C; 95% rel. humidity) | | | 28 cycles (55 °C; 95% rel. humidity) | |
| ■ | | | ■ | |
| Top \| bottom | | | Top \| bottom | |
| III \| 2 | | | III \| 2 | |
| | | | | |
| See page 4/34 | | | See page 4/34 | |



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# RCBOs





| Types | | | 5SU1 (up to 40 A) | | | 5SV1 | |
|---|---|---|---|---|---|---|---|
| | | | Instantaneous | Short-time delayed/ Super resistant | Selective [S] | Instantaneous | Short-time delayed/ Super resistant |
| Type AC | | | ■ | ■ | – | ■ | – |
| Type A | | | ■ | ■ | ■ | ■ | ■ |
| Type B | | | – | – | – | – | – |
| Type B+ | | | – | – | – | – | – |
| Type F | | | – | ■ | – | – | ■ |
| **Peak withstand current 8/20 µs** | | | | | | | |
| Type A | | kA | > 1 | > 3 | > 5 | > 1 | > 3 |
| Type F | | kA | – | > 3 | – | – | > 3 |
| **Minimum voltage for operation of the test equipment** | | | | | | | |
| 30-mA devices | | V AC | 195 | | | 195 | |
| Non-30-mA devices | | V AC | 100 | | | 100 | |
| **Terminal conductor cross-sections** | | | | | | | |
| 1 conductor at front + busbar at rear | Solid/stranded | $mm^2$ | 0.75 ... 35 | | | 0.75 ... 16 | |
| | Finely stranded with end sleeve | $mm^2$ | 0.75 ... 25 | | | 0.75 ... 10 | |
| | Finely stranded without end sleeve | $mm^2$ | 1 ... 25 | | | 0.75 ... 16 | |
| 2 conductors at rear | Solid/stranded | $mm^2$ | 0.75 ... 6 | | | 0.75 ... 4 | |
| | Finely stranded with non-insulated end sleeve | $mm^2$ | 0.75 ... 4 | | | 0.75 ... 2.5 | |
| | Finely stranded with insulated end sleeve | $mm^2$ | 0.75 ... 4 | | | 0.75 ... 1.5 | |
| | Finely stranded without end sleeve | $mm^2$ | 1 ... 4 | | | 0.75 ... 4 | |
| Terminal tightening torque | | Nm | 2.5 ... 3.0 | | | 1.2 ... 2.0 | |
| **Poles** | | | | | | | |
| Number of poles | | | 1P+N \| 2P | | | 1P+N | |
| Rated voltage $U_n$ | | V AC | 110 \| 230 | | | 230 | |
| Operating frequency | | Hz | 50 \| 50/60 | | | 50 \| 50/60 | |
| **Standards** | | | | | | | |
| | | | IEC/EN 61009-1 (VDE 0664-20), IEC/EN 61009-2-1 (VDE 0664-21), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40) | | | IEC/EN 61009-1 (VDE 0664-20), IEC/EN 61009-2-1 (VDE 0664-21), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40) | |
| | | | | | | | |
| Rated residual current $I_{\Delta n}$ | | mA | 10, 30, 100, 300 | | | 30, 300 | |
| Rated current $I_n$ | | A | 6 ... 40 | | | 2 ... 16 | |
| Rated breaking capacity $I_{cn}$ | | kA | 4.5 \| 6 \| 10 | | | 4.5 \| 6 | |
| Connection | | | N right \| N left | | | N right | |
| Service life | Average number of operating cycles | | > 10000 | | | > 10 000 | |
| Test button test cycles | | | Half-yearly [1] | | | Half-yearly [1] | |
| Degree of protection | Acc. to EN 60529 (VDE 0470-1) | | IP20, if the distribution board is installed, with connected conductors | | | IP20, if the distribution board is installed, with connected conductors | |
| Touch protection | Acc. to EN 50274 (VDE 0660-514) | | Finger and back-of-hand safe | | | Finger and back-of-hand safe | |
| Temperature | Storage temperature | °C | –40 ... +75 °C | | | –40 ... +75 °C | |
| | Ambient temperature | °C | –25 ... +45, marked with | | | –25 ... +45, marked with | |
| Resistance to climate | Acc. to IEC 60068-2-30 | | 28 cycles (55 °C; 95% rel. humidity) | | | 28 cycles (55 °C; 95% rel. humidity) | |
| CFC and silicone-free | | | ■ | | | ■ | |
| Mains connection | | | Top \| bottom | | | Top \| bottom | |
| Energy limitation class | | | 3 | | | 3 | |
| Overvoltage category \| Degree of pollution | | | III \| 2 | | | III \| 2 | |
| **Further information** | | | | | | | |
| | | | See page 4/44 | | | See page 4/52 | |

[1] Extension to annual test interval under certain conditions, see SiePortal for details
[2] RCBO function conforming to IEC/EN 61009-1 (IEC/EN 62423)
[3] Applies only to terminals on the infeed side



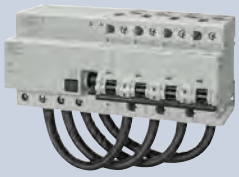
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| 5SU1 (up to 32 A) | | 5SU1 (125 A) | | 5SU1 (100 A, 125 A) | | 5TY1 COM new |
|---|---|---|---|---|---|---|
| **Instantaneous** | **Short-time delayed/ Super resistant** | **Instantaneous** | **Short-time delayed/ Super resistant** | **Short-time delayed/ Super resistant** | **Selective [S]** | |
| – | – | ■ | ■ | – | – | – |
| ■ | ■ | ■ | ■ | – | – | – |
| – | – | – | – | ■ | ■ | – |
| – | – | – | – | ■ | ■ | – |
| – | – | – | – | – | – | ■ [2] |
| | | | | | | |
| > 0.25 | > 3 | > 1 | > 3 | > 3 | > 5 | > 3 |
| – | – | – | – | – | – | > 3 |
| | | | | | | |
| 2P, 4P: 195 V \| 3P: 340 V | | 195 | | 195 | | 85 |
| 2P, 4P: 195 V \| 3P: 340 V | | 100 | | 100 | | – |
| | | | | | | |
| 1 ... 35 | | 25 ... 50 | | 20 ... 50 | | 0.75 ... 16 [3] |
| 1 ... 35 | | 25 ... 35 | | 25 ... 35 | | 0.75 ... 10 |
| – | | – | | – | | 0.75 ... 16 |
| – | | – | | – | | 0.75 ... 4 |
| – | | – | | – | | 0.75 ... 2.5 |
| – | | – | | – | | 0.75 ... 1.5 |
| – | | – | | – | | 0.75 ... 4 |
| 2.0 | | 3.0 ... 3.5 | | 3.0 ... 3.5 | | 1.2 ... 2 |
| | | | | | | |
| 2P \| 3P \| 4P | | 2P \| 4P | | 4P | | 1P+N |
| 230 \| 400 | | 230 \| 400 | | 400 \| 430 | | 230 |
| 50 \| 50/60 | | 50 \| 50/60 | | 50/60 | | 50 |
| | | | | | | |
| IEC/EN 61009-1 (VDE 0664-20), IEC/EN 61009-2-1 (VDE 0664-21) | | IEC/EN 61009-1 (VDE 0664-20), IEC/EN 61009-2-1 (VDE 0664-21), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40) | | IEC/EN 61009-1 (VDE 0664-20), IEC/EN 61009-2-1 (VDE 0664-21), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40) | | CE |
| | | | | | | |
| 30, 300 | | 30, 300, 1000 | | 30, 300 | | 30 |
| 6 ... 32 | | 125 | | 100, 125 | | 6 ... 16 |
| 6 \| 10 | | 10 | | 10 | | 75 |
| – | | N right \| N left | | N right \| N left | | N right |
| > 10000 | | > 10000 | | > 10000 | | > 10000 |
| Monthly | | Half-yearly [1] | | Half-yearly [1] | | Half-yearly [1] |
| IP20, if the distribution board is installed, with connected conductors | | IP20, if the distribution board is installed, with connected conductors | | IP20, if the distribution board is installed, with connected conductors | | IP20, if the distribution board is installed, with connected conductors |
| Finger and back-of-hand safe | | Finger and back-of-hand safe | | Finger and back-of-hand safe | | Finger and back-of-hand safe |
| –40 ... +70 °C | | –40 ... +75 °C | | –40 ... +75 °C | | –40 ... +75 °C |
| –25 ... +40, marked with ⎈ | | –25 ... +45, marked with ⎈ | | –25 ... +45, marked with ⎈ | | –25 ... +45, marked with ⎈ |
| 28 cycles (55 °C; 95% rel. humidity) | | 28 cycles (55 °C; 95% rel. humidity) | | 28 cycles (55 °C; 95% rel. humidity) | | – |
| – | | ■ | | ■ | | ■ |
| Top \| bottom | | Top \| bottom | | Top \| bottom | | Bottom |
| 3 \| 1 | | 3 | | 3 | | 3 |
| III \| 3 | | III \| 2 | | III \| 2 | | III \| 2 |
| | | | | | | |
| See page 4/46 | | See page 4/48 | | See page 4/51 | | See page 4/54 |

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# Arc fault detection devices (AFDDs)









| | | | 5SM6 | 5SV6 | 5SV6....KP.. |
|---|---|---|---|---|---|
| **Poles** | | | | | |
| Number of poles | | | 2P | 1P+N | 1P+N |
| Rated voltage $U_n$ | | V AC | 230 | 230 | 230 |
| Operating frequency | | Hz | 50 | 50 | 50 |
| **Terminal conductor cross-sections** | | | | | |
| Solid and stranded | | $mm^2$ | 0.75 ... 16 | 0.75 ... 16 | 0.75 ... 16 (top)<br>0.75 ... 35 (bottom) |
| Finely stranded with end sleeve | | $mm^2$ | 0.75 ... 10 | 0.75 ... 10 | 0.75 ... 10 (top)<br>0.75 ... 25 (bottom) |
| Terminal tightening torque | | Nm | 2.0 ... 2.5 | 1.2 ... 2.0 | 1.2 ... 2.0 (top)<br>2.5 ... 3.5 (bottom) |
| **Standards** | | | | | |
| | | | IEC/EN 62606 | IEC/EN 62606 | IEC/EN 62606 |
| | | | | | |
| Rated current $I_n$ | | A | Up to 16/40 A | 6 ... 40 | 6 ... 40 |
| Service life | Average number of operating cycles | | > 10000 | > 10000 | > 10000 |
| Mounting position | | | Any | Any | Any |
| Degree of protection | Acc. to EN 60529 (VDE 0470-1) | | IP20, with connected conductors | IP20, with connected conductors | IP20, with connected conductors |
| Touch protection | Acc. to EN 50274 (VDE 0660-514) | | Finger and back-of-hand safe | Finger and back-of-hand safe | Finger and back-of-hand safe |
| Temperature | Storage temperature | °C | –40 ... +75 °C | –40 ... +75 °C | –40 ... +75 °C |
| | Ambient temperature | °C | –25 ... +45, marked with | –25 ... +45, marked with | –25 ... +45, marked with |
| Resistance to climate | Acc. to IEC 60068-2-30 | | 28 cycles (55 °C; 95% rel. humidity) | 28 cycles (55 °C; 95% rel. humidity) | 28 cycles (55 °C; 95% rel. humidity) |
| CFC and silicone-free | | | ■ | ■ | ■ |
| Mains connection | | | Bottom | Top \| bottom | Bottom |
| Overvoltage category \| Degree of pollution | | | III \| 2 | III \| 2 | III \| 2 |
| Tripping in the event of overvoltage | | V | > 275 | > 285 | > 285 |
| **Additional functions** | | | | | |
| Measuring and communication function | | | – | ■ | – |
| **Further information** | | | | | |
| | | | See page 4/56 | See page 4/57 and page 4/14 | See page 4/57 |

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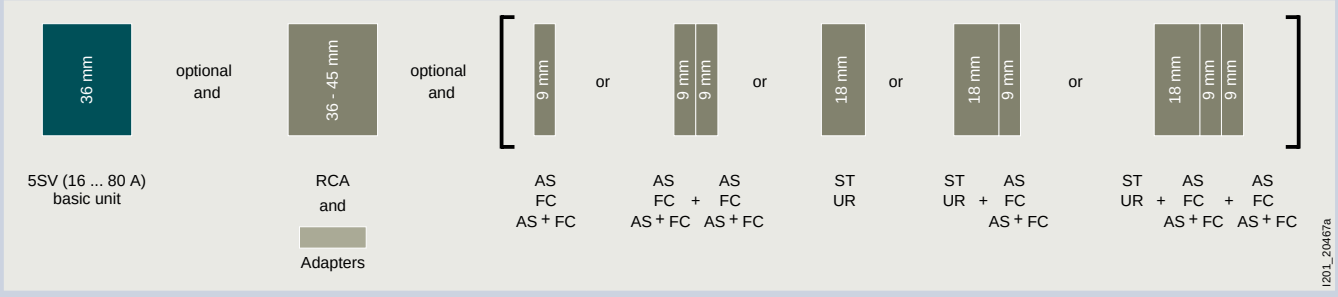
# 5SV RCCBs

## Type A, 1P+N

| | | | | Instantaneous | | | Instantaneous (only available in Belgium) [2] |
|---|---|---|---|---|---|---|---|
| | | | Rated voltage $U_n$ | 24 ... 125 V AC | 230 V AC | | 230 V AC |
| | | | N connection | Right | Right | Left | Right |
| | | | |  |  |  |  |
| $I_{\Delta n}$ | $I_n$ | Thermal overload protection [1] | Bulk packaging (36 units) | | | | |
| Type A | | | | | | | |
| 10 mA | 16 A | – | – | – | 5SV3111-6 | 5SV3111-6KL | – |
| | 25 A | – | – | – | 5SV3112-6 | – | – |
| 30 mA | 16 A | – | – | 5SV3311-6KK13 | 5SV3311-6 | 5SV3311-6KL | – |
| | | – | ■ | – | 5SV3311-6GV01 | – | – |
| | 25 A | – | – | 5SV3312-6KK13 | 5SV3312-6 | 5SV3312-6KL | 5SV3312-6BA |
| | | – | ■ | – | 5SV3312-6GV01 | – | – |
| | 40 A | – | – | 5SV3314-6KK13 | 5SV3314-6 | 5SV3314-6KL | 5SV3314-6BA |
| | | – | ■ | – | 5SV3314-6GV01 | – | – |
| | | ■ | – | – | 5SV3314-6LA | – | – |
| | 63 A | – | – | 5SV3316-6KK13 | 5SV3316-6 | 5SV3316-6KL | 5SV3316-6BA |
| | 80 A | – | – | – | 5SV3317-6 | 5SV3317-6KL | – |
| 100 mA | 25 A | – | – | – | 5SV3412-6 | 5SV3412-6KL | 5SV3612-6BA |
| | 40 A | – | – | – | 5SV3414-6 | 5SV3414-6KL | 5SV3614-6BA |
| | 63 A | – | – | – | 5SV3416-6 | 5SV3416-6KL | 5SV3616-6BA |
| | 80 A | – | – | – | 5SV3417-6 | 5SV3417-6KL | – |
| 300 mA | 25 A | – | – | – | 5SV3612-6 | 5SV3612-6KL | – |
| | 40 A | – | – | – | 5SV3614-6 | 5SV3614-6KL | – |
| | 63 A | – | – | – | 5SV3616-6 | 5SV3616-6KL | – |
| | 80 A | – | – | – | 5SV3617-6 | 5SV3617-6KL | – |

[1] Thermal overload protection according to OVE E 8101 possible up to rated current of the RCCB (40 A, 63 A).
[2] These products cannot be used in France according to NF C 15-100. Product complies with the specifications of the Belgian market only. (Simultaneous tripping of the 3 poles and the N conductor.) Available for the export market only.

## Mounting concept




| | | |
|---|---|---|
| AS | Auxiliary switches | See page 4/62 |
| FC | Fault signal contacts | See page 4/64 |
| AS+FC | Auxiliary switches and fault signal contacts | See page 4/65 |
| ST | Shunt trips | See page 4/68 |
| UR | Undervoltage releases | See page 4/69 |
| RCA | Remote control auxiliaries | See page 4/70 |



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| SIGRES, instantaneous | Short-time delayed [G] | Super resistant [K] | Selective [S] | | SIGRES, super resistant [K], 6 mA DC |
|---|---|---|---|---|---|
| 230 V AC | 230 V AC | 230 V AC | 230 V AC | | 230 V AC |
| Right | Right | Right | Right | Left | Right |
|  |  |  |  |  |  |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| 5SV3311-6KK12 | – | – | – | – | – |
| – | – | – | – | – | – |
| 5SV3312-6KK12 | – | 5SV3312-6KK01 | – | – | 5SV3322-6KK60 |
| – | – | – | – | – | – |
| 5SV3314-6KK12 | – | 5SV3314-6KK01 | – | – | 5SV3324-6KK60 |
| – | – | – | – | – | – |
| – | 5SV3314-6LA01 | – | – | – | – |
| 5SV3316-6KK12 | – | 5SV3316-6KK01 | – | – | – |
| – | – | 5SV3317-6KK01 | – | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | – | 5SV3416-8 | – | – |
| – | – | – | – | – | – |
| – | – | 5SV3612-6KK01 | 5SV3612-8 | – | – |
| – | – | 5SV3614-6KK01 | 5SV3614-8 | 5SV3614-8KL | – |
| – | – | 5SV3616-6KK01 | 5SV3616-8 | 5SV3616-8KL | – |
| – | – | 5SV3617-6KK01 | 5SV3617-8 | – | – |

## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |
| **Fault signal contacts (FC)** | | **Article No.** |
| 1 NO + 1 NC | | 5ST3020 |
| 2 NO | | 5ST3021 |
| 2 NC | | 5ST3022 |
| **Auxiliary switches and fault signal contacts (AS+FC)** | | **Article No.** |
| 1 CO (AS) + 1 CO (FC) | | 5ST3062 |
| 5ST3 COM (AS+FC) | | 5ST3062-0MC |

| Shunt trips (ST) | | Article No. |
|---|---|---|
| 110 ... 415 V AC, 110 ... 220 V DC | | 5ST3030 |
| 24 ... 48 V AC/DC | | 5ST3031 |
| 12 V DC | | 5ST3031-0XX01 |
| **Undervoltage releases (UR)** | | **Article No.** |
| With integrated auxiliary switch | 230 V AC | 5ST3040 |
| | 110 V DC | 5ST3041 |
| | 24 V DC | 5ST3042 |
| Without integrated auxiliary switch | 230 V AC | 5ST3043 |
| | 110 V DC | 5ST3044 |
| | 24 V DC | 5ST3045 |
| **Remote control auxiliaries (RCA)** | | **Article No.** |
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/IR test | 100 ... 240 V AC | 5ST3073-0MC new |
| **Adapters for remote control auxiliaries (RCA)** | | **Article No.** |
| 2 MW | | 5ST3820-6 |

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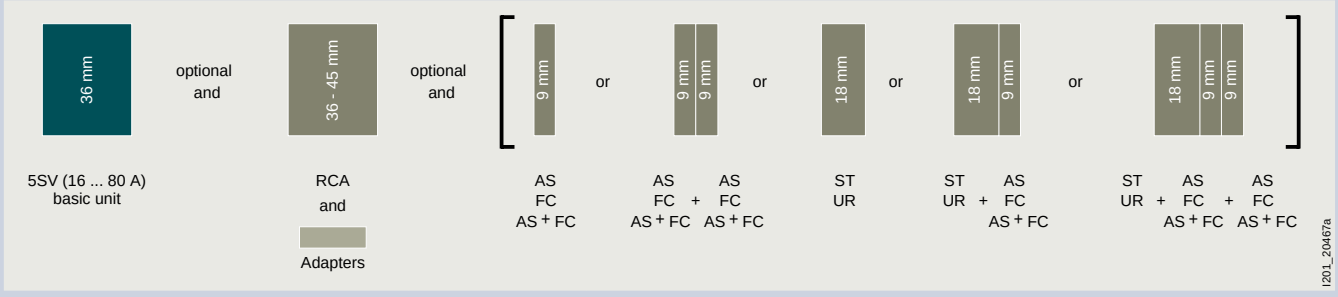


# 5SV RCCBs

## Type F, 1P+N

| | | Super resistant [K] | Selective [S] | SIGRES, super resistant [K], 6 mA DC |
|---|---|---|---|---|
| Rated voltage $U_n$ | | 230 V AC | 230 V AC | 230 V AC |
| N connection | | Right | Right | Right |
| | |  |  |  |
| $I_{\Delta n}$ | $I_n$ | | | |
| Type F | | | | |
| 30 mA | 25 A | 5SV3312-3 | – | 5SV3322-3KK60 |
| | 40 A | 5SV3314-3 | – | 5SV3324-3KK60 |
| | 63 A | 5SV3316-3 | – | – |
| | 80 A | 5SV3317-3 | – | – |
| 300 mA | 25 A | 5SV3612-3 | – | – |
| | 40 A | 5SV3614-3 | 5SV3614-7 | – |
| | 63 A | 5SV3616-3 | – | – |
| | 80 A | 5SV3617-3 | 5SV3617-7 | – |

## Mounting concept




| | | |
|---|---|---|
| AS | Auxiliary switches | See page 4/62 |
| FC | Fault signal contacts | See page 4/64 |
| AS+FC | Auxiliary switches and fault signal contacts | See page 4/65 |
| ST | Shunt trips | See page 4/68 |
| UR | Undervoltage releases | See page 4/69 |
| RCA | Remote control auxiliaries | See page 4/70 |

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## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

| Fault signal contacts (FC) | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3020 |
| 2 NO | 5ST3021 |
| 2 NC | 5ST3022 |

| Auxiliary switches and fault signal contacts (AS+FC) | Article No. |
|---|---|
| 1 CO (AS) + 1 CO (FC) | 5ST3062 |
| 5ST3 COM (AS+FC) | 5ST3062-0MC |

| Shunt trips (ST) | | Article No. |
|---|---|---|
| 110 ... 415 V AC, 110 ... 220 V DC | | 5ST3030 |
| 24 ... 48 V AC/DC | | 5ST3031 |
| 12 V DC | | 5ST3031-0XX01 |
| **Undervoltage releases (UR)** | | **Article No.** |
| With integrated auxiliary switch | 230 V AC | 5ST3040 |
| | 110 V DC | 5ST3041 |
| | 24 V DC | 5ST3042 |
| Without integrated auxiliary switch | 230 V AC | 5ST3043 |
| | 110 V DC | 5ST3044 |
| | 24 V DC | 5ST3045 |
| **Remote control auxiliaries (RCA)** | | **Article No.** |
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/IR test | 100 ... 240 V AC | 5ST3073-0MC new |
| **Adapters for remote control auxiliaries (RCA)** | | **Article No.** |
| 2 MW | | 5ST3820-6 |

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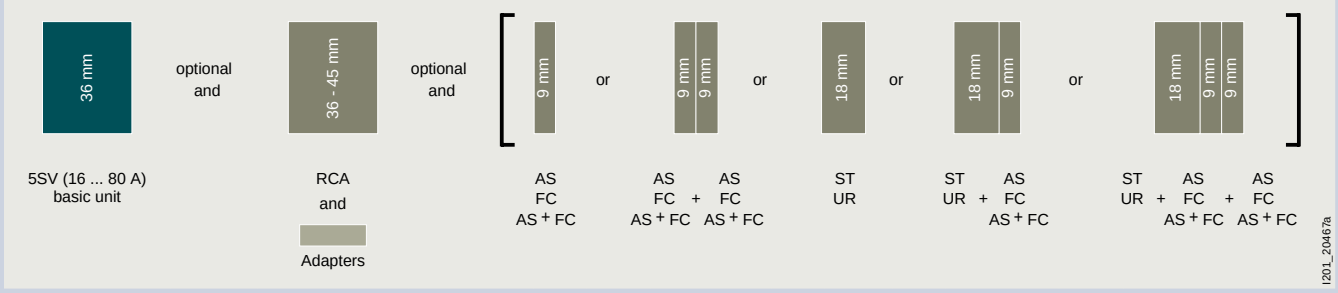


# 5SV RCCBs

## Type AC, 1P+N (2 MW)

| | | | Instantaneous | | |
|---|---|---|---|---|---|
| | | Rated voltage $U_n$ | 230 V AC | | 24 ... 125 V AC |
| | | N connection | Right | Left | Right |
| | | |  |  |  |
| $I_{\Delta n}$ | $I_n$ | Bulk packaging (36 units) | | | |
| Type AC | | | | | |
| 10 mA | 16 A | – | 5SV4111-0 | 5SV4111-0KL | – |
| | 25 A | – | 5SV4112-0 | – | – |
| 30 mA | 16 A | – | 5SV4311-0 | 5SV4311-0KL | 5SV4311-0KK13 |
| | 25 A | – | 5SV4312-0 | 5SV4312-0KL | 5SV4312-0KK13 |
| | | ■ | 5SV4312-0GV01 | – | – |
| | 40 A | – | 5SV4314-0 | 5SV4314-0KL | 5SV4314-0KK13 |
| | | ■ | 5SV4314-0GV01 | 5SV4314-0GV02 | – |
| | 63 A | – | 5SV4316-0 | 5SV4316-0KL | 5SV4316-0KK13 |
| | 80 A | – | 5SV4317-0 | 5SV4317-0KL | – |
| 100 mA | 25 A | – | 5SV4412-0 | – | – |
| | 40 A | – | 5SV4414-0 | 5SV4414-0KL | – |
| | 63 A | – | 5SV4416-0 | 5SV4416-0KL | – |
| | 80 A | – | 5SV4417-0 | – | – |
| 300 mA | 25 A | – | 5SV4612-0 | 5SV4612-0KL | – |
| | 40 A | – | 5SV4614-0 | 5SV4614-0KL | – |
| | 63 A | – | 5SV4616-0 | 5SV4616-0KL | – |
| | 80 A | – | 5SV4617-0 | 5SV4617-0KL | – |

## Mounting concept




| | | |
|---|---|---|
| AS | Auxiliary switches | See page 4/62 |
| FC | Fault signal contacts | See page 4/64 |
| AS+FC | Auxiliary switches and fault signal contacts | See page 4/65 |
| ST | Shunt trips | See page 4/68 |
| UR | Undervoltage releases | See page 4/69 |
| RCA | Remote control auxiliaries | See page 4/70 |



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## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

| Fault signal contacts (FC) | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3020 |
| 2 NO | 5ST3021 |
| 2 NC | 5ST3022 |

| Auxiliary switches and fault signal contacts (AS+FC) | Article No. |
|---|---|
| 1 CO (AS) + 1 CO (FC) | 5ST3062 |
| 5ST3 COM (AS+FC) | 5ST3062-0MC |

| Shunt trips (ST) | | Article No. |
|---|---|---|
| 110 ... 415 V AC, 110 ... 220 V DC | | 5ST3030 |
| 24 ... 48 V AC/DC | | 5ST3031 |
| 12 V DC | | 5ST3031-0XX01 |
| **Undervoltage releases (UR)** | | **Article No.** |
| With integrated auxiliary switch | 230 V AC | 5ST3040 |
| | 110 V DC | 5ST3041 |
| | 24 V DC | 5ST3042 |
| Without integrated auxiliary switch | 230 V AC | 5ST3043 |
| | 110 V DC | 5ST3044 |
| | 24 V DC | 5ST3045 |
| **Remote control auxiliaries (RCA)** | | **Article No.** |
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/IR test | 100 ... 240 V AC | 5ST3073-0MC new |
| **Adapters for remote control auxiliaries (RCA)** | | **Article No.** |
| 2 MW | | 5ST3820-6 |

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# 5SV RCCBs

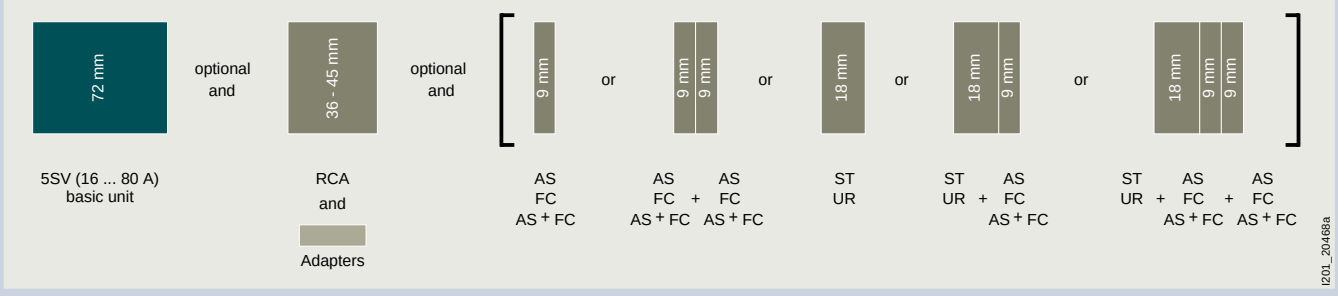
## Type A, 3P+N (4 MW)



| | | | | Instantaneous | | | |
|---|---|---|---|---|---|---|---|
| | | | Rated voltage $U_n$ | 400 V AC | | 400 V AC/400 Hz | 500 V AC |
| | | | N connection | Right | Left | Right | Right |
| | | | |  |  |  |  |
| $I_{\Delta n}$ | $I_n$ | Thermal overload protection [1] | Bulk packaging (18 units) | | | | |
| Type A | | | | | | | |
| 30 mA | 25 A | – | – | 5SV3342-6 | 5SV3342-6KL | 5SV3342-6KK03 | 5SV3352-6 |
| | | – | ■ | 5SV3342-6GV01 | – | – | – |
| | 40 A | – | – | 5SV3344-6 | 5SV3344-6KL | 5SV3344-6KK03 | 5SV3354-6 |
| | | – | ■ | 5SV3344-6GV01 | 5SV3344-6GV02 | – | – |
| | | ■ | – | 5SV3344-6LA | – | – | – |
| | 63 A | – | – | 5SV3346-6 | 5SV3346-6KL | – | 5SV3356-6 |
| | | – | ■ | 5SV3346-6GV01 | – | – | – |
| | | ■ | – | 5SV3346-6LA | – | – | – |
| | 80 A | – | – | 5SV3347-6 | 5SV3347-6KL | – | 5SV3357-6 |
| 100 mA | 25 A | – | – | 5SV3442-6 | – | – | – |
| | 40 A | – | – | 5SV3444-6 | – | – | – |
| | | ■ | – | 5SV3444-6LA | – | – | – |
| | 63 A | – | – | 5SV3446-6 | – | – | – |
| | | ■ | – | 5SV3446-6LA | – | – | – |
| | 80 A | – | – | 5SV3447-6 | – | – | – |
| 300 mA | 25 A | – | – | 5SV3642-6 | 5SV3642-6KL | – | 5SV3652-6 |
| | 40 A | – | – | 5SV3644-6 | 5SV3644-6KL | – | 5SV3654-6 |
| | | ■ | – | – | – | – | – |
| | 63 A | – | – | 5SV3646-6 | 5SV3646-6KL | – | 5SV3656-6 |
| | | ■ | – | – | – | – | – |
| | 80 A | – | | 5SV3647-6 | 5SV3647-6KL | – | 5SV3657-6 |
| 500 mA | 25 A | – | – | 5SV3742-6 | – | – | – |
| | 40 A | – | – | 5SV3744-6 | – | – | – |
| | 63 A | – | – | 5SV3746-6 | 5SV3746-6KL | – | – |
| | | – | ■ | 5SV3746-6GV01 | – | – | – |
| | 80 A | – | – | 5SV3747-6 | – | – | – |
| 1000 mA | 63 A | – | – | – | – | – | – |

[1] Thermal overload protection according to OVE E 8101 possible up to rated current of the RCCB (40 A, 63 A).
[2] These products cannot be used in France according to NF C 15-100. Product complies with the specifications of the Belgian market only. (Simultaneous tripping of the 3 poles and the N conductor.) Available for the export market only.

## Mounting concept




| | | | | | |
|---|---|---|---|---|---|
| AS | Auxiliary switches | See page 4/62 | ST | Shunt trips | See page 4/68 |
| FC | Fault signal contacts | See page 4/64 | UR | Undervoltage releases | See page 4/69 |
| AS+FC | Auxiliary switches and fault signal contacts | See page 4/65 | RCA | Remote control auxiliaries | See page 4/70 |



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| Instantaneous (only available in Belgium) [2] | SIGRES, instantaneous | Short-time delayed [G] | Super resistant [K] | Selective [S] | | SIGRES, selective [S] | SIGRES, super resistant [K], 6 mA DC |
|---|---|---|---|---|---|---|---|
| 400 V AC | 400 V AC | 400 V AC | 400 V AC | 400 V AC | | 400 V AC | 230 V AC |
| Right | Right | Right | Right | Right | Left | Right | Rechts |
|  |  |  |  |  |  |  |  |
| | | | | | | | |
| 5SV3342-6BA | 5SV3342-6KK12 | – | 5SV3342-6KK01 | – | – | – | 5SV3342-6KK60 |
| – | – | – | – | – | – | – | – |
| 5SV3344-6BA | 5SV3344-6KK12 | 5SV3344-6LB01 | 5SV3344-6KK01 | – | – | – | 5SV3344-6KK60 |
| – | – | – | – | – | – | – | – |
| – | – | 5SV3344-6LA01 | – | – | – | – | – |
| 5SV3346-6BA | 5SV3346-6KK12 | 5SV3346-6LB01 | 5SV3346-6KK01 | – | – | – | 5SV3346-6KK60 |
| – | – | – | – | – | – | – | – |
| – | – | 5SV3346-6LA01 | – | – | – | – | – |
| – | 5SV3347-6KK12 | 5SV3347-6LB01 | 5SV3347-6KK01 | – | – | – | – |
| – | – | – | – | – | – | – | – |
| – | – | 5SV3444-6LB01 | – | 5SV3444-8 | – | – | – |
| – | – | 5SV3444-6LA01 | – | 5SV3444-8LA | – | – | – |
| – | – | 5SV3446-6LB01 | – | 5SV3446-8 | – | – | – |
| – | – | 5SV3446-6LA01 | – | 5SV3446-8LA | – | – | – |
| – | – | – | – | – | – | – | – |
| 5SV3642-6BA | 5SV3642-6KK12 | – | 5SV3642-6KK01 | 5SV3642-8 | – | – | – |
| 5SV3644-6BA | 5SV3644-6KK12 | – | 5SV3644-6KK01 | 5SV3644-8 | – | – | – |
| – | – | – | – | 5SV3644-8LA | – | – | – |
| 5SV3646-6BA | 5SV3646-6KK12 | – | 5SV3646-6KK01 | 5SV3646-8 | 5SV3646-8KL | 5SV3646-8KK12 | – |
| – | – | – | – | 5SV3646-8LA | – | – | – |
| – | 5SV3647-6KK12 | – | 5SV3647-6KK01 | 5SV3647-8 | – | – | – |
| – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – |
| – | – | – | – | 5SV3846-8 | – | – | – |

## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

| Fault signal contacts (FC) | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3020 |
| 2 NO | 5ST3021 |
| 2 NC | 5ST3022 |

| Auxiliary switches and fault signal contacts (AS+FC) | Article No. |
|---|---|
| 1 CO (AS) + 1 CO (FC) | 5ST3062 |
| 5ST3 COM (AS+FC) | 5ST3062-0MC |

| Shunt trips (ST) | Article No. |
|---|---|
| 110 ... 415 V AC, 110 ... 220 V DC | 5ST3030 |
| 24 ... 48 V AC/DC | 5ST3031 |
| 12 V DC | 5ST3031-0XX01 |

| Undervoltage releases (UR) | | Article No. |
|---|---|---|
| With integrated auxiliary switch | 230 V AC | 5ST3040 |
| | 110 V DC | 5ST3041 |
| | 24 V DC | 5ST3042 |
| Without integrated auxiliary switch | 230 V AC | 5ST3043 |
| | 110 V DC | 5ST3044 |
| | 24 V DC | 5ST3045 |

| Remote control auxiliaries (RCA) | | Article No. |
|---|---|---|
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/IR test | 100 ... 240 V AC | 5ST3073-0MC new |

| Adapters for remote control auxiliaries (RCA) | Article No. |
|---|---|
| 4 MW | 5ST3820-7 |

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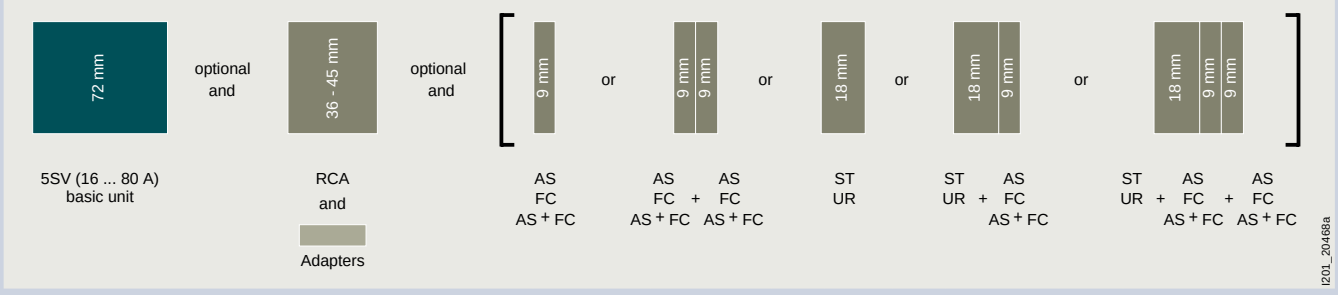
# 5SV RCCBs

## Type F, 3P+N (4 MW)

| | | Super resistant [K] | Selective [S] | SIGRES, super resistant [K], 6 mA DC |
|---|---|---|---|---|
| | Rated voltage $U_n$ | 400 V AC | 400 V AC | 230 V AC |
| | N connection | Right | Right | Right |
| | |  |  |  |
| $I_{\Delta n}$ | $I_n$ | | | |
| **Type F** | | | | |
| 30 mA | 25 A | 5SV3342-3 | – | 5SV3342-3KK60 |
| | 40 A | 5SV3344-3 | – | 5SV3344-3KK60 |
| | 63 A | 5SV3346-3 | – | 5SV3346-3KK60 |
| | 80 A | 5SV3347-3 | – | – |
| 300 mA | 25 A | 5SV3642-3 | – | – |
| | 40 A | 5SV3644-3 | 5SV3644-7 | – |
| | 63 A | 5SV3646-3 | – | – |
| | 80 A | 5SV3647-3 | 5SV3647-7 | – |

4

## Mounting concept




| | | |
|---|---|---|
| AS | Auxiliary switches | See page 4/62 |
| FC | Fault signal contacts | See page 4/64 |
| AS+FC | Auxiliary switches and fault signal contacts | See page 4/65 |
| ST | Shunt trips | See page 4/68 |
| UR | Undervoltage releases | See page 4/69 |
| RCA | Remote control auxiliaries | See page 4/70 |



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## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

| Fault signal contacts (FC) | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3020 |
| 2 NO | 5ST3021 |
| 2 NC | 5ST3022 |

| Auxiliary switches and fault signal contacts (AS+FC) | Article No. |
|---|---|
| 1 CO (AS) + 1 CO (FC) | 5ST3062 |
| 5ST3 COM (AS+FC) | 5ST3062-0MC |

| Shunt trips (ST) | | Article No. |
|---|---|---|
| 110 ... 415 V AC, 110 ... 220 V DC | | 5ST3030 |
| 24 ... 48 V AC/DC | | 5ST3031 |
| 12 V DC | | 5ST3031-0XX01 |
| **Undervoltage releases (UR)** | | **Article No.** |
| With integrated auxiliary switch | 230 V AC | 5ST3040 |
| | 110 V DC | 5ST3041 |
| | 24 V DC | 5ST3042 |
| Without integrated auxiliary switch | 230 V AC | 5ST3043 |
| | 110 V DC | 5ST3044 |
| | 24 V DC | 5ST3045 |
| **Remote control auxiliaries (RCA)** | | **Article No.** |
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/IR test | 100 ... 240 V AC | 5ST3073-0MC new |
| **Adapters for remote control auxiliaries (RCA)** | | **Article No.** |
| 4 MW | | 5ST3820-7 |

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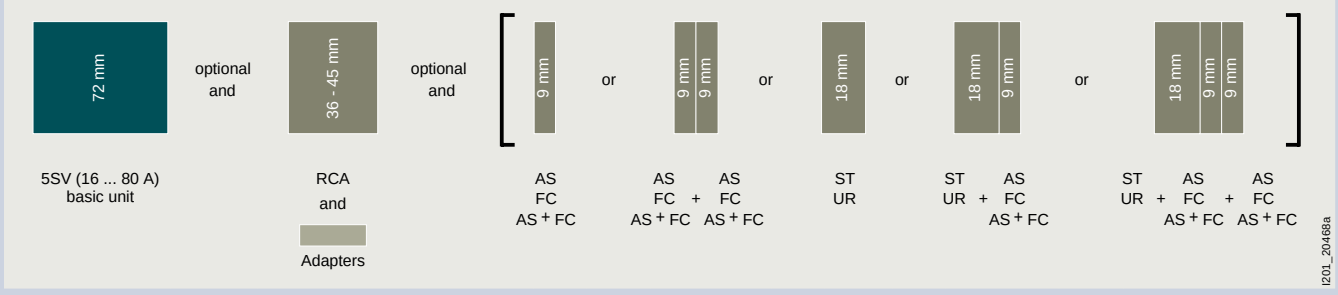

# 5SV RCCBs

## Type AC, 3P+N (4 MW)



| | | | Instantaneous | |
|---|---|---|---|---|
| | | Rated voltage $U_n$ | 400 V AC | |
| | | N connection | Right | Left |
| | | |  |  |
| $I_{\Delta n}$ | $I_n$ | Bulk packaging (18 units) | | |
| Type AC | | | | |
| 30 mA | 25 A | – | 5SV4342-0 | 5SV4342-0KL |
| | | ■ | 5SV4342-0GV01 | – |
| | 40 A | – | 5SV4344-0 | 5SV4344-0KL |
| | | ■ | 5SV4344-0GV01 | – |
| | 63 A | – | 5SV4346-0 | 5SV4346-0KL |
| | 80 A | – | 5SV4347-0 | 5SV4347-0KL |
| 100 mA | 25 A | – | 5SV4442-0 | – |
| | 40 A | – | 5SV4444-0 | – |
| | 63 A | – | 5SV4446-0 | – |
| | 80 A | – | 5SV4447-0 | – |
| 300 mA | 25 A | – | 5SV4642-0 | 5SV4642-0KL |
| | 40 A | – | 5SV4644-0 | 5SV4644-0KL |
| | 63 A | – | 5SV4646-0 | 5SV4646-0KL |
| | 80 A | – | 5SV4647-0 | 5SV4647-0KL |
| 500 mA | 25 A | – | 5SV4742-0 | – |
| | 40 A | – | 5SV4744-0 | – |
| | 63 A | – | 5SV4746-0 | – |
| | 80 A | – | 5SV4747-0 | – |

## Mounting concept




| | | |
|---|---|---|
| AS | Auxiliary switches | See page 4/62 |
| FC | Fault signal contacts | See page 4/64 |
| AS+FC | Auxiliary switches and fault signal contacts | See page 4/65 |
| ST | Shunt trips | See page 4/68 |
| UR | Undervoltage releases | See page 4/69 |
| RCA | Remote control auxiliaries | See page 4/70 |



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## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

| Fault signal contacts (FC) | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3020 |
| 2 NO | 5ST3021 |
| 2 NC | 5ST3022 |

| Auxiliary switches and fault signal contacts (AS+FC) | Article No. |
|---|---|
| 1 CO (AS) + 1 CO (FC) | 5ST3062 |
| 5ST3 COM (AS+FC) | 5ST3062-0MC |

| Shunt trips (ST) | | Article No. |
|---|---|---|
| 110 ... 415 V AC, 110 ... 220 V DC | | 5ST3030 |
| 24 ... 48 V AC/DC | | 5ST3031 |
| 12 V DC | | 5ST3031-0XX01 |
| **Undervoltage releases (UR)** | | **Article No.** |
| With integrated auxiliary switch | 230 V AC | 5ST3040 |
| | 110 V DC | 5ST3041 |
| | 24 V DC | 5ST3042 |
| Without integrated auxiliary switch | 230 V AC | 5ST3043 |
| | 110 V DC | 5ST3044 |
| | 24 V DC | 5ST3045 |
| **Remote control auxiliaries (RCA)** | | **Article No.** |
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/IR test | 100 ... 240 V AC | 5ST3073-0MC new |
| **Adapters for remote control auxiliaries (RCA)** | | **Article No.** |
| 4 MW | | 5ST3820-7 |

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# 5SV RCCBs

## Type A and AC, 3P+N (4 MW), high-current

| | | Instantaneous | Short-time delayed [G], [K] | Selective [S] |
|---|---|---|---|---|
| | Rated voltage $U_n$ | 400 V AC | 400 V AC | 400 V AC |
| | N connection | Right | Right | Right |
| | |  |  |  |
| $I_{\Delta n}$ | $I_n$ | | | |
| Type A | | | | |
| 30 mA | 100 A | 5SV3348-6 | – | – |
| | 125 A | 5SV3345-6 | 5SV3345-6KK01 | – |
| 100 mA | 100 A | 5SV3448-6 | – | – |
| | 125 A | 5SV3445-6 | 5SV3445-6KK01 | – |
| 300 mA | 100 A | 5SV3648-6 | – | – |
| | 125 A | 5SV3645-6 | 5SV3645-6KK01 | 5SV3645-8 |
| 500 mA | 100 A | 5SV3748-6 | – | – |
| | 125 A | 5SV3745-6 | 5SV3745-6KK01 | 5SV3745-8 |
| Type AC | | | | |
| 30 mA | 100 A | 5SV4348-0 | – | – |
| | 125 A | 5SV4345-0 | – | – |
| 100 mA | 100 A | 5SV4448-0 | – | – |
| | 125 A | 5SV4445-0 | – | – |
| 300 mA | 100 A | 5SV4648-0 | – | – |
| | 125 A | 5SV4645-0 | – | – |
| 500 mA | 100 A | 5SV4748-0 | – | – |
| | 125 A | 5SV4745-0 | – | – |



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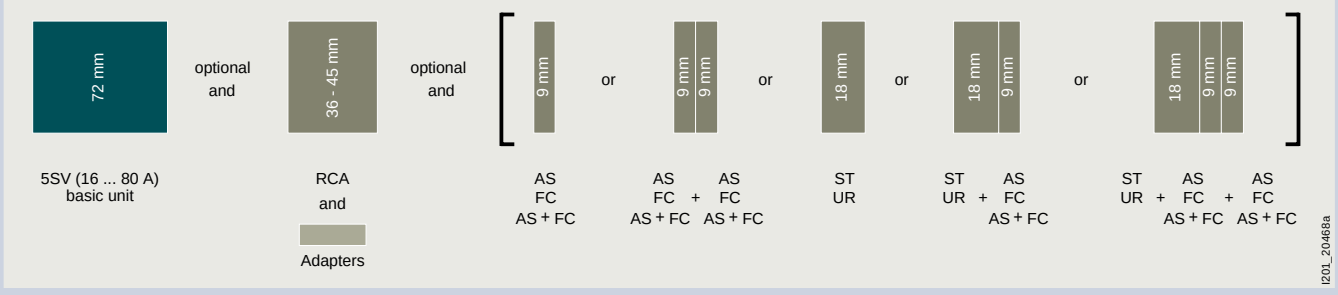

# 5SV3 RCCBs (SIQUENCE)

## Type B, 1P+N (4 MW)

| | SIGRES, super resistant [K] | SIGRES, super resistant [K], 6 mA DC |
|---|---|---|
| Rated voltage $U_n$ | 230 V AC | 230 V AC |
| N connection | Right | Right |
| |  |  |

| $I_{\Delta n}$ | $I_n$ | Bulk packaging (18 units) | | |
|---|---|---|---|---|
| **Type B** | | | | |
| 30 mA | 16 A | – | 5SV3321-4 | – |
| | 25 A | – | 5SV3322-4 | 5SV3322-4KK60 |
| | 40 A | – | 5SV3324-4 | 5SV3324-4KK60 |
| | | ■ | 5SV3324-4GV01 | – |
| | 63 A | – | 5SV3326-4 | 5SV3326-4KK60 |
| | 80 A | – | – | 5SV3327-4KK60 |
| 300 mA | 16 A | – | 5SV3621-4 | – |
| | 25 A | – | 5SV3622-4 | – |
| | 40 A | – | 5SV3624-4 | – |
| | 63 A | – | 5SV3626-4 | – |

## Mounting concept




| | | |
|---|---|---|
| AS | Auxiliary switches | See page 4/62 |
| FC | Fault signal contacts | See page 4/64 |
| AS+FC | Auxiliary switches and fault signal contacts | See page 4/65 |
| ST | Shunt trips | See page 4/68 |
| UR | Undervoltage releases | See page 4/69 |
| RCA | Remote control auxiliaries | See page 4/70 |


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## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

| Fault signal contacts (FC) | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3020 |
| 2 NO | 5ST3021 |
| 2 NC | 5ST3022 |

| Auxiliary switches and fault signal contacts (AS+FC) | Article No. |
|---|---|
| 1 CO (AS) + 1 CO (FC) | 5ST3062 |
| 5ST3 COM (AS+FC) | 5ST3062-0MC |

| Shunt trips (ST) | | Article No. |
|---|---|---|
| 110 ... 415 V AC, 110 ... 220 V DC | | 5ST3030 |
| 24 ... 48 V AC/DC | | 5ST3031 |
| 12 V DC | | 5ST3031-0XX01 |
| **Undervoltage releases (UR)** | | **Article No.** |
| With integrated auxiliary switch | 230 V AC | 5ST3040 |
| | 110 V DC | 5ST3041 |
| | 24 V DC | 5ST3042 |
| Without integrated auxiliary switch | 230 V AC | 5ST3043 |
| | 110 V DC | 5ST3044 |
| | 24 V DC | 5ST3045 |
| **Remote control auxiliaries (RCA)** | | **Article No.** |
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/IR test | 100 ... 240 V AC | 5ST3073-0MC new |
| **Adapters for remote control auxiliaries (RCA)** | | **Article No.** |
| 4 MW | | 5ST3820-7 |

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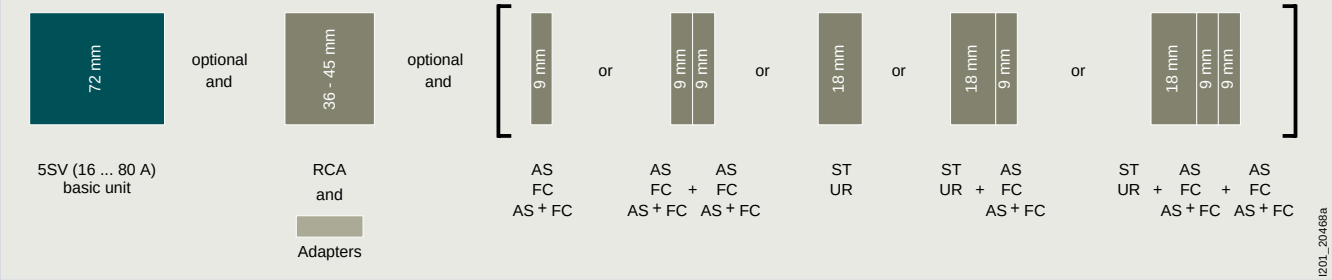


# 5SV3 RCCBs (SIQUENCE)

## Type B and B +, 3P+N (4 MW)

| | | | SIGRES, super resistant [K] | SIGRES, super resistant [K], 6 mA DC | SIGRES, selective [S] |
|---|---|---|---|---|---|
| | | Rated voltage $U_n$ | 230 ... 400 V AC | 230 ... 400 V AC | 230 ... 400 V AC |
| | | N connection | Right | Right | Right |
| | | |  |  |  |
| $I_{\Delta n}$ | $I_n$ | Bulk packaging (18 units) | | | |
| **Type B** | | | | | |
| 30 mA | 25 A | – | 5SV3342-4 | 5SV3342-4KK60 | – |
| | | ■ | 5SV3342-4GV01 | – | – |
| | 40 A | – | 5SV3344-4 | 5SV3344-4KK60 | – |
| | | ■ | 5SV3344-4GV01 | – | – |
| | 63 A | – | 5SV3346-4 | 5SV3346-4KK60 | – |
| | | ■ | 5SV3346-4GV01 | – | – |
| | 80 A | – | 5SV3347-4 | 5SV3347-4KK60 | – |
| 300 mA | 25 A | – | 5SV3642-4 | – | – |
| | | ■ | 5SV3642-4GV01 | – | – |
| | 40 A | – | 5SV3644-4 | – | – |
| | | ■ | 5SV3644-4GV01 | – | – |
| | 63 A | – | 5SV3646-4 | – | 5SV3646-5 |
| | | ■ | 5SV3646-4GV01 | – | – |
| | 80 A | – | 5SV3647-4 | – | 5SV3647-5 |
| 500 mA | 25 A | – | 5SV3742-4 | – | – |
| | 40 A | – | 5SV3744-4 | – | – |
| | 63 A | – | 5SV3746-4 | – | 5SV3746-5 |
| | 80 A | – | 5SV3747-4 | – | 5SV3747-5 |
| **Type B+** | | | | | |
| 30 mA | 25 A | – | 5SV3342-4KK14 | – | – |
| | 40 A | – | 5SV3344-4KK14 | – | – |
| | 63 A | – | 5SV3346-4KK14 | – | – |
| | 80 A | – | 5SV3347-4KK14 | – | – |
| 300 mA | 25 A | – | 5SV3642-4KK14 | – | – |
| | 40 A | – | 5SV3644-4KK14 | – | – |
| | 63 A | – | 5SV3646-4KK14 | – | 5SV3646-5KK14 |
| | 80 A | – | 5SV3647-4KK14 | – | 5SV3647-5KK14 |

## Mounting concept




| | | |
|---|---|---|
| AS | Auxiliary switches | See page 4/62 |
| FC | Fault signal contacts | See page 4/64 |
| AS+FC | Auxiliary switches and fault signal contacts | See page 4/65 |
| ST | Shunt trips | See page 4/68 |
| UR | Undervoltage releases | See page 4/69 |
| RCA | Remote control auxiliaries | See page 4/70 |



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## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

| Fault signal contacts (FC) | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3020 |
| 2 NO | 5ST3021 |
| 2 NC | 5ST3022 |

| Auxiliary switches and fault signal contacts (AS+FC) | Article No. |
|---|---|
| 1 CO (AS) + 1 CO (FC) | 5ST3062 |
| 5ST3 COM (AS+FC) | 5ST3062-0MC |

| Shunt trips (ST) | | Article No. |
|---|---|---|
| 110 ... 415 V AC, 110 ... 220 V DC | | 5ST3030 |
| 24 ... 48 V AC/DC | | 5ST3031 |
| 12 V DC | | 5ST3031-0XX01 |
| **Undervoltage releases (UR)** | | **Article No.** |
| With integrated auxiliary switch | 230 V AC | 5ST3040 |
| | 110 V DC | 5ST3041 |
| | 24 V DC | 5ST3042 |
| Without integrated auxiliary switch | 230 V AC | 5ST3043 |
| | 110 V DC | 5ST3044 |
| | 24 V DC | 5ST3045 |
| **Remote control auxiliaries (RCA)** | | **Article No.** |
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/IR test | 100 ... 240 V AC | 5ST3073-0MC new |
| **Adapters for remote control auxiliaries (RCA)** | | **Article No.** |
| 4 MW | | 5ST3820-7 |

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# 5SM3 RCCBs

## Type A and AC, 1P+N (2 MW), high-current

| | Instantaneous |
|---|---|
| **Rated voltage $U_n$** | 230 V AC |
| **N connection** | Right |



| $I_{\Delta n}$ | $I_n$ | |
|---|---|---|
| **Type A** | | |
| 30 mA | 100 A | 5SM3318-6KK |
| | 125 A | 5SM3315-6KK |
| 100 mA | 100 A | 5SM3418-6KK |
| | 125 A | 5SM3415-6KK |
| 300 mA | 100 A | 5SM3618-6KK |
| | 125 A | 5SM3615-6KK |
| **Type AC** | | |
| 30 mA | 100 A | 5SM3318-0KK |
| | 125 A | 5SM3315-0KK |
| 100 mA | 100 A | 5SM3418-0KK |
| | 125 A | 5SM3415-0KK |
| 300 mA | 100 A | 5SM3618-0KK |
| | 125 A | 5SM3615-0KK |

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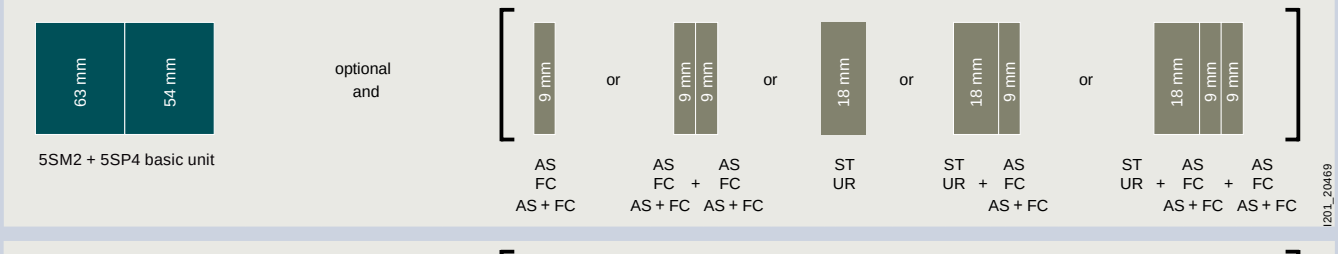
# 5SM2 RC units

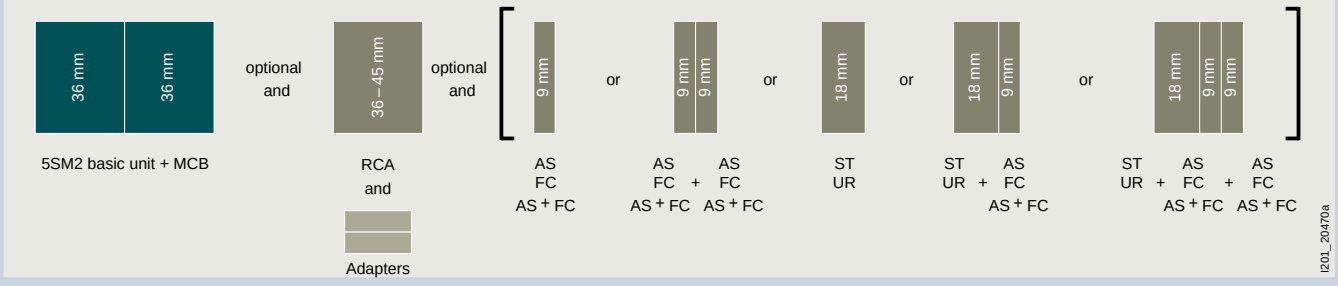
## Type A, F and AC, 2-pole

| | For 5SY miniature circuit breakers [1] | | |
|---|---|---|---|
| **Rated voltage $U_n$** | 230 V AC | | |
| **Version** | Instantaneous | Super resistant [K] | Selective [S] |
| **Mounting width** | 2 MW | 2 MW | 2 MW |
| |  |  |  |
| $I_{\Delta n}$ | $I_n$ | | | |
| **Type A** | | | | |
| 10 mA | 0.3 ... 16 A | 5SM2121-6 | – | – |
| 30 mA | 0.3 ... 40 A | 5SM2322-6 | 5SM2322-6KK01 | – |
| | 0.3 ... 63 A | 5SM2325-6 | 5SM2325-6KK01 | – |
| | 80 ... 100 A | – | – | – |
| 100 mA | 0.3 ... 63 A | 5SM2425-6 | – | – |
| 300 mA | 0.3 ... 40 A | 5SM2622-6 | – | 5SM2622-8 |
| | 0.3 ... 63 A | 5SM2625-6 | – | 5SM2625-8 |
| | 80 ... 100 A | – | – | – |
| 500 mA | 0.3 ... 63 A | 5SM2725-6 | – | – |
| 1000 mA | 0.3 ... 40 A | – | – | 5SM2822-8 |
| | 0.3 ... 63 A | – | – | 5SM2825-8 |
| | 80 ... 100 A | – | – | – |
| **Type F** | | | | |
| 30 mA | 0.3 ... 40 A | – | 5SM2322-3 | – |
| | 0.3 ... 63 A | – | 5SM2325-3 | – |
| **Type AC** | | | | |
| 10 mA | 0.3 ... 40 A | 5SM2121-0 | – | – |
| 30 mA | 0.3 ... 40 A | 5SM2322-0 | – | – |
| | 0.3 ... 63 A | 5SM2325-0 | – | – |
| | 80 ... 100 A | – | – | – |
| 300 mA | 0.3 ... 40 A | 5SM2622-0 | – | 5SM2622-2 |
| | 0.3 ... 63 A | 5SM2625-0 | – | 5SM2625-2 |
| | 80 ... 100 A | – | – | – |
| 500 mA | 0.3 ... 63 A | 5SM2725-0 | – | – |
| 1000 mA | 0.3 ... 63 A | 5SM2825-0 | – | – |

[1] Not suitable for use with 5SY5 and type A + type F not suitable for use with 5SY8

## Mounting concept




MCB Miniature circuit breakers See page 3/1
AS Auxiliary switches See page 4/62
FC Fault signal contacts See page 4/64
AS+FC Auxiliary switches and fault signal contacts See page 4/65
ST Shunt trips See page 4/68
UR Undervoltage releases See page 4/69
RCA Remote control auxiliaries See page 4/70

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| For 5SL4 miniature circuit breakers | | For 5SP4 miniature circuit breakers (B and C characteristics) | |
|---|---|---|---|
| 230 V AC | | 230 V AC | |
| Instantaneous | Selective [S] | Instantaneous | Selective [S] |
| 2 MW | 2 MW | 3.5 MW | 3.5 MW |
|  |  |  |  |
| | | | |
| | | | |
| – | – | – | – |
| 5SM2323-6 | – | – | – |
| 5SM2326-6 | – | – | – |
| – | – | 5SM2327-6 | – |
| – | – | – | – |
| 5SM2623-6 | 5SM2623-8 | – | – |
| 5SM2626-6 | 5SM2626-8 | – | – |
| – | – | 5SM2627-6 | 5SM2627-8 |
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |
| – | – | – | 5SM2827-8 |
| | | | |
| – | – | – | – |
| – | – | – | – |
| | | | |
| – | – | – | – |
| 5SM2323-0 | – | – | – |
| 5SM2326-0 | – | – | – |
| – | – | – | – |
| 5SM2623-0 | 5SM2623-2 | 5SM2327-0 | – |
| 5SM2626-0 | 5SM2626-2 | 5SM2627-0 | – |
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |

## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

| Fault signal contacts (FC) | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3020 |
| 2 NO | 5ST3021 |
| 2 NC | 5ST3022 |

| Auxiliary switches and fault signal contacts (AS+FC) | Article No. |
|---|---|
| 1 CO (AS) + 1 CO (FC) | 5ST3062 |
| 5ST3 COM (AS+FC) | 5ST3062-0MC |

| Shunt trips (ST) | Article No. |
|---|---|
| 110 ... 415 V AC, 110 ... 220 V DC | 5ST3030 |
| 24 ... 48 V AC/DC | 5ST3031 |
| 12 V DC | 5ST3031-0XX01 |

| Undervoltage releases (UR) | | Article No. |
|---|---|---|
| With integrated auxiliary switch | 230 V AC | 5ST3040 |
| | 110 V DC | 5ST3041 |
| | 24 V DC | 5ST3042 |
| Without integrated auxiliary switch | 230 V AC | 5ST3043 |
| | 110 V DC | 5ST3044 |
| | 24 V DC | 5ST3045 |

| Remote control auxiliaries (RCA) | | Article No. |
|---|---|---|
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/IR test | 100 ... 240 V AC | 5ST3073-0MC new |

| Adapters for remote control auxiliaries (RCA) | Article No. |
|---|---|
| 5SM2 with 5SY (2P) | 5ST3820-3 + 5ST3820-1 |
| 5SM2 with 5SL (2P) | 5ST3820-3 + 5ST3820-6 |

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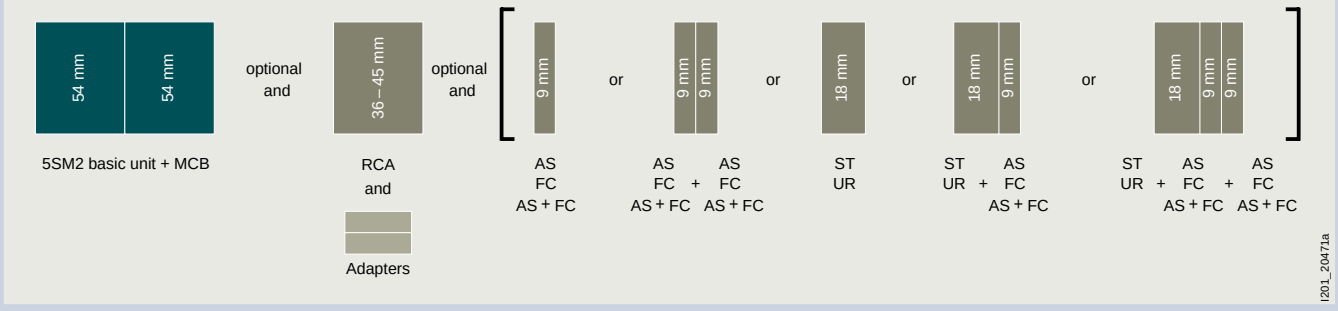
# 5SM2 RC units

## Type A and AC, 3-pole

| | | For 5SY miniature circuit breakers [1] | | | For 5SL4 miniature circuit breakers | |
|---|---|---|---|---|---|---|
| Rated voltage $U_n$ | | 400 V AC | | | 400 V AC | |
| Version | | Instantaneous | Super resistant [K] | Selective [S] | Instantaneous | Selective [S] |
| Mounting width | | 3 MW | 3 MW | 3 MW | 3 MW | 3 MW |
| | |  |  |  |  |  |
| $I_{\Delta n}$ | $I_n$ | | | | | |
| **Type A** | | | | | | |
| 30 mA | 0.3 ... 40 A | 5SM2332-6 | 5SM2332-6KK01 | – | 5SM2333-6 | – |
| | 0.3 ... 63 A | 5SM2335-6 | 5SM2335-6KK01 | – | 5SM2336-6 | – |
| 100 mA | 0.3 ... 63 A | 5SM2435-6 | – | – | – | – |
| 300 mA | 0.3 ... 40 A | 5SM2632-6 | – | – | 5SM2633-6 | – |
| | 0.3 ... 63 A | 5SM2635-6 | – | 5SM2635-8 | 5SM2636-6 | 5SM2636-8 |
| 500 mA | 0.3 ... 63 A | 5SM2735-6 | – | 5SM2735-8 | – | – |
| 1000 mA | 0.3 ... 40 A | – | – | 5SM2832-8 | – | – |
| | 0.3 ... 63 A | – | – | 5SM2835-8 | – | – |
| **Type AC** | | | | | | |
| 30 mA | 0.3 ... 40 A | 5SM2332-0 | – | – | 5SM2333-0 | – |
| | 0.3 ... 63 A | 5SM2335-0 | – | – | 5SM2336-0 | – |
| 300 mA | 0.3 ... 40 A | 5SM2632-0 | – | – | 5SM2633-0 | – |
| | 0.3 ... 63 A | 5SM2635-0 | – | – | 5SM2636-0 | – |
| 500 mA | 0.3 ... 63 A | 5SM2735-0 | – | – | – | – |

[1] Not suitable for use with 5SY5 and type A not suitable for use with 5SY8

## Mounting concept




| | | |
|---|---|---|
| MCB | Miniature circuit breakers | See page 3/1 |
| AS | Auxiliary switches | See page 4/62 |
| FC | Fault signal contacts | See page 4/64 |
| AS+FC | Auxiliary switches and fault signal contacts | See page 4/65 |
| ST | Shunt trips | See page 4/68 |
| UR | Undervoltage releases | See page 4/69 |
| RCA | Remote control auxiliaries | See page 4/70 |

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## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

| Fault signal contacts (FC) | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3020 |
| 2 NO | 5ST3021 |
| 2 NC | 5ST3022 |

| Auxiliary switches and fault signal contacts (AS+FC) | Article No. |
|---|---|
| 1 CO (AS) + 1 CO (FC) | 5ST3062 |
| 5ST3 COM (AS+FC) | 5ST3062-0MC |

| Shunt trips (ST) | Article No. |
|---|---|
| 110 ... 415 V AC, 110 ... 220 V DC | 5ST3030 |
| 24 ... 48 V AC/DC | 5ST3031 |
| 12 V DC | 5ST3031-0XX01 |

| Undervoltage releases (UR) | | Article No. |
|---|---|---|
| With integrated auxiliary switch | 230 V AC | 5ST3040 |
| | 110 V DC | 5ST3041 |
| | 24 V DC | 5ST3042 |
| Without integrated auxiliary switch | 230 V AC | 5ST3043 |
| | 110 V DC | 5ST3044 |
| | 24 V DC | 5ST3045 |

| Remote control auxiliariess (RCA) | | Article No. |
|---|---|---|
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/IR test | 100 ... 240 V AC | 5ST3073-0MC new |

| Adapters for remote control auxiliariess (RCA) | Article No. |
|---|---|
| 5SM2 with 5SY (2P) | 5ST3820-3 + 5ST3820-1 |
| 5SM2 with 5SL (2P) | 5ST3820-3 + 5ST3820-6 |

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# 5SM2 RC units

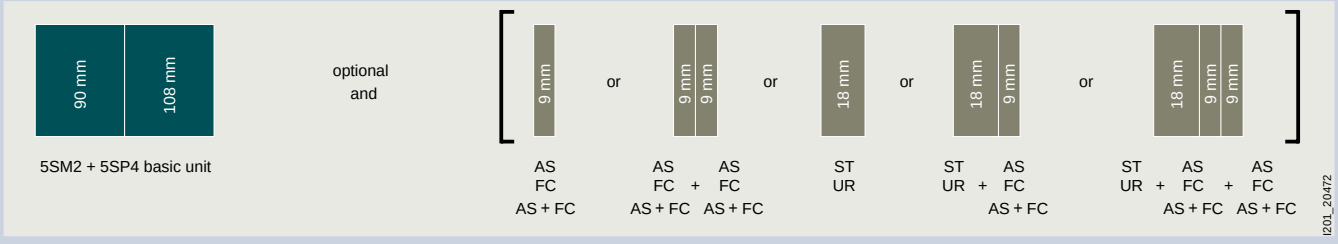
## Type A and AC, 4-pole

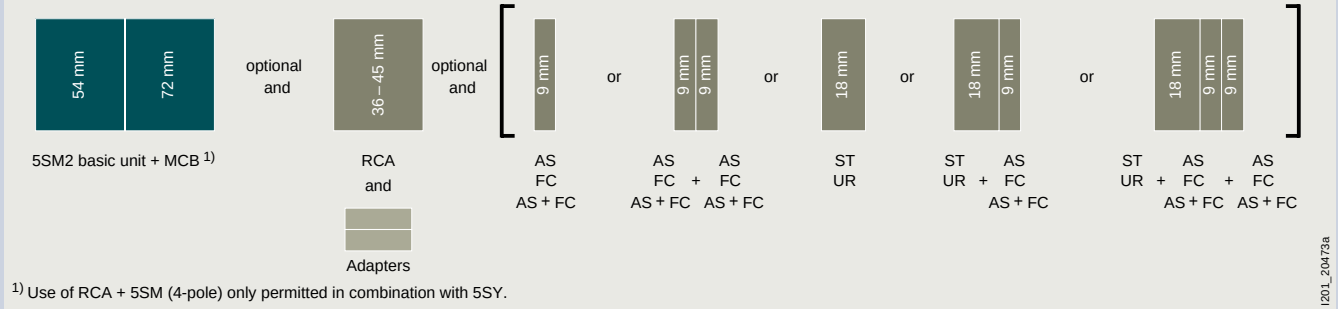


| | For 5SY miniature circuit breakers [1] | | | |
|---|---|---|---|---|
| **Rated voltage $U_n$** | 400 V AC | | | |
| **Version** | Instantaneous | Super resistant [K] | Selective [S] | SIGRES, instantaneous |
| **Mounting width** | 3 MW | 3 MW | 3 MW | 3 MW |
| |  |  |  |  |
| $I_{\Delta n}$ | $I_n$ | | | | |
| **Type A** | | | | | |
| 30 mA | 0.3 ... 40 A | 5SM2342-6 | 5SM2342-6KK01 | – | – |
| | 0.3 ... 63 A | 5SM2345-6 | 5SM2345-6KK01 | – | 5SM2345-6KK12 |
| | 80 ... 100 A | – | – | – | – |
| 100 mA | 0.3 ... 63 A | 5SM2445-6 | – | – | – |
| 300 mA | 0.3 ... 40 A | 5SM2642-6 | – | – | – |
| | 0.3 ... 63 A | 5SM2645-6 | – | 5SM2645-8 | 5SM2645-6KK12 |
| | 80 ... 100 A | – | – | – | – |
| 500 mA | 0.3 ... 63 A | 5SM2745-6 | – | 5SM2745-8 | – |
| 1000 mA | 0.3 ... 40 A | – | – | 5SM2842-8 | – |
| | 0.3 ... 63 A | – | – | 5SM2845-8 | – |
| | 80 ... 100 A | – | – | – | – |
| **Type AC** | | | | | |
| 30 mA | 0.3 ... 40 A | 5SM2342-0 | – | – | – |
| | 0.3 ... 63 A | 5SM2345-0 | – | – | – |
| | 80 ... 100 A | – | – | – | – |
| 300 mA | 0.3 ... 40 A | 5SM2642-0 | – | – | – |
| | 0.3 ... 63 A | 5SM2645-0 | – | 5SM2645-2 | – |
| | 80 ... 100 A | – | – | – | – |
| 500 mA | 0.3 ... 63 A | 5SM2745-0 | – | – | – |
| 1000 mA | 0.3 ... 63 A | – | – | 5SM2845-2 | – |

[1] Not suitable for use with 5SY5 and type A not suitable for use with 5SY8

## Mounting concept




[1] Use of RCA + 5SM (4-pole) only permitted in combination with 5SY.

MCB Miniature circuit breakers See page 3/1
AS Auxiliary switches Fault signal contacts FC See page 4/62 See page 4/64
AS+FC Auxiliary switches and fault signal contacts See page 4/65
ST Shunt trips See page 4/68
UR Undervoltage releases See page 4/69
RCA Remote control auxiliaries See page 4/70

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| For 5SL4 miniature circuit breakers | | For 5SP4 miniature circuit breakers (B and C characteristics) | |
|---|---|---|---|
| 400 V AC | | 400 V AC | |
| Instantaneous | Selective [S] | Instantaneous | Selective [S] |
| 3 MW | 3 MW | 5 MW | 5 MW |
|  |  |  |  |
| | | | |
| | | | |
| 5SM2343-6 | – | – | – |
| 5SM2346-6 | – | – | – |
| – | – | 5SM2347-6 | – |
| – | – | – | – |
| 5SM2643-6 | – | – | – |
| 5SM2646-6 | 5SM2646-8 | – | – |
| – | – | 5SM2647-6 | 5SM2647-8 |
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |
| – | – | – | 5SM2847-8 |
| | | | |
| 5SM2343-0 | – | – | – |
| 5SM2346-0 | – | – | – |
| – | – | 5SM2347-0 | – |
| 5SM2643-0 | – | – | – |
| 5SM2646-0 | 5SM2646-2 | – | – |
| – | – | 5SM2647-0 | – |
| – | – | – | – |
| – | – | – | – |

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## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

| Fault signal contacts (FC) | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3020 |
| 2 NO | 5ST3021 |
| 2 NC | 5ST3022 |

| Auxiliary switches and fault signal contacts (AS+FC) | Article No. |
|---|---|
| 1 CO (AS) + 1 CO (FC) | 5ST3062 |
| 5ST3 COM (AS+FC) | 5ST3062-0MC |

| Shunt trips (ST) | Article No. |
|---|---|
| 110 ... 415 V AC, 110 ... 220 V DC | 5ST3030 |
| 24 ... 48 V AC/DC | 5ST3031 |
| 12 V DC | 5ST3031-0XX01 |

| Undervoltage releases (UR) | | Article No. |
|---|---|---|
| With integrated auxiliary switch | 230 V AC | 5ST3040 |
| | 110 V DC | 5ST3041 |
| | 24 V DC | 5ST3042 |
| Without integrated auxiliary switch | 230 V AC | 5ST3043 |
| | 110 V DC | 5ST3044 |
| | 24 V DC | 5ST3045 |

| Remote control auxiliaries (RCA) | | Article No. |
|---|---|---|
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/IR test | 100 ... 240 V AC | 5ST3073-0MC new |

| Adapters for remote control auxiliaries (RCA) | Article No. |
|---|---|
| 5SM2 with 5SY (2P) | 5ST3820-3 + 5ST3820-1 |
| 5SM2 with 5SL (2P) | 5ST3820-3 + 5ST3820-6 |

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# 5SU1 RCBOs

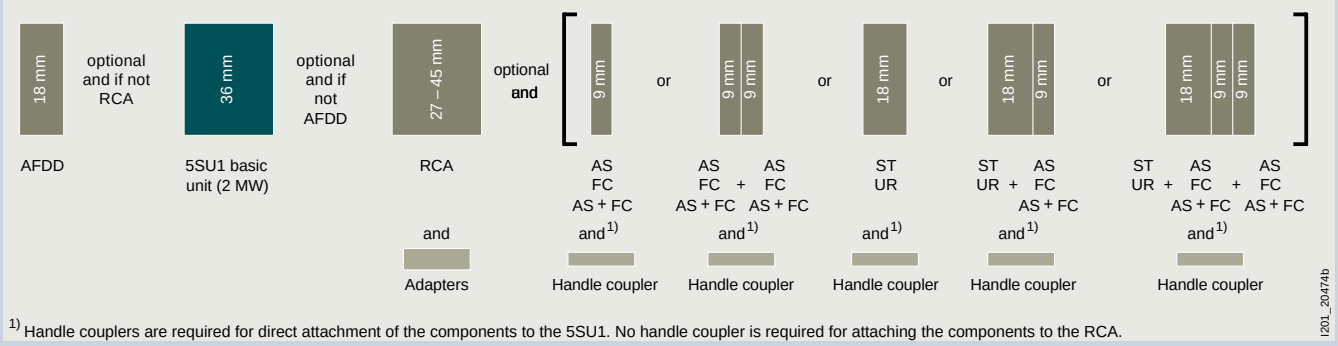
## Type A, 1P+N

| | Instantaneous | | |
|---|---|---|---|
| Rated voltage $U_n$ | 230 V AC | | |
| Mounting width | 2 MW | 2 MW | 2 MW |
| Short-circuit breaking capacity | 4.5 kA | 4.5 kA | 6 kA |
| N connection | Right | Left | Right |
| |  |  |  |

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| $I_{\Delta n}$ | $I_n$ | Bulk packaging (36 units) | Characteristic C | C | Characteristic B | C |
|---|---|---|---|---|---|---|
| Type A | | | | | | |
| 10 mA | 6 A | – | – | – | – | – |
| | 10 A | – | – | – | – | – |
| | 13 A | – | – | – | – | – |
| | 16 A | – | – | – | – | – |
| 30 mA | 6 A | – | 5SU1353-7KK06 | 5SU1353-7KL06 | 5SU1356-6KK06 | 5SU1356-7KK06 |
| | | ■ | – | – | 5SU1356-6GV06 | 5SU1356-7GV06 |
| | 8 A | – | 5SU1353-7KK08 | – | – | 5SU1356-7KK08 |
| | 10 A | – | 5SU1353-7KK10 | 5SU1353-7KL10 | 5SU1356-6KK10 | 5SU1356-7KK10 |
| | | ■ | – | – | 5SU1356-6GV10 | 5SU1356-7GV10 |
| | 13 A | – | 5SU1353-7KK13 | – | 5SU1356-6KK13 | 5SU1356-7KK13 |
| | 16 A | – | 5SU1353-7KK16 | 5SU1353-7KL16 | 5SU1356-6KK16 | 5SU1356-7KK16 |
| | | ■ | – | – | 5SU1356-6GV16 | 5SU1356-7GV16 |
| | 20 A | – | 5SU1353-7KK20 | 5SU1353-7KL20 | 5SU1356-6KK20 | 5SU1356-7KK20 |
| | 25 A | – | 5SU1353-7KK25 | 5SU1353-7KL25 | 5SU1356-6KK25 | 5SU1356-7KK25 |
| | 32 A | – | 5SU1353-7KK32 | 5SU1353-7KL32 | 5SU1356-6KK32 | 5SU1356-7KK32 |
| | 40 A | – | 5SU1353-7KK40 | 5SU1353-7KL40 | 5SU1356-6KK40 | 5SU1356-7KK40 |
| 300 mA | 6 A | – | 5SU1653-7KK06 | – | 5SU1656-6KK06 | 5SU1656-7KK06 |
| | 10 A | – | 5SU1653-7KK10 | – | 5SU1656-6KK10 | 5SU1656-7KK10 |
| | 13 A | – | 5SU1653-7KK13 | – | 5SU1656-6KK13 | 5SU1656-7KK13 |
| | 16 A | – | 5SU1653-7KK16 | – | 5SU1656-6KK16 | 5SU1656-7KK16 |
| | 20 A | – | 5SU1653-7KK20 | – | 5SU1656-6KK20 | 5SU1656-7KK20 |
| | 25 A | – | 5SU1653-7KK25 | – | 5SU1656-6KK25 | 5SU1656-7KK25 |
| | 32 A | – | 5SU1653-7KK32 | – | 5SU1656-6KK32 | 5SU1656-7KK32 |
| | 40 A | – | 5SU1653-7KK40 | – | 5SU1656-6KK40 | 5SU1656-7KK40 |

## Mounting concept




1) Handle couplers are required for direct attachment of the components to the 5SU1. No handle coupler is required for attaching the components to the RCA.

| | | | | | |
|---|---|---|---|---|---|
| AFDD | Arc fault detection units | See page 4/56 | ST | Shunt trips | See page 4/68 |
| AS | Auxiliary switches | See page 4/62 | UR | Undervoltage releases | See page 4/69 |
| FC | Fault signal contacts | See page 4/64 | RCA | Remote control auxiliaries | See page 4/70 |
| AS+FC | Auxiliary switches and fault signal contacts | See page 4/65 | | | |



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| Instantaneous | | Short-time delayed [G], super resistant [K] | |
|---|---|---|---|
| 230 V AC | | 230 V AC | |
| 2 MW | | 2 MW | |
| 10 kA | | 10 kA | |
| Right | | Right | |
|  | |  | |
| **Characteristic** | | **Characteristic** | |
| **B** | **C** | **B** | **C** |
| | | | |
| 5SU1154-6KK06 | 5SU1154-7KK06 | – | – |
| 5SU1154-6KK10 | 5SU1154-7KK10 | – | – |
| 5SU1154-6KK13 | 5SU1154-7KK13 | – | – |
| 5SU1154-6KK16 | 5SU1154-7KK16 | – | – |
| 5SU1354-6KK06 | 5SU1354-7KK06 | – | – |
| 5SU1354-6GV06 | 5SU1354-7GV06 | – | – |
| – | 5SU1354-7KK08 | – | – |
| 5SU1354-6KK10 | 5SU1354-7KK10 | 5SU1354-6LB10 | 5SU1354-7LB10 |
| 5SU1354-6GV10 | 5SU1354-7GV10 | – | – |
| 5SU1354-6KK13 | 5SU1354-7KK13 | 5SU1354-6LB13 | 5SU1354-7LB13 |
| 5SU1354-6KK16 | 5SU1354-7KK16 | 5SU1354-6LB16 | 5SU1354-7LB16 |
| 5SU1354-6GV16 | 5SU1354-7GV16 | – | – |
| 5SU1354-6KK20 | 5SU1354-7KK20 | 5SU1354-6LB20 | 5SU1354-7LB20 |
| 5SU1354-6KK25 | 5SU1354-7KK25 | 5SU1354-6LB25 | 5SU1354-7LB25 |
| 5SU1354-6KK32 | 5SU1354-7KK32 | 5SU1354-6LB32 | 5SU1354-7LB32 |
| 5SU1354-6KK40 | 5SU1354-7KK40 | 5SU1354-6LB40 | 5SU1354-7LB40 |
| 5SU1654-6KK06 | 5SU1654-7KK06 | – | – |
| 5SU1654-6KK10 | 5SU1654-7KK10 | – | – |
| 5SU1654-6KK13 | 5SU1654-7KK13 | – | – |
| 5SU1654-6KK16 | 5SU1654-7KK16 | – | – |
| 5SU1654-6KK20 | 5SU1654-7KK20 | – | – |
| 5SU1654-6KK25 | 5SU1654-7KK25 | – | – |
| 5SU1654-6KK32 | 5SU1654-7KK32 | – | – |
| 5SU1654-6KK40 | 5SU1654-7KK40 | – | – |

## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

| Fault signal contacts (FC) | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3020 |
| 2 NO | 5ST3021 |
| 2 NC | 5ST3022 |

| Auxiliary switches and fault signal contacts (AS+FC) | Article No. |
|---|---|
| 1 CO (AS) + 1 CO (FC) | 5ST3062 |
| 5ST3 COM (AS+FC) | 5ST3062-0MC |

| Shunt trips (ST) | Article No. |
|---|---|
| 110 ... 415 V AC, 110 ... 220 V DC | 5ST3030 |
| 24 ... 48 V AC/DC | 5ST3031 |
| 12 V DC | 5ST3031-0XX01 |

| Arc fault detection units (AFDD) | | Article No. |
|---|---|---|
| For 5SU1 basic units | $I_n$ up to 16 A | 5SM6021-2 |
| | $I_n$ up to 40 A | 5SM6024-2 |

| Undervoltage releases (UR) | | Article No. |
|---|---|---|
| With integrated auxiliary switch | 230 V AC | 5ST3040 |
| | 110 V DC | 5ST3041 |
| | 24 V DC | 5ST3042 |
| Without integrated auxiliary switch | 230 V AC | 5ST3043 |
| | 110 V DC | 5ST3044 |
| | 24 V DC | 5ST3045 |

| Handle couplers for AS, FC, AS+FC, ST and UR | Article No. |
|---|---|
| 1 set = 5 units | 5ST3805-1 |

| Remote control auxiliaries (RCA) | | Article No. |
|---|---|---|
| Basic | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3053 |
| | 177 ... 270 V AC | 5ST3054 |
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/IR test | 100 ... 240 V AC | 5ST3073-0MC new |

| Adapters for remote control auxiliaries (RCA) | Article No. |
|---|---|
| 2 MW | 5ST3820-5 |

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# 5SU1 RCBOs

## Type F, 1P+N

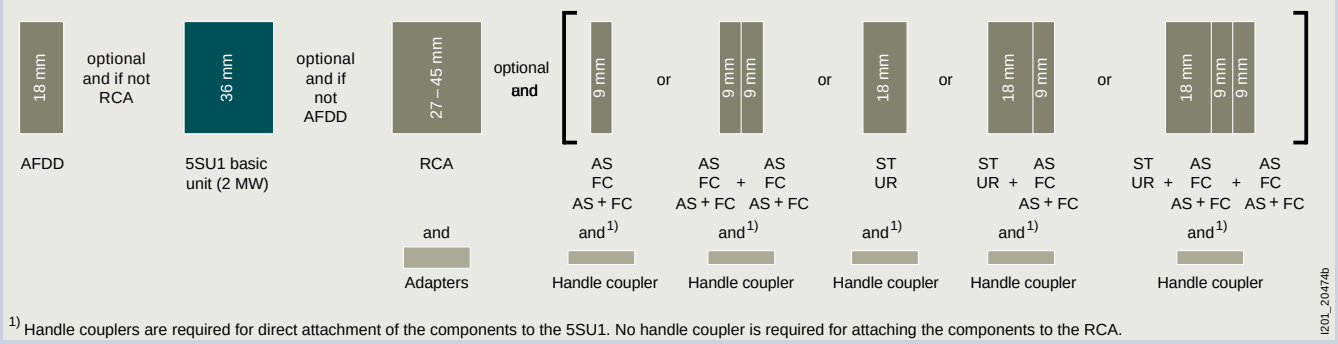
| | Super resistant [K] |
|---|---|
| Rated voltage $U_n$ | 230 V AC |
| Mounting width | 2 MW |
| Short-circuit breaking capacity | 10 kA |
| N connection | Right |



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| $I_{\Delta n}$ | $I_n$ | Characteristic B | Characteristic C |
|---|---|---|---|
| **Type F** | | | |
| 30 mA | 6 A | 5SU1354-3KK06 | 5SU1354-4KK06 |
| | 10 A | 5SU1354-3KK10 | 5SU1354-4KK10 |
| | 13 A | 5SU1354-3KK13 | 5SU1354-4KK13 |
| | 16 A | 5SU1354-3KK16 | 5SU1354-4KK16 |
| | 20 A | 5SU1354-3KK20 | 5SU1354-4KK20 |
| | 25 A | 5SU1354-3KK25 | 5SU1354-4KK25 |
| | 32 A | 5SU1354-3KK32 | 5SU1354-4KK32 |
| | 40 A | 5SU1354-3KK40 | 5SU1354-4KK40 |

## Mounting concept




1) Handle couplers are required for direct attachment of the components to the 5SU1. No handle coupler is required for attaching the components to the RCA.

| | | | | | |
|---|---|---|---|---|---|
| AFDD | Arc fault detection units | See page 4/56 | ST | Shunt trips | See page 4/68 |
| AS | Auxiliary switches | See page 4/62 | UR | Undervoltage releases | See page 4/69 |
| FC | Fault signal contacts | See page 4/64 | RCA | Remote control auxiliaries | See page 4/70 |
| AS+FC | Auxiliary switches and fault signal contacts | See page 4/65 | | | |



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## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

| Fault signal contacts (FC) | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3020 |
| 2 NO | 5ST3021 |
| 2 NC | 5ST3022 |

| Auxiliary switches and fault signal contacts (AS+FC) | Article No. |
|---|---|
| 1 CO (AS) + 1 CO (FC) | 5ST3062 |
| 5ST3 COM (AS+FC) | 5ST3062-0MC |

| Shunt trips (ST) | Article No. |
|---|---|
| 110 ... 415 V AC, 110 ... 220 V DC | 5ST3030 |
| 24 ... 48 V AC/DC | 5ST3031 |
| 12 V DC | 5ST3031-0XX01 |

| Arc fault detection units (AFDD) | | Article No. |
|---|---|---|
| For 5SU1 basic units | $I_n$ up to 16 A | 5SM6021-2 |
| | $I_n$ up to 40 A | 5SM6024-2 |

| Undervoltage releases (UR) | | Article No. |
|---|---|---|
| With integrated auxiliary switch | 230 V AC | 5ST3040 |
| | 110 V DC | 5ST3041 |
| | 24 V DC | 5ST3042 |
| Without integrated auxiliary switch | 230 V AC | 5ST3043 |
| | 110 V DC | 5ST3044 |
| | 24 V DC | 5ST3045 |

| Handle couplers for AS, FC, AS+FC, ST and UR | Article No. |
|---|---|
| 1 set = 5 units | 5ST3805-1 |

| Remote control auxiliaries (RCA) | | Article No. |
|---|---|---|
| Basic | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3053 |
| | 177 ... 270 V AC | 5ST3054 |
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/IR test | 100 ... 240 V AC | 5ST3073-0MC new |

| Adapters for remote control auxiliaries (RCA) | Article No. |
|---|---|
| 2 MW | 5ST3820-5 |

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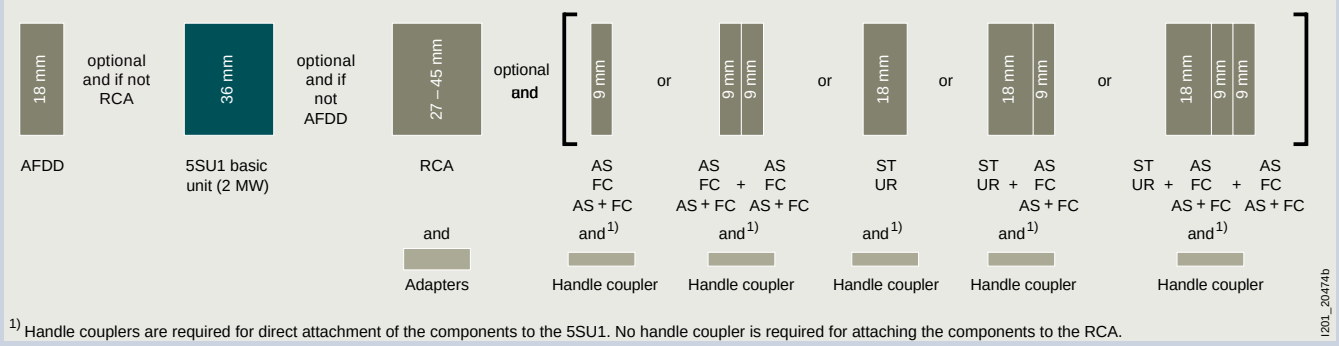
# 5SU1 RCBOs

## Type AC, 1P+N

| | Instantaneous | | |
|---|---|---|---|
| Rated voltage $U_n$ | 230 V AC | | |
| Mounting width | 2 MW | 2 MW | 2 MW |
| Short-circuit breaking capacity | 4.5 kA | 4.5 kA | 6 kA |
| N connection | Right | Left | Right |
| |  |  |  |

| $I_{\Delta n}$ | $I_n$ | Bulk packaging (36 units) | Characteristic C | C | Characteristic B | C |
|---|---|---|---|---|---|---|
| **Type AC** | | | | | | |
| 30 mA | 6 A | – | 5SU1353-1KK06 | 5SU1353-1KL06 | 5SU1356-0KK06 | 5SU1356-1KK06 |
| | 8 A | – | 5SU1353-1KK08 | – | – | 5SU1356-1KK08 |
| | 10 A | – | 5SU1353-1KK10 | 5SU1353-1KL10 | 5SU1356-0KK10 | 5SU1356-1KK10 |
| | | ■ | 5SU1353-1GV10 | – | – | – |
| | 13 A | – | 5SU1353-1KK13 | 5SU1353-1KL13 | 5SU1356-0KK13 | 5SU1356-1KK13 |
| | 16 A | – | 5SU1353-1KK16 | 5SU1353-1KL16 | 5SU1356-0KK16 | 5SU1356-1KK16 |
| | | ■ | 5SU1353-1GV16 | – | – | 5SU1356-1GV16 |
| | 20 A | – | 5SU1353-1KK20 | 5SU1353-1KL20 | 5SU1356-0KK20 | 5SU1356-1KK20 |
| | 25 A | – | 5SU1353-1KK25 | 5SU1353-1KL25 | 5SU1356-0KK25 | 5SU1356-1KK25 |
| | 32 A | – | 5SU1353-1KK32 | 5SU1353-1KL32 | 5SU1356-0KK32 | 5SU1356-1KK32 |
| | 40 A | – | 5SU1353-1KK40 | 5SU1353-1KL40 | 5SU1356-0KK40 | 5SU1356-1KK40 |
| 100 mA | 6 A | – | – | – | – | – |
| | 10 A | – | – | – | – | – |
| | 13 A | – | – | – | – | – |
| | 16 A | – | – | – | – | – |
| | 20 A | – | – | – | – | – |
| | 25 A | – | – | – | – | – |
| | 32 A | – | – | – | – | – |
| | 40 A | – | – | – | – | – |
| 300 mA | 6 A | – | 5SU1653-1KK06 | 5SU1653-1KL06 | 5SU1656-0KK06 | 5SU1656-1KK06 |
| | 10 A | – | 5SU1653-1KK10 | 5SU1653-1KL10 | 5SU1656-0KK10 | 5SU1656-1KK10 |
| | 13 A | – | 5SU1653-1KK13 | 5SU1653-1KL16 | 5SU1656-0KK13 | 5SU1656-1KK13 |
| | 16 A | – | 5SU1653-1KK16 | – | 5SU1656-0KK16 | 5SU1656-1KK16 |
| | | ■ | 5SU1653-1GV16 | – | – | – |
| | 20 A | – | 5SU1653-1KK20 | 5SU1653-1KL20 | 5SU1656-0KK20 | 5SU1656-1KK20 |
| | 25 A | – | 5SU1653-1KK25 | 5SU1653-1KL25 | 5SU1656-0KK25 | 5SU1656-1KK25 |
| | 32 A | – | 5SU1653-1KK32 | 5SU1653-1KL32 | 5SU1656-0KK32 | 5SU1656-1KK32 |
| | 40 A | – | 5SU1653-1KK40 | 5SU1653-1KL40 | 5SU1656-0KK40 | 5SU1656-1KK40 |

## Mounting concept




1) Handle couplers are required for direct attachment of the components to the 5SU1. No handle coupler is required for attaching the components to the RCA.

| | | | | | |
|---|---|---|---|---|---|
| AFDD | Arc fault detection units | See page 4/56 | ST | Shunt trips | See page 4/68 |
| AS | Auxiliary switches | See page 4/62 | UR | Undervoltage releases | See page 4/69 |
| FC | Fault signal contacts | See page 4/64 | RCA | Remote control auxiliaries | See page 4/70 |
| AS+FC | Auxiliary switches and fault signal contacts | See page 4/65 | | | |



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| Instantaneous | | Short-time delayed [G], super resistant [K] | |
|---|---|---|---|
| 230 V AC | | 230 V AC | |
| 2 MW | | 2 MW | |
| 10 kA | | 10 kA | |
| Right | | Right | |
|  | |  | |
| **Characteristic** | | **Characteristic** | |
| **B** | **C** | **B** | **C** |
| 5SU1354-0KK06 | 5SU1354-1KK06 | – | – |
| – | 5SU1354-1KK08 | – | – |
| 5SU1354-0KK10 | 5SU1354-1KK10 | 5SU1354-0LB10 | 5SU1354-1LB10 |
| – | – | – | – |
| 5SU1354-0KK13 | 5SU1354-1KK13 | 5SU1354-0LB13 | 5SU1354-1LB13 |
| 5SU1354-0KK16 | 5SU1354-1KK16 | 5SU1354-0LB16 | 5SU1354-1LB16 |
| – | – | – | – |
| 5SU1354-0KK20 | 5SU1354-1KK20 | 5SU1354-0LB20 | 5SU1354-1LB20 |
| 5SU1354-0KK25 | 5SU1354-1KK25 | 5SU1354-0LB25 | 5SU1354-1LB25 |
| 5SU1354-0KK32 | 5SU1354-1KK32 | 5SU1354-0LB32 | 5SU1354-1LB32 |
| 5SU1354-0KK40 | 5SU1354-1KK40 | 5SU1354-0LB40 | 5SU1354-1LB40 |
| – | 5SU1454-1KK06 | – | – |
| – | 5SU1454-1KK10 | – | – |
| – | 5SU1454-1KK13 | – | – |
| – | 5SU1454-1KK16 | – | – |
| – | 5SU1454-1KK20 | – | – |
| – | 5SU1454-1KK25 | – | – |
| – | 5SU1454-1KK32 | – | – |
| – | 5SU1454-1KK40 | – | – |
| 5SU1654-0KK06 | 5SU1654-1KK06 | – | – |
| 5SU1654-0KK10 | 5SU1654-1KK10 | – | – |
| 5SU1654-0KK13 | 5SU1654-1KK13 | – | – |
| 5SU1654-0KK16 | 5SU1654-1KK16 | – | – |
| – | – | – | – |
| 5SU1654-0KK20 | 5SU1654-1KK20 | – | – |
| 5SU1654-0KK25 | 5SU1654-1KK25 | – | – |
| 5SU1654-0KK32 | 5SU1654-1KK32 | – | – |
| 5SU1654-0KK40 | 5SU1654-1KK40 | – | – |

## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

| Fault signal contacts (FC) | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3020 |
| 2 NO | 5ST3021 |
| 2 NC | 5ST3022 |

| Auxiliary switches and fault signal contacts (AS+FC) | Article No. |
|---|---|
| 1 CO (AS) + 1 CO (FC) | 5ST3062 |
| 5ST3 COM (AS+FC) | 5ST3062-0MC |

| Shunt trips (ST) | Article No. |
|---|---|
| 110 ... 415 V AC, 110 ... 220 V DC | 5ST3030 |
| 24 ... 48 V AC/DC | 5ST3031 |
| 12 V DC | 5ST3031-0XX01 |

| Arc fault detection units (AFDD) | | Article No. |
|---|---|---|
| For 5SU1 basic units | $I_n$ up to 16 A | 5SM6021-2 |
| | $I_n$ up to 40 A | 5SM6024-2 |

| Undervoltage releases (UR) | | Article No. |
|---|---|---|
| With integrated auxiliary switch | 230 V AC | 5ST3040 |
| | 110 V DC | 5ST3041 |
| | 24 V DC | 5ST3042 |
| Without integrated auxiliary switch | 230 V AC | 5ST3043 |
| | 110 V DC | 5ST3044 |
| | 24 V DC | 5ST3045 |

| Handle couplers for AS, FC, AS+FC, ST and UR | Article No. |
|---|---|
| 1 set = 5 units | 5ST3805-1 |

| Remote control auxiliaries (RCA) | | Article No. |
|---|---|---|
| Basic | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3053 |
| | 177 ... 270 V AC | 5ST3054 |
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/IR test | 100 ... 240 V AC | 5ST3073-0MC new |

| Adapters for remote control auxiliaries (RCA) | Article No. |
|---|---|
| 2 MW | 5ST3820-5 |

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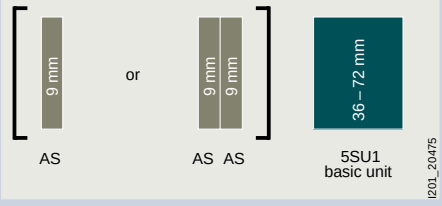
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# 5SU1 RCBOs

## Type A, 2/3/4-pole with residual current tripped indication

| | | 2-pole<br>Instantaneous | | | |
|---|---|---|---|---|---|
| Rated voltage $U_n$ | | 230 V AC | | | |
| Short-circuit breaking capacity | | 6 kA | | 10 kA | |
| | |  | |  | |
| $I_{\Delta n}$ | $I_n$ | Characteristic<br>B | C | Characteristic<br>B | C |
| 30 mA | 6 A | 5SU1326-6FP06 | 5SU1326-7FP06 | 5SU1324-6FP06 | 5SU1324-7FP06 |
| | 10 A | 5SU1326-6FP10 | 5SU1326-7FP10 | 5SU1324-6FP10 | 5SU1324-7FP10 |
| | 13 A | 5SU1326-6FP13 | 5SU1326-7FP13 | 5SU1324-6FP13 | 5SU1324-7FP13 |
| | 16 A | 5SU1326-6FP16 | 5SU1326-7FP16 | 5SU1324-6FP16 | 5SU1324-7FP16 |
| | 20 A | 5SU1326-6FP20 | 5SU1326-7FP20 | 5SU1324-6FP20 | 5SU1324-7FP20 |
| | 25 A | 5SU1326-6FP25 | 5SU1326-7FP25 | 5SU1324-6FP25 | 5SU1324-7FP25 |
| | 32 A | 5SU1326-6FP32 | 5SU1326-7FP32 | 5SU1324-6FP32 | 5SU1324-7FP32 |
| 300 mA | 6 A | – | – | – | – |
| | 10 A | – | – | – | – |
| | 16 A | – | – | – | – |
| | 20 A | – | – | – | – |
| | 25 A | – | – | – | – |
| | 32 A | – | – | – | – |

### Mounting concept




AS Auxiliary switches See page 4/62



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| 2-pole<br>Short-time delayed, super resistant [K] | | 3-pole<br>Instantaneous | | 4-pole<br>Instantaneous | |
|---|---|---|---|---|---|
| 230 V AC | | 400 V AC | | 400 V AC | |
| 10 kA | | 6 kA | | 6 kA | |
|  | |  | |  | |
| Characteristic | | Characteristic | | Characteristic | |
| B | C | B | C | B | C |
| – | 5SU1324-7FR06 | 5SU1336-6FP06 | 5SU1336-7FP06 | 5SU1346-6FP06 | 5SU1346-7FP06 |
| – | 5SU1324-7FR10 | 5SU1336-6FP10 | 5SU1336-7FP10 | 5SU1346-6FP10 | 5SU1346-7FP10 |
| – | – | 5SU1336-6FP13 | 5SU1336-7FP13 | 5SU1346-6FP13 | 5SU1346-7FP13 |
| 5SU1324-6FR16 | 5SU1324-7FR16 | 5SU1336-6FP16 | 5SU1336-7FP16 | 5SU1346-6FP16 | 5SU1346-7FP16 |
| 5SU1324-6FR20 | 5SU1324-7FR20 | 5SU1336-6FP20 | 5SU1336-7FP20 | 5SU1346-6FP20 | 5SU1346-7FP20 |
| 5SU1324-6FR25 | 5SU1324-7FR25 | 5SU1336-6FP25 | 5SU1336-7FP25 | 5SU1346-6FP25 | 5SU1346-7FP25 |
| – | 5SU1324-7FR32 | 5SU1336-6FP32 | 5SU1336-7FP32 | 5SU1346-6FP32 | 5SU1346-7FP32 |
| – | – | 5SU1636-6FP06 | 5SU1636-7FP06 | 5SU1646-6FP06 | 5SU1646-7FP06 |
| – | – | 5SU1636-6FP10 | 5SU1636-7FP10 | 5SU1646-6FP10 | 5SU1646-7FP10 |
| – | – | 5SU1636-6FP16 | 5SU1636-7FP16 | 5SU1646-6FP16 | 5SU1646-7FP16 |
| – | – | 5SU1636-6FP20 | 5SU1636-7FP20 | 5SU1646-6FP20 | 5SU1646-7FP20 |
| – | – | 5SU1636-6FP25 | 5SU1636-7FP25 | 5SU1646-6FP25 | 5SU1646-7FP25 |
| – | – | 5SU1636-6FP32 | 5SU1636-7FP32 | 5SU1646-6FP32 | 5SU1646-7FP32 |



## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 CO | Standard | 5ST1010-0FP |

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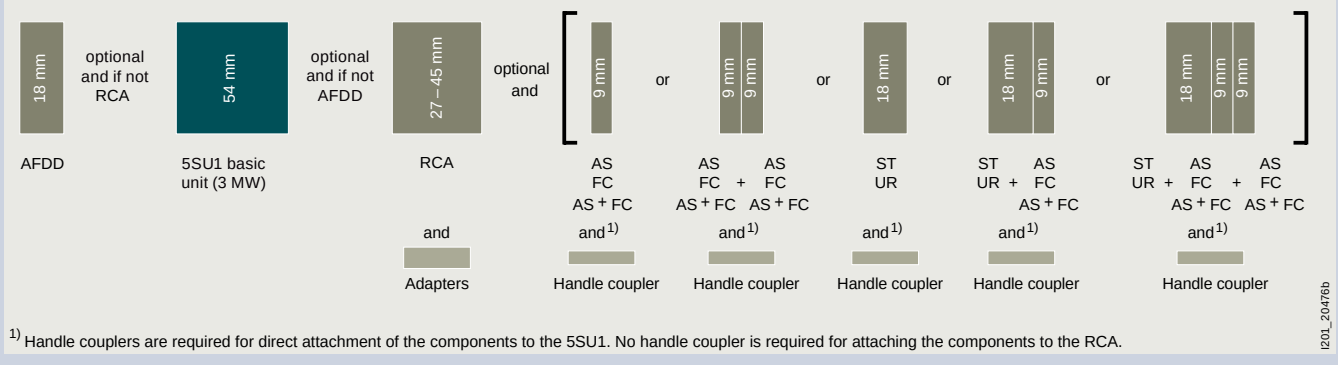
# 5SU1 RCBOs

## Type A and AC, 2-pole

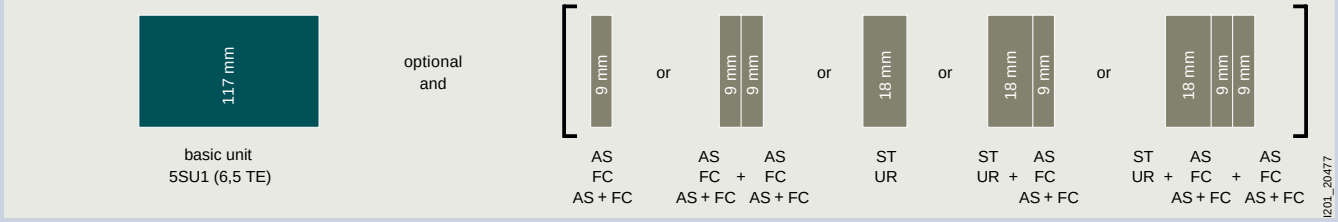
| | Instantaneous | |
|---|---|---|
| Rated voltage $U_n$ | 110 V AC | 230 V AC |
| Mounting width | 3 MW | 3 MW |
| Short-circuit breaking capacity | 10 kA | 10 kA |
| |  |  |

| $I_{\Delta n}$ | $I_n$ | Characteristic B | C | Characteristic B |
|---|---|---|---|---|
| **Type A** | | | | |
| 30 mA | 6 A | 5SU1324-6KX06 | 5SU1324-7KX06 | 5SU1324-6FA06 |
| | 10 A | 5SU1324-6KX10 | 5SU1324-7KX10 | 5SU1324-6FA10 |
| | 13 A | 5SU1324-6KX13 | 5SU1324-7KX13 | 5SU1324-6FA13 |
| | 16 A | 5SU1324-6KX16 | 5SU1324-7KX16 | 5SU1324-6FA16 |
| | 20 A | 5SU1324-6KX20 | 5SU1324-7KX20 | 5SU1324-6FA20 |
| | 25 A | 5SU1324-6KX25 | 5SU1324-7KX25 | 5SU1324-6FA25 |
| | 32 A | 5SU1324-6KX32 | 5SU1324-7KX32 | 5SU1324-6FA32 |
| | 40 A | 5SU1324-6KX40 | 5SU1324-7KX40 | 5SU1324-6FA40 |
| | 125 A | – | – | – |
| 300 mA | 125 A | – | – | – |
| **Type AC** | | | | |
| 30 mA | 125 A | – | – | – |
| 300 mA | 125 A | – | – | – |

## Mounting concept




1) Handle couplers are required for direct attachment of the components to the 5SU1. No handle coupler is required for attaching the components to the RCA.




AFDD Arc fault detection units See page 4/56
AS Auxiliary switches See page 4/62
FC Fault signal contacts See page 4/64
AS+FC Auxiliary switches and fault signal contacts See page 4/65
ST Shunt trips See page 4/68
UR Undervoltage releases See page 4/69
RCA Remote control auxiliaries See page 4/70

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| | | | Selective [S] | |
|---|---|---|---|---|
| | | | 230 V AC | |
| | 6.5 MW | | 6.5 MW | |
| | 10 kA | | 10 kA | |
| |  | |  | |
| | Characteristic | | Characteristic | |
| C | B | C | B | C |
| | | | | |
| 5SU1324-7FA06 | – | – | – | – |
| 5SU1324-7FA10 | – | – | – | – |
| 5SU1324-7FA13 | – | – | – | – |
| 5SU1324-7FA16 | – | – | – | – |
| 5SU1324-7FA20 | – | – | – | – |
| 5SU1324-7FA25 | – | – | – | – |
| 5SU1324-7FA32 | – | – | – | – |
| 5SU1324-7FA40 | – | – | – | – |
| – | 5SU1324-6KK82 | 5SU1324-7KK82 | – | – |
| – | 5SU1624-6KK82 | 5SU1624-7KK82 | 5SU1624-6WK82 | 5SU1624-7WK82 |
| | | | | |
| – | 5SU1324-0KK82 | 5SU1324-1KK82 | – | – |
| – | 5SU1624-0KK82 | 5SU1624-1KK82 | – | – |

4

## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

| Fault signal contacts (FC) | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3020 |
| 2 NO | 5ST3021 |
| 2 NC | 5ST3022 |

| Auxiliary switches and fault signal contacts (AS+FC) | Article No. |
|---|---|
| 1 CO (AS) + 1 CO (FC) | 5ST3062 |
| 5ST3 COM (AS+FC) | 5ST3062-0MC |

| Shunt trips (ST) | Article No. |
|---|---|
| 110 ... 415 V AC, 110 ... 220 V DC | 5ST3030 |
| 24 ... 48 V AC/DC | 5ST3031 |
| 12 V DC | 5ST3031-0XX01 |

| Arc fault detection units (AFDD) | | Article No. |
|---|---|---|
| For 5SU1 basic units | $I_n$ up to 16 A | 5SM6021-2 |
| | $I_n$ up to 40 A | 5SM6024-2 |

| Undervoltage releases (UR) | | Article No. |
|---|---|---|
| With integrated auxiliary switch | 230 V AC | 5ST3040 |
| | 110 V DC | 5ST3041 |
| | 24 V DC | 5ST3042 |
| Without integrated auxiliary switch | 230 V AC | 5ST3043 |
| | 110 V DC | 5ST3044 |
| | 24 V DC | 5ST3045 |

| Handle couplers for AS, FC, AS+FC, ST and UR | Article No. |
|---|---|
| 1 set = 5 units | 5ST3805-1 |

| Remote control auxiliaries (RCA) | | Article No. |
|---|---|---|
| Basic | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3053 |
| | 177 ... 270 V AC | 5ST3054 |
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/IR test | 100 ... 240 V AC | 5ST3073-0MC new |

| Adapters for remote control auxiliaries (RCA) | Article No. |
|---|---|
| 2 MW | 5ST3820-5 |

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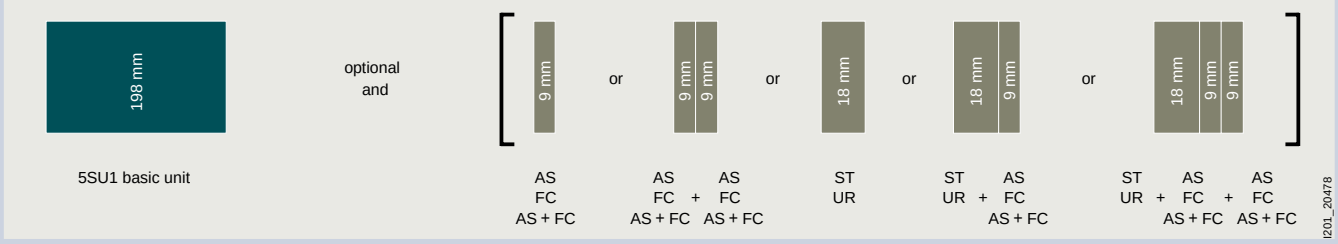
# 5SU1 RCBOs

## Type A and AC, 4-pole

| | Instantaneous | Selective [S] |
|---|---|---|
| Rated voltage $U_n$ | 400 V AC | 400 V AC |
| Mounting width | 11 MW | 11 MW |
| Short-circuit breaking capacity | 10 kA | 10 kA |
| |  |  |

| $I_{\Delta n}$ | $I_n$ | Characteristic | | Characteristic | |
|---|---|---|---|---|---|
| | | B | C | B | C |
| **Type A** | | | | | |
| 30 mA | 125 A | 5SU1344-6KK82 | 5SU1344-7KK82 | – | – |
| 300 mA | 125 A | 5SU1644-6KK82 | 5SU1644-7KK82 | 5SU1644-6WK82 | 5SU1644-7WK82 |
| 1000 mA | 125 A | – | – | 5SU1844-6WK82 | 5SU1844-7WK82 |
| **Type AC** | | | | | |
| 30 mA | 125 A | 5SU1344-0KK82 | 5SU1344-1KK82 | – | – |
| 300 mA | 125 A | 5SU1644-0KK82 | 5SU1644-1KK82 | – | – |

## Mounting concept




| | | | | | |
|---|---|---|---|---|---|
| AS | Auxiliary switches | See page 4/62 | ST | Shunt trips | See page 4/68 |
| FC | Fault signal contacts | See page 4/64 | UR | Undervoltage releases | See page 4/69 |
| AS+FC | Auxiliary switches and fault signal contacts | See page 4/65 | | | |



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# Type B and B+, 4-pole

| | | Super resistant [K] | | | Selective [S] | |
|---|---|---|---|---|---|---|
| **Rated voltage $U_n$** | | 400 V AC | | 480 V AC | 400 V AC | |
| **Mounting width** | | 11 MW | | 11 MW | 11 MW | |
| **Short-circuit breaking capacity** | | 10 kA | | 10 kA | 10 kA | |
| | |  | | |  | |
| $I_{\Delta n}$ | $I_n$ | Characteristic C | D | Characteristic C | Characteristic C | D |
| **Type B** | | | | | | |
| 30 mA | 100 A | 5SU1374-7AK81 | 5SU1374-8AK81 | – | – | – |
| | 125 A | 5SU1374-7AK82 | – | – | – | – |
| 300 mA | 100 A | 5SU1674-7AK81 | 5SU1674-8AK81 | 5SU1674-7CK81 | – | 5SU1674-8BK81 |
| | 125 A | 5SU1674-7AK82 | – | 5SU1674-7CK82 | 5SU1674-7BK82 | – |
| **Type B+** | | | | | | |
| 30 mA | 100 A | 5SU1374-7DK81 | 5SU1374-8DK81 | – | – | – |
| | 125 A | 5SU1374-7DK82 | – | – | – | – |
| 300 mA | 100 A | 5SU1674-7DK81 | 5SU1674-8DK81 | 5SU1674-7FK81 | – | 5SU1674-8EK81 |
| | 125 A | 5SU1674-7DK82 | – | 5SU1674-7FK82 | 5SU1674-7EK82 | – |

4

## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

| Fault signal contacts (FC) | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3020 |
| 2 NO | 5ST3021 |
| 2 NC | 5ST3022 |

| Auxiliary switches and fault signal contacts (AS+FC) | Article No. |
|---|---|
| 1 CO (AS) + 1 CO (FC) | 5ST3062 |
| 5ST3 COM (AS+FC) | 5ST3062-0MC |

| Shunt trips (ST) | Article No. |
|---|---|
| 110 ... 415 V AC, 110 ... 220 V DC | 5ST3030 |
| 24 ... 48 V AC/DC | 5ST3031 |
| 12 V DC | 5ST3031-0XX01 |

| Undervoltage releases (UR) | | Article No. |
|---|---|---|
| With integrated auxiliary switch | 230 V AC | 5ST3040 |
| | 110 V DC | 5ST3041 |
| | 24 V DC | 5ST3042 |
| Without integrated auxiliary switch | 230 V AC | 5ST3043 |
| | 110 V DC | 5ST3044 |
| | 24 V DC | 5ST3045 |

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# 5SV1 RCBOs

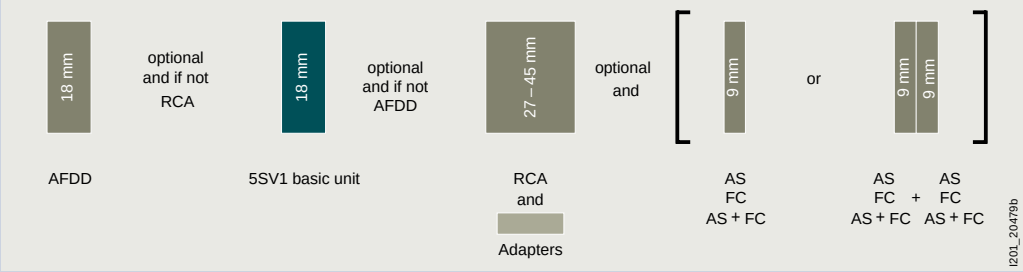
Siemens EcoTech

## Type A, 1P+N

| | Instantaneous | | Short-time delayed [G], Super resistant [K] |
|---|---|---|---|
| Rated voltage $U_n$ | 230 V AC | | 230 V AC |
| Mounting width | 1 MW | 1 MW | 1 MW |
| Short-circuit breaking capacity | 4.5 kA | 6 kA | 6 kA |
| N connection | Right | Right | Right |
| |  |  |  |

| $I_{\Delta n}$ | $I_n$ | Bulk packaging (12 units) | Characteristic B | Characteristic C | Characteristic B | Characteristic C | Characteristic B | Characteristic C |
|---|---|---|---|---|---|---|---|---|
| **Typ A** | | | | | | | | |
| 30 mA | 2 A | – | – | 5SV1313-7KK02 | – | 5SV1316-7KK02 | – | – |
| | 4 A | – | – | 5SV1313-7KK04 | – | 5SV1316-7KK04 | – | – |
| | 6 A | – | 5SV1313-6KK06 | 5SV1313-7KK06 | 5SV1316-6KK06 | 5SV1316-7KK06 | 5SV1316-6LK06 | 5SV1316-7LK06 |
| | | ■ | – | – | 5SV1316-6GV06 | 5SV1316-7GV06 | – | – |
| | 10 A | – | 5SV1313-6KK10 | 5SV1313-7KK10 | 5SV1316-6KK10 | 5SV1316-7KK10 | 5SV1316-6LK10 | 5SV1316-7LK10 |
| | | ■ | – | – | 5SV1316-6GV10 | 5SV1316-7GV10 | – | – |
| | 13 A | – | 5SV1313-6KK13 | 5SV1313-7KK13 | 5SV1316-6KK13 | 5SV1316-7KK13 | 5SV1316-6LK13 | 5SV1316-7LK13 |
| | | ■ | – | – | 5SV1316-6GV13 | 5SV1316-7GV13 | – | – |
| | 16 A | – | 5SV1313-6KK16 | 5SV1313-7KK16 | 5SV1316-6KK16 | 5SV1316-7KK16 | 5SV1316-6LK16 | 5SV1316-7LK16 |
| | | ■ | – | – | 5SV1316-6GV16 | 5SV1316-7GV16 | – | – |
| 300 mA | 2 A | – | – | 5SV1613-7KK02 | – | 5SV1616-7KK02 | – | – |
| | 4 A | – | – | 5SV1613-7KK04 | – | 5SV1616-7KK04 | – | – |
| | 6 A | – | 5SV1613-6KK06 | 5SV1613-7KK06 | 5SV1616-6KK06 | 5SV1616-7KK06 | – | – |
| | 10 A | – | 5SV1613-6KK10 | 5SV1613-7KK10 | 5SV1616-6KK10 | 5SV1616-7KK10 | – | – |
| | 13 A | – | 5SV1613-6KK13 | 5SV1613-7KK13 | 5SV1616-6KK13 | 5SV1616-7KK13 | – | – |
| | 16 A | – | 5SV1613-6KK16 | 5SV1613-7KK16 | 5SV1616-6KK16 | 5SV1616-7KK16 | – | – |

## Mounting concept




| | | | | | |
|---|---|---|---|---|---|
| AFDD | Arc fault detection units | See page 4/56 | AS+FC | Auxiliary switches and fault signal contacts | See page 4/65 |
| AS | Auxiliary switches | See page 4/62 | RCA | Remote control auxiliaries | See page 4/70 |
| FC | Fault signal contacts | See page 4/64 | | | |

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# Type F and AC, 1P+N

| | | | Instantaneous | | | Super resistant [K] | |
|---|---|---|---|---|---|---|---|
| | | Rated voltage $U_n$ | 230 V AC | | | 230 V AC | |
| | | Mounting width | 1 MW | 1 MW | | 1 MW | |
| | | Short-circuit breaking capacity | 4.5 kA | 6 kA | | 6 kA | |
| | | N connection | Right | Right | | Right | |
| | | |  |  | |  | |
| $I_{\Delta n}$ | $I_n$ | Bulk packaging (12 units) | Characteristic C | Characteristic B | Characteristic C | Characteristic B | Characteristic C |
| **Type F** | | | | | | | |
| 30 mA | 6 A | – | – | – | – | 5SV1316-3KK06 | 5SV1316-4KK06 |
| | 10 A | – | – | – | – | 5SV1316-3KK10 | 5SV1316-4KK10 |
| | 13 A | – | – | – | – | 5SV1316-3KK13 | 5SV1316-4KK13 |
| | 16 A | – | – | – | – | 5SV1316-3KK16 | 5SV1316-4KK16 |
| **Type AC** | | | | | | | |
| 30 mA | 2 A | – | 5SV1313-1KK02 | – | 5SV1316-1KK02 | – | – |
| | 4 A | – | 5SV1313-1KK04 | – | 5SV1316-1KK04 | – | – |
| | 6 A | – | 5SV1313-1KK06 | 5SV1316-0KK06 | 5SV1316-1KK06 | – | – |
| | 10 A | – | 5SV1313-1KK10 | 5SV1316-0KK10 | 5SV1316-1KK10 | – | – |
| | | ■ | 5SV1313-1GV10 | – | 5SV1316-1GV10 | – | – |
| | 13 A | – | 5SV1313-1KK13 | 5SV1316-0KK13 | 5SV1316-1KK13 | – | – |
| | 16 A | – | 5SV1313-1KK16 | 5SV1316-0KK16 | 5SV1316-1KK16 | – | – |
| | | ■ | 5SV1313-1GV16 | – | 5SV1316-1GV16 | – | – |
| 300 mA | 2 A | – | 5SV1613-1KK02 | – | 5SV1616-1KK02 | – | – |
| | 4 A | – | 5SV1613-1KK04 | – | 5SV1616-1KK04 | – | – |
| | 6 A | – | 5SV1613-1KK06 | 5SV1616-0KK06 | 5SV1616-1KK06 | – | – |
| | 10 A | – | 5SV1613-1KK10 | 5SV1616-0KK10 | 5SV1616-1KK10 | – | – |
| | 13 A | – | 5SV1613-1KK13 | 5SV1616-0KK13 | 5SV1616-1KK13 | – | – |
| | 16 A | – | 5SV1613-1KK16 | 5SV1616-0KK16 | 5SV1616-1KK16 | – | – |

## Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

| Fault signal contacts (FC) | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3020 |
| 2 NO | 5ST3021 |
| 2 NC | 5ST3022 |

| Auxiliary switches and fault signal contacts (AS+FC) | Article No. |
|---|---|
| 1 CO (AS) + 1 CO (FC) | 5ST3062 |
| 5ST3 COM (AS+FC) | 5ST3062-0MC |

| Remote control auxiliaries (RCA) | | Article No. |
|---|---|---|
| Basic | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3053 |
| | 177 ... 270 V AC | 5ST3054 |
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 |
| Communication-capable | 100 ... 240 V AC | 5ST3072-0MC new |
| Communication-capable with RCD/IR test | 100 ... 240 V AC | 5ST3073-0MC new |

| Adapters for remote control auxiliaries (RCA) | Article No. |
|---|---|
| 1 MW | 5ST3820-6 |

| Arc fault detection units (AFDD) | | Article No. |
|---|---|---|
| For 5SV1 basic units | $I_n$ up to 16 A | 5SM6011-2 |

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# 5TY1 COM electronic circuit protection devices (ECPD) with measuring and communication function

Siemens EcoTech

new

## Type F [1)]



| | Instantaneous |
|---|---|
| Rated voltage $U_n$ | 230 V AC |
| Mounting width | 2 MW |
| Short-circuit breaking capacity | 75 kA |
| Magnetic tripping operation (instantaneous tripping) | 3 ... 3.6 × $I_n$ |
| Thermal tripping (delayed tripping) | 1.05 ... 1.13 × $I_n$ |
| N connection | Right |



| $I_{\Delta n}$ | $I_n$ | |
|---|---|---|
| **Type F** | | |
| 30 mA | 6 A | 5TY1350-3MF06 |
| | 10 A | 5TY1350-3MF10 |
| | 16 A | 5TY1350-3MF16 |

[1)] RCBO function conforming to IEC/EN 61009-1 (IEC/EN 62423)

## Monitoring functions with limit monitoring

- Switching state with trip monitoring: short-circuit, overload, arc fault, residual current, undervoltage, overvoltage
- Counters incl. limit monitoring for:
  - Operating hours
  - Operating hours with load current
  - Operating cycles electrical/mechanical
  - Tripping operations
  - Short circuits
- Limit values for:
  - Overcurrent alarm 1 and alarm 2
  - Undercurrent alarm 1 and alarm 2
  - Overvoltage alarm 1 and alarm 2
  - Undervoltage alarm 1 and alarm 2
  - Temperature

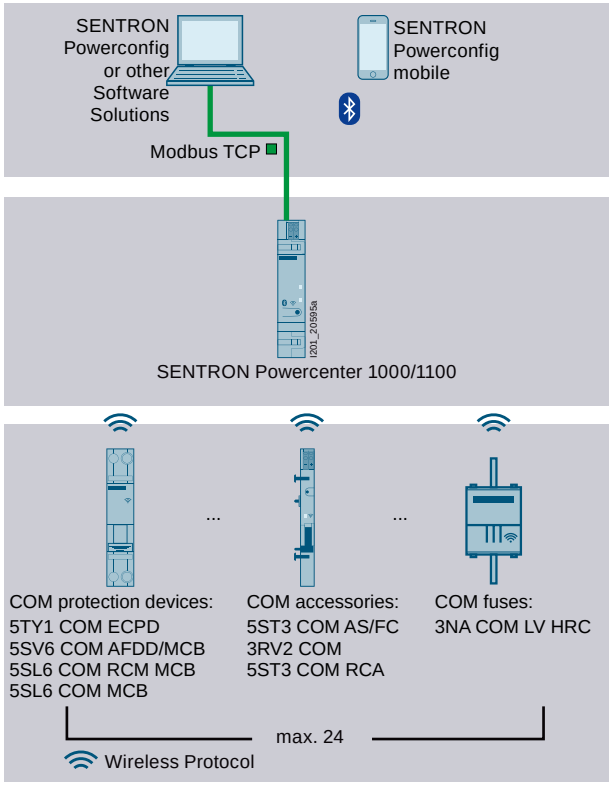
| Measured values | Unit | Memory |
|---|---|---|
| Temperature | °C | 1 hour in 1-minute intervals; 7 days in 15-minute intervals |
| Average temperature | °C | – |
| Current | A | Min. and max. values over 10 days; 1 hour in 10-second intervals; 7 days in 15-minute intervals |
| Average current | A | – |
| Maximum current | A | – |
| Voltage | V | Min. and max. values over 10 days |
| Line frequency | Hz | Min. and max. values over 10 days |
| Active power | W | Min. and max. values over 10 days |
| Apparent power | VA | Min. and max. values over 10 days |
| Reactive power | Var | – |
| Power factor | | – |
| Active energy imported | Wh | – |
| Active energy exported | Wh | – |
| Reactive energy imported | Varh | – |
| Reactive energy exported | Varh | – |

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## SENTRON Powercenter 1000/1100 data transceiver




- Wireless radio transmission of measured values and data to the SENTRON Powercenter 1000/1100 data transceiver
- Commissioning, parameter assignment, firmware updates and further processing of the data via the SENTRON Powercenter 1000/1100 data transceiver



| SENTRON Powercenter | Article No. |
|---|---|
| SENTRON Powercenter 1000 | 7KN1110-0MC00 |
| SENTRON Powercenter 1100 | 7KN1111-0MC00 |

**See page 10/26**

You will find further information at **www.siemens.com/lowvoltage/manuals**

Installation Manual – Circuit protection devices with communication and measuring function **(109791805)**

System Manual – Circuit protection devices with communication and measuring function **(109791806)**

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# 5SM6 arc fault detection units

## For combination with an MCB or RCBO

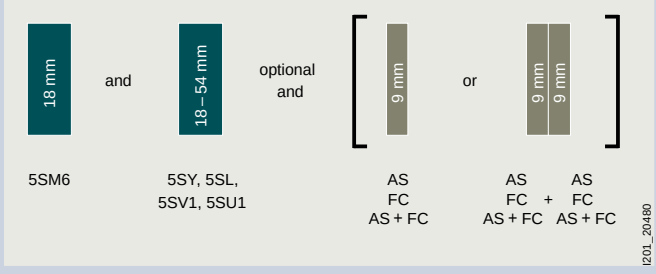


| For combination with basic units | | | Rated current $I_n$ | |
|---|---|---|---|---|
| Width of basic unit | Miniature circuit breakers | RCBO | | |
| 1 MW | 5SL60 (no KL types) | 5SV1 | Up to 16 A | 5SM6011-2 |
| | | | Up to 40 A | 5SM6014-2 |
| 2 MW | 5SY [1], 5SL4 (only 1+N devices, not compact) | 5SU1 (2 MW, 3 MW) | Up to 16 A | 5SM6021-2 |
| | | | Up to 40 A | 5SM6024-2 |

[1] Not suitable for use with 5SY5 or 5SY8

4

### Mounting concept




| | | |
|---|---|---|
| AS | Auxiliary switches | See page 4/62 |
| FC | Fault signal contacts | See page 4/64 |
| AS+FC | Auxiliary switches and fault signal contacts | See page 4/65 |

The mounting concept shown is only one example of how devices and accessories can be combined.

### Accessories

| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |
| **Fault signal contacts (FC)** | | **Article No.** |
| 1 NO + 1 NC | | 5ST3020 |
| 2 NO | | 5ST3021 |
| 2 NC | | 5ST3022 |
| **Auxiliary switches and fault signal contacts (AS+FC)** | | **Article No.** |
| 1 CO (AS) + 1 CO (FC) | | 5ST3062 |
| 5ST3 COM (AS+FC) | | 5ST3062-0MC |

**See suitable busbars, from page 4/76 onwards**
**See suitable terminals and end caps, from page 4/80 onwards**


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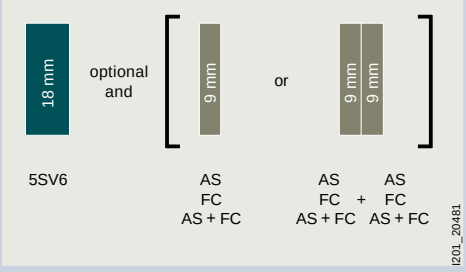
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# 5SV6 AFDD/MCB



| Mounting width | 1 MW | | 1 MW pigtail | |
|---|---|---|---|---|
| |  | |  | |
| **Rated current $I_n$** | **Bulk packaging (12 units)** | **Characteristic** | | **Characteristic** | |
| | | **B** | **C** | **B** | **C** |
| 6 A | – | 5SV6016-6KK06 | 5SV6016-7KK06 | 5SV6016-6KP06 | 5SV6016-7KP06 |
| | ■ | 5SV6016-6GV06 | 5SV6016-7GV06 | – | – |
| 10 A | – | 5SV6016-6KK10 | 5SV6016-7KK10 | 5SV6016-6KP10 | 5SV6016-7KP10 |
| | ■ | 5SV6016-6GV10 | 5SV6016-7GV10 | – | – |
| 13 A | – | 5SV6016-6KK13 | 5SV6016-7KK13 | 5SV6016-6KP13 | 5SV6016-7KP13 |
| | ■ | 5SV6016-6GV13 | – | – | – |
| 16 A | – | 5SV6016-6KK16 | 5SV6016-7KK16 | 5SV6016-6KP16 | 5SV6016-7KP16 |
| | ■ | 5SV6016-6GV16 | 5SV6016-7GV16 | – | – |
| 20 A | – | 5SV6016-6KK20 | 5SV6016-7KK20 | 5SV6016-6KP20 | 5SV6016-7KP20 |
| 25 A | – | 5SV6016-6KK25 | 5SV6016-7KK25 | 5SV6016-6KP25 | 5SV6016-7KP25 |
| | ■ | 5SV6016-6GV25 | – | – | – |
| 32 A | – | 5SV6016-6KK32 | 5SV6016-7KK32 | 5SV6016-6KP32 | 5SV6016-7KP32 |
| 40 A | – | 5SV6016-6KK40 | 5SV6016-7KK40 | 5SV6016-6KP40 | 5SV6016-7KP40 |

## Mounting concept




| | | |
|---|---|---|
| AS | Auxiliary switches | See page 4/62 |
| FC | Fault signal contacts | See page 4/64 |
| AS+FC | Auxiliary switches and fault signal contacts | See page 4/65 |

## Accessories

| **Auxiliary switches (AS)** | | **Article No.** |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |
| **Fault signal contacts (FC)** | | **Article No.** |
| 1 NO + 1 NC | | 5ST3020 |
| 2 NO | | 5ST3021 |
| 2 NC | | 5ST3022 |
| **Auxiliary switches and fault signal contacts (AS+FC)** | | **Article No.** |
| 1 CO (AS) + 1 CO (FC) | | 5ST3062 |
| 5ST3 COM (AS+FC) | | 5ST3062-0MC |

**See suitable busbars, from page 4/76 onwards**
**See suitable terminals and end caps, from page 4/80 onwards**

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# 5SV6 COM AFDD/MCB with measuring and communication function

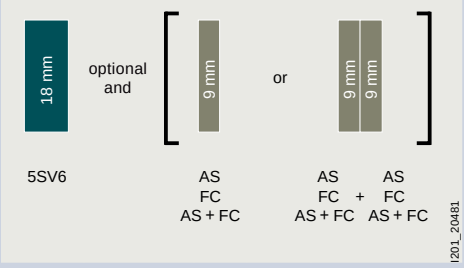
| | |
|---|---|
| Mounting width | 1 MW |



| Rated current $I_n$ | Characteristic | |
|---|---|---|
| | B | C |
| 6 A | 5SV6016-6MC06 | 5SV6016-7MC06 |
| 10 A | 5SV6016-6MC10 | 5SV6016-7MC10 |
| 13 A | 5SV6016-6MC13 | 5SV6016-7MC13 |
| 16 A | 5SV6016-6MC16 | 5SV6016-7MC16 |
| 20 A | 5SV6016-6MC20 | 5SV6016-7MC20 |
| 25 A | 5SV6016-6MC25 | 5SV6016-7MC25 |
| 32 A | 5SV6016-6MC32 | 5SV6016-7MC32 |

**Note:**
Please note the country-specific radio licenses of the products at
www.siemens.com/lowvoltage/certificates (109801197)

## Mounting concept




| | | |
|---|---|---|
| AS | Auxiliary switches | See page 4/62 |
| FC | Fault signal contacts | See page 4/64 |
| AS+FC | Auxiliary switches and fault signal contacts | See page 4/65 |

## Accessories

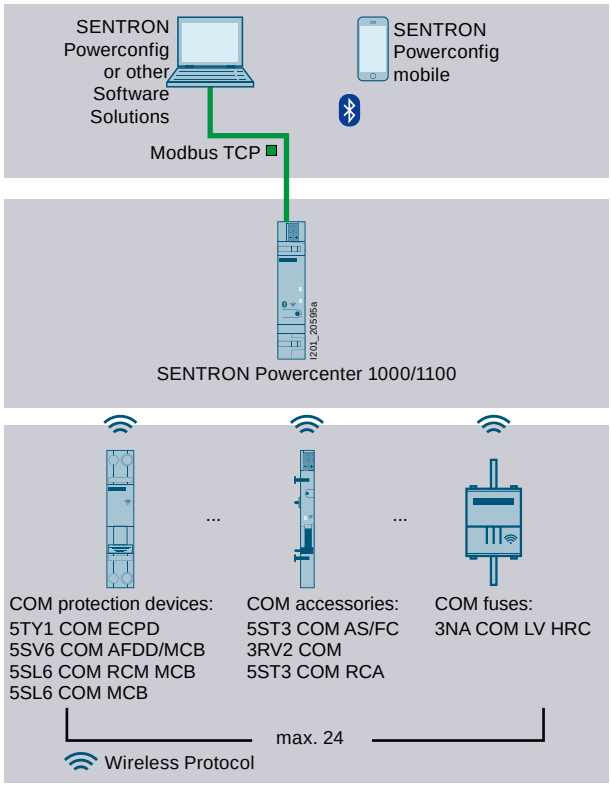
| Auxiliary switches (AS) | | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |
| **Fault signal contacts (FC)** | | **Article No.** |
| 1 NO + 1 NC | | 5ST3020 |
| 2 NO | | 5ST3021 |
| 2 NC | | 5ST3022 |
| **Auxiliary switches and fault signal contacts (AS+FC)** | | **Article No.** |
| 1 CO (AS) + 1 CO (FC) | | 5ST3062 |
| 5ST3 COM (AS+FC) | | 5ST3062-0MC |
| **Data transceiver (essential accessory)** | | **Article No.** |
| SENTRON Powercenter 1000 | | 7KN1110-0MC00 |

**See suitable busbars, from page 4/76 onwards**
**See suitable terminals and end caps, from page 4/80 onwards**


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## SENTRON Powercenter 1000/1100 data transceiver




- Wireless radio transmission of measured values and data to the SENTRON Powercenter 1000/1100 data transceiver
- Commissioning, parameter assignment, firmware updates and further processing of the data via the SENTRON Powercenter 1000/1100 data transceiver



| SENTRON Powercenter | Article No. |
|---|---|
| SENTRON Powercenter 1000 | 7KN1110-0MC00 |
| SENTRON Powercenter 1100 | 7KN1111-0MC00 |

**See page 10/26**

You will find further information at **www.siemens.com/lowvoltage/manuals**

Installation Manual – Circuit protection devices with communication and measuring function **(109791805)**

System Manual – Circuit protection devices with communication and measuring function **(109791806)**

## Monitoring functions with limit monitoring

- Switching state with trip monitoring: short-circuit, overload, arc fault
- Counters incl. limit monitoring for:
  - Operating hours
  - Operating hours with load current
  - Operating cycles (ON/OFF)
  - Tripping operations
  - Short circuits
- Limit values for:
  - Overcurrent alarm 1 and alarm 2
  - Undercurrent alarm 1 and alarm 2
  - Overvoltage alarm 1 and alarm 2
  - Undervoltage alarm 1 and alarm 2
  - Lower voltage threshold for AFDD tripping
  - Temperature

| Measured values | Unit | Memory |
|---|---|---|
| Temperature | °C | 1 hour in 1-minute intervals; 7 days in 15-minute intervals |
| Average temperature | °C | – |
| Current | A | Min. and max. values over 10 days; 1 hour in 10-second intervals; 7 days in 15-minute intervals |
| Average current | A | – |
| Maximum current | A | – |
| Voltage | V | Min. and max. values over 10 days |
| Line frequency | Hz | Min. and max. values over 10 days |
| Active power | W | Min. and max. values over 10 days |
| Apparent power | VA | Min. and max. values over 10 days |
| Reactive power | Var | – |
| Power factor | | – |
| Active energy imported | Wh | 7 days in 15-minute intervals; 30 days in 1-day intervals |
| Active energy exported | Wh | – |
| Reactive energy imported | Varh | – |
| Reactive energy exported | Varh | – |

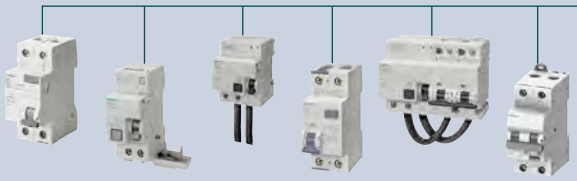
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# Overview of the modular system

## Residual current protective devices



| | | | | 5SV (16 ... 80 A) | 5SM2 + MCB | 5SM2 + 5SP4 | 5SU1 | 5SU1 (125 A) | 5SU1... FP/FR |
|---|---|---|---|---|---|---|---|---|---|
| **5SM6 arc fault detection units** | | | **Article No.** | | | | | | |
|  | Rated current up to 16 A | Standard | 5SM6021-2 | – | – | – | ■ | – | – |
| | | For compact devices 1P+N in 1 MW | 5SM6011-2 | – | – | – | – | – | – |
| | Rated current up to 40 A | Standard | 5SM6024-2 | – | – | – | ■ | – | – |
| | | For compact devices 1P+N in 1 MW | 5SM6014-2 | – | – | – | – | – | – |
| **Auxiliary switches (AS)** | | | **Article No.** | | | | | | |
|  | 1 NO + 1 NC | Standard | 5ST3010 | ■ | ■ | ■ | ■ | ■ | – |
| | | For low power | 5ST3013 | ■ | ■ | ■ | ■ | ■ | – |
| | | For low power (with diode) | 5ST3013-0XX01 | ■ | ■ | ■ | ■ | ■ | – |
| | 2 NO | Standard | 5ST3011 | ■ | ■ | ■ | ■ | ■ | – |
| | | For low power | 5ST3014 | ■ | ■ | ■ | ■ | ■ | – |
| | 2 NC | Standard | 5ST3012 | ■ | ■ | ■ | ■ | ■ | – |
| | | For low power | 5ST3015 | ■ | ■ | ■ | ■ | ■ | – |
| | 1 CO | Standard | 5ST3016 | ■ | ■ | ■ | ■ | ■ | – |
| | | | 5ST1010-0FP | – | – | – | – | – | ■ |
| **Fault signal contacts (FC)** | | | **Article No.** | | | | | | |
|  | 1 NO + 1 NC | | 5ST3020 | ■ | ■ | ■ | ■ | ■ | – |
| | 2 NO | | 5ST3021 | ■ | ■ | ■ | ■ | ■ | – |
| | 2 NC | | 5ST3022 | ■ | ■ | ■ | ■ | ■ | – |
| **Auxiliary switches and fault signal contacts (AS+FC)** | | | **Article No.** | | | | | | |
|  | 1 CO (AS) + 1 CO (FC) | Standard | 5ST3062 | ■ | ■ | ■ | ■ | ■ | – |
| | 5ST3 COM (AS+FC) | With measuring and communication function | 5ST3062-0MC | ■ | ■ | ■ | ■ | ■ | – |
| **Shunt trips (ST)** | | | **Article No.** | | | | | | |
|  | 110 ... 415 V AC, 110 ... 220 V DC | | 5ST3030 | ■ | ■ | ■ | ■ | ■ | – |
| | 24 ... 48 V AC/DC | | 5ST3031 | ■ | ■ | ■ | ■ | ■ | – |
| | 12 V DC | | 5ST3031-0XX01 | ■ | ■ | ■ | ■ | ■ | – |
| **Undervoltage releases (UR)** | | | **Article No.** | | | | | | |
|  | With integrated auxiliary switch | 230 V AC | 5ST3040 | ■ | ■ | ■ | ■ | ■ | – |
| | | 110 V DC | 5ST3041 | ■ | ■ | ■ | ■ | ■ | – |
| | | 24 V DC | 5ST3042 | ■ | ■ | ■ | ■ | ■ | – |
| | Without integrated auxiliary switch | 230 V AC | 5ST3043 | ■ | ■ | ■ | ■ | ■ | – |
| | | 110 V DC | 5ST3044 | ■ | ■ | ■ | ■ | ■ | – |
| | | 24 V DC | 5ST3045 | ■ | ■ | ■ | ■ | ■ | – |
| **Remote control auxiliaries (RCA)** | | | **Article No.** | | | | | | |
|  | Basic | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3053 | – | – | – | ■ | – | – |
| | | 177 ... 270 V AC | 5ST3054 | – | – | – | ■ | – | – |
| | Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 | ■ | ■ | – | ■ | – | – |
| | | 177 ... 270 V AC | 5ST3056 | ■ | ■ | – | ■ | – | – |
| | Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 | ■ | ■ | – | ■ | – | – |
| | | 177 ... 270 V AC | 5ST3058 | ■ | ■ | – | ■ | – | – |
|  | Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 | ■ | ■ | – | ■ | – | – |
| | | 170 ... 277 V AC, 77 ... 286 V DC | 5ST3071 | ■ | – | – | ■ | – | – |
| | Communication-capable new | 100 ... 240 V AC | 5ST3072-0MC | ■ | ■ | – | ■ | – | – |
| | Communication-capable with RCD/IR test new | 100 ... 240 V AC | 5ST3073-0MC | ■ | ■ | – | ■ | – | – |
| **Standard busbars** | | | **Article No.** | | | | | | |
|  | Cannot be cut | | 5ST36.. | ■ | ■ | ■ | ■ | ■ | ■ |
| | Can be cut | | 5ST37.. | ■ | ■ | ■ | ■ | ■ | ■ |
| **Compact busbars** | | | **Article No.** | | | | | | |
|  | Cannot be cut | | 5ST36.. | ■ | – | – | – | – | – |
| | Can be cut | | 5ST37.. | ■ | – | – | – | – | – |

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■ Suitable for all versions □ Suitable for some versions



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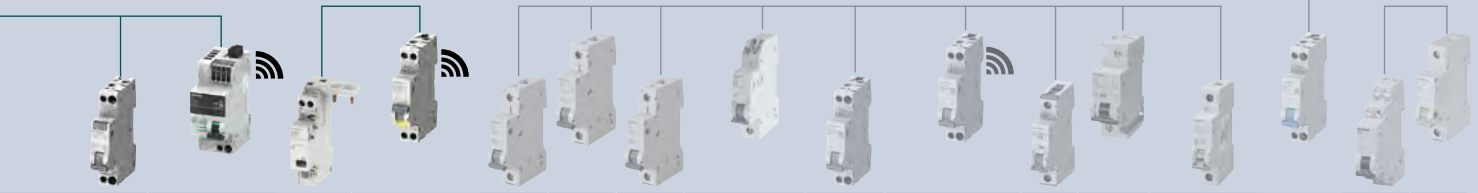


Arc fault detection devices

Miniature circuit breakers

Circuit breakers for equipment

Switching devices



| 5SV1 | 5TY1 COM | 5SM6 | 5SV6/ 5SV6 COM | 5SL3 | 5SL6 | 5SL4 | 5SJ6...-.KS | 5SL30 | 5SL60/ 5SL6 COM | 5SY | 5SP4/ 5SP5 | 5SJ4..HG.. | 5SY17 | 5TE8 | 5TL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| – | – | – | – | – | – | □ | – | – | – | □ | – | – | – | – | – |
| ■ | – | – | – | – | – | – | – | – | □ | – | – | – | – | – | – |
| – | – | – | – | – | – | □ | – | – | – | □ | – | – | – | – | – |
| ■ | – | – | – | – | – | – | – | – | □ | – | – | – | – | – | – |
| ■ | – | □ | ■ | ■ | ■ | ■ | – | ■ | ■ | ■ | ■ | ...-0HG | ■ | ■ | ■ |
| ■ | – | □ | ■ | ■ | ■ | ■ | – | ■ | ■ | ■ | ■ | – | ■ | ■ | ■ |
| ■ | – | □ | ■ | ■ | ■ | ■ | – | ■ | ■ | ■ | ■ | – | ■ | ■ | ■ |
| ■ | – | □ | ■ | ■ | ■ | ■ | – | ■ | ■ | ■ | ■ | ...-0HG | ■ | ■ | ■ |
| ■ | – | □ | ■ | ■ | ■ | ■ | – | ■ | ■ | ■ | ■ | – | ■ | ■ | ■ |
| ■ | – | □ | ■ | ■ | ■ | ■ | – | ■ | ■ | ■ | ■ | ...-0HG | ■ | ■ | ■ |
| ■ | – | □ | ■ | ■ | ■ | ■ | – | ■ | ■ | ■ | ■ | – | ■ | ■ | ■ |
| ■ | – | □ | ■ | ■ | ■ | ■ | – | ■ | ■ | ■ | ■ | – | ■ | ■ | ■ |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| ■ | – | □ | ■ | ■ | ■ | ■ | – | ■ | ■ | ■ | ■ | ...-0HG | ■ | – | – |
| ■ | – | □ | ■ | ■ | ■ | ■ | – | ■ | ■ | ■ | ■ | ...-0HG | ■ | – | – |
| ■ | – | □ | ■ | ■ | ■ | ■ | – | ■ | ■ | ■ | ■ | ...-0HG | ■ | – | – |
| ■ | – | □ | ■ | ■ | ■ | ■ | – | ■ | ■ | ■ | ■ | – | ■ | – | – |
| ■ | – | □ | ■ | ■ | ■ | ■ | – | ■ | ■ | ■ | ■ | – | ■ | – | – |
| – | – | □ | – | – | – | ■ | – | – | – | ■ | ■ | ...-0HG | – | – | – |
| – | – | □ | – | – | – | ■ | – | – | – | ■ | ■ | ...-0HG | – | – | – |
| – | – | □ | – | – | – | ■ | – | – | – | ■ | ■ | – | – | – | – |
| – | – | □ | – | – | – | ■ | – | – | – | ■ | ■ | – | – | – | – |
| – | – | □ | – | – | – | ■ | – | – | – | ■ | ■ | – | – | – | – |
| – | – | □ | – | – | – | ■ | – | – | – | ■ | ■ | – | – | – | – |
| – | – | □ | – | – | – | ■ | – | – | – | ■ | ■ | – | – | – | – |
| ■ | – | – | – | – | ■ | ■ | – | – | ■ | ■ | – | – | ■ | – | ■ |
| ■ | – | – | – | – | ■ | ■ | – | – | ■ | ■ | – | – | ■ | – | ■ |
| ■ | – | – | – | – | ■ | ■ | – | – | ■ | ■ | ■ | – | ■ | – | ■ |
| ■ | – | – | – | – | ■ | ■ | – | – | ■ | ■ | ■ | – | ■ | – | ■ |
| ■ | – | – | – | – | ■ | ■ | – | – | ■ | ■ | – | – | ■ | – | ■ |
| ■ | – | – | – | – | ■ | ■ | – | – | ■ | ■ | – | – | ■ | – | ■ |
| ■ | – | – | – | – | ■ | ■ | – | – | ■ | ■ | ■ | – | ■ | – | – |
| ■ | – | – | – | – | ■ | ■ | – | – | ■ | ■ | ■ | – | ■ | – | – |
| ■ | – | – | – | – | ■ | ■ | – | – | ■ | ■ | ■ | – | ■ | – | – |
| ■ | ■ | □ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| ■ | ■ | □ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | □ | ■ |
| ■ | ■ | ■ | ■ | □ | □ | □ | – | ■ | ■ | – | – | – | ■ | – | – |
| ■ | ■ | ■ | ■ | □ | □ | □ | – | ■ | ■ | – | – | – | – | – | – |
| From page 4/14 | | From page 4/56 | | From page 3/12 | | | | | | | | | From page 3/46 | From page 5/6 | |

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# Electrical accessories



## Auxiliary switches (AS)

- Signals the contact position of the mounted device
- Version for the switching of small currents and voltages according to EN 61131-2 for control of programmable control systems (PLCs)
- Test button enables the testing of control circuits without the need to switch the mounted device

| For combining with basic units | | | | | | Contacts | Version | Mounting width (1 MW = 18 mm) | Article No. |
|---|---|---|---|---|---|---|---|---|---|
| Miniature circuit breakers | Circuit breakers for equipment | RCCBs | RCBOs | Arc fault detection devices | ON/OFF switches | | | | |
| **Auxiliary switches (AS)** | | | | | | | | | |
| – | – | 5SM3 (3P+N, 100/125 A) | – | – | – | 1 NO + 1 NC | Standard | 0.5 MW | 5SW3330 |
| 5SL, 5SY, 5SP4, 5SP5 | 5SY17 | 5SV (16 ... 80 A) | 5SU1 [1], 5SV1 | 5SV6 | 5TL1, 5TE8 | 1 NO + 1 NC | Standard | 0.5 MW | 5ST3010 |
| | | | | | | | For low power | 0.5 MW | 5ST3013 |
| | | | | | | | For low power (with diode) | 0.5 MW | 5ST3013-0XX01 |
| | | | | | | 2 NO | Standard | 0.5 MW | 5ST3011 |
| | | | | | | | For low power | 0.5 MW | 5ST3014 |
| | | | | | | 2 NC | Standard | 0.5 MW | 5ST3012 |
| | | | | | | | For low power | 0.5 MW | 5ST3015 |
| | | | | | | 1 CO | Standard | 0.5 MW | 5ST3016 |
| – | – | – | 5SU1... FP/FR | – | – | 1 CO | Standard | 0.5 MW | 5ST1010-0FP |
| **Auxiliary switches (AS) with TEST button** | | | | | | | | | |
| 5SL, 5SY, 5SP4, 5SP5 | 5SY17 | 5SV (16 ... 80 A) | 5SU1 [1], 5SV1 | 5SV6 | 5TL1, 5TE8 | 1 NO + 1 NC | Standard | 0.5 MW | 5ST3010-2 |
| | | | | | | | For low power | 0.5 MW | 5ST3013-2 |
| | | | | | | 2 NO | Standard | 0.5 MW | 5ST3011-2 |
| | | | | | | | For low power | 0.5 MW | 5ST3014-2 |
| | | | | | | 2 NC | Standard | 0.5 MW | 5ST3012-2 |
| | | | | | | | For low power | 0.5 MW | 5ST3015-2 |

[1] 5ST3805-1 handle coupler required


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## Further technical specifications

| | | 5ST3010, 5ST3011, 5ST3012, 5ST3016 | 5ST3010-2, 5ST3011-2, 5ST3012-2 | 5ST3013, 5ST3014, 5ST3015, 5ST3013-0XX01[1] | 5ST3013-2, 5ST3014-2, 5ST3015-2 | 5SW3330 | 5ST1010-0FP |
|---|---|---|---|---|---|---|---|
| **Standards** | | | | | | | |
| Standards | IEC/EN | IEC/EN 62019, IEC/EN 60947-5-1 | | | | IEC/EN 62019 | |
| | UL, CSA | UL 1077, CSA C22.2 No. 235 | – | UL 1077, CSA C22.2 No. 235 | – | | |
| **Contacts** | | | | | | | |
| Minimum contact load | | 50 mA, 24 V | | 1 mA, 5 V DC | 5 mA, 5 V DC | 50 mA, 24 V | 5 mA, 24 V DC |
| Maximum contact load | | – | | 100 mA, 30 V DC | 50 mA, 30 V DC | – | |
| Contact load acc. to IEC/EN 62019 and IEC/EN 60947-5-1 | 230 V AC, AC-12 | – | | | | 5/– | 6 A/– |
| | 230 V AC, AC-13 | 6 A/6 A | | – | | | |
| | 400 V AC, AC-13 | 2 A/2 A | | – | | | |
| | 230 V AC, AC-14 | 6 A/6 A | | – | | | |
| | 400 V AC, AC-14 | 2 A/2 A | | – | | | |
| | 24 V DC, DC-13 | 6 A/3 A | | – | | | |
| | 30 V DC, DC-14 | – | | 0.1 A | | – | |
| | 60 V DC, DC-13 | 3 A/1.5 A | | – | | | |
| | 110 V DC, DC-13 | 1 A/0.75 A | | – | | | |
| | 220 V DC, DC-12 | – | | | | 0.5/– | 1 A/– |
| | 220 V DC, DC-13 | 1 A/0.5 A | | – | | | |
| Contact load acc. to UL | 120 V AC | – | | | | | |
| | 125 V AC | 3 A | – | | | | |
| | 240 V AC | 4 A | – | | | | |
| | 277 V AC | – | | | | | |
| | 480 V AC | – | | | | | |
| | 60 V DC | – | | | | | |
| | 125 V DC | 1.1 A | – | | | | |
| | 250 V DC | 0.55 A | – | | | | |
| Service life, on average, with rated load | Actuations | 20000 | | | | – | 8000 |
| **Safety** | | | | | | | |
| Short-circuit protection | | Miniature circuit breakers 5SY... 6 A or gG 6 A fuse | | | | B6 or C6 or gL/gG 6 A fuse | |
| **Connections** | | | | | | | |
| Conductor cross-sections | | 0.5 ... 2.5 mm² (AWG 22 ... 14) | | | | 0.75 ... 2.5 mm² | |
| Terminals | Max. tightening torque | 0.5 Nm (4.5 lb-in) | | | | – | 0.6 Nm |
| **Ambient conditions** | | | | | | | |
| Permissible ambient temperature | | –40 ... +70 °C | | | | | –25 ... +60 °C |
| Permissible storage temperature | | –40 ... +75 °C | | | | | –40 ... +70 °C |
| Resistance to climate | Acc. to IEC 60068-2-30 | 28 cycles | | | | | |
| Mounting position | | Any | | | | | |
| Shock at 11 ms half-sine | Acc. to IEC 60068-2-27 | 150 m/s² | | | | | – |
| Resistance to vibrations at 10 ... 150 Hz | Acc. to IEC 60068-2-6 | 50 m/s² | | | | | – |

[1] No approvals

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# Electrical accessories



## Fault signal contacts (FC)

- Signals automatic tripping of the circuit protection device in the event of a fault, such as an overload or a short circuit
- If the fault signal contact is activated, the contact position does not change if the mounted circuit protection device is tripped manually
- Version with TEST and RESET buttons enables the testing of control circuits without operation of the circuit protection device
- Red RESET button in the operating handle indicates automatic tripping of the mounted circuit protection device



| For combining with basic units | | | | | Contacts | Mounting width (1 MW = 18 mm) | Article No. |
|---|---|---|---|---|---|---|---|
| Miniature circuit breakers | Circuit breakers for equipment | RCCBs | RCBOs | Arc fault detection devices | | | |
| **Fault signal contacts (FC)** | | | | | | | |
| 5SL, 5SY, 5SP4, 5SP5 | 5SY17 | 5SV (16 ... 80 A) | 5SU1 [1], 5SV1 | 5SV6 | 1 NO + 1 NC | 0.5 MW | 5ST3020 |
| | | | | | 2 NO | 0.5 MW | 5ST3021 |
| | | | | | 2 NC | 0.5 MW | 5ST3022 |
| **Fault signal contacts (FC) with TEST and RESET buttons** | | | | | | | |
| 5SL, 5SY, 5SP4, 5SP5 | 5SY17 | 5SV (16 ... 80 A) | 5SU1 [1], 5SV1 | 5SV6 | 1 NO + 1 NC | 0.5 MW | 5ST3020-2 |
| | | | | | 2 NO | 0.5 MW | 5ST3021-2 |
| | | | | | 2 NC | 0.5 MW | 5ST3022-2 |

[1] 5ST3805-1 handle coupler required

## Further technical specifications

| | | 5ST3020, 5ST3021, 5ST3022 | 5ST3020-2, 5ST3021-2, 5ST3022-2 |
|---|---|---|---|
| **Standards** | | | |
| Standards | IEC/EN | IEC/EN 62019, IEC/EN 60947-5-1 | |
| | UL, CSA | UL 1077, CSA C22.2 No. 235 | – |
| **Contacts** | | | |
| Minimum contact load | | 50 mA, 24 V | |
| Contact load acc. to IEC/EN 62019/IEC/EN 60947-5-1 | 230 V AC, AC-13 | 6 A/6 A | |
| | 400 V AC, AC-13 | 6 A/6 A | |
| | 230 V AC, AC-14 | 2 A/2 A | |
| | 400 V AC, AC-14 | 2 A/2 A | |
| | 24 V DC, DC-13 | 6 A/3 A | |
| | 60 V DC, DC-13 | 3 A/1.5 A | |
| | 110 V DC, DC-13 | 1 A/0.75 A | |
| | 220 V DC, DC-13 | 1 A/0.5 A | |
| Contact load acc. to UL | 120 V AC | – | |
| | 125 V AC | 3 A | – |
| | 240 V AC | 4 A | – |
| | 277 V AC | – | |
| | 480 V AC | 1.5 A | – |
| | 60 V DC | – | |
| | 125 V DC | 1.1 A | – |
| | 250 V DC | 0.55 A | – |
| Service life, on average, with rated load | Actuations | 20000 | |
| **Safety** | | | |
| Short-circuit protection | | Miniature circuit breaker or gG 6 A fuse | |
| **Connections** | | | |
| Conductor cross-sections | | 0.5 ... 2.5 mm² (AWG 22 ... 14) | |
| Terminals | Max. tightening torque | 0.5 Nm (4.5 lb-in) | |
| **Ambient conditions** | | | |
| Permissible ambient temperature | | –25 ... +55 °C | |
| Permissible storage temperature | | –40 ... +75 °C | |
| Resistance to climate | Acc. to IEC 60068-2-30 | 28 cycles | |
| Mounting position | | Any | |
| Shock at 11 ms half-sine | Acc. to IEC 60068-2-27 | 150 m/s² | |
| Resistance to vibration at 10 ... 150 Hz | Acc. to IEC 60068-2-6 | 50 m/s² | |

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# Auxiliary switches and fault signal contacts (AS+FC)

- Combines the function of both switches in a width of only 0.5 MW (9 mm)
- Signals the contact position of the mounted circuit protection device
- Signals automatic tripping of the circuit protection device in the event of a fault, such as an overload, a short circuit or a fault current
- If the fault signal contact is activated, the contact position does not change if the mounted circuit protection device is tripped manually

| For combining with basic units | | | | | Contacts | Mounting width (1 MW = 18 mm) | Article No. |
|---|---|---|---|---|---|---|---|
| Miniature circuit breakers | Circuit breakers for equipment | RCCBs | RCBOs | Arc fault detection devices | | | |
| **Auxiliary switches and fault signal contacts (AS+FC)** | | | | | | | |
| 5SL, 5SY, 5SP4, 5SP5 | 5SY17 | 5SV (16 ... 80 A) | 5SU1 [1], 5SV1 | 5SV6 | 1 CO (AS) + 1 CO (FC) | 0.5 MW | 5ST3062 |

[1] 5ST3805-1 handle coupler required

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## Further technical specifications

| | | 5ST3062 |
|---|---|---|
| **Standards** | | |
| Standards | IEC/EN | IEC/EN 62019, IEC/EN 60947-5-1 |
| | UL, CSA | UL 1077, CSA C22.2 No. 235 |
| **Contacts** | | |
| Minimum contact load | | 50 mA, 24 V |
| Maximum contact load | | – |
| Contact load according to IEC/EN 62019/ IEC/EN 60947-5-1 | 230 V AC, AC-13 | 6 A/6 A |
| | 400 V AC, AC-14 | 2 A/2 A |
| Contact load according to IEC/EN 62019/ IEC/EN 60947-5-1 | 24 V DC, DC-13 | 3 A/3 A |
| | 60 V DC, DC-13 | 3 A/1 A |
| | 110 V DC, DC-13 | 0.5 A/0.5 A |
| | 220 V DC, DC-13 | 0.5 A/0.3 A |
| Contact load acc. to UL | 125 V AC | 2 A |
| | 240 V AC | 1.5 A |
| | 480 V AC | 0.75 A |
| | 125 V DC | 0.5 A |
| | 250 V DC | 0.3 A |
| Service life, on average, with rated load | Actuations | 20000 |
| **Safety** | | |
| Short-circuit protection | | Miniature circuit breaker or gG 6 A fuse |
| **Connections** | | |
| Conductor cross-sections | | 0.5 ... 2.5 $mm^2$ (AWG 22 ... 14) |
| Terminals | Max. tightening torque | 0.5 Nm (4.5 lb-in) |
| **Ambient conditions** | | |
| Permissible ambient temperature | | –25 ... +55 °C |
| Permissible storage temperature | | –40 ... +75 °C |
| Resistance to climate | Acc. to IEC 60068-2-30 | 28 cycles |
| Mounting position | | Any |
| Shock at 11 ms half-sine | Acc. to IEC 60068-2-27 | 150 $m/s^2$ |
| Resistance to vibrations at 10 ... 150 Hz | Acc. to IEC 60068-2-6 | 50 $m/s^2$ |

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# Electrical accessories



## 5ST3 COM auxiliary switches and fault signal contacts (AS+FC) with measuring and communication function

- Reports the switching state of the mounted standard circuit protection device (ON, tripped, manual OFF, tripped with locked handle)
- Measures the temperature of the device and counts operating cycles, trips and operating hours
- Communication via radio to SENTRON Powercenter 1000 data transceiver
- Plug-in terminals for 24 V DC power supply incl. daisy chain function
- Low space requirements of 0.5 MW (9 mm)



| For combining with basic units | | | | | | Mounting width (1 MW = 18 mm) | Article No. |
|---|---|---|---|---|---|---|---|
| Miniature circuit breakers | Circuit breakers for equipment | RCCBs | RCBOs | Arc fault detection devices | Communication | | |
| 5ST3 COM auxiliary switches and fault signal contacts (AS+FC) with measuring and communication function | | | | | | | |
| 5SL, 5SY, 5SP4, 5SP5 | 5SY17 | 5SV (16 ... 80 A) | 5SU1 [1], 5SV1 | 5SV6 | Radio link to SENTRON Powercenter 1000 | 0.5 MW | 5ST3062-0MC |

[1] 5ST3805-1 handle coupler required

**Note:**
Please note the country-specific radio licenses of the products at
www.siemens.com/lowvoltage/certificates (109801197)

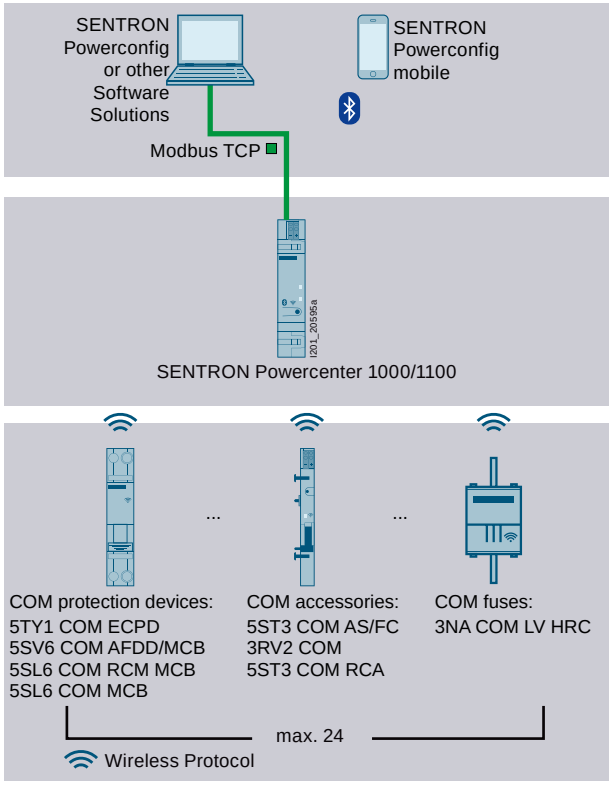
### Further technical specifications

| | | 5ST3062-0MC |
|---|---|---|
| **Standards** | | |
| Standards | IEC/EN; UL, CSA | 60669-2-5 |
| | RED | 2014/53/EU |
| **Power supply** | | |
| Power supply | | 24 V DC ±20%, SELV |
| Conductor cross-sections | | 0.2 ... 1.5 mm² |
| Connection type | | Plug-in terminal |
| **Safety** | | |
| Degree of pollution for overvoltage category | | 2/II |
| Degree of protection | | IP40, with front cover |
| **Ambient conditions** | | |
| Permissible ambient temperature | | –25 ... +60 °C |
| Permissible storage temperature | | –40 ... +85 °C |
| Humidity | | 93% at 40 °C |
| Resistance to climate | Acc. to IEC 60068-2-30 | 28 cycles |
| Mounting position | | Any |
| Shock | | 150 m/s² |
| Resistance to vibrations at 10 ... 150 Hz | Acc. to IEC 60068-2-6 | 50 m/s² |
| Service life/endurance | | 10000 |
| **Communication** | | |
| Interface | SENTRON Powercenter 1000 | Radio link |
| Temperature | | Measuring accuracy of 2 °C with limit monitoring incl. storage (1 hour in 1-minute intervals and 7 days in 15-minute intervals) |
| Operating cycles counters | | Mechanical operation with limit monitoring |
| Trip counter | | Trip of the mounted circuit protection device with limit monitoring |
| Operating hours counter | | Operating hours with limit monitoring |


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## SENTRON Powercenter 1000/1100 data transceiver




- Wireless radio transmission of measured values and data to the SENTRON Powercenter 1000/1100 data transceiver
- Commissioning, parameter assignment, firmware updates and further processing of the data via the SENTRON Powercenter 1000/1100 data transceiver



| SENTRON Powercenter | Article No. |
|---|---|
| SENTRON Powercenter 1000 | 7KN1110-0MC00 |
| SENTRON Powercenter 1100 | 7KN1111-0MC00 |

**See page 10/26**

You will find further information at **www.siemens.com/lowvoltage/manuals**

Installation Manual – Circuit protection devices with communication and measuring function **(109791805)**

System Manual – Circuit protection devices with communication and measuring function **(109791806)**



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# Electrical accessories



## Shunt trips (ST)

- For remote-controlled tripping of the mounted device

| For combining with basic units<br>Miniature circuit breakers | RCCBs | RCBOs | Rated operational voltage $U_e$ | Mounting width (1 MW = 18 mm) | Article No. |
|---|---|---|---|---|---|
| **Shunt trips (ST)** | | | | | |
| 5SL4, 5SY, 5SP4, 5SP5 | 5SV (16 ... 80 A) | 5SU1 [1] | 110 ... 415 V AC, 110 ... 220 V DC | 1 MW | 5ST3030 |
| | | | 24 ... 48 V AC/DC | 1 MW | 5ST3031 |
| | | | 12 V DC | 1 MW | 5ST3031-0XX01 |

[1] 5ST3805-1 handle coupler required

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| Further technical specifications | | 5ST3030 | 5ST3031 | 5ST3031-0XX01 |
|---|---|---|---|---|
| **Standards** | | | | |
| Standards | IEC/EN | EN 60947-1 | | |
| **Supply** | | | | |
| Primary operating range | | 0.7 ... 1.1 × $U_n$ | | |
| Rated frequency $f_n$ | | 50 ... 60 Hz | | – |
| **Contacts** | | | | |
| Minimum contact load | | 50 mA, 24 V | | 1 mA, 5 V |
| Tripping operations | | Max. 2000 | | |
| Service life, on average, with rated load | Actuations | 20000 | | |
| **Safety** | | | | |
| Short-circuit protection | | Miniature circuit breaker B/C 6 A or fuse gG 6 A | | |
| **Connections** | | | | |
| Conductor cross-sections | | 0.5 ... 2.5 mm² (AWG 22 ... 14) | | |
| Terminals | Max. tightening torque | 0.8 Nm (6.8 lb-in) | | |
| **Ambient conditions** | | | | |
| Permissible ambient temperature | | –25 ... +55 °C | | –40 ... +70 °C |
| Permissible storage temperature | | –40 ... +75 °C | | |
| Resistance to climate | Acc. to IEC 60068-2-30 | 28 cycles | | |
| Mounting position | | Any | | |
| Shock at 11 ms half-sine | Acc. to IEC 60068-2-27 | 150 m/s² | | |
| Resistance to vibrations at 10 ... 150 Hz | Acc. to IEC 60068-2-6 | 50 m/s² | | |


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## Undervoltage releases (UR)

- Are integrated (e.g. in EMERGENCY-OFF loops), thus ensuring that the MCB trips in the event of an emergency. EMERGENCY-OFF is a function provided to disconnect the electricity supply to all or some parts of the installation in case of emergency, when there is a risk of electric shock or any other hazard caused by electrical power
- In addition, an undervoltage release also trips if the voltage is interrupted or too low, or prevents the MCB from closing
- Suitable for use with all devices that can be mounted for implementing EMERGENCY-OFF circuits
- In conjunction with 5SV residual current operated circuit breakers (RCCBs), not suitable for implementing EMERGENCY-STOP circuits



| For combining with basic units<br>Miniature circuit breakers | RCCBs | RCBOs | Rated operational voltage $U_e$ | Mounting width (1 MW = 18 mm) | Article No. |
|---|---|---|---|---|---|
| **With integrated auxiliary switch** | | | | | |
| 5SL4, 5SY, 5SP4, 5SP5 | 5SV (16 ... 80 A) | 5SU1 [1] | 230 V AC | 1 MW | 5ST3040 |
| | | | 110 V DC | 1 MW | 5ST3041 |
| | | | 24 V DC | 1 MW | 5ST3042 |
| **Without integrated auxiliary switch** | | | | | |
| 5SL4, 5SY, 5SP4, 5SP5 | 5SV (16 ... 80 A) | 5SU1 [1] | 230 V AC | 1 MW | 5ST3043 |
| | | | 110 V DC | 1 MW | 5ST3044 |
| | | | 24 V DC | 1 MW | 5ST3045 |

[1] 5ST3805-1 handle coupler required

## Further technical specifications

| | | 5ST304. |
|---|---|---|
| **Standards** | | |
| Standards | IEC/EN | EN 60947-1 |
| **Supply** | | |
| Primary operating range | | 0.85 ... 1.1 × $U_n$ |
| Rated frequency $f_n$ | | 50/60 Hz |
| **Contacts** | | |
| Minimum contact load | | 50 mA, 24 V |
| Tripping operations | | Max. 2000 |
| Service life, on average, with rated load | Actuations | 20000 |
| **Safety** | | |
| Short-circuit protection | | Miniature circuit breaker B/C 6 A or fuse gG 6 A |
| **Connections** | | |
| Conductor cross-sections | | 0.5 ... 2.5 mm² (AWG 22 ... 14) |
| Terminals | Max. tightening torque | 0.8 Nm (6.8 lb-in) |
| **Ambient conditions** | | |
| Permissible ambient temperature | | –25 ... +55 °C |
| Permissible storage temperature | | –40 ... +75 °C |
| Resistance to climate | Acc. to IEC 60068-2-30 | 28 cycles |
| Mounting position | | Any |
| Shock at 11 ms half-sine | Acc. to IEC 60068-2-27 | 150 m/s² |
| Resistance to vibrations at 10 ... 150 Hz | Acc. to IEC 60068-2-6 | 50 m/s² |

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# Electrical accessories



## 5ST3 remote control auxiliaries (RCA)

- For locations that are spread out over a wide area or not permanently attended
- Permits direct and immediate access to the installation even if it is remote or in a location that is hard to access
- Permits fast reconnection after a fault
- Version with ARD with automatic restart
- Versions with ARD and Power with integrated auxiliary switches and fault signal contacts



| Type | Display | Ambient temperature | Vibration and shock requirements | Rated operational voltage $U_e$ | Mounting width (1 MW = 18 mm) | Article No. |
|---|---|---|---|---|---|---|
| Basic | – | –25 °C ... +45 °C | – | 12 ... 30 V AC, 12 ... 48 V DC | 1.5 MW | 5ST3053 |
| | | | | 177 ... 270 V AC | 2 MW | 5ST3054 |
| Power | LED | –25 °C ... +45 °C | – | 12 ... 30 V AC, 12 ... 48 V DC | 2 MW | 5ST3055 |
| | | | | 177 ... 270 V AC | 2 MW | 5ST3056 |
| Power with ARD | LED | –25 °C ... +45 °C | – | 12 ... 30 V AC, 12 ... 48 V DC | 2 MW | 5ST3057 |
| | | | | 177 ... 270 V AC | 2 MW | 5ST3058 |
| Power with extended function | LED | –40 °C ... +70 °C | Acc. to IEC/EN 61373/ IEC/EN 50155 "1B" | 12 ... 30 V AC, 12 ... 48 V DC | 2 MW | 5ST3070 |
| | | | | 170 ... 277 V AC, 77 ... 286 V DC | 2 MW | 5ST3071 |
| With IR test before ARD new | LED | –40 °C ... +70 °C | – | 100 ... 240 V AC | 2.5 MW | 5ST3074 |

| Further technical specifications | 5ST3053 | 5ST3054 | 5ST3055 | 5ST3056 | 5ST3057 | 5ST3058 | 5ST3070 | 5ST3071 | 5ST3074 new |
|---|---|---|---|---|---|---|---|---|---|
| **Standards** | | | | | | | | | |
| Standards | IEC/EN 63024 (VDE 0640-21) | | | | | | | | |
| **Supply** | | | | | | | | | |
| Rated frequency $f_n$ | 50 ... 60 Hz | | | | | | | | |
| Rated power dissipation on standby | ≤ 1 VA | | | | | | | | ≦ 1.5 VA |
| **Contacts** | | | | | | | | | |
| Service life, on average, with rated load Actuations | 10000 | | | | | | | | |
| Number of remote switching operations per minute | 2 | | | | | | | | 4 |
| Number of automatic reclose attempts | – | | | | 3 | | – | | 3 |
| Cable length in the control circuit | ≤ 1500 m | | | | | | | ≤ 1500 m (DC)/ ≤ 200 m (AC) | ≤ 1500 m |
| Sliding selector with locking device | – | ■ | | | | | | | |
| Integrated auxiliary switches | – | | 1CO; 2 A; 250 V | | | | | | – |
| Integrated fault signal contacts | – | | 1CO; 2 A; 250 V | | | | | | – |
| **Connections** | | | | | | | | | |
| Conductor cross-sections | 0.5 ... 1.5 mm² (AWG 14 ... 30) | | | | | | | | |
| Terminal tightening torque | 0.2 ... 0.25 Nm (2.0 lb-in) | | | | | | | | |
| **Ambient conditions** | | | | | | | | | |
| Permissible storage temperature | –40 ... +55 °C | | | | | | –40 ... +70 °C | | |
| Degree of protection | IP20 | | | | | | | | |
| Degree of pollution for overvoltage category | 3/II | | | | | | | | |

## Suitable adapters for combination with basic units



| Basic units | Mounting width | | | | | | | Article No. |
|---|---|---|---|---|---|---|---|---|
| | 1 MW | 2 MW | 3 MW | 4 MW | 2-pole | 3-pole | 4-pole | |
| 5SU1 | – | ■ | ■ | – | – | – | – | 5ST3820-5 |
| 5SV1 | ■ | – | – | – | – | – | – | 5ST3820-6 |
| 5SV (16 ... 80 A) | – | ■ | – | ■ | – | – | – | 5ST3820-6 |
| 5SM2 with 5SY | – | – | – | – | ■ | – | – | 5ST3820-3 + 5ST3820-1 |
| | – | – | – | – | – | ■ | ■ | 5ST3820-3 + 5ST3820-2 |
| 5SM2 with 5SL | – | – | – | – | ■ | – | – | 5ST3820-3 + 5ST3820-6 |
| | – | – | – | – | – | ■ | ■ | 5ST3820-3 + 5ST3820-7 |

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# 5ST3 COM remote control auxiliaries (RCA) with communication function new

- For locations that are spread out over a wide area or not permanently attended
- Permit access to the installation even if it is remote or in a location that is hard to access
- Remote control via wired contact or communications interface to Powercenter 1000
- Permit fast reconnection after a fault
- With integrated and adjustable reclosing function (ARD)
- Versions with automatic and adjustable RCD/IR test function

| Type | Display | Ambient temperature | Vibration and shock requirements | Rated operational voltage $U_e$ | Mounting width (1 MW = 18 mm) | Article No. |
|---|---|---|---|---|---|---|
| Communication-capable | LED | –40 °C ... +70 °C | Acc. to IEC/EN 61373 | 100 ... 240 V AC | 2 MW | 5ST3072-0MC |
| Communication-capable with RCD/IR test | LED | –40 °C ... +70 °C | Acc. to IEC/EN 61373 | 100 ... 240 V AC | 2.5 MW | 5ST3073-0MC |

4

## Further technical specifications

| | | 5ST3072-0MC, 5ST3073-0MC |
|---|---|---|
| **Standards** | | |
| Standards | | IEC/EN 63024 |
| General product approvals | | RED2014/53/EU |
| **Basic data** | | |
| Rated frequency $f_n$ | | 50/60 Hz |
| Service life, on average, with rated load | Actuations | 10000 |
| Number of ARD attempts | | 3 (+3 adjustable) |
| **Contacts** | | |
| Conductor cross-sections | | 0.5 ... 1.5 mm² |
| Type of connection | | Screw terminals |
| **Ambient conditions** | | |
| Permissible storage temperature | | –40 ... +70 °C |
| **Communication function** | | |
| Interface | SENTRON Powercenter 1000 | Wireless |
| Metering values | | Circuit breaker status, temperature, operating cycles, trip counter, operating hours |
| Switching command | | Wired, via communication |
| Configuration | 5ST3072-0MC | Alarms, origin, switching command, ARD times |
| | 5ST3073-0MC | Alarms, origin, switching command, ARD times, test function |
| **Test function** | | |
| RCD test | | Measurement, tripping current, tripping time |
| IR measurement | Acc. to IEC/EN 63024 | Measurement, insulation resistance |
| Manual test start | | Wired, via communication |
| Automatic test start | | Adjustable time and repeat interval |

## Suitable adapters for combination with basic units



| Basic units | Mounting width | | | | | | | Article No. |
|---|---|---|---|---|---|---|---|---|
| | 1 MW | 2 MW | 3 MW | 4 MW | 2-pole | 3-pole | 4-pole | |
| 5SU1 | – | ■ | ■ | – | – | – | – | 5ST3820-5 |
| 5SV1 | ■ | – | – | – | – | – | – | 5ST3820-6 |
| 5SV (16 ... 80 A) | – | ■ | – | ■ | – | – | – | 5ST3820-6 |
| 5SM2 with 5SY | – | – | – | – | ■ | – | – | 5ST3820-3 + 5ST3820-1 |
| | – | – | – | – | – | ■ | ■ | 5ST3820-3 + 5ST3820-2 |
| 5SM2 with 5SL | – | – | – | – | ■ | – | – | 5ST3820-3 + 5ST3820-6 |
| | – | – | – | – | – | ■ | ■ | 5ST3820-3 + 5ST3820-7 |

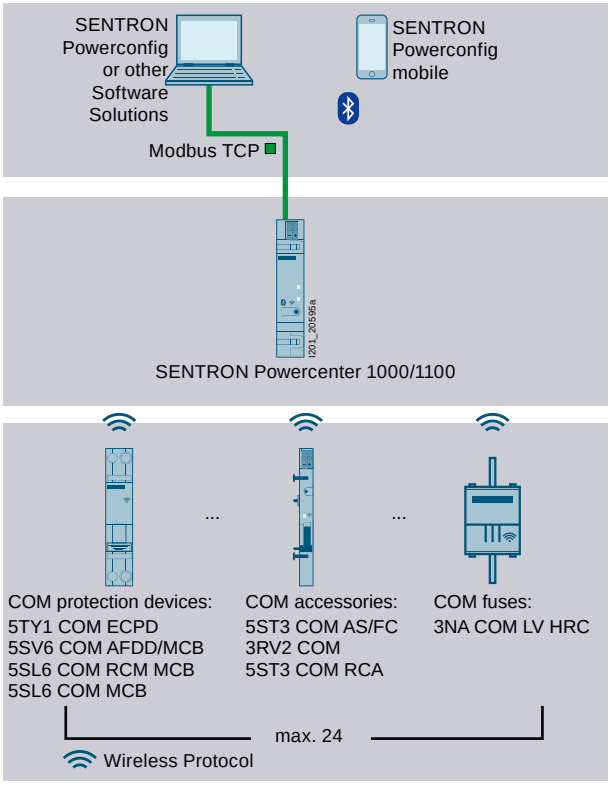
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# Electrical accessories

## 5ST3 COM remote control auxiliaries (RCA) with communication function new

### SENTRON Powercenter 1000/1100 data transceiver




- Wireless radio transmission of measured values and data to the SENTRON Powercenter 1000/1100 data transceiver
- Commissioning, parameter assignment, firmware updates and further processing of the data via the SENTRON Powercenter 1000/1100 data transceiver



| SENTRON Powercenter | Article No. |
|---|---|
| SENTRON Powercenter 1000 | 7KN1110-0MC00 |
| SENTRON Powercenter 1100 | 7KN1111-0MC00 |

See page 10/26

You will find further information at www.siemens.com/lowvoltage/manuals

Installation Manual – Circuit protection devices with communication and measuring function (109791805)

System Manual – Circuit protection devices with communication and measuring function (109791806)



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# Mechanical accessories



## Handle couplers for additional components



- Necessary for mounting the additional components auxiliary switches, fault signal contacts, shunt trips and undervoltage releases onto the 5SU1 RCBO
- 1 set = 5 units

| | Article No. |
|---|---|
| | 5ST3805-1 |

## Handle locking devices

- To prevent undesired mechanical ON/OFF switching
- Sealable and lockable
- For padlock with 3 ... 6 mm shackle





| Version | Article No. |
|---|---|
| For 5SV (16 ... 80 A) RCCBs, 5SV1 RCBOs, 5SV6 AFDD/MCB, 5TY1 COM electronic circuit protection devices (ECPD) | 5ST3806 |
| For 5SU1 RCBOs | 5ST3801-1 |

## Locking device

- For 5SV (16 ... 80 A) RCCBs, 5SV1 RCBOs, 5SV6 AFDD/MCB

| Comprising | Article No. |
|---|---|
| 5ST3806 handle locking device and 5ST3802 padlock | 5ST3807 |

## Padlock



- For 5ST3801-1 and 5ST3806 handle locking devices and 5ST3054 ... 58, 5ST3070 remote control auxiliaries, 5TY1 COM electronic circuit protection devices (ECPD)

| | Article No. |
|---|---|
| | 5ST3802 |

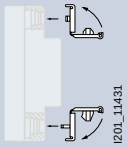
## Device labels



- For adhesive attachment
- For modular installation devices, e.g. 5SY, 5SL, 5TL1

| Types | Article No. |
|---|---|
| 15 mm × 6 mm, white (WIN 098) | 8WH8210-0AA35 |
| 15 mm × 6 mm, yellow (WIN 099) | 8WH8210-0AA36 |

## Covers for connection terminals




- For 5SV3 (16 ... 80 A) and 5SV4 (16 ... 80 A) residual current operated circuit breakers, sealable (2 units in plastic bag)

| Mounting width | Article No. |
|---|---|
| 2 MW | 5SW3010 |
| 4 MW | 5SW3008 |

## Terminal covers, gray



- For surface mounting, degree of protection IP40
- Sealable
- Can be used with 35 mm DIN rail

| For width up to | Article No. |
|---|---|
| 2.5 MW | 5SW3004 |
| 4.5 MW | 5SW3005 |

## Wall enclosures, gray



- For flush mounting, degree of protection IP40
- Can be used with 35 mm DIN rail

| For width up to | Article No. |
|---|---|
| 2.5 MW | 5SW3006 |
| 4.5 MW | 5SW3007 |

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# RCCB protective socket outlets

## Acc. to VDE 0664

### Covers



- Can be assembled as mini-distribution board
- Suitable for all devices
- Cover parts prepared for rail mounting of conventional label caps

| Comprising | Article No. |
|---|---|
| End plates | 5ST2134 |
| Angled profile | 5ST2135 |
| Flat profile as alternative | 5ST2136 |

### RCCB protective socket outlets in molded-plastic enclosures



- Equipped with RCCB and flush-mounted SCHUKO® socket outlet
- Degree of protection IP54

| Rated residual current $I_{\Delta n}$ | Rated current $I_n$ | Article No. |
|---|---|---|
| 10 mA | 16 A | 5SZ9206 |
| 30 mA | 16 A | 5SZ9216 |

4



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System overview, page 4/4

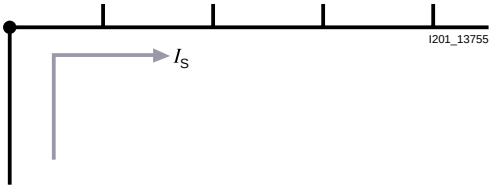
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# Standard busbars

## General information

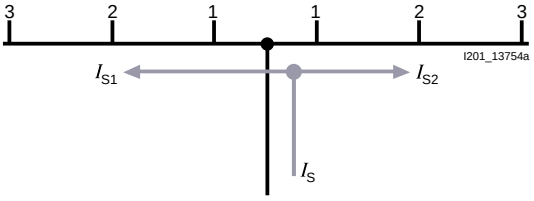
### Infeed

#### At the start or end of the busbar




Maximum busbar current $I_s$/phase
- Cross-section 10 mm²: 63 A
- Cross-section 16 mm²: 80 A

#### Along the busbar or midpoint infeed




Maximum busbar current $I_s$/phase
- Cross-section 10 mm²: 100 A
- Cross-section 16 mm²: 130 A

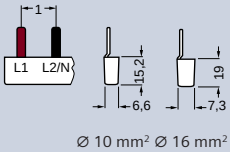
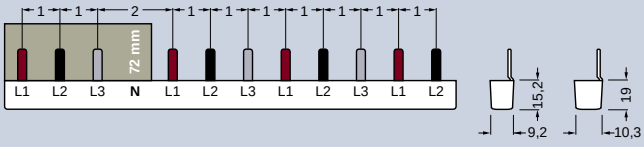
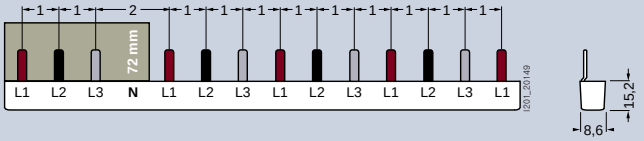
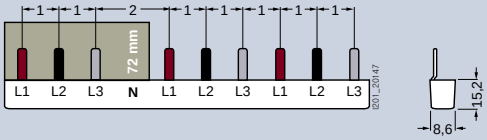
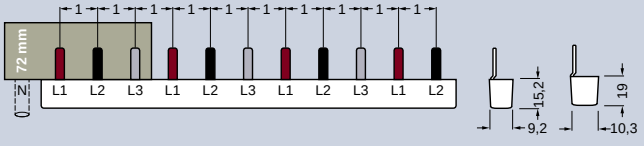
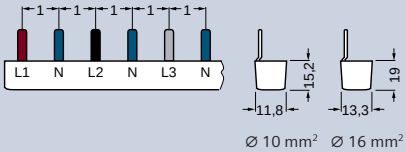
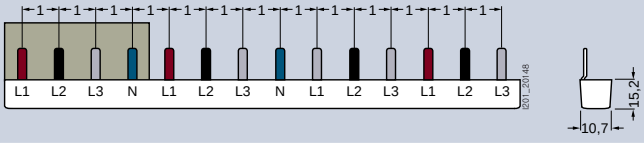
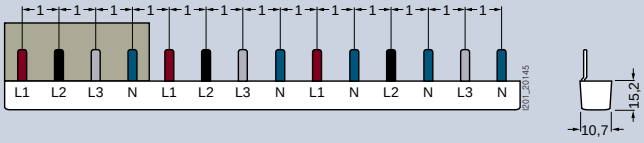
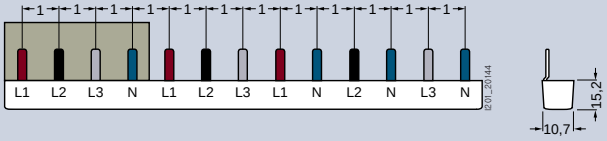
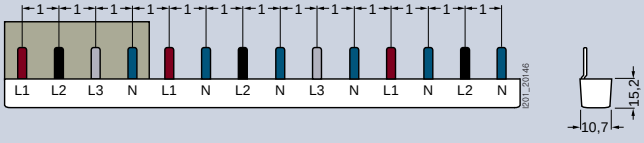


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# Fixed lengths, cannot be cut

| Pin spacing in MW (1 MW = 18 mm) | Application | No. of MW | Length | Conductor cross-section 10 mm² | 16 mm² |
|---|---|---|---|---|---|
| **2-phase/1-phase + N** | | | | Article No. | Article No. |
|  | For 6 × 2 MW devices (2P) | 12 MW | 210 mm | 5ST3608 | 5ST3638 |
| **3-phase, for MCBs with RCCB** | | | | Article No. | Article No. |
|  | For 8 MCBs 1P with 1 RCCB 3P+N, N right | 12 MW | 210 mm | 5ST3624 | 5ST3654 |
|  | For 10 MCBs 1P with 1 RCCB 3P+N or for 1 RCCB 3P+N, 1 MCB 3P and 7 MCBs 1P | 14 MW | 249 mm | 5ST3624-4 | – |
|  | For 6 MCBs 1P with 1 RCCB 3P+N or for 1 RCCB 3P+N, 1 MCB 3P and 3 MCBs 1P | 10 MW | 176 mm | 5ST3624-1 | – |
|  | For 8 MCBs 1P with 1 RCCB 3P+N, N left | 11 MW | 192 mm | 5ST3667 | 5ST3668 |
| **4-phase/3-phase + N** | | | | Article No. | Article No. |
|  | For 6 × 2MW devices (1P+N) | 12 MW | 215 mm | 5ST3623 | 5ST3653 |
| **4-phase/3-phase + N, for MCBs with RCCB** | | | | Article No. | Article No. |
|  | For 1 RCCB 3P+N, 1 MCB 3P+N and 6 MCBs 1P | 14 MW | 248 mm | 5ST3724-4 | – |
|  | For 1 RCCB 3P+N, 1 MCB 3P+N and 3 MCBs 1P+N | 14 MW | 248 mm | 5ST3725-4 | – |
|  | For 1 RCCB 3P+N, 1 MCB 3P and 3 MCBs 1P+N | 13 MW | 230 mm | 5ST3725-3 | – |
|  | For 1 RCCB 3P+N and 5 MCBs 1P+N | 14 MW | 248 mm | 5ST3625-4 | – |

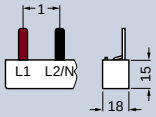
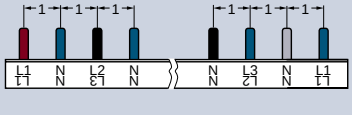
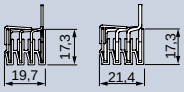
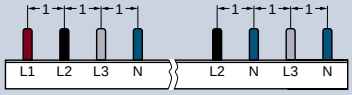
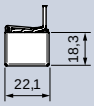
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# Standard busbars

## Can be cut

| Pin spacing in MW (1 MW = 18 mm) | Application | No. of MW | Length | End caps included | Conductor cross-section 10 mm² | 16 mm² |
|---|---|---|---|---|---|---|
| **2-phase/1-phase + N** | | | | | Article No. | Article No. |
|  | For 2 MW units (2P/1+N) | 12 MW | 214 mm | ■ | 5ST3734 | 5ST3704 |
| | | 56 MW | 1016 mm | – | 5ST3735 | 5ST3705 |
| **4-phase/3-phase + N, for MCBs with RCCB** | | | | | Article No. | Article No. |
|   Ø 10 mm² Ø 16 mm² | For RCBOs or MCBs 1P+N | 56 MW | 1000 mm | – | 5ST3770-2 | 5ST3770-3 |
|   | For 6 MCBs 1P+N with 1 RCCB 3P+N, N right | 16 MW | 292 mm | ■ | 5ST3770-4 | 5ST3770-5 |

## Accessories for busbars 5ST36 and 5ST37

**End caps for 5ST37**



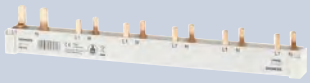
| Version | Article No. |
|---|---|
| For 2- and 3-phase busbars | 5ST3750 |
| For 4-phase busbars | 5ST3718 |

4



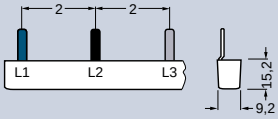
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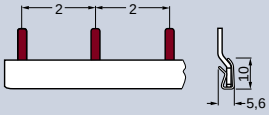
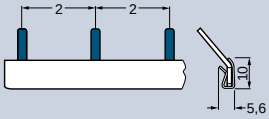
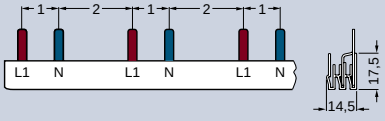
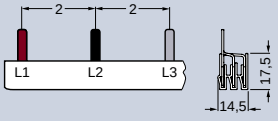
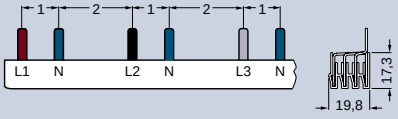
# 5ST36 and 5ST37

## Fixed lengths, cannot be cut, for devices with add-on 5SM6 arc fault detection units and 5TY1 COM electronic circuit protection devices (ECPD)

| Pin spacing in MW (1 MW = 18 mm) | Application | No. of MW | Length | End caps included | Color | Conductor cross-section 10 mm² |
|---|---|---|---|---|---|---|
| **3-phase** | | | | | | **Article No.** |
|  | For 5SM601. and 5TY1 COM | 12 MW | 210 mm | – | Gray | 5ST3615-1 |

4

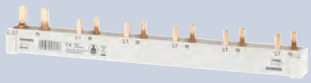
## Can be cut, for devices with add-on 5SM6 arc fault detection units and 5TY1 COM electronic circuit protection devices (ECPD)

| Pin spacing in MW (1 MW = 18 mm) | Application | No. of MW | Length | End caps included | Color | Conductor cross-section 10 mm² |
|---|---|---|---|---|---|---|
| **1-phase, straight** | | | | | | **Article No.** |
|  | For 5SM601. and 5TY1 COM | 56 MW | 1000 mm | – | Gray | 5ST3764-1 |
| | | | | | Blue | 5ST3765-2 |
| **1-phase, angled 45°** | | | | | | **Article No.** |
|  | For 5SM601. and 5TY1 COM | 56 MW | 1000 mm | – | Blue | 5ST3765-1 |
| **2-phase/1-phase + N** | | | | | | **Article No.** |
|  | For 5SM602. (1P+N) | 56 MW | 1000 mm | – | Gray | 5ST3735-1 |
| **3-phase** | | | | | | **Article No.** |
|  | For 5SM601. and 5TY1 COM | 60 MW | 1050 mm | – | Gray | 5ST3740-1 |
| **4-phase/3-phase + N** | | | | | | **Article No.** |
|  | For 5SM602. | 52 MW | 950 mm | – | Gray | 5ST3746-1 |

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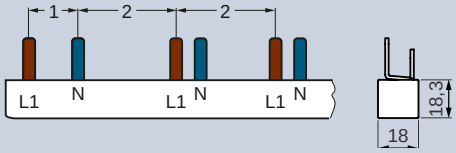
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# Standard busbars



## 5ST36 and 5ST37

### Can be cut, for devices with add-on 5SM6 arc fault detection units and infeed via RCCB

| Pin spacing in MW (1 MW = 18 mm) | Application | No. of MW | Length | End caps included | Color | Conductor cross-section 16 mm² |
|---|---|---|---|---|---|---|
| 2-phase/1-phase + N | | | | | | Article No. |
|   | For RCCB 2P N-right and 5 AFDD (5SM601.) + compact device | 12 MW | 214 mm | ■ | Gray | 5ST3772 |

4

## Accessories

| Terminals for infeed at side | | Article No. |
|---|---|---|
| For conductors 6 ... 25 mm² | Short | 5ST3768 |
| | Short, IP20 | 5ST3771-2 |
| | Long | 5ST3771-1 |
| **End caps** | | **Article No.** |
| For 1-phase busbars | Gray | 5ST3766 |
| | Blue | 5ST3767 |
| For 2 and 3-phase busbars | | 5ST3750 |
| For 4-phase busbars | | 5ST3718 |
| **Touch protection** | | **Article No.** |
| For free connections, yellow (RAL 1004) 5 × 1 pin | | 5ST3655 |

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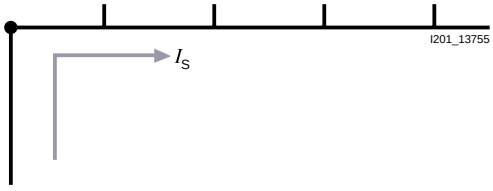
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# Compact busbars

## General information

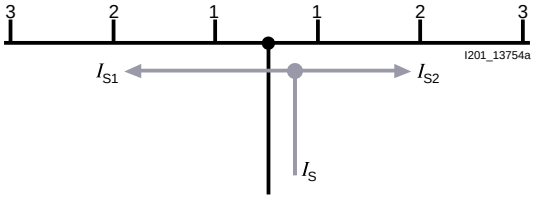
### Infeed

#### At the start or end of the busbar




Maximum busbar current $I_S$/phase
- Cross-section 10 mm²: 63 A
- Cross-section 16 mm²: 80 A

#### Along the busbar or midpoint infeed




Maximum busbar current $I_S$/phase
- Cross-section 10 mm²: 100 A
- Cross-section 16 mm²: 130 A

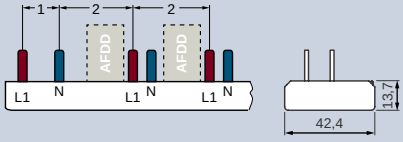
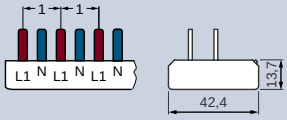
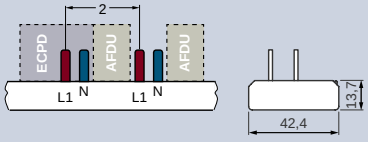
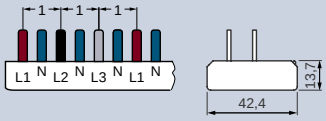
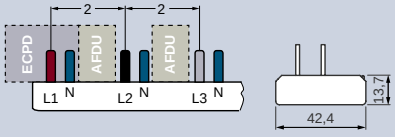
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# Compact busbars

## 5ST36, fixed lengths, cannot be cut

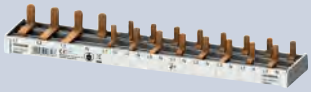
| Pin spacing in MW (1 MW = 18 mm) | Application | No. of MW | Length | End caps included | Conductor cross-section 10 mm² |
|---|---|---|---|---|---|
| **2-phase/1-phase + N, for infeed via RCCB** | | | | | **Article No.** |
|  | For 1 × RCCB 1P+N and 5 × compact devices equipped with 5SM6 arc fault detection unit | 12 MW | 216 mm | ■ | 5ST3685-0 |
| **2-phase/1-phase + N** | | | | | **Article No.** |
|  | For compact devices | 6 MW | 113 mm | ■ | 5ST3674-6 |
| | | 9 MW | 166 mm | ■ | 5ST3674-7 |
| | | 12 MW | 218 mm | ■ | 5ST3674-0 |
|  | For 6 × compact devices equipped with 5SM6 arc fault detection unit and 5TY1 COM electronic circuit protection devices (ECPD) | 12 MW | 200 mm | ■ | 5ST3676-0 |
| **4-phase/3-phase + N** | | | | | **Article No.** |
|  | For compact devices | 6 MW | 113 mm | ■ | 5ST3673-6 |
| | | 9 MW | 166 mm | ■ | 5ST3673-7 |
| | | 12 MW | 218 mm | ■ | 5ST3673-0 |
| | | 14 MW | 254 mm | ■ | 5ST3673-4 |
|  | For 6 × compact devices equipped with 5SM6 arc fault detection unit and 5TY1 COM electronic circuit protection devices (ECPD) | 11 MW | 200 mm | ■ | 5ST3675-0 |

4



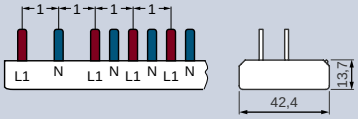
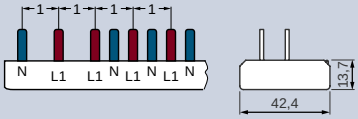
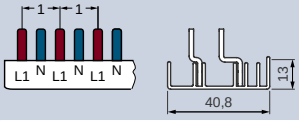
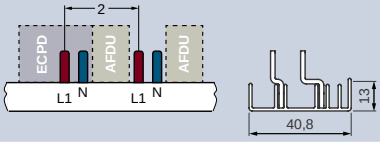
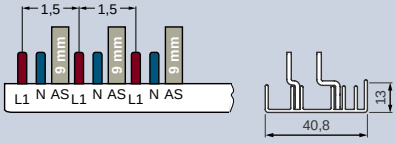
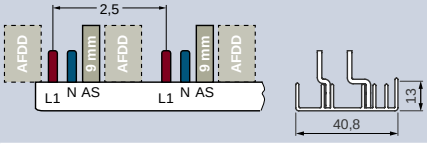
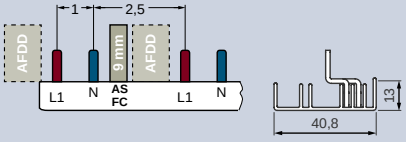
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## 5ST37, can be cut



| Pin spacing in MW (1 MW = 18 mm) | Application | No. of MW | Length | End caps included | Conductor cross-section 10 mm² |
|---|---|---|---|---|---|
| **2-phase/1-phase + N, for infeed via RCCB** | | | | | **Article No.** |
|  | For 1 × RCCB 1P+N<br>and 10 × compact devices | 12 MW | 215 mm | ■ | 5ST3784-0 |
|  | For 1 × RCCB 1P+N (RCCB N left only)<br>and 10 × compact devices | 12 MW | 215 mm | ■ | 5ST3784-0KL |
| **2-phase/1-phase + N** | | | | | **Article No.** |
|  | For compact devices | 60 MW | 1060 mm | – | 5ST3774-0 |
|  | For compact devices equipped with<br>5SM6 arc fault detection unit and 5TY1 COM<br>electronic circuit protection devices (ECPD) | 59 MW | 1042 mm | – | 5ST3776-0 |
|  | For compact devices equipped with auxiliary switch | 59.5 MW | 1055 mm | – | 5ST3778-0 |
|  | For compact devices equipped with<br>5SM6 arc fault detection unit and auxiliary switch | 58.5 MW | 1036 mm | – | 5ST3780-0 |
|  | For 2 MW units (MCBs or RCBOs) with mounted<br>5SM6 arc fault detection unit and auxiliary switch | 54 MW | 956 mm | – | 5ST3786-0 |

4

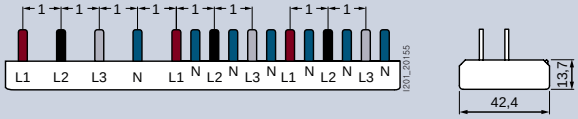
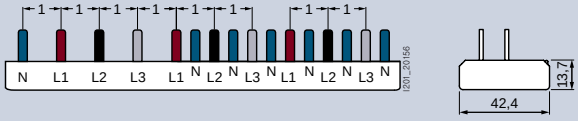
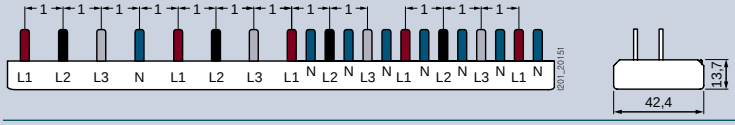
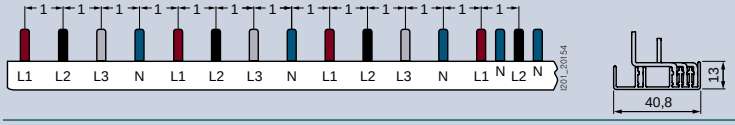
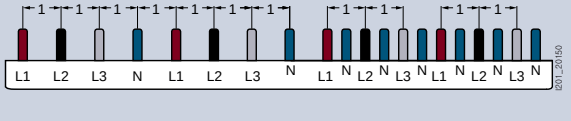
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# Compact busbars

## 5ST37, can be cut

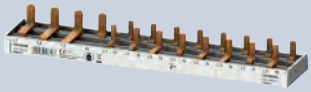
| Pin spacing in MW (1 MW = 18 mm) | Application | No. of MW | Length | End caps included | Conductor cross-section 10 mm² |
|---|---|---|---|---|---|
| **4-phase/3-phase + N, for infeed via RCCB** | | | | | **Article No.** |
|  | For 1 × RCCB 3P+N and 6 × compact devices | 10 MW | 181 mm | ■ | 5ST3783-1 |
| | For 1 × RCCB 3P+N and 8 × compact devices | 12 MW | 216 mm | ■ | 5ST3783-0 |
| | For 1 × RCCB 3P+N and 10 × compact devices | 14 MW | 251 mm | ■ | 5ST3783-4 |
|  | For 1 × RCCB 3P+N (RCCB N left only) and 6 × compact devices | 10 MW | 181 mm | ■ | 5ST3783-1KL |
| | For 1 × RCCB 3P+N (RCCB N left only) and 8 × compact devices | 12 MW | 216 mm | ■ | 5ST3783-0KL |
|  | For 1 × RCCB 3P+N, 1 × MCB 3P and 7 × compact devices | 14 MW | 253 mm | ■ | 5ST3785-4 |
|  | For 1 × RCCB 3P+N, 2 × MCBs 3P+N and 12 × compact devices | 24 MW | 430 mm | ■ | 5ST3790-1 |
|  | For 1 × RCCB 3P+N, 2 × MCBs 3P+N and 45 × compact devices | 57 MW | 1009 mm | – | 5ST3790-2 |
|  | For 1 × RCCB 3P+N, 1 × MCB 3P+N and 4 × compact devices | 12 MW | 217 mm | ■ | 5ST3795-0 |
|  | For 1 × RCCB 3P+N, 1 × MCB 3P+N and 6 × compact devices | 14 MW | 253 mm | ■ | 5ST3795-4 |

4

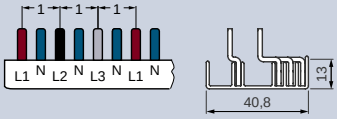
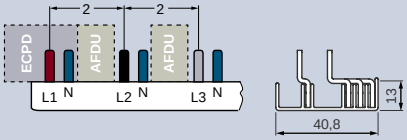
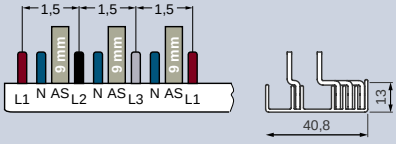


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| Pin spacing in MW (1 MW = 18 mm) | Application | No. of MW | Length | End caps included | Conductor cross-section 10 mm² |
|---|---|---|---|---|---|
| **4-phase/3-phase + N** | | | | | **Article No.** |
|   | For compact devices | 60 MW | 1060 mm | – | 5ST3773-0 |
|   | For compact devices equipped with 5SM6 arc fault detection unit and 5TY1 COM electronic circuit protection devices (ECPD) | 59 MW | 1042 mm | – | 5ST3775-0 |
|   | For compact devices equipped with auxiliary switch | 59.5 MW | 1055 mm | – | 5ST3777-0 |

## Accessories for 5ST3 compact busbars, versions that can and cannot be cut

**Touch protection for 5ST3**



| Version | Color | Article No. |
|---|---|---|
| For free connections, for pins L1, N | Yellow (RAL1004) | 5ST3655 |
| For pins L2, L3 | Yellow (RAL1004) | 5ST3655-0HG |

**End caps for 5ST3**



| Version | Color | Article No. |
|---|---|---|
| For 2- and 4-phase busbars | Gray | 5ST3788-0 |

**Terminals, short, IP20**

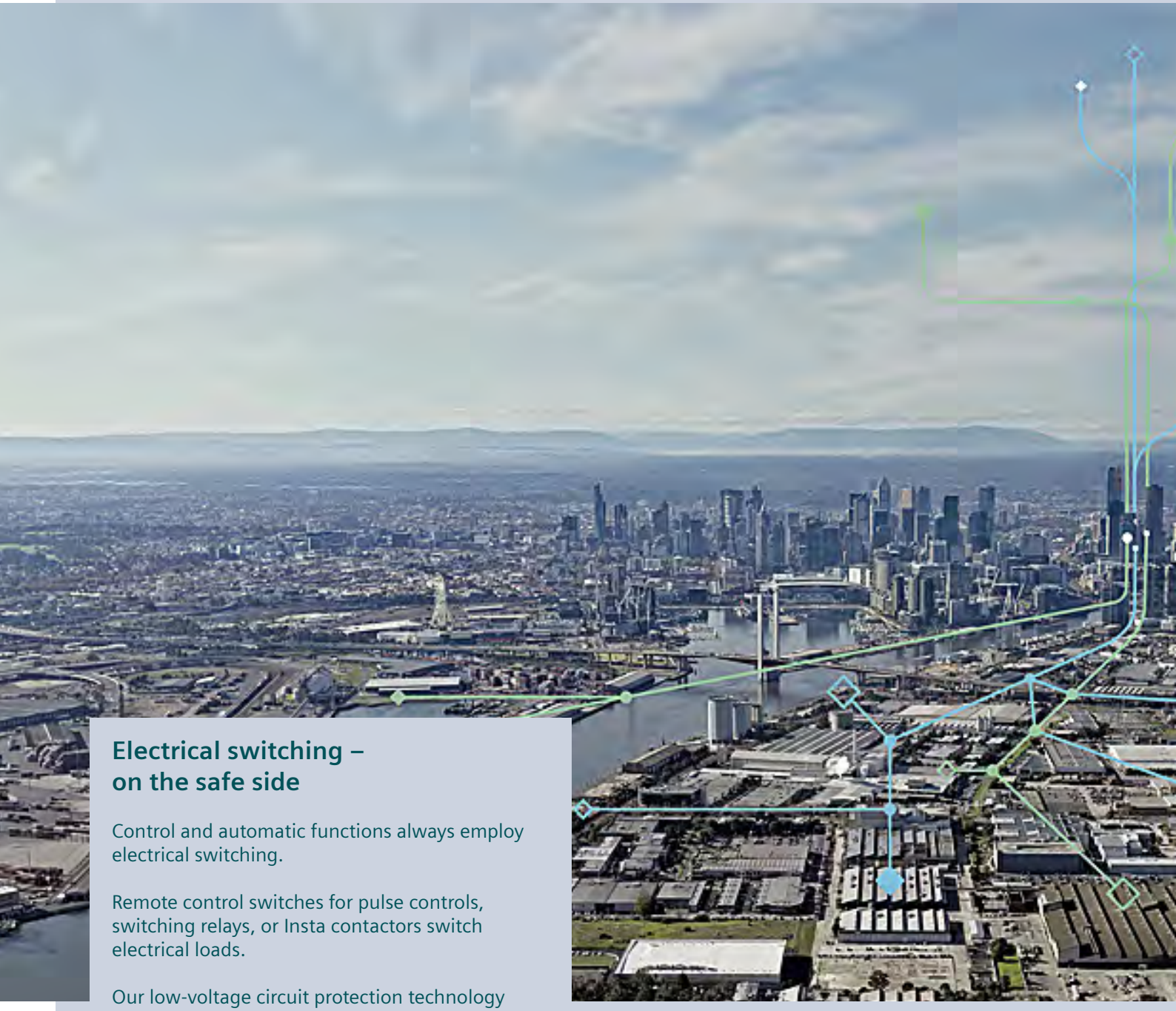


| Version | For conductors | Infeed | Article No. |
|---|---|---|---|
| Infeed terminal for connection of larger cross-section | Up to 25 mm² | Lateral | 5ST3771-2 |

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## Electrical switching – on the safe side

Control and automatic functions always employ electrical switching.

Remote control switches for pulse controls, switching relays, or Insta contactors switch electrical loads.

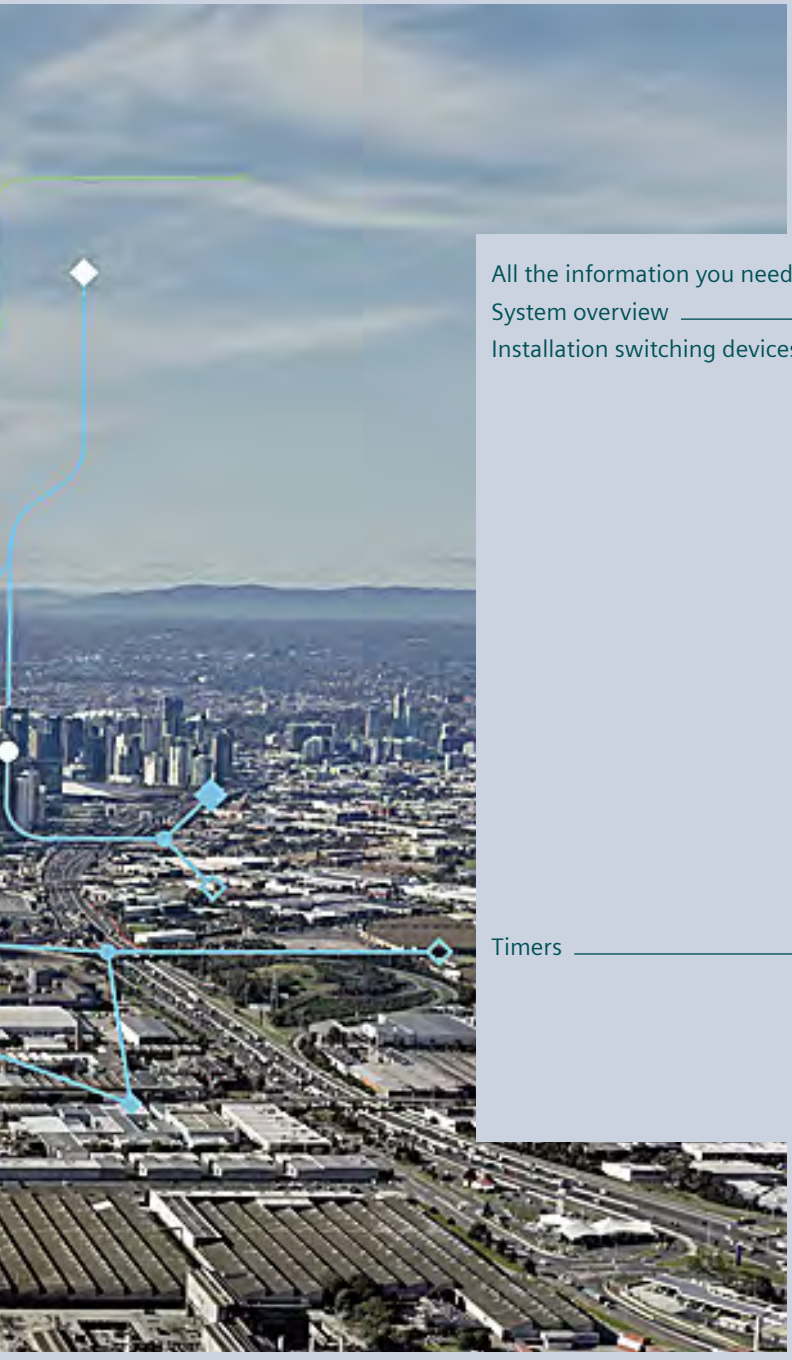
Our low-voltage circuit protection technology offers a wide variety of contact versions and rated currents for the different requirements of these devices.

Safety, convenience and energy savings – these characterize automatic switching.

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# Switching Devices




All the information you need 5/2
System overview 5/4
Installation switching devices 5/6
5TE8 control switches 5/6
5TE48 pushbuttons 5/8
5TE58 light indicators 5/10
5TE81/82 On/Off switches 5/12
5TL1 On/Off switches 5/14
5TE DC isolator 5/16
5TE busbars 5/18
5TT41 remote control switches 5/20
5TT44 remote control switches 5/24
5TT4 auxiliary switches 5/26
5TT42 switching relays 5/28
5TT50 Insta contactors 5/30
5TT58 Insta contactors 5/32
5TT5 auxiliary switches 5/36
5TT3 soft-starting devices 5/37
Timers 5/38
7LF4 digital time switches 5/38
7LF5 mechanical time switches 5/44
7LF6 timers for buildings 5/48
5TT3 timers for industrial applications 5/49

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# A multitude of additional information ...

## Information + ordering

### All the important things at a glance

For information about transfer switching equipment and load transfer switches, please visit our website **www.siemens.com/switching-devices**

### Your product in detail

The relevant tender specifications can be found at **www.siemens.com/tenderspecifications**

Use our conversion tool for quick and easy conversion to Siemens products **www.siemens.com/conversion-tool**

### Everything you need for your order

Refer to SiePortal to find an overview of your products (product catalog)

- Switching devices **sie.ag/2m4eG5M**

Direct forwarding to the individual products in SiePortal by clicking on the article number in the catalog or entering this web address incl. article number **www.siemens.com/product_catalog_SIEP?Article No.**



### The fast track to the experts

#### Contact persons in your region

We offer a comprehensive portfolio of services.
You can find your local contacts at
**www.siemens.com/lowvoltage/components/contact**

You will find further information on services at
**www.siemens.com/service-offers**

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at
**www.siemens.com/support-request**

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# … can be found in our online services

## Commissioning + operation

### Your product in detail

The SiePortal platform (knowledge base) provides detailed technical information
**www.siemens.com/lowvoltage/product-support**

- Operating instructions
- Certificates

Online Support app available for download from the **App Store** and **Play Store**
You will find further information at
**www.siemens.com/support-app**

Provision of 3D data (step and u3d data formats)

- SiePortal (product catalog)
  **www.siemens.com/lowvoltage/product-catalog**
- Image database
  **www.siemens.com/lowvoltage/picturedb**

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
**www.siemens.com/cax**

### Manuals

Manuals can be found in SiePortal at
**www.siemens.com/lowvoltage/manuals**

- Configuration Manual
  – Switching devices **(45315361)**

### Face-to-face or online training

Our training courses can be found at
**www.siemens.com/sitrain-lowvoltage**

- Basic principles of electrical engineering (WT-LVBGET)

### Technical overview – Switching devices

#### The fast way to get you to our online services

This page provides you with comprehensive information and links on switching devices
**www.siemens.com/lowvoltage/product-support (109769083)**

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# System overview

## Basic units and accessories

### Installation switching devices



5TE8
control switches



5TE48
pushbuttons



5TE58
light indicators



5TE81/82, 5TL1
On/Off switches



5TE
DC isolators



5TE
busbars



5TT41, 5TT44
remote control switches



5TT4, 5TT5
auxiliary switches



5TT42
switching relays



5TT50, 5TT58
Insta contactors



5TT3
soft-starting devices

### Accessories



Auxiliary switches (AS)



Shunt trips (ST)



Undervoltage releases (UR)



Remote control auxiliaries (RCA)



Handle locking devices



LEDs



Caps/covers



Connectors

### Timers



7LF4 digital time switches



7LF5 mechanical time switches



7LF6 timers for buildings



5TT3 timers for industrial applications

### Accessories



Holders

**Note:**
You will find a detailed range of accessories with the basic units.

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# 5TE8 control switches

| | Control switches | Two-way switches | Group switches with center position |
|---|---|---|---|
| **Rated operational current $I_e$ per conducting path** | 20 A | 20 A | 20 A |
| **Rigid conductor cross-section** | 1 … 6 mm² | 1 … 6 mm² | 1 … 6 mm² |
| **Flexible conductor cross-section, with end sleeve** | 1 … 6 mm² | 1 … 6 mm² | 1 … 6 mm² |







| Contacts | $U_e$ AC | Mounting width | Auxiliary switches Cannot be retrofitted | Mounted | Auxiliary switches Cannot be retrofitted | Mounted | Auxiliary switches Cannot be retrofitted |
|---|---|---|---|---|---|---|---|
| 1 NO | 48 V | 1 MW | 5TE8101-3 | – | – | – | – |
| | 230 V | 1 MW | 5TE8101 | – | – | – | – |
| 2 NO | 400 V | 1 MW | 5TE8102 | – | – | – | – |
| 3 NO | 400 V | 1 MW | 5TE8103 | – | – | – | – |
| | | 1.5 MW | – | 5TE8108 | – | – | – |
| 1 NO + 1 NC | 400 V | 1 MW | – | – | – | 5TE8151 | – |
| 2 NO + 2 NC | 400 V | 1 MW | – | – | 5TE8152 | – | – |
| 3 NO + 1 NC | 400 V | 1 MW | – | – | 5TE8153 | – | – |
| 1 CO | 230 V | 1 MW | – | – | 5TE8161 | – | – |
| 2 CO | 400 V | 1 MW | – | – | 5TE8162 | – | – |
| 1 toggle switch | 230 V | 1 MW | – | – | – | – | 5TE8141 |
| 2 toggle switches | 400 V | 1 MW | – | – | – | – | 5TE8142 |

## Further technical specifications

| | | 5TE8 |
|---|---|---|
| **Standards** | | |
| Standards | | IEC/EN 60947-3 (VDE 0660-107), IEC/EN 60669-1 (VDE 0632-1) |
| Approvals | | IEC/EN 60947-3 (VDE 0660-107), GB14048.3-2008 CCC |
| **Supply** | | |
| Rated power dissipation $P_v$ | Per pole | 0.7 VA |
| **Contacts** | | |
| Minimum contact load | | 10 V; 300 mA |
| Rated making/rated breaking capacity | At p.f. = 0.65 | 60 A/60 A |
| Rated short-time withstand current $I_{cw}$ per conducting path at p.f. = 0.7 | Up to 0.2 s | 650 A |
| | Up to 0.5 s | 400 A |
| | Up to 1 s | 290 A |
| | Up to 3 s | 170 A |
| Thermal rated current $I_{th}$ | | 20 A |
| Electrical endurance/mechanical service life | Actuations | 10000/25000 |
| **Safety** | | |
| Clearances | Open contacts | 2 × > 2 mm |
| | Between the poles | > 7 mm |
| Creepage distances | | > 7 mm |
| Sealable switch position | | Yes |
| Separate handle locking device | | Yes |
| Rated short-circuit making capacity $I_{cm}$ | | 10 kA |
| Rated impulse voltage $U_{imp}$ | | > 5 kV |
| **Connections** | | |
| Terminals | ± Screw (Pozidriv) | PZ1 |
| | Max. tightening torque | 0.8 … 1.0 Nm |
| **Ambient conditions** | | |
| Permissible ambient temperature | | –5 … +40 °C |
| Resistance to climate at 95% relative humidity | Acc. to DIN 50015 | 45 °C |

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## Accessories

### Handle locking device



- To prevent undesired mechanical On/Off switching
- Sealable
- For padlock with max. 3 mm shackle

| Article No. |
|---|
| 5ST3801 |

### Spacer



- Contour for modular devices with a mounting depth of 70 mm
- Can be snapped onto either side of the busbar for convenient cable routing
- Spacer is recommended for better heat dissipation

| Article No. |
|---|
| 5TG8240 |

### Set of mixed caps



- For manual changing of the luminous plates for the control switches

| Article No. |
|---|
| 5TG8068 |

5

System overview, page 5/4

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# 5TE48 pushbuttons

## With/without LED

| | Pushbuttons without maintained-contact function | | Pushbuttons with maintained-contact function | | Control pushbuttons with maintained-contact function or momentary-contact function | |
|---|---|---|---|---|---|---|
| | Without LED | | Without LED | | With LED | |
| **Rated operational current $I_e$ per conducting path** | 20 A | | 20 A | | 20 A | |
| **Rigid/flexible conductor cross-section** | 1 ... 6 mm² | | 1 ... 6 mm² | | 1 ... 6 mm² | |
| **Max. cable length** | Standard | | Standard | | Standard | |
| |  | |  | |  | |
| **Contacts** | **$U_e$ AC** | **Mounting width** | | | | |
| 1 NO | 230 V | 1 MW | | – | | – | 1 × red | 5TE4821 |
| | | | | – | | – | | – |
| 2 × 1 NO | 400 V | 1 MW | 1 × green, 1 × blue | 5TE4804 | | – | | – |
| 2 NO | 400 V | 1 MW | | – | 1 × gray | 5TE4811 | 1 × red | 5TE4823 |
| 1 NO + 1 NC | 400 V | 1 MW | 1 × gray | 5TE4800 | 1 × gray | 5TE4810 | | – |
| | | | 1 × red | 5TE4805 | | – | 1 × red | 5TE4820 |
| | | | 1 × green | 5TE4806 | | – | | – |
| | | | 1 × yellow | 5TE4807 | | – | | – |
| | | | 1 × blue | 5TE4808 | | – | | – |
| 2 × (1 NO + 1 NC) | 400 V | 1 MW | | – | | – | | – |
| 2 NO + 2 NC | 400 V | 1 MW | 1 × gray | 5TE4801-2 | 1 × gray | 5TE4811-2 | | – |
| 3 NO + 1 NC | 400 V | 1 MW | 1 × gray | 5TE4802 | 1 × gray | 5TE4812-1 | | – |
| 3 NO + N | 400 V | 1 MW | | – | 1 × gray | 5TE4812 | | – |
| 2 NC | 400 V | 1 MW | | – | | – | 1 × red | 5TE4824 |
| 4 NC | 400 V | 1 MW | | – | 1 × gray | 5TE4813 | | – |
| 2 CO | 400 V | 1 MW | | – | 1 × gray | 5TE4814 | | – |

## Further technical specifications

| | | 5TE48 |
|---|---|---|
| **Standards** | | |
| Standards | | IEC/EN 60947-3 (VDE 0660-107), IEC/EN 60669-1 (VDE 0632-1) |
| Approvals | | IEC/EN 60947-3 (VDE 0660-107) |
| **Supply** | | |
| Rated power dissipation $P_v$ | Per pole | 0.6 VA |
| **Contacts** | | |
| Minimum contact load | | 10 V; 300 mA |
| Rated making/rated breaking capacity | At p.f. = 0.65 | 60 A/60 A |
| Rated short-time withstand current $I_{cw}$ per conducting path at p.f. = 0.7 | Up to 0.2 s | 650 A |
| | Up to 0.5 s | 400 A |
| | Up to 1 s | 290 A |
| | Up to 3 s | 170 A |
| Thermal rated current $I_{th}$ | | 20 A |
| Mechanical service life | Actuations | 25000 |
| **Safety** | | |
| Clearances | Open contacts | 2 × > 2 mm |
| | Between the poles | > 7 mm |
| Creepage distances | | > 7 mm |
| Rated impulse voltage $U_{imp}$ | | > 5 kV |
| **Connections** | | |
| Terminals | ± Screw (Pozidriv) | PZ1 |
| | Max. tightening torque | 0.8 ... 1.0 Nm |
| **Ambient conditions** | | |
| Permissible ambient temperature | | –5 ... +40 °C |
| Resistance to climate at 95% relative humidity | Acc. to DIN 50015 | 45 °C |

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| | | Double pushbuttons with maintained-contact function and/or momentary-contact function | | | |
|---|---|---|---|---|---|
| With LED | | Without LED | | With LED | |
| 20 A | | 20 A | | 20 A | |
| 1 ... 6 mm² | | 1 ... 6 mm² | | 1 ... 6 mm² | |
| 150 m | | Standard | | Standard | |
|  | |  | |  | |
| 1 × red | 5TE4822 | – | | – | |
| 1 × blue | 5TE4822-1 | – | | – | |
| | – | – | | 1 × green, 1 × red | 5TE4840 |
| | – | – | | | – |
| | – | – | | | – |
| | – | – | | | – |
| | – | 1 × green, 1 × red | 5TE4830 | 1 × green, 1 × red | 5TE4841 |
| | – | – | | | – |
| | – | – | | | – |
| | – | 1 × green, 1 × red | 5TE4831 | | – |
| | – | – | | | – |
| | – | – | | | – |
| | – | – | | | – |
| | – | – | | | – |
| | – | – | | | – |
| | – | – | | | – |

## Accessories

### LEDs for manual spare part



| $I_e$ | $U_e$ | Color | Article No. |
|---|---|---|---|
| 0.4 A | 12 ... 60 V AC/DC | White | 5TG8056-0 |
| | | Red | 5TG8056-1 |
| | | Yellow | 5TG8056-2 |
| | | Green | 5TG8056-3 |
| | | Blue | 5TG8056-4 |
| | 115 V AC/DC | White | 5TG8057-0 |
| | | Red | 5TG8057-1 |
| | | Yellow | 5TG8057-2 |
| | | Green | 5TG8057-3 |
| | | Blue | 5TG8057-4 |
| | 230 V AC | White | 5TG8058-0 |
| | | Red | 5TG8058-1 |
| | | Yellow | 5TG8058-2 |
| | | Green | 5TG8058-3 |
| | | Blue | 5TG8058-4 |

### Cap sets

- For manual changing of colored caps with or without lamps
- 1 set = 5 units



| Color | Article No. |
|---|---|
| Red, transparent | 5TG8061 |
| Green, transparent | 5TG8062 |
| Yellow, transparent | 5TG8063 |
| Blue, transparent | 5TG8064 |
| Black, non-transparent | 5TG8065 |
| White, transparent | 5TG8066 |
| Gray, non-transparent | 5TG8060 |

### Sets of mixed caps



- For manual changing of colored caps with or without lamps

| Color | Article No. |
|---|---|
| 10 × each of red/green + 5 × each of yellow/blue/white | 5TG8067 |
| 1 × each of red/green/yellow | 5TG8070 |

## Color coding according to IEC 60073

| Color | Safety of people/ environment | Process state | System state |
|---|---|---|---|
| Red | Danger | Emergency | Faulty |
| Green | Safety | Normal | Normal |
| Yellow | Warning/Caution | Abnormal | Abnormal |
| Blue | Stipulation | | |
| Black, white, gray | No special significance assigned | | |

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# 5TE58 light indicators

## With LED

| | | 5TE58 light indicators | | | |
|---|---|---|---|---|---|
| **Rigid conductor cross-section** | | 1.5 ... 6 mm² | | 1.5 ... 6 mm² | |
| **Flexible conductor cross-section, with end sleeve** | | 1 ... 6 mm² | | 1 ... 6 mm² | |
| **Max. cable length** | | Standard | | 250 m | |
| | |  | |  | |
| **$U_e$ AC** | **Mounting width** | | | | |
| 230 V | 1 MW | 1 × red | 5TE5800 | 1 × red | 5TE5804 |
| | | 1 × green, 1 × red | 5TE5801 | | – |
| | | 3 × green | 5TE5802 | | – |
| | | 1 × red, 1 × yellow, 1 × green | 5TE5803 | | – |
| 12 ... 60 V | 1 MW | 1 × red | 5TE5810 | | – |
| | | 1 × green | 5TE5810-1 | | – |
| | | 1 × green, 1 × red | 5TE5811 | | – |
| | | 3 × green | 5TE5812 | | – |
| | | 1 × red, 1 × yellow, 1 × green | 5TE5812-1 | | – |

## Further technical specifications

| | | 5TE58 |
|---|---|---|
| **Standards** | | |
| Standards | | DIN VDE 62094-1/A11 |
| **Supply** | | |
| Rated power dissipation $P_v$ | LED | 0.4 VA |
| **Safety** | | |
| Clearances | Between the terminals | > 7 mm |
| **Connections** | | |
| Terminals | ± Screw (Pozidriv) | PZ1 |
| | Max. tightening torque | 0.8 ... 1.0 Nm |
| **Ambient conditions** | | |
| Permissible ambient temperature | | –5 ... +40 °C |
| Resistance to climate at 95% relative humidity | Acc. to DIN 50015 | 45 °C |

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## Accessories

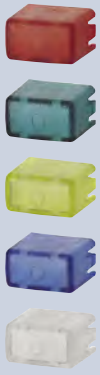
**LEDs for manual spare part**



| $I_e$ | $U_e$ | Color | Article No. |
|---|---|---|---|
| 0.4 A | 12 ... 60 V AC/DC | White | 5TG8056-0 |
| | | Red | 5TG8056-1 |
| | | Yellow | 5TG8056-2 |
| | | Green | 5TG8056-3 |
| | | Blue | 5TG8056-4 |
| | 115 V AC/DC | White | 5TG8057-0 |
| | | Red | 5TG8057-1 |
| | | Yellow | 5TG8057-2 |
| | | Green | 5TG8057-3 |
| | | Blue | 5TG8057-4 |
| | 230 V AC | White | 5TG8058-0 |
| | | Red | 5TG8058-1 |
| | | Yellow | 5TG8058-2 |
| | | Green | 5TG8058-3 |
| | | Blue | 5TG8058-4 |

**Cap sets**

- For manual changing of colored caps
- 1 set = 5 units



| Color | Article No. |
|---|---|
| Red, transparent | 5TG8061 |
| Green, transparent | 5TG8062 |
| Yellow, transparent | 5TG8063 |
| Blue, transparent | 5TG8064 |
| White, transparent | 5TG8066 |

**Sets of mixed caps**

- For manual changing of colored caps



| Color | Article No. |
|---|---|
| 10 × each of red/green + 5 × each of yellow/blue/white | 5TG8067 |
| 1 × each of red/green/yellow | 5TG8070 |

## Color coding according to IEC 60073

| Color | Safety of people/ environment | Process state | System state |
|---|---|---|---|
| Red | Danger | Emergency | Faulty |
| Green | Safety | Normal | Normal |
| Yellow | Warning/Caution | Abnormal | Abnormal |
| Blue | Stipulation | | |
| Black, white, gray | No special significance assigned | | |

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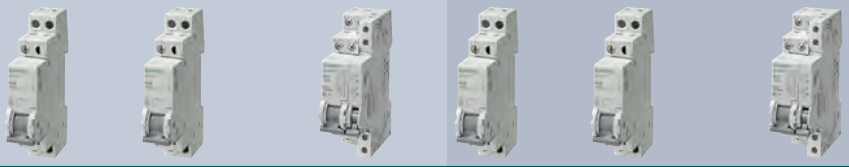
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# 5TE81/82 On/Off switches

| | 5TE81 On/Off switches | 5TE82 On/Off switches |
|---|---|---|
| Rated operational current $I_e$ per conducting path | 20 A | 32 A |
| Rigid conductor cross-section | 1.5 ... 6 mm² | 1.5 ... 6 mm² |
| Flexible conductor cross-section, with end sleeve | 1 ... 6 mm² | 1 ... 6 mm² |



| Contacts | $U_e$ AC | Mounting width | Auxiliary switches | | | Auxiliary switches | | |
|---|---|---|---|---|---|---|---|---|
| | | | Can be retrofitted | Cannot be retrofitted | Mounted | Can be retrofitted | Cannot be retrofitted | Mounted |
| 1 NO | 230 V | 1 MW | 5TE8111 | – | – | 5TE8211 | – | – |
| 2 NO | 400 V | 1 MW | 5TE8112 | – | – | 5TE8212 | – | – |
| 3 NO | 400 V | 1 MW | 5TE8113 | – | – | 5TE8213 | – | – |
| 3 NO + N | 400 V | 1 MW | – | 5TE8114 | – | – | 5TE8214 | – |
| | | 1.5 MW | – | – | 5TE8118 | – | – | 5TE8218 |

## Further technical specifications

| | | 5TE81 | 5TE82 |
|---|---|---|---|
| **Standards** | | | |
| Standards | | IEC/EN 60947-3 (VDE 0660-107), IEC/EN 60669-1 | IEC/EN 60947-3 (VDE 0660-107) |
| Approvals | | IEC/EN 60947-3 (VDE 0660-107) | |
| **Supply** | | | |
| Rated power dissipation $P_v$ | Per pole | 0.7 VA | |
| **Contacts** | | | |
| Minimum contact load | | 10 V; 300 mA | |
| Rated making/rated breaking capacity | At p.f. = 0.65 | 60 A/60 A | 96 A/96 A |
| Rated short-time withstand current $I_{cw}$ per conducting path at p.f. = 0.7 | Up to 0.2 s | 650 A | 1000 A |
| | Up to 0.5 s | 400 A | 630 A |
| | Up to 1 s | 290 A | 450 A |
| | Up to 3 s | 170 A | 250 A |
| Thermal rated current $I_{th}$ | | 20 A | 32 A |
| Electrical endurance/mechanical service life | Actuations | 10000/25000 | |
| **Safety** | | | |
| Clearances | Open contacts | 2 × > 2 mm | |
| | Between the poles | > 7 mm | |
| Creepage distances | | > 7 mm | |
| Rated short-circuit making capacity $I_{cm}$ | | 10 kA | |
| Rated impulse voltage $U_{imp}$ | | > 5 kV | |
| **Connections** | | | |
| Terminals | ± Screw (Pozidriv) | PZ1 | |
| | Max. tightening torque | 0.8 ... 1.0 Nm | |
| **Ambient conditions** | | | |
| Permissible ambient temperature | | –5 ... +40 °C | |
| Resistance to climate at 95% relative humidity | Acc. to DIN 50015 | 45 °C | |

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## Accessories

### Auxiliary switches (AS)



- For right-hand-side retrofitting with factory-fitted brackets

| Contacts | Type | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

### Handle locking device



- To prevent undesired mechanical On/Off switching
- Sealable
- For padlock with max. 3 mm shackle

| Article No. |
|---|
| 5ST3801 |

### Terminal cover



- For covering screw openings
- Sealable

| Article No. |
|---|
| 5ST3800 |

### Spacer



- Contour for modular devices with a mounting depth of 70 mm
- Can be snapped onto either side of the busbar for convenient cable routing
- Spacer is recommended for better heat dissipation

| Article No. |
|---|
| 5TG8240 |

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# 5TL1 On/Off switches

| | Rated operational current $I_e$ per conducting path | | | | | |
|---|---|---|---|---|---|---|
| | 32 A | 40 A | 63 A | | 80 A | 100 A |
| Rigid conductor cross-section | 1 ... 35 mm² | 1 ... 35 mm² | 1 ... 35 mm² | | 2.5 ... 50 mm² | 2.5 ... 50 mm² |
| Flexible conductor cross-section, with end sleeve | 1 ... 25 mm² | 1 ... 25 mm² | 1 ... 25 mm² | | 2.5 ... 50 mm² | 2.5 ... 50 mm² |
| |  |  |  |  |  |  |

| Contacts | Rated operational voltage $U_e$ AC | Mounting width | Gray handle | Gray handle | Gray handle | Red handle | Gray handle | Gray handle |
|---|---|---|---|---|---|---|---|---|
| 1 NO | 230 V | 1 MW | 5TL1132-0 | 5TL1140-0 | 5TL1163-0 | 5TL1163-1 | 5TL1180-0 | 5TL1191-0 |
| 2 NO | 400 V | 2 MW | 5TL1232-0 | 5TL1240-0 | 5TL1263-0 | 5TL1263-1 | 5TL1280-0 | 5TL1291-0 |
| 3 NO | 400 V | 3 MW | 5TL1332-0 | 5TL1340-0 | 5TL1363-0 | 5TL1363-1 | 5TL1380-0 | 5TL1391-0 |
| 4 NO | 400 V | 4 MW | 5TL1432-0 | 5TL1440-0 | 5TL1463-0 | – | 5TL1480-0 | 5TL1491-0 |
| 3 NO + N | 400 V | 4 MW | 5TL1632-0 | 5TL1640-0 | 5TL1663-0 | 5TL1663-1 | 5TL1680-0 | 5TL1691-0 |

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## Further technical specifications

| | | 5TL1.32 | 5TL1.40 | 5TL1.63 | 5TL1.80 | 5TL1.91 | 5TL1.92 |
|---|---|---|---|---|---|---|---|
| **Standards** | | | | | | | |
| Standards | | IEC/EN 60947-3 (VDE 0660-107) | | | | | |
| Approvals | | IEC/EN 60947-3 (VDE 0660-107) | | | | | |
| **Supply** | | | | | | | |
| Rated power dissipation $P_v$ | Per pole, max. | 0.7 VA | 0.9 VA | 2.2 VA | 3.5 VA | 5.5 VA | 8.6 VA |
| **Contacts** | | | | | | | |
| Minimum contact load | | 24 V; 300 mA | | | | | |
| Rated making/rated breaking capacity AC-22A | At p.f. = 0.65 | 96 A/ 96 A | 120 A/ 120 A | 196 A/ 196 A | 240 A/ 240 A | 300 A/ 300 A | 375 A/ 375 A |
| Rated short-time withstand current $I_{cw}$ per conducting path at p.f. = 0.7 [1] | Up to 0.2 s | 760 A | 950 A | 1500 A | 2700 A | 3400 A | |
| | Up to 0.5 s | 500 A | 630 A | 1000 A | 1650 A | 2100 A | |
| | Up to 1 s | 400 A | 500 A | 800 A | 1350 A | 1700 A | |
| | Up to 3 s | 280 A | 350 A | 560 A | 800 A | 1000 A | |
| Thermal rated current $I_{th}$ | | 32 A | 40 A | 63 A | 80 A | 100 A | 125 A |
| Electrical endurance/mechanical service life | Switching cycles | 10000/ 20000 | 10000 | 5000 | 2000 | | |
| Rated power for the switching of resistive load including moderate overload AC-21 | 1-pole | 5 kW | 6.5 kW | 10 kW | 13 kW | 16 kW | |
| | 2-pole | 9 kW | 11 kW | 18 kW | 22 kW | 28 kW | |
| | 3/4-pole | 15 kW | | 30 kW | 39 kW | 48 kW | |
| **Safety** | | | | | | | |
| Creepage distances | | > 7 mm | | | | | |
| Clearances | Open contacts | > 7 mm | | | | | |
| | Between the poles | > 7 mm | | | | | |
| Rated short-circuit making capacity $I_{cm}$ (in conjunction with fuse of the same rated operational current EN 60269 gL/gG) | | 10 kA | | | | | |
| Rated impulse voltage $U_{imp}$ | | 6 kV | | | | | |
| **Connections** | | | | | | | |
| Terminals | ± Screw (Pozidriv) | PZ2 | | | | | |
| | Max. tightening torque | 3.5 Nm | | | | | |
| **Ambient conditions** | | | | | | | |
| Permissible ambient temperature | | –5 ... +40 °C | | | | | |
| Resistance to climate at 95% relative humidity | Acc. to DIN 50015 | 45 °C | | | | | |

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| | 125 A |
|---|---|
| | 2.5 ... 50 mm² |
| | 2.5 ... 50 mm² |
|  |  |
| **Red handle** | **Gray handle** |
| 5TL1191-1 | 5TL1192-0 |
| 5TL1291-1 | 5TL1292-0 |
| 5TL1391-1 | 5TL1392-0 |
| – | 5TL1492-0 |
| 5TL1691-1 | 5TL1692-0 |

## Accessories

### Auxiliary switches (AS)



- For right-hand-side retrofitting with factory-fitted brackets

| Contacts | Type | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

### Remote control auxiliaries (RCA)



| Type | $U_e$ | Article No. |
|---|---|---|
| Basic | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3053 |
| | 177 ... 270 V AC | 5ST3054 |
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | 177 ... 270 V AC | 5ST3058 |

### Adapters for remote control auxiliaries (RCA)



| Mounting width | Article No. |
|---|---|
| 1–2 MW | 5ST3820-6 |
| 3–4 MW | 5ST3820-7 |

### Handle locking device



- To prevent undesired mechanical On/Off switching
- Sealable
- For padlock with max. 3 mm shackle

| Article No. |
|---|
| 5ST3806 |

### Terminal cover



- For covering screw openings
- Sealable

| Article No. |
|---|
| 5ST3800 |

### Spacer



- Contour for modular devices with a mounting depth of 70 mm
- Can be snapped onto either side of the busbar for convenient cable routing
- Spacer is recommended for better heat dissipation

| Article No. |
|---|
| 5TG8240 |

### Phase connectors



- For easy wiring in various circuit versions and bus mountings
- As a support terminal for conductors from 2.5 to 50 mm²

| Number of poles | $I_e$ | $U_e$ AC | Mounting width | Article No. |
|---|---|---|---|---|
| 1-pole | 125 A | 230 V | 1 MW | 5TL1192-4 |

### N conductor connectors



- For easy wiring in various circuit versions and bus mountings
- As a support terminal for N conductors from 2.5 to 50 mm² with blue color marking

| Number of poles | $I_e$ | $U_e$ AC | Mounting width | Article No. |
|---|---|---|---|---|
| 1-pole | 125 A | 230 V | 1 MW | 5TL1192-3 |

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# 5TE DC isolator

## Can be used as switch disconnectors according to EN 60947-3

| | Rated operational current $I_e$ 63 A |
|---|---|
| Rigid conductor cross-section | 0.75 ... 35 mm² |
| Flexible conductor cross-section, with end sleeve | 0.75 ... 25 mm² |



| Contacts | Max. operational voltage $U_{max}$ DC | Mounting width | Auxiliary switches can be retrofitted |
|---|---|---|---|
| 4 NO | 1000 V | 4 MW | 5TE2515-1 |

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### Further technical specifications

| | | |
|---|---|---|
| **Standards** | | |
| Standards | | IEC/EN 60947-3; GB14048.3-2008 CCC |
| **Supply** | | |
| Rated operational voltage $U_e$ | For 4 poles in series | 880 V DC |
| Rated power dissipation $P_v$ | Per pole, max. | 4.4 W |
| **Contacts** | | |
| Minimum contact load | | 24 V; 300 mA |
| Rated short-time withstand current $I_{cw}$ | 1000 V DC, 4-pole | 760 A |
| Electrical endurance/mechanical service life | Actuations | 5000/10000 |
| **Safety** | | |
| Rated short-circuit making capacity $I_{cm}$ | 1000 V DC, 4-pole | 500 A |
| Rated impulse voltage $U_{imp}$ | | > 5 kV |
| Overvoltage category | At $U$ = 440 ... 880 V | II |
| | At $U$ = 1000 V | I |
| Utilization category | | DC-21B |
| **Connections** | | |
| Terminals | ± Screw (Pozidriv) | PZ2 |
| | Max. tightening torque | 2.5 ... 3 Nm |
| **Ambient conditions** | | |
| Permissible ambient temperature | | –25 ... +40 °C |
| Resistance to climate at 95% relative humidity | Acc. to DIN 50015 | 45 °C |

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## Accessories

### Auxiliary switches (AS)



- For right-hand-side retrofitting with factory-fitted brackets

| Contacts | Type | Article No. |
|---|---|---|
| 1 NO + 1 NC | Standard | 5ST3010 |
| | For low power | 5ST3013 |
| | For low power (with diode) | 5ST3013-0XX01 |
| 2 NO | Standard | 5ST3011 |
| | For low power | 5ST3014 |
| 2 NC | Standard | 5ST3012 |
| | For low power | 5ST3015 |
| 1 CO | Standard | 5ST3016 |

### Shunt trips (ST)



| Rated operational voltage $U_e$ | Article No. |
|---|---|
| 110 ... 415 V AC, 110 ... 220 V DC | 5ST3030 |
| 24 ... 48 V AC/DC | 5ST3031 |
| 12 V AC/DC | 5ST3031-0XX01 |

### Undervoltage releases (UR)



| Type | Rated operational voltage $U_e$ | Article No. |
|---|---|---|
| With integrated auxiliary switch | 230 V AC | 5ST3040 |
| | 110 V DC | 5ST3041 |
| | 24 V DC | 5ST3042 |
| Without integrated auxiliary switch | 230 V AC | 5ST3043 |
| | 110 V DC | 5ST3044 |
| | 24 V DC | 5ST3045 |



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# 5TE busbars

## For modular installation devices

### 1-phase busbar



- For all 5TE8 switches, 20 A and 32 A
- For the cutting of unused terminal lugs and to ensure insulation clearances if one device terminal is to be supplied separately despite being mounted on the bus
- Infeed to unit terminal with conductor cross-section of 6 mm² up to 32 A
- Can be mounted from either top or bottom, in the front or rear terminal area
- An end cap is not required on 1-phase busbars

| Length | Division | Article No. |
|---|---|---|
| 210 mm | 12 MW version with 1 MW modular clearance | 5TE9100 |

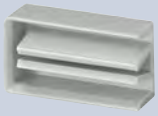
### 2-phase busbar



- For all 5TE8 switches, 20 A and 32 A
- Infeed to unit terminal with conductor cross-section of 6 mm² up to 32 A
- Can be mounted from either top or bottom, in the front and/or rear terminal area, thus allowing realization of a 4-wire connection using 2 2-phase busbars
- Both copper conductors of the 2-phase busbar are insulated together

| Length | Division | Article No. |
|---|---|---|
| 220 mm | 12 MW version each with 1 MW modular clearance, phases offset by 0.5 MW | 5TE9101 |

### End caps for 2-phase busbars



- End caps for 5TE9101 2-phase busbars to maintain insulation clearances when the bar is being cut
- 1 set = 10 units

| Article No. |
|---|
| 5TE9102 |





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# 5TT41 remote control switches

## Rated current 16 A

| | Rated operational current $I_e$ 16 A |
|---|---|
| Rigid conductor cross-section | 1 ... 6 mm² |
| Flexible conductor cross-section, with end sleeve | 1 ... 6 mm² |



| Contacts | $U_e$ | $U_c$ AC | $U_c$ DC | Mounting width 1 MW | Mounting width 2 MW | Auxiliary switches can be retrofitted |
|---|---|---|---|---|---|---|
| 1 NO | 250 V | 230 V | – | ■ | – | 5TT4101-0 |
| | | 115 V | – | ■ | – | 5TT4101-1 |
| | | 24 V | – | ■ | – | 5TT4101-2 |
| | | 12 V | – | ■ | – | 5TT4101-3 |
| | | 8 V | – | ■ | – | 5TT4101-4 |
| | | – | 110 V | ■ | – | 5TT4111-1 |
| | | | 24 V | ■ | – | 5TT4111-2 |
| | | | 12 V | ■ | – | 5TT4111-3 |
| 1 NO + 1 NC | 250 V | 230 V | – | ■ | – | 5TT4105-0 |
| | | 115 V | – | ■ | – | 5TT4105-1 |
| | | 24 V | – | ■ | – | 5TT4105-2 |
| | | 12 V | – | ■ | – | 5TT4105-3 |
| | | 8 V | – | ■ | – | 5TT4105-4 |
| | | – | 110 V | ■ | – | 5TT4115-1 |
| | | | 24 V | ■ | – | 5TT4115-2 |
| | | | 12 V | ■ | – | 5TT4115-3 |
| 2 NO | 400 V | 230 V | – | ■ | – | 5TT4102-0 |
| | | 115 V | – | ■ | – | 5TT4102-1 |
| | | 24 V | – | ■ | – | 5TT4102-2 |
| | | 12 V | – | ■ | – | 5TT4102-3 |
| | | 8 V | – | ■ | – | 5TT4102-4 |
| | | – | 110 V | ■ | – | 5TT4112-1 |
| | | | 24 V | ■ | – | 5TT4112-2 |
| | | | 12 V | ■ | – | 5TT4112-3 |
| 3 NO | 400 V | 230 V | – | – | ■ | 5TT4103-0 |
| | | 24 V | – | – | ■ | 5TT4103-2 |
| 4 NO | 400 V | 230 V | – | – | ■ | 5TT4104-0 |
| | | 24 V | – | – | ■ | 5TT4104-2 |
| | | – | 110 V | – | ■ | 5TT4114-1 |
| | | | 24 V | – | ■ | 5TT4114-2 |

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## Further technical specifications

| | | 5TT4101<br>5TT4102<br>5TT4105 | 5TT4111<br>5TT4112<br>5TT4115 | 5TT4103<br>5TT4104<br>5TT4114 |
|---|---|---|---|---|
| **Standards** | | | | |
| Standards | | IEC 60669-1, IEC 60669-2, IEC 60669-3,<br>EN 60669 (VDE 0632), EN 60669-2-2, EN 60669-2-2/A1 | | |
| Approvals | | VDE | | |
| **Supply** | | | | |
| Rated operational current $I_e$ | At p.f. = 0.6 ... 1 (AC-15) | 16 A | | |
| Primary operating range | | 0.8 ... 1.1 × $U_c$ | | |
| Rated frequency $f_c$ | | 50 Hz | | |
| Rated power dissipation $P_v$ | Magnet coil, only pulse | 4.5 W/7 VA | | 9 W/13 VA |
| | Per pole, max. | 1.2 W | | |
| **Contacts** | | | | |
| Contact gap | | > 1.2 mm | | |
| Minimum contact load | | 10 V; 100 mA | | |
| Electrical endurance at $I_e/U_e$, p.f. = 0.6, incandescent lamp load 600 W | Operating cycles | 50000 | | |
| Incandescent lamp load (switching of incandescent lamps for 15000 switching cycles) | At AC-5b (230 V) | 1200 W | | |
| Glow lamp load at 230 V | | 5 mA | | |
| | With 1 5TT4920 compensator | 25 mA | | |
| | With 2 5TT4920 compensators | 45 mA | | |
| Minimum pulse duration | | 50 ms | | |
| **Safety** | | | | |
| Different phases between magnet coil and contact | | Permissible | | |
| Clearances | Between magnet coil and contact | > 6 mm | | |
| Creepage distances | Between magnet coil and contact | > 6 mm | | |
| Rated impulse voltage $U_{imp}$ | | 4 kV | | |
| **Function** | | | | |
| Manual operation | | Yes | | |
| Switching position indication | | Yes | | |
| **Connections** | | | | |
| Terminals | ± Screw (Pozidriv) | PZ1 | | |
| | Max. tightening torque | 0.8 ... 1 Nm | | |
| **Ambient conditions** | | | | |
| Permissible ambient temperature | | –10 ... +40 °C | | |
| Resistance to climate at 95% relative humidity | Acc. to DIN 50015 | 35 °C | | |
| Degree of protection | Acc. to EN 60529 | IP20, with connected conductors | | |

## Accessories

**Auxiliary switches**



- One device per remote control switch can be retrofitted

| Contacts | Type | $I_e$ | $U_e$ | Mounting width | Article No. |
|---|---|---|---|---|---|
| 1 CO | Standard | 5 A | 250 V AC | 0.5 MW | 5TT4900 |
| | For low power | 0.1 A | 30 V AC/DC | 0.5 MW | 5TT4901 |

**Compensator**



- For increasing the glow lamp load by 20 mA

| $U_e$ | Mounting width | Article No. |
|---|---|---|
| 250 V AC | 1 MW | 5TT4920 |

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# 5TT41 remote control switches

## For special applications, rated current 16 A

| | | | | Remote control switches with central On/Off switching | Remote control switches with central and group On/Off switching |
|---|---|---|---|---|---|
| | | | Rigid conductor cross-section | 1 ... 6 mm² | 1 ... 6 mm² |
| | | | Flexible conductor cross-section, with end sleeve | 1 ... 6 mm² | 1 ... 6 mm² |
| | | | |  |  |
| **Contacts** | **$U_e$** | **$U_c$ AC** | **Mounting width** | **Auxiliary switches cannot be retrofitted** | **Auxiliary switches cannot be retrofitted** |
| 1 NO | 250 V | 230 V | 1.5 MW | 5TT4121-0 | 5TT4151-0 |
| | | 24 V | 1.5 MW | 5TT4121-2 | 5TT4151-2 |
| 2 NO | 400 V | 230 V | 1.5 MW | 5TT4122-0 | 5TT4152-0 |
| | | 24 V | 1.5 MW | 5TT4122-2 | 5TT4152-2 |
| 3 NO | 400 V | 230 V | 2.5 MW | 5TT4123-0 | – |
| 1 NO + 1 NC | 250 V | 115 V | 1.5 MW | 5TT4125-0 | – |

| | | | | Series remote control switch contact sequence 1 – 2 – 1+2 – 0 | Shutter/blind remote control switch contact sequence 1 – 0 – 2 – 0 |
|---|---|---|---|---|---|
| | | | Rigid conductor cross-section | 1 ... 6 mm² | 1 ... 6 mm² |
| | | | Flexible conductor cross-section, with end sleeve | 1 ... 6 mm² | 1 ... 6 mm² |
| | | | |  |  |
| **Contacts** | **$U_e$** | **$U_c$ AC** | **Mounting width** | **Auxiliary switches cannot be retrofitted** | **Auxiliary switches cannot be retrofitted** |
| 2 NO | 250 V | 230 V | 1 MW | 5TT4132-0 | 5TT4142-0 |
| | | 24 V | 1 MW | – | 5TT4142-2 |
| | | 12 V | 1 MW | 5TT4132-3 | 5TT4142-3 |

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## Further technical specifications

| | | 5TT412<br>5TT415 | 5TT413<br>5TT414 |
|---|---|---|---|
| **Standards** | | | |
| Standards | | EN 60669-1 (VDE 0632-1)/EN 60669-1/A1/A2<br>EN 60669-2-2 (VDE 0632-2-2)/EN 60669-2-2 | |
| Approvals | | VDE | |
| **Supply** | | | |
| Rated operational current $I_e$ | At p.f. = 0.6 ... 1 (AC-15) | 16 A | |
| Primary operating range | | 0.8 ... 1.1 × $U_c$ | |
| Rated frequency $f_c$ | | 50 Hz | |
| Rated power dissipation $P_v$ | Magnet coil, only pulse | 4.5 W/7 VA | |
| | Per pole, max. | 1.2 W | |
| **Contacts** | | | |
| Contact gap | | > 1.2 mm | |
| Minimum contact load | | 10 V; 100 mA | |
| Electrical endurance at $I_e/U_e$, p.f. = 0.6, incandescent lamp load 600 W | Operating cycles | 50000 | |
| Incandescent lamp load (switching of incandescent lamps for 15000 switching cycles) | At AC-5b (230 V) | 1200 W | |
| Glow lamp load at 230 V | | 5 mA | |
| | With 1 5TT4920 compensator | 25 mA | |
| | With 2 5TT4920 compensators | 45 mA | |
| Minimum pulse duration | | 50 ms | |
| **Safety** | | | |
| Different phases between magnet coil and contact | | Permissible | |
| Clearances | Between magnet coil and contact | > 6 mm | |
| Creepage distances | Between magnet coil and contact | > 6 mm | |
| Rated impulse voltage $U_{imp}$ | | 4 kV | |
| **Function** | | | |
| Manual operation | | Yes | |
| Switching position indication | | Yes | – |
| **Connections** | | | |
| Terminals | ± Screw (Pozidriv) | PZ1 | |
| | Max. tightening torque | 0.8 ... 1 Nm | |
| **Ambient conditions** | | | |
| Permissible ambient temperature | | –10 ... +40 °C | |
| Resistance to climate at 95% relative humidity | Acc. to DIN 50015 | 35 °C | |
| Degree of protection | Acc. to EN 60529 | IP20, with connected conductors | |

## Accessories

**Auxiliary switches**



- One device per remote control switch can be retrofitted

| Contacts | Type | $I_e$ | $U_e$ | Mounting width | Article No. |
|---|---|---|---|---|---|
| 1 CO | Standard | 5 A | 250 V AC | 0.5 MW | 5TT4900 |
| | For low power | 0.1 A | 30 V AC/DC | 0.5 MW | 5TT4901 |

**Compensator**



- For increasing the glow lamp load by 20 mA

| $U_e$ | Mounting width | Article No. |
|---|---|---|
| 250 V AC | 1 MW | 5TT4920 |

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# 5TT44 remote control switches

## Rated current 20 A – 63 A

| | Rated operational current $I_e$ | | | | |
|---|---|---|---|---|---|
| | 20 A | 25 A | 32 A | 40 A | 63 A |
| Rigid conductor cross-section | 1 ... 10 mm² | 1 ... 10 mm² | 1 ... 10 mm² | 2.5 ... 25 mm² | 2.5 ... 25 mm² |
| Flexible conductor cross-section, with end sleeve | 1 ... 10 mm² | 1 ... 10 mm² | 1 ... 10 mm² | 2.5 ... 25 mm² | 2.5 ... 25 mm² |
| |  |  |  |  |  |

| Contacts | $U_e$ | $U_c$ AC | $U_c$ DC | Mounting width | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **For AC applications – auxiliary switches can be retrofitted** | | | | | | | | | |
| 1 NO + 1 NC | 440 V | 230 V | – | 1 MW | 5TT4405-0 | 5TT4425-0 | 5TT4455-0 | – | – |
| | | | | 2 MW | – | – | – | 5TT4465-0 | 5TT4475-0 |
| | | 24 V | – | 1 MW | 5TT4405-2 | 5TT4425-2 | 5TT4455-2 | – | – |
| | | | | 2 MW | – | – | – | 5TT4465-2 | 5TT4475-2 |
| 1 CO | 250 V | 230 V | – | 1 MW | 5TT4407-0 | – | – | – | – |
| | | 24 V | – | 1 MW | 5TT4407-2 | – | – | – | – |
| 2 NO | 440 V | 230 V | – | 1 MW | 5TT4402-0 | 5TT4422-0 | 5TT4452-0 | – | – |
| | | | | 2 MW | – | – | – | 5TT4462-0 | 5TT4472-0 |
| | | 24 V | – | 1 MW | 5TT4402-2 | 5TT4422-2 | 5TT4452-2 | – | – |
| | | | | 2 MW | – | – | – | 5TT4462-2 | 5TT4472-2 |
| 2 CO | 440 V | 230 V | – | 2 MW | – | 5TT4428-0 | 5TT4458-0 | 5TT4468-0 | 5TT4478-0 |
| | | 24 V | – | 2 MW | – | 5TT4428-2 | 5TT4458-2 | 5TT4468-2 | 5TT4478-2 |
| 4 NO | 440 V | 230 V | – | 2 MW | – | 5TT4424-0 | 5TT4454-0 | – | – |
| | | | | 4 MW | – | – | – | 5TT4464-0 | 5TT4474-0 |
| | | 24 V | – | 2 MW | – | 5TT4424-2 | 5TT4454-2 | – | – |
| | | | | 4 MW | – | – | – | 5TT4464-2 | 5TT4474-2 |
| 2 NO + 2 NC | 440 V | 230 V | – | 2 MW | – | 5TT4426-0 | 5TT4456-0 | – | – |
| | | | | 4 MW | – | – | – | 5TT4466-0 | 5TT4476-0 |
| | | 24 V | – | 2 MW | – | 5TT4426-2 | 5TT4456-2 | – | – |
| | | | | 4 MW | – | – | – | 5TT4466-2 | 5TT4476-2 |
| **For DC applications** | | | | | | | | | |
| 1 NO | 250 V | – | 24 V | 1 MW | 5TT4411-5 | 5TT4431-5 | 5TT4451-5 | – | – |
| 2 NO | 440 V | – | 24 V | 1 MW | 5TT4412-5 | 5TT4432-5 | 5TT4452-5 | – | – |
| 1 NO + 1 NC | 440 V | – | 24 V | 1 MW | 5TT4415-5 | 5TT4435-5 | 5TT4455-5 | – | – |
| 1 CO | 250 V | – | 24 V | 1 MW | 5TT4417-5 | 5TT4437-5 | 5TT4457-5 | – | – |

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## Further technical specifications

| | | 5TT440 | 5TT442 | 5TT445 | 5TT446 | 5TT447 |
|---|---|---|---|---|---|---|
| **Standards** | | | | | | |
| Standards | | IEC 60669-2-2 | | | EN 60669-1 (VDE 0632-1)/EN 60669-1/A1/A2<br>EN 60669-2-2 (VDE 0632-2-2)/EN 60669-2-2 | |
| Approvals | | CE | | | | |
| **Supply** | | | | | | |
| Rated operational current $I_e$ | At p.f. = 0.6 ... 1 (AC-15) | 20 A | 25 A | 32 A | 40 A | 63 A |
| Rated frequency $f_c$ | | 50/60 Hz | | | | |
| Rated power dissipation $P_v$ | Magnet coil, "On" pulse | 13 W/18 VA | | | 12 W/26 VA | |
| | Per pole, max. | 1.5 W | 2 W | 3 W | | 3.5 W |
| Rated operational power (AC-3) | 1-phase, at 230 V | 0.5 kW | 0.75 kW | 1.1 kW | 2.2 kW | 4 kW |
| | 3-phase, at 230 V | 1.5 kW | 2.2 kW | 3 kW | 5.5 kW | 11 kW |
| | 3-phase, at 400 V | 3 kW | 4 kW | 5.5 kW | 11 kW | 18.5 kW |
| **Contacts** | | | | | | |
| Contact gap | | > 3 mm | | | | |
| Minimum contact load AC | | 10 V; 100 mA | | | | |
| Electrical endurance at $I_e/U_e$, p. f. = 0.6, incandescent lamp load 600 W | Operating cycles | 50000 | | | | |
| Incandescent lamp load (switching of incandescent lamps for 15000 switching cycles) | At AC-5b (230 V) | 4400 W | 5500 W | 7000 W | 8800 W | 13800 W |
| Max. switching speed | In switching cycles per hour | 600 $h^{-1}$ | 450 $h^{-1}$ | | 360 $h^{-1}$ | |
| **Safety** | | | | | | |
| Different phases between magnet coil and contact | | Permissible | | | | |
| Rated impulse voltage $U_{imp}$ | | 3 kV | | | | |
| **Function** | | | | | | |
| Manual operation | | Yes | | | | |
| Switching position indication | | Yes | | | | |
| **Connections** | | | | | | |
| Terminals | ± Screw (Pozidriv) | Coil: PZ1, contact: PZ2 | | | | |
| | Max. tightening torque | Coil: 0.6 Nm, contact: 1.2 Nm | | | Coil: 0.6 Nm, contact: 2 Nm | |
| Coil conductor cross-sections | | 1 ... 4 $mm^2$ | | | | |
| **Ambient conditions** | | | | | | |
| Permissible ambient temperature | For operation/for storage | –25 ... +55 °C/–30 ... +80 °C | | | | |
| Resistance to climate at 95% relative humidity | Acc. to DIN 50015 | 55 °C | | | | |
| Degree of protection | Acc. to EN 60529 | IP20 | | | | |
| Mounting position | | Any (not upside down) | | | | |

## Accessories

**Auxiliary switch**



| Contacts | $U_e$ | $I_e$ | Mounting width | Article No. |
|---|---|---|---|---|
| 1 NO + 1 NC | 250 V AC | 16 A | 0.5 MW | 5TT4930 |

**Central switch, central with diode**



- For central function (no auxiliary switch)

| $U_e$ | Mounting width | Article No. |
|---|---|---|
| 250 V AC | 0.5 MW | 5TT4931 |

**Central switch, group with several diodes**



- For group function (no auxiliary switch)

| $U_e$ | Mounting width | Article No. |
|---|---|---|
| 250 V AC | 0.5 MW | 5TT4932 |

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# 5TT4 auxiliary switches

## For 5TT4 remote control switches

| | Auxiliary switches for 5TT41 | Auxiliary switches for 5TT44 |
|---|---|---|
| **Rigid conductor cross-section** | 0.5 ... 2.5 mm² | 1 ... 4 mm² |
| **Flexible conductor cross-section, with end sleeve** | 0.5 ... 2.5 mm² | 1 ... 4 mm² |





| Contacts | Type | $I_e$ | $U_e$ | Mounting width | | |
|---|---|---|---|---|---|---|
| **Auxiliary switches** | | | | | | |
| 1 NO + 1 NC | Standard | 16 A | 250 V AC | 0.5 MW | – | 5TT4930 |
| 1 CO | Standard | 5 A | 250 V AC | 0.5 MW | 5TT4900 | – |
| | For low power | 0.1 A | 30 V AC/DC | 0.5 MW | 5TT4901 | – |
| **Auxiliary switches, central with diode for central function** | | | | | | |
| | | | 250 V AC | 0.5 MW | – | 5TT4931 |
| **Auxiliary switches, group with several diodes for group function** | | | | | | |
| | | | 250 V AC | 0.5 MW | – | 5TT4932 |

## Further technical specifications

| | | Auxiliary switches for 5TT41 | Auxiliary switches for 5TT44 | | |
|---|---|---|---|---|---|
| | | 5TT4900<br>5TT4901 | 5TT4930 | 5TT4931 | 5TT4932 |
| **Standards** | | | | | |
| Standards | | EN 60947-1 (VDE 0660 Part 100)<br>EN 60947-5-1 (VDE 0660 Part 200) | IEC/EN 60947-5-1 | | |
| Approvals | | – | CE, EAC | | |
| **Supply** | | | | | |
| Rated operational current $I_e$ | At p.f. = 0.6 ... 1 (AC-15) | 16 A | 4 A | – | |
| Rated frequency $f_c$ | | – | 50/60 Hz | | |
| Rated power dissipation $P_v$ | Per pole, max. | – | 0.3 W | | |
| **Contacts** | | | | | |
| Contact gap | | < 1.2 mm | > 3 mm | | |
| Minimum contact load | | 5 V; 1 mA | 12 V; 5 mA | | |
| Electrical endurance at $I_e/U_e$, p.f. = 0.6, incandescent lamp load 600 W | Operating cycles | – | 100000 | – | |
| **Safety** | | | | | |
| Clearances | Between magnet coil and contact | > 6 mm | – | | |
| Creepage distances | Between magnet coil and contact | > 6 mm | – | | |
| Rated impulse voltage $U_{imp}$ | | 1 kV | 1 kV | | |
| Pushbutton malfunction protected against continuous voltage, safe due to design | | Yes | – | | |
| **Function** | | | | | |
| Manual operation | | – | No | | |
| Switching position indication | | – | No | | |
| **Connections** | | | | | |
| Terminals | ± Screw (Pozidriv) | PZ1 | PZ1 | | |
| | Max. tightening torque | 0.5 Nm | 0.8 Nm | | |
| **Ambient conditions** | | | | | |
| Permissible ambient temperature | For operation/for storage | –10 ... +40 °C/–10 ... +40 °C | –25 ... +70 °C/–30 ... +80 °C | | |
| Resistance to climate at 95% relative humidity | Acc. to DIN 50015 | 35 °C | 55 °C | | |
| Degree of protection | Acc. to EN 60529 | IP20, with connected conductors | IP20 | | |
| Mounting position | | Any | Any (not upside down) | | |

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## Accessories

**Compensator**



- For increasing the glow lamp load by 20 mA

| $U_e$ | Mounting width | Article No. |
|---|---|---|
| 250 V AC | 1 MW | 5TT4920 |



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# 5TT42 switching relays

## Rated current 16 A

| | Rated operational current $I_e$ 16 A |
|---|---|
| Rigid conductor cross-section | 1 ... 6 mm² |
| Flexible conductor cross-section, with end sleeve | 1 ... 6 mm² |



| Contacts | $U_e$ | $U_c$ AC | $U_c$ DC | Mounting width | |
|---|---|---|---|---|---|
| 1 NO | 250 V | 230 V | – | 1 MW | 5TT4201-0 |
| | | 115 V | – | 1 MW | 5TT4201-1 |
| | | 24 V | – | 1 MW | 5TT4201-2 |
| | | 12 V | – | 1 MW | 5TT4201-3 |
| | | 8 V | – | 1 MW | 5TT4201-4 |
| 2 NO | 400 V | 230 V | – | 1 MW | 5TT4202-0 |
| | | 115 V | – | 1 MW | 5TT4202-1 |
| | | 24 V | – | 1 MW | 5TT4202-2 |
| | | 12 V | – | 1 MW | 5TT4202-3 |
| | | 8 V | – | 1 MW | 5TT4202-4 |
| 4 NO | 400 V | 230 V | – | 1 MW | 5TT4204-0 |
| | | 115 V | – | 1 MW | 5TT4204-1 |
| | | 24 V | – | 1 MW | 5TT4204-2 |
| | | 12 V | – | 1 MW | 5TT4204-3 |
| | | 8 V | – | 1 MW | 5TT4204-4 |
| 1 NO + 1 NC | 400 V | 230 V | – | 1 MW | 5TT4205-0 |
| | | 115 V | – | 1 MW | 5TT4205-1 |
| | | 24 V | – | 1 MW | 5TT4205-2 |
| | | 12 V | – | 1 MW | 5TT4205-3 |
| | | 8 V | – | 1 MW | 5TT4205-4 |
| 1 CO | 250 V | 230 V | – | 1 MW | 5TT4206-0 |
| | | 115 V | – | 1 MW | 5TT4206-1 |
| | | 24 V | – | 1 MW | 5TT4206-2 |
| | | 12 V | – | 1 MW | 5TT4206-3 |
| | | 8 V | – | 1 MW | 5TT4206-4 |
| 2 CO | 400 V | 230 V | – | 1 MW | 5TT4207-0 |
| | | 115 V | – | 1 MW | 5TT4207-1 |
| | | 24 V | – | 1 MW | 5TT4207-2 |
| | | 12 V | – | 1 MW | 5TT4207-3 |
| | | 8 V | – | 1 MW | 5TT4207-4 |
| | | – | 110 V | 1 MW | 5TT4217-1 |
| | | | 30 V | 1 MW | 5TT4217-6 |
| | | | 24 V | 1 MW | 5TT4217-2 |
| | | | 12 V | 1 MW | 5TT4217-3 |



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## Further technical specifications

| | | 5TT4201-. | 5TT4202-. | 5TT4204-. | 5TT4205-. | 5TT4206-. | 5TT4207-. | 5TT4217-. |
|---|---|---|---|---|---|---|---|---|
| **Standards** | | | | | | | | |
| Standards | | EN 60947-5-1, EN 60669-2-2 | | | | | | |
| Approvals | | VDE, CCC | | | | | | |
| **Supply** | | | | | | | | |
| Rated operational current $I_e$ | At p.f. = 0.6 ... 1 | 16 A | | | | | | |
| Primary operating range | | 0.8 ... 1.1 × $U_c$ | | | | | | |
| Rated frequency $f_c$ | | 50 Hz | | | | | | |
| Rated power dissipation $P_v$ | Magnet coil | 2.4 W<br>3.0 VA | | 4.8 W<br>6.0 VA | 2.4 W<br>3.0 VA | | | 1.7 W<br>1.7 VA |
| | Per pole, max. | 1.0 W | | | | | | |
| **Contacts** | | | | | | | | |
| Contact gap | | > 1.2 mm | | | | | | |
| Minimum contact load | | 10 V AC; 100 mA | | | | | | |
| Electrical endurance at $I_e/U_e$, p.f. = 0.6, incandescent lamp load 600 W | Operating cycles | 50000 | | | | | | |
| **Safety** | | | | | | | | |
| Different phases between magnet coil and contact | | Permissible | | | | | | |
| Safe separation | | > 6 mm | | | | | | |
| Rated impulse voltage $U_{imp}$ | | 4 kV | | | | | | |
| **Function** | | | | | | | | |
| Manual operation | | Yes | | | | | | |
| **Connections** | | | | | | | | |
| Terminals | ± Screw (Pozidriv) | PZ1 | | | | | | |
| | Max. tightening torque | 0.8 ... 1 Nm | | | | | | |
| **Ambient conditions** | | | | | | | | |
| Permissible ambient temperature | | –10 ... +40 °C | | | | | | |
| Resistance to climate at 95% relative humidity | Acc. to DIN 50015 | 35 °C | | | | | | |
| Degree of protection | Acc. to EN 60529 | IP20, with connected conductors | | | | | | |

## Accessories

**Spacer**



- Contour for modular devices with a mounting depth of 70 mm
- Can be snapped onto either side of the busbar for convenient cable routing
- Spacer is recommended for better heat dissipation

| Article No. |
|---|
| 5TG8240 |

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# 5TT50 Insta contactors

## AC/DC technology – hum-free Insta contactors

| | Rated operational current $I_e$ | | | |
|---|---|---|---|---|
| | 20 A | 25 A | 40 A | 63 A |
| Main connection conductor cross-section, solid | 1.0 ... 10 mm² | 1.5 ... 25 mm² | 1.5 ... 25 mm² | 1.5 ... 25 mm² |
| Main connection conductor cross-section, stranded with end sleeve | 1.0 ... 6 mm² | 1.5 ... 16 mm² | 1.5 ... 16 mm² | 1.5 ... 16 mm² |
| Main connection conductor cross-section, AWG | 16 ... 8 | 16 ... 4 | 16 ... 4 | 16 ... 4 |
| |  |  |  |  |

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| Contacts | $U_e$ | $U_c$ AC | $U_c$ DC | Mounting width | | | | |
|---|---|---|---|---|---|---|---|---|
| **Insta contactors with manual switch** | | | | | | | | |
| 2 NO | 400 V | 230 V | 220 V | 1 MW | 5TT5000-0 | – | – | – |
| | | 24 V | 24 V | 1 MW | 5TT5000-2 | – | – | – |
| 4 NO | 400 V | 230 V | 220 V | 2 MW | – | 5TT5030-0 | – | – |
| | | | | 3 MW | – | – | 5TT5040-0 | 5TT5050-0 |
| | | 115 V | 110 V | 2 MW | – | 5TT5030-1 | – | – |
| | | 24 V | 24 V | 2 MW | – | 5TT5030-2 | – | – |
| | | | | 3 MW | – | – | 5TT5040-2 | 5TT5050-2 |
| 2 NC | 400 V | 230 V | 220 V | 1 MW | 5TT5002-0 | – | – | – |
| | | 24 V | 24 V | 1 MW | 5TT5002-2 | – | – | – |
| 4 NC | 400 V | 230 V | 220 V | 2 MW | – | 5TT5033-0 | – | – |
| | | | | 3 MW | – | – | 5TT5043-0 | – |
| | | 24 V | 24 V | 2 MW | – | 5TT5033-2 | – | – |
| | | | | 3 MW | – | – | 5TT5043-2 | – |
| 1 NO + 1 NC | 400 V | 230 V | 220 V | 1 MW | 5TT5001-0 | – | – | – |
| | | 24 V | 24 V | 1 MW | 5TT5001-2 | – | – | – |
| 2 NO + 2 NC | 400 V | 230 V | 220 V | 2 MW | – | 5TT5032-0 | – | – |
| | | | | 3 MW | – | – | 5TT5042-0 | 5TT5052-0 |
| | | 24 V | 24 V | 2 MW | – | 5TT5032-2 | – | – |
| | | | | 3 MW | – | – | 5TT5042-2 | 5TT5052-2 |
| 3 NO + 1 NC | 400 V | 230 V | 220 V | 2 MW | – | 5TT5031-0 | – | – |
| | | | | 3 MW | – | – | 5TT5041-0 | 5TT5051-0 |
| | | 24 V | 24 V | 2 MW | – | 5TT5031-2 | – | – |
| | | | | 3 MW | – | – | 5TT5041-2 | 5TT5051-2 |
| **Insta contactors with O/I/Automatic** | | | | | | | | |
| 2 NO | 400 V | 230 V | 220 V | 1 MW | 5TT5000-6 | – | – | – |
| | | 24 V | 24 V | 1 MW | 5TT5000-8 | – | – | – |
| 4 NO | 400 V | 230 V | 220 V | 2 MW | – | 5TT5030-6 | – | – |
| | | 24 V | 24 V | 2 MW | – | 5TT5030-8 | – | – |
| 1 NO + 1 NC | 400 V | 230 V | 220 V | 1 MW | 5TT5001-6 | – | – | – |
| | | 24 V | 24 V | 1 MW | 5TT5001-8 | – | – | – |
| 3 NO + 1 NC | 400 V | 230 V | 220 V | 2 MW | – | 5TT5031-6 | – | – |
| | | 24 V | 24 V | 2 MW | – | 5TT5031-8 | – | – |

**Note:**
Provision must be made for spacers to ensure heat dissipation.
See Configuration Manual – Switching devices www.siemens.com/lowvoltage/manuals (45315361).

## Accessories

**Spacer**



- Contour for modular devices with a mounting depth of 70 mm
- Can be snapped onto either side of the busbar for convenient cable routing
- Spacer is recommended for better heat dissipation

| Article No. |
|---|
| 5TG8240 |

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## Further technical specifications

| | | 5TT500 | 5TT503 | 5TT504 | 5TT505 |
|---|---|---|---|---|---|
| **Standards** | | | | | |
| Standards | | EN 60947-4-1; EN 60947-5-1; EN 61095 | | | |
| Approvals | | UL 508; UL File No. E303328 | | | |
| **Supply** | | | | | |
| Rated operational current $I_e$ | AC-1/AC-7a, NO contacts/NC contacts | 20 A/20 A | 25 A/25 A | 40 A/40 A | 63 A/63 A |
| | AC-3/AC-7b, NO contacts/NC contacts | 9 A/6 A | 8.5 A/8.5 A | 22 A/22 A | 30 A/30 A |
| Primary operating range | | 0.85 ... 1.1 × $U_c$ | | | |
| Rated frequency $f_c$ at AC | | 50/60 Hz | | | |
| Rated power dissipation $P_v$ | Pick-up power (without manual switch or with manual switch in "I" position) | 2.1 VA/2.1 W | 2.6 VA/2.6 W | 5 VA/5 W | |
| | Pick-up power (with manual switch in "AUTO" position) | 2.1 VA/4.1 W | 2.6 VA/2.6 W | 5 VA/5 W | |
| | Holding power | 2.1 VA/2.1 W | 2.6 VA/2.6 W | 5 VA/5 W | |
| | Per contact AC-1/AC-7a | 1.7 VA | 2.2 VA | 4 VA | 8 VA |
| **Contacts** | | | | | |
| Contact gap (NO contacts) | Min. | 3.6 mm | | | |
| Minimum switching capacity | (= minimum contact load) | ≥ 17 V; 50 mA | | | |
| Electrical endurance at $I_e$ and load | AC-1/AC-7a operating cycles | 200000 | | 100000 | |
| | AC-3/AC-7b operating cycles | 300000 | 500000 | | 150000 |
| Mechanical service life | Operating cycles | 3 million | | | |
| Switching of resistive loads AC-1 for rated operational power $P_s$ | 1-phase (NO contacts) | 4 kW (230 V) | 5.4 kW (400 V) | 8.7 kW (400 V) | 13.3 kW (400 V) |
| | 3-phase (NO contacts) | – | 16 kW (400 V) | 26 kW (400 V) | 40 kW (400 V) |
| Switching of three-phase asynchronous motors AC-3 for rated operational power $P_s$ | 1-phase (NO contacts) | 1.3 kW/0.75 kW | 1.3 kW/1.3 kW | 3.7 kW/3.7 kW | 5/5 kW |
| | 3-phase (NO contacts) | – | 4 kW | 11 kW | 15 kW |
| Maximum switching frequency at load | AC-1/AC-7a/AC-3/AC-7b | 600 $h^{-1}$ | | | |
| **Safety** | | | | | |
| Rated impulse voltage $U_{imp}$ | | ≤ 4 kV | | | |
| Short-circuit protection, according to coordination type 1 | Back-up fuse characteristic gL/gG | 20 A | 25 A | 63 A | 80 A |
| Overload withstand capability at 10 s | Per conducting path (NO contacts only) | 72 A | 68 A | 176 A | 240 A |
| **Function** | | | | | |
| Switching times | Closing (NO contacts) | 15 ... 45 ms | | 15 ... 20 ms | |
| | Opening (NO contacts) | 20 ... 50 ms | 20 ... 70 ms | 35 ... 45 ms | |
| **Connections** | | | | | |
| Coil/main connection terminals | ± Screw (Pozidriv) | PZ1/PZ1 | PZ1/PZ2 | | |
| Coil connection conductor cross-section | Solid | 1.0 ... 2.5 $mm^2$ | | | |
| | Stranded, with end sleeve | 1.0 ... 2.5 $mm^2$ | | | |
| | AWG cables | 16 ... 10 | | | |
| Main connection conductor cross-section | Solid | 1.0 ... 10 $mm^2$ | 1.5 ... 25 $mm^2$ | | |
| | Stranded, with end sleeve | 1.0 ... 6 $mm^2$ | 1.5 ... 16 $mm^2$ | | |
| | AWG cables | 16 ... 8 | 16 ... 4 | | |
| Tightening torque | Coil connection | 0.6 Nm/8 lbs/in. | | | |
| | Main connection | 1.2 Nm/9 lbs/in. | 3.5 Nm/20 lbs/in. | | |
| **Ambient conditions** | | | | | |
| Permissible ambient temperature | For operation [1]/For storage | –15 ... +55 °C/–50 ... +80 °C | | | |
| Degree of protection | Acc. to EN 60529 | IP20, with connected conductors | | | |
| **Characteristics according to UL 508** | | | | | |
| Rated operational current $I_n$ | | 20 A | 25 A | 40 A | 63 A |
| UL 508 General Use 240 V/480 V | FLA | 20 A | 25 A | 40 A | 63 A |
| UL 508 AC discharge lamps | | 20 A | 25 A | 30 A | 40 A |
| UL 508 motor load | Power 240 V/480 V | 1 hp/– | 3 hp/5 hp | 7.5 hp/15 hp | 10 hp/20 hp |
| UL 508 short-circuit at 480 V | K5 fuses | 20 A | 25 A | 60 A | 70 A |

[1] Contactors can be operated at ambient temperatures of between -25 °C and +70 °C, but only under special conditions.
For further information, please contact Siemens Support. For questions concerning heat dissipation, please refer to the instructions in the Configuration Manual "Switching devices".

## Accessories

### Auxiliary switches



- For right-hand-side retrofitting
- Max. one auxiliary switch per Insta contactor

| Contacts | Mounting width | Article No. |
|---|---|---|
| 2 NO | 0.5 MW | 5TT5910-0 |
| 1 NO + 1 NC | 0.5 MW | 5TT5910-1 |

### Sealable terminal covers



| For Insta contactor | Mounting width | Article No. |
|---|---|---|
| 20 A | 1 MW | 5TT5910-5 |
| 25 A | 2 MW | 5TT5910-6 |
| 40 A and 63 A | 3 MW | 5TT5910-7 |

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# 5TT58 Insta contactors

## AC technology



| | Rated operational current $I_e$ | | | | |
|---|---|---|---|---|---|
| | 20 A | 25 A | 32 A | 40 A | 63 A |
| Main connection conductor cross-section, rigid | 1.0 ... 10 mm² | 1.0 ... 10 mm² | 1.0 ... 10 mm² | 1 ... 25 mm² | 1 ... 25 mm² |
| Main connection conductor cross-section, flexible with end sleeve | 1.0 ... 6 mm² | 1.0 ... 6 mm² | 1.0 ... 6 mm² | 1 ... 16 mm² | 1 ... 16 mm² |
| |  |  |  |  |  |

| Contacts | $U_e$ | $U_c$ AC | | Mounting width | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Insta contactors without manual switch** | | | | | | | | | |
| 2 NO | 400 V | 230 V | | 1 MW | 5TT5800-0 | 5TT5810-0 | 5TT5860-0 | – | – |
| | | | | 2 MW | – | – | – | 5TT5870-0 | – |
| | | 24 V | | 1 MW | 5TT5800-2 | – | – | – | – |
| 4 NO | 400 V | 230 V | Standard | 2 MW | – | 5TT5830-0 | – | – | – |
| | | | | 3 MW | – | – | – | 5TT5840-0 | 5TT5850-0 |
| | | | Capacitive loads up to 150 µF | 2 MW | – | 5TT5820-0 | – | – | – |
| | | 115 V | | 2 MW | – | 5TT5830-1 | – | – | – |
| | | 24 V | | 2 MW | – | 5TT5830-2 | – | – | – |
| | | | | 3 MW | – | – | – | 5TT5840-2 | 5TT5850-2 |
| 2 NC | 400 V | 230 V | | 1 MW | 5TT5802-0 | – | – | – | – |
| | | 24 V | | 1 MW | 5TT5802-2 | – | – | – | – |
| 4 NC | 400 V | 230 V | | 2 MW | – | 5TT5833-0 | – | – | – |
| | | | | 3 MW | – | – | – | 5TT5843-0 | 5TT5853-0 |
| | | 24 V | | 2 MW | – | 5TT5833-2 | – | – | – |
| | | | | 3 MW | – | – | – | 5TT5843-2 | 5TT5853-2 |
| 1 NO + 1 NC | 400 V | 230 V | | 1 MW | 5TT5801-0 | – | – | – | – |
| | | 24 V | | 1 MW | 5TT5801-2 | – | – | – | – |
| 2 NO + 2 NC | 400 V | 230 V | | 2 MW | – | 5TT5832-0 | – | – | – |
| | | | | 3 MW | – | – | – | 5TT5842-0 | 5TT5852-0 |
| | | 24 V | | 2 MW | – | 5TT5832-2 | – | – | – |
| | | | | 3 MW | – | – | – | 5TT5842-2 | 5TT5852-2 |
| 3 NO + 1 NC | 400 V | 230 V | | 2 MW | – | 5TT5831-0 | – | – | – |
| | | | | 3 MW | – | – | – | 5TT5841-0 | 5TT5851-0 |
| | | 115 V | | 2 MW | – | 5TT5831-1 | – | – | – |
| | | 24 V | | 2 MW | – | 5TT5831-2 | – | – | – |
| | | | | 3 MW | – | – | – | 5TT5841-2 | 5TT5851-2 |
| **Insta contactors with manual switch O/I/Automatic** | | | | | | | | | |
| 2 NO | 400 V | 230 V | | 1 MW | 5TT5800-6 | – | – | – | – |
| | | 24 V | | 1 MW | 5TT5800-8 | – | – | – | – |
| 4 NO | 400 V | 230 V | | 2 MW | – | 5TT5830-6 | – | – | – |
| | | | | 3 MW | – | – | – | 5TT5840-6 | 5TT5850-6 |
| | | 24 V | | 2 MW | – | 5TT5830-8 | – | – | – |
| | | | | 3 MW | – | – | – | 5TT5840-8 | – |
| 1 NO + 1 NC | 400 V | 230 V | | 1 MW | 5TT5801-6 | – | – | – | – |
| | | 24 V | | 1 MW | 5TT5801-8 | – | – | – | – |
| 3 NO + 1 NC | 400 V | 230 V | | 2 MW | – | 5TT5831-6 | – | – | – |
| | | | | 3 MW | – | – | – | 5TT5841-6 | – |
| | | 24 V | | 2 MW | – | 5TT5831-8 | – | – | – |
| | | | | 3 MW | – | – | – | 5TT5841-8 | – |

**Note:**
Provision must be made for spacers to ensure heat dissipation.
See Configuration Manual – Switching devices www.siemens.com/lowvoltage/manuals (45315361).

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## Further technical specifications

| | | 5TT580. | 5TT581. | 5TT582. 5TT583. | 5TT584. | 5TT585. | 5TT586. | 5TT587. |
|---|---|---|---|---|---|---|---|---|
| **Standards** | | | | | | | | |
| Standards | | IEC 60947-4-1, IEC 60947-5-1, IEC 61095; EN 60947-4-1, EN 60947-5-1, EN 61095, VDE 0660 | | | | | | |
| **Supply** | | | | | | | | |
| Number of poles | | 2 | | 4 | | | 2 | |
| Rated operational current $I_e$ | | 20 A | 25 A | | 40 A | 63 A | 32 A | 40 A |
| Primary operating range | | 0.85 ... 1.1 × $U_c$ | | | | | | |
| Rated frequency $f_c$ at AC | | 50/60 Hz | | | | | | |
| Rated power dissipation $P_v$ | Pick-up power (without manual switch or manual switch in "I" position) | 6 VA/3.8 W | 12 VA/10 W | 10 VA/5 W | 15.4 VA/4.6 W | | 12 VA/10 W | 33 VA/25 W |
| | Pick-up power (with manual switch in "AUTO" position) | 12 VA/10 W | – | 33 VA/25 W | 62 VA/50 W | | – | |
| | Holding power | 2.8 VA/1.2 W | | 5.5 VA/1.6 W | 7.7 VA/3 W | | 2.8 VA/1.2 W | 5.5 VA/1.6 W |
| | Per contact AC-1/AC-7a | 1.7 VA | 2.0 VA | 2.2 VA | 4 VA | 8 VA | 2.5 VA | |
| **Contacts** | | | | | | | | |
| Contact gap | Minimum | 3.6 mm | | | 3.4 mm | | 3.6 mm | |
| Minimum switching capacity | (= minimum contact load) | ≥ 17 V; 50 mA | | | | | | |
| Electrical endurance at $I_e$ and load | AC-1/AC-7a operating cycles | 200000 | | | 100000 | | 150000 | 100000 |
| | AC-3/AC-7b operating cycles | 300000 | | 500000 | 150000 | | 300000 | 150000 |
| Mechanical service life | Operating cycles | 3 million | | | | | | |
| Switching of resistive loads AC-1/AC-7a for rated operational power $P_s$ | 1-phase (230 V) (NO contacts) | 4 kW | 5.4 kW | | 8.7 kW | 13.3 kW | 5.9 kW | 3.7 kW |
| | 3-phase (400 V) (NO contacts) | – | | 16 kW | 26 kW | 40 kW | – | |
| Switching of 3-phase asynchronous motors AC-3/AC-7b for rated operational power $P_s$ | 1-phase (230 V) (NO contacts) | 1.3 kW [1] | 1.3 kW | | 3.7 kW | 5 kW | 1.3 kW | – |
| | 3-phase (400 V) (NO contacts) | – | | 4 kW | 11 kW | 15 kW | – | |
| Maximum switching frequency at load | | 600 $h^{-1}$ | | | | | | |
| **Safety** | | | | | | | | |
| Rated insulation voltage $U_i$ | | 440 V | | | 500 V | | 440 V | 230 V |
| Rated impulse voltage $U_{imp}$ | | 4 kV | | | | | | 6 KV |
| Short-circuit protection, according to coordination type 1 | Back-up fuse characteristic gL/gG | 20 A | 25 A | | 63 A | 80 A | 32 A | 63 A |
| Overload withstand capability at 10 s | Per conducting path (NO contacts only) | 72 A | | 68 A | 176 A | 240 A | 72 A | 176 A |
| **Function** | | | | | | | | |
| Switching times | Closing (NO contacts) | 15 ... 25 ms | | 10 ... 20 ms | 15 ... 20 ms | | 15 ... 25 ms | 10 ... 20 ms |
| | Opening (NO contacts) | 20 ms | 10 ... 30 ms | 20 ms | 10 ms | | 10 ... 30 ms | 10 ... 15 ms |
| | Closing (NC contacts) | 20 ... 30 ms | – | 20 ... 30 ms | 5 ... 10 ms | | – | |
| | Opening (NC contacts) | 10 ms | – | 10 ms | 10 ... 15 ms | | – | |
| **Connections** | | | | | | | | |
| Coil connection terminals | ± Screw (Pozidriv) | PZ1 | | | | | | |
| Main connection terminals | ± Screw (Pozidriv) | PZ1 | | | PZ2 | | PZ1 | |
| Coil connection conductor cross-section | Rigid | 1.0 ... 2.5 $mm^2$ | | | | | | |
| | Flexible, with end sleeve | 1.0 ... 2.5 $mm^2$ | | | | | | |
| Main connection conductor cross-section | Rigid | 1.0 ... 10 $mm^2$ | | | 1 ... 25 $mm^2$ | | 1.0 ... 10 $mm^2$ | 1.5 ... 25 $mm^2$ |
| | Flexible, with end sleeve | 1.0 ... 6 $mm^2$ | | | 1 ... 16 $mm^2$ | | 1.0 ... 6 $mm^2$ | 1.5 ... 16 $mm^2$ |
| Tightening torque | Coil connection | 0.6 Nm | | | | | | |
| | Main connection | 1.2 Nm | | | 3.5 Nm | | 1.2 Nm | 2.5 Nm |
| **Ambient conditions** | | | | | | | | |
| Permissible ambient temperature | For operation/for storage | –5 ... +55 °C/–30 ... +80 °C | | | | | | |
| Degree of protection | Acc. to EN 60529 | IP20, with connected conductors | | | | | | |

[1] For NO contacts only.

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# 5TT58 Insta contactors

## AC technology

### Accessories

**Auxiliary switches**



- For right-hand-side retrofitting
- Max. one auxiliary switch per Insta contactor

| Contacts | Mounting width | Article No. |
|---|---|---|
| 2 NO | 0.5 MW | 5TT5910-0 |
| 1 NO + 1 NC | 0.5 MW | 5TT5910-1 |

**Sealable terminal covers**



| For Insta contactor | Mounting width | Article No. |
|---|---|---|
| 20 A | 1 MW | 5TT5910-5 |
| 25 A | 2 MW | 5TT5910-6 |
| 40 A and 63 A | 3 MW | 5TT5910-7 |

**Spacer**



- Contour for modular devices with a mounting depth of 70 mm
- Can be snapped onto either side of the busbar for convenient cable routing
- Spacer is recommended for better heat dissipation

| For Insta contactor | Mounting width | Article No. |
|---|---|---|
| 20 A | 1 MW | 5TG8240 |





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# 5TT5 auxiliary switches

## For 5TT5 Insta contactor

| | |
|---|---|
| **Rigid conductor cross-section** | 1 ... 2.5 mm² |
| **Flexible conductor cross-section, with end sleeve** | 1 ... 2.5 mm² |



| Contacts | $U_e$ AC | Mounting width | |
|---|---|---|---|
| 2 NO | 230 V/400 V | 0.5 MW | 5TT5910-0 |
| 1 NO + 1 NC | 230 V/400 V | 0.5 MW | 5TT5910-1 |

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## Further technical specifications

| | | 5TT5910 |
|---|---|---|
| **Standards** | | |
| Standards | | IEC 60947-5-1 |
| Approvals | | CCC |
| **Supply** | | |
| Number of poles | | 2 |
| Rated operational current $I_e$ | 230 V | 6 A |
| | 400 V | 4 A |
| Rated frequency $f_c$ at AC | | 50/60 Hz |
| **Contacts** | | |
| Contact gap | Minimum | 4 mm |
| Minimum switching capacity | (= minimum contact load) | ≥ 12 V; 5 mA |
| Mechanical service life | Operating cycles | 3 million |
| Maximum switching frequency at load | | 600 $h^{-1}$ |
| **Safety** | | |
| Rated insulation voltage $U_i$ | | 500 V |
| Rated impulse voltage $U_{imp}$ | | 4 kV |
| Short-circuit protection, according to coordination type 1 | Back-up fuse characteristic gL/gG | 6 A |
| **Connections** | | |
| Terminals | ± Screw (Pozidriv) | PZ1 |
| Conductor cross-section | Rigid | 1 ... 2.5 mm² |
| | Flexible, with end sleeve | 1 ... 2.5 mm² |
| Tightening torque | | 0.8 Nm |
| **Ambient conditions** | | |
| Permissible ambient temperature | For operation/for storage | –5 ... +55 °C/–30 ... +80 °C |
| Degree of protection | Acc. to EN 60529 | IP20, with connected conductors |

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# 5TT3 soft-starting devices

## For 2-phase motor control

| | |
|---|---|
| **Rigid conductor cross-section** | Max. 2 × 2.5 mm² |
| **Flexible conductor cross-section, with end sleeve** | Min. 1 × 0.5 mm² |



| Version | $U_e$ AC | Mounting width | |
|---|---|---|---|
| 3-phase | 400 V | 6 MW | 5TT3440 |



## Further technical specifications

| | | 5TT3440 |
|---|---|---|
| **Standards** | | |
| Standards | | EN 60947-4-2 (VDE 0660-117) |
| **Supply** | | |
| Line/motor voltage | | 400 V AC |
| Primary operating range | | 0.8 ... 1.1 × $U_c$ |
| Rated frequency $f_c$ at AC | | 50/60 Hz |
| Rated power | | 3.5 VA |
| Rated power dissipation $P_v$ at rated operational current | Coil/drive | 3.5 VA |
| | Per contact | 4.6 VA |
| Rated output of motor at 400 V | Max. | 5500 VA |
| | Min. | 300 VA |
| Startup voltage | | 30 ... 70% |
| Starting ramp | | 0.1 ... 10 s |
| **Safety** | | |
| Quick-acting semiconductor fuse | | 35 A |
| **Function** | | |
| Switching frequency 3 × $I_N$, $T_{AN}$ = 10 s, $v_u$ = 20% | Operating cycles (up to 3 kW) | 36 $h^{-1}$ |
| | Operating cycles (from 3 ... 5.5 kW) | 20 $h^{-1}$ |
| Recovery time | | 100 ms |
| **Connections** | | |
| Conductor cross-section | Rigid | Max. 2 × 2.5 mm² |
| | Flexible, with end sleeve | Min. 1 - 0.5 mm² |
| **Ambient conditions** | | |
| Permissible ambient temperature | | –20 ... +60 °C |
| Resistance to climate | Acc. to EN 60068-1 | 20/60/4 |

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# 7LF4 digital time switches

## Mini



- Weekly program
- 28 programs
- Automatic daylight-saving adjustment

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| Contacts | $U_c$ | Channels | Mounting width | |
|---|---|---|---|---|
| 1 NO | 230 V AC | 1 | 1 MW | 7LF4501-5 |

| Further technical specifications | | Mini |
|---|---|---|
| **Standards** | | |
| Standards | | EN 60730-1, -2-7; VDE 0631-1, -2-7 |
| **Supply** | | |
| Primary operating range | | 0.85 ... 1.1 × $U_c$ |
| Frequency range | | 50/60 Hz |
| Rated power dissipation $P_v$ | | 0.9 VA |
| **Channels** | | |
| Rated operational voltage $U_e$ | | 250 V AC |
| Rated operational current $I_e$ | At p.f. = 1 | 16 A |
| | At p.f. = 0.6 | 10 A |
| **Contacts** | | |
| Minimum contact load | | 12 V/100 mA |
| Electrical operating cycles | At p.f. = 1 | 6000 (20 A) |
| Mechanical operating cycles | | > 5 million |
| Incandescent lamp load | | 5 A |
| Energy-saving lamp load | | 300 W |
| Fluorescent lamp load | Parallel p.f. correction 70 µF | 60 VA |
| | Uncorrected | 2500 VA |
| **Safety** | | |
| Different phases between operating mechanism and contact | | Permissible |
| Rated impulse voltage $U_{imp}$ | | 4 kV |
| Electrostatic discharge | Acc. to IEC 61000-4-2 | > 8.0 kV |
| EMC: Burst | Acc. to IEC 61000-4-4 | > 4.4 kV |
| EMC: Surge | Acc. to IEC 61000-4-5 | > 2.0 kV |
| Overvoltage category | Acc. to EN 61010-1 | III |
| **Function** | | |
| Clock errors per day | Typical | ±1 s/day |
| Power reserve storage | Battery | 3 years |
| Make and break cycles | | 1 min |
| Minimum switching sequences | | 1 min |
| Control input | Terminal S | – |
| Programs [1)] | | 28 |
| Battery type | | Li primary cell |
| **Connections** | | |
| Terminals | ± Screw (Pozidriv) | PZ1 |
| Conductor cross-sections of main conducting path | Rigid | 1.5 ... 4 mm² |
| | Flexible, with end sleeve | Max. 2.5 mm² |
| **Ambient conditions** | | |
| Permissible ambient temperature | For operation/ for storage | –10 ... +55 °C/ –20 ... +60 °C |
| Resistance to climate | Acc. to EN 60068-1 | 10/055/21 |
| Degree of protection | Acc. to EN 60529 | IP20, with connected conductors |
| Protection class | Acc. to EN 61140 | II |

[1)] A program consists of an ON time, an OFF time and assigned ON and OFF days or day blocks.



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# Top



- Weekly program
- 28 programs
- Text-assisted programming concept
  - Language: English
- Manual daylight-saving adjustment

| Contacts | $U_c$ | Channels | Mounting width | |
|---|---|---|---|---|
| 1 CO | 230 V AC | 1 | 2 MW | 7LF4511-0 |
| 2 CO | 230 V AC | 2 | 2 MW | 7LF4512-0 |

## Further technical specifications

| | | Top |
|---|---|---|
| **Standards** | | |
| Standards | | EN 60730-1, -2-7; VDE 0631-1, -2-7 |
| **Supply** | | |
| Primary operating range | | 0.85 ... 1.1 × $U_c$ |
| Frequency range | | 50/60 Hz |
| Rated power dissipation $P_v$ | | 2 VA |
| **Channels** | | |
| Rated operational voltage $U_e$ | | 250 V AC |
| Rated operational current $I_e$ | At p.f. = 1 | 16 A |
| | At p.f. = 0.6 | 10 A |
| **Contacts** | | |
| Minimum contact load | | 12 V/100 mA |
| Electrical operating cycles | At p.f. = 1 | 100000 |
| Mechanical operating cycles | | 10 million |
| Incandescent lamp load | | 8 A |
| Energy-saving lamp load | | 60 VA |
| Fluorescent lamp load | Parallel p.f. correction 70 µF | 60 VA |
| | Uncorrected | 2300 VA |
| **Safety** | | |
| Different phases between operating mechanism and contact | | Permissible [2] |
| Rated impulse voltage $U_{imp}$ | | 4 kV |
| Electrostatic discharge | Acc. to IEC 61000-4-2 | > 8.0 kV |
| EMC: Burst | Acc. to IEC 61000-4-4 | > 4.4 kV |
| EMC: Surge | Acc. to IEC 61000-4-5 | > 2.0 kV |
| Overvoltage category | Acc. to EN 61010-1 | III |
| **Function** | | |
| Clock errors per day | Typical | ±1.5 s/day |
| Power reserve storage | Battery | 3 years |
| Make and break cycles | | 1 min |
| Minimum switching sequences | | 1 min |
| Control input | Terminal S | No |
| Programs [1] | | 28 (14 per channel) |
| Program memory | Captive | No |
| Battery type | | Li primary cell |
| **Connections** | | |
| Terminals | ± Screw (Pozidriv) | PZ1 |
| Conductor cross-sections of main conducting path | Rigid | 1.5 ... 4 mm² |
| | Flexible, with end sleeve | Max. 2.5 mm² |
| **Ambient conditions** | | |
| Permissible ambient temperature | For operation/ for storage | –20 ... +55 °C/ –20 ... +60 °C |
| Resistance to climate | Acc. to EN 60068-1 | 20/055/21 |
| Degree of protection | Acc. to EN 60529 | IP20, with connected conductors |
| Protection class | Acc. to EN 61140 | II |

[1] A program consists of an ON time, an OFF time and assigned ON and OFF days or day blocks.
[2] The combination of line voltage (230 V) and SELV is not permissible in conjunction with a 2-channel time switch. This requirement is, however, admissible in the case of 1-channel time switch.

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# 7LF4 digital time switches

## Profi



- Weekly program
- Vacation program
- Random program
- Expert mode
- Cycle function
- Text-assisted programming concept
  – 15 languages
- Simple program creation on a PC
  using the supplied software, with 7LF4941-0 USB adapter
- Automatic daylight-saving adjustment
- Operating hours counter, counting range: 65535 h
- Accurate to the second hh:mm:ss
- Synchronization 50/60 Hz

| Contacts | $U_c$ | Channels | Mounting width | |
|---|---|---|---|---|
| 1 CO | 230 V AC | 1 | 2 MW | 7LF4521-0 |
| | 24 V AC/DC | 1 | 2 MW | 7LF4521-2 |
| 2 CO | 230 V AC | 2 | 2 MW | 7LF4522-0 |
| | 24 V AC/DC | 2 | 2 MW | 7LF4522-2 |

## Further technical specifications

| | | Profi |
|---|---|---|
| **Standards** | | |
| Standards | | EN 60730-1, -2-7; VDE 0631-1, -2-7 |
| Approvals | | UL File No. E301698 |
| **Supply** | | |
| Primary operating range | $U_c$ 230 V | 0.85 ... 1.1 × $U_c$ |
| | $U_c$ 24 V | 0.9 ... 1.1 × $U_c$ |
| Frequency range | $U_c$ 230 V | 50/60 Hz |
| | $U_c$ 24 V | 50/60 Hz |
| Rated power dissipation $P_v$ | $U_c$ 230 V | 2 VA |
| | $U_c$ 24 V | 2 VA |
| **Channels** | | |
| Rated operational voltage $U_e$ | | 250 V AC |
| Rated operational current $I_e$ | At p.f. = 1 | 16 A |
| | At p.f. = 0.6 | 10 A |
| **Contacts** | | |
| Minimum contact load | | 12 V/100 mA |
| Electrical operating cycles | At p.f. = 1 | 100000 |
| Mechanical operating cycles | | 10 million |
| Incandescent lamp load | | 8 A |
| Energy-saving lamp load | | 1000 W |
| Fluorescent lamp load | Parallel p.f. correction 70 µF | 600 VA |
| | Uncorrected | 2000 VA |
| **Safety** | | |
| Different phases between operating mechanism and contact | | Permissible [2] |
| Rated impulse voltage $U_{imp}$ | | 4 kV |
| Electrostatic discharge | Acc. to IEC 61000-4-2 | > 8.0 kV |
| EMC: Burst | Acc. to IEC 61000-4-4 | > 4.4 kV |
| EMC: Surge | Acc. to IEC 61000-4-5 | > 2.0 kV |
| Overvoltage category | Acc. to EN 61010-1 | III |
| **Function** | | |
| Clock errors per day | Typical | ±0.1 s/day |
| Power reserve storage | Battery | 5 years |
| Make and break cycles | | 1 s |
| Minimum switching sequences | | 1 s |
| Control input | Terminal S | No |
| Programs [1] | | 28 |
| Program memory | Captive | Yes |
| Battery type | | Li primary cell |
| **Connections** | | |
| Terminals | ± Screw (Pozidriv) | PZ1 |
| Conductor cross-sections of main conducting path | Rigid | 1.5 ... 4 mm² |
| | Flexible, with end sleeve | Max. 2.5 mm² |
| **Ambient conditions** | | |
| Permissible ambient temperature | For operation/for storage | –20 ... +55 °C/ –20 ... +60 °C |
| Resistance to climate | Acc. to EN 60068-1 | 20/055/21 |
| Degree of protection | Acc. to EN 60529 | IP20, with connected conductors |
| Protection class | Acc. to EN 61140 | II |

[1] A program consists of an ON time, an OFF time and assigned ON and OFF days or day blocks.
[2] The combination of line voltage (230 V) and SELV is not permissible in conjunction with a 2-channel time switch. This requirement is, however, admissible in the case of 1-channel time switch.

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# Astro



- Weekly program
- Vacation program
- Random program
- Expert mode
- Astro function
- Text-assisted programming concept
  – 15 languages
- Simple program creation on a PC using the supplied software, with 7LF4941-0 USB adapter
- Automatic daylight-saving adjustment
- Operating hours counter, counting range: 65535 h
- Accurate to the second hh:mm:ss
- Synchronization 50/60 Hz
- Input disable via PIN code
- Daylight-saving correction
- 1 h test

| Contacts | $U_c$ | Channels | Mounting width | |
|---|---|---|---|---|
| 1 CO | 230 V AC | 1 | 2 MW | 7LF4531-0 |
| 2 CO | 230 V AC | 2 | 2 MW | 7LF4532-0 |

## Further technical specifications

| | | Astro |
|---|---|---|
| **Standards** | | |
| Standards | | EN 60730-1, -2-7; VDE 0631-1, -2-7 |
| Approvals | | UL File No. E301698 |
| **Supply** | | |
| Primary operating range | | 0.85 ... 1.1 × $U_c$ |
| Frequency range | | 50/60 Hz |
| Rated power dissipation $P_v$ | | 2 VA |
| **Channels** | | |
| Rated operational voltage $U_e$ | | 250 V AC |
| Rated operational current $I_e$ | At p.f. = 1 | 16 A |
| | At p.f. = 0.6 | 10 A |
| **Contacts** | | |
| Minimum contact load | | 12 V/100 mA |
| Electrical operating cycles | At p.f. = 1 | 100000 |
| Mechanical operating cycles | | 10 million |
| Incandescent lamp load | | 8 A |
| Energy-saving lamp load | | 1000 W |
| Fluorescent lamp load | Parallel p.f. correction 70 µF | 600 VA |
| | Uncorrected | 2000 VA |
| **Safety** | | |
| Different phases between operating mechanism and contact | | Permissible [2] |
| Rated impulse voltage $U_{imp}$ | | 4 kV |
| Electrostatic discharge | Acc. to IEC 61000-4-2 | > 8.0 kV |
| EMC: Burst | Acc. to IEC 61000-4-4 | > 4.4 kV |
| EMC: Surge | Acc. to IEC 61000-4-5 | > 2.0 kV |
| Overvoltage category | Acc. to EN 61010-1 | III |
| **Function** | | |
| Clock errors per day | Typical | ±0.1 s/day |
| Power reserve storage | Battery | 5 years |
| Make and break cycles | | 1 s |
| Minimum switching sequences | | 1 s |
| Control input | Terminal S | Yes (with 1K clock) |
| Programs [1] | | 56 (2 × 28) |
| Program memory | Captive | Yes |
| Battery type | | Li primary cell |
| **Connections** | | |
| Terminals | ± Screw (Pozidriv) | PZ1 |
| Conductor cross-sections of main conducting path | Rigid | 1.5 ... 4 mm² |
| | Flexible, with end sleeve | Max. 2.5 mm² |
| **Ambient conditions** | | |
| Permissible ambient temperature | For operation/ for storage | –20 ... +55 °C/ –20 ... +60 °C |
| Resistance to climate | Acc. to EN 60068-1 | 20/055/21 |
| Degree of protection | Acc. to EN 60529 | IP20, with connected conductors |
| Protection class | Acc. to EN 61140 | II |

[1] A program consists of an ON time, an OFF time and assigned ON and OFF days or day blocks.
[2] The combination of line voltage (230 V) and SELV is not permissible in conjunction with a 2-channel time switch. This requirement is, however, admissible in the case of 1-channel time switch.

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# 7LF4 digital time switches

## Accessories



| | | Mini | Top | Profi | Astro |
|---|---|---|---|---|---|
| **Data keys** | | | | | |
|  • For Profi and Astro digital time switches<br>• Programming at the PC (7LF4941-0 USB adapter and software required)<br>• Read-in of programs to the time switch<br>• Writing of programs from the time switch<br>• Transfer of programs<br>– From PC to time switch and vice versa<br>– From time switch to time switch | | | | | |
| | **Article No.** | | | | |
| | 7LF4941-1 | – | – | ■ | ■ |
| **USB adapter and software** | | | | | |
|  • For Profi and Astro digital time switches<br>• For the reading and writing of data keys at the PC<br>• Including programming software<br>• Including 7LF4941-1 data key for Profi and Astro<br>• Compatible with 7LF4940-1 data key (predecessor model) and 7LF4940-2 data key<br>• Can be connected via USB interface<br>• System requirements:<br>– Windows 7, Windows Vista, Windows 2000, Windows ME, Windows XP or Windows 98 Second Edition<br>– USB connection<br>– 40 MB free disk space | | | | | |
| | **Article No.** | | | | |
| | 7LF4941-0 | – | – | ■ | ■ |
| **Holders for front panel installation** | | | | | |
|  • Universal application for devices from 1 MW ... 6 MW<br>• Cutout dimensions:<br>– Height $45^{+0.5}$ mm<br>– Width 23 mm, 41 mm, 59 mm, 77 mm, 95 mm or 113 mm | | | | | |
| | **Article No.** | | | | |
| | 7LF9006 | ■ | ■ | ■ | ■ |

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# 7LF5 mechanical time switches

## Time switches without power reserve

| | | For DIN rail | | For wall mounting (surface mounting) |
|---|---|---|---|---|
| | |  |  |  |
| **Contacts** | **Mounting width** | | | |
| **With day disk** | | | | |
| 1 NO | 1 MW | 7LF5300-1 | – | – |
| 1 CO | 3 MW | – | 7LF5300-5 | – |
| | – | – | – | 7LF5301-0 |
| **With week disk** | | | | |
| 1 CO | 3 MW | – | 7LF5300-6 | – |

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## Further technical specifications

| | | 7LF5300-1 | 7LF5300-5 | 7LF5300-6 | 7LF5301-0 |
|---|---|---|---|---|---|
| **Standards** | | | | | |
| Standards | | EN 60730-1, -2-7, UL 917, UL 917, CSA C22.2 No. 14 and 177 | | | |
| Approvals | | VDE | | | |
| **Supply** | | | | | |
| Rated control supply voltage $U_c$ | | 230 V AC | | | |
| Primary operating range | $U_c$ 230 V AC | 0.85 ... 1.1 × $U_c$ | | | |
| Rated frequency | | 50 Hz | | | |
| Frequency range | | 50 Hz | | | |
| Rated power dissipation $P_v$ | | 1 VA | | | |
| **Channels** | | | | | |
| Rated operational voltage $U_e$ | | 250 V AC | | | |
| Rated operational current $I_e$ | At p.f. = 1 | 16 A | | | |
| | At p.f. = 0.6 | 4 A | | | |
| **Contacts** | | | | | |
| Minimum contact load | | 4 V/1 mA | | | |
| Electrical operating cycles | At p.f. = 1 | 100000 | | | |
| Mechanical operating cycles | | 20 million | | | |
| Incandescent lamp load | | 5 A | | | |
| Fluorescent lamp load | Parallel p.f. correction 70 µF | 60 VA | | | |
| | Uncorrected | 1400 VA | | | |
| **Safety** | | | | | |
| Different phases between operating mechanism and contact | | Permissible | | | |
| Electrical isolation, creepage distances and clearances | Operating mechanism | 8 mm | | | |
| | Contact | 6 mm | | | |
| Rated impulse voltage $U_{imp}$ | | 4 kV | | | |
| Electrostatic discharge | Acc. to IEC 61000-4-2 | > 8.0 kV | | | |
| EMC: Burst | Acc. to IEC 61000-4-4 | > 4.4 kV | | | |
| EMC: Surge | Acc. to IEC 61000-4-5 | > 2.0 kV | | | |
| Overvoltage category | Acc. to EN 61010-1 | III | | | |
| **Function** | | | | | |
| Switching accuracy | | ±5 min | | ±30 min | ±5 min |
| Clock errors | | System-synchronized | | | |
| Make and break cycles | | 15 min | | 120 min | 10 min |
| Minimum switching sequences | | 30 min | | 240 min | 30 min |
| **Connections** | | | | | |
| Terminals | ± Screw (Pozidriv) | PZ1 | | | |
| Conductor cross-sections of main conducting path | Rigid | 1.5 ... 4 mm² | | | |
| | Flexible, with end sleeve | Max. 2.5 mm² | | | |
| | Flexible, without end sleeve | Max. 4 mm² | | | |
| **Ambient conditions** | | | | | |
| Permissible ambient temperature | For operation/for storage | –10 ... +55 °C/–10 ... +60 °C | | | |
| Resistance to climate | Acc. to EN 60068-1 | 10/055/21 | | | |
| Degree of protection | Acc. to EN 60529 | IP20, with connected conductors | | | |
| Protection class | Acc. to EN 61140 | II | | | |

## Accessories

**Holders for front panel installation**



- Universal application for devices from 1 MW ... 6 MW
- Cutout dimensions:
  - Height $45^{+0.5}$ mm
  - Width 23 mm, 41 mm, 59 mm, 77 mm, 95 mm or 113 mm

| | Article No. |
|---|---|
| | 7LF9006 |

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# 7LF5 mechanical time switches

## Time switches with power reserve

| | For DIN rail | | | For wall mounting (surface mounting) |
|---|---|---|---|---|
| Time buffering in the event of a power failure | – | – | ■ | – |
| Automatic daylight-saving adjustment | – | – | ■ | – |
| Automatic time setting for Central European time zone during commissioning | – | – | ■ | – |
| |  |  |  |  |

| Contacts | Mounting width | | | | |
|---|---|---|---|---|---|
| **With day disk** | | | | | |
| 1 NO | 1 MW | 7LF5301-1 | – | – | – |
| 1 CO | 3 MW | – | 7LF5301-6 | 7LF5301-4 | – |
| | – | – | – | – | 7LF5305-0 |
| **With week disk** | | | | | |
| 1 CO | 3 MW | – | 7LF5301-7 | 7LF5301-5 | – |

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## Further technical specifications

| | | 7LF5301-1 | 7LF5301-4 | 7LF5301-5 | 7LF5301-6 | 7LF5301-7 | 7LF5305-0 |
|---|---|---|---|---|---|---|---|
| **Standards** | | | | | | | |
| Standards | | EN 60730-1, -2-7, UL 917, UL 917, CSA C22.2 No. 14 and 177 | | | | | |
| Approvals | | VDE, UL File: E301698 | | | | | |
| **Supply** | | | | | | | |
| Rated control supply voltage $U_c$ | | 230 V AC | | | | | |
| Primary operating range | | 0.85 ... 1.1 × $U_c$ | | | | | |
| Rated frequency | | 50 Hz | | | | | |
| Frequency range | | 50/60 Hz | | | | | |
| Rated power dissipation $P_v$ | | 1 VA | 0.2 VA | | 1 VA | | |
| **Channels** | | | | | | | |
| Rated operational voltage $U_e$ | | 250 V AC | | | | | |
| Rated operational current $I_e$ | At p.f. = 1 | 16 A | | | | | |
| | At p.f. = 0.6 | 4 A | | | | | |
| **Contacts** | | | | | | | |
| Minimum contact load | | 4 V/1 mA | | | | | |
| Electrical operating cycles | At p.f. = 1 | 100000 | | | | | |
| Mechanical operating cycles | | 20 million | | | | | |
| Incandescent lamp load | | 5 A | | | | | |
| Fluorescent lamp load | Parallel p.f. correction 70 µF | 60 VA | | | | | |
| | Uncorrected | 1400 VA | | | | | |
| **Safety** | | | | | | | |
| Different phases between operating mechanism and contact | | Permissible | | | | | |
| Electrical isolation, creepage distances and clearances | Operating mechanism | 8 mm | | | | | |
| | Contact | 6 mm | | | | | |
| Rated impulse voltage $U_{imp}$ | | 4 kV | | | | | |
| Electrostatic discharge | Acc. to IEC 61000-4-2 | > 8.0 kV | | | | | |
| EMC: Burst | Acc. to IEC 61000-4-4 | > 4.4 kV | | | | | |
| EMC: Surge | Acc. to IEC 61000-4-5 | > 2.0 kV | | | | | |
| Overvoltage category | Acc. to EN 61010-1 | III | | | | | |
| **Function** | | | | | | | |
| Switching accuracy | | ±5 min | | ±30 min | ±5 min | ±30 min | ±5 min |
| Clock errors | | ±2.5 s/day | ±0.2 s/day | ±60 s/day | ±2.5 s/day | | |
| Power reserve storage | | 100 h | 6 years | | 100 h | | |
| Make and break cycles | | 15 min | | 120 min | 15 min | 120 min | 15 min |
| Minimum switching sequences | | 30 min | | 240 min | 30 min | 240 min | 30 min |
| Battery type | | NiMH cell | Li primary cell | | NiMH cell | | |
| Minimum loading time | | 48 h | – | | 48 h | | |
| Service life of battery | At 20 °C | 6 years | 10 years | | 6 years | | |
| | At 40 °C | 5 years | | | | | |
| **Connections** | | | | | | | |
| Terminals | ± Screw (Pozidriv) | PZ1 | | | | | |
| Conductor cross-sections of main conducting path | Rigid | 1.5 ... 4 mm² | | | | | |
| | Flexible, with end sleeve | Max. 2.5 mm² | | | | | |
| | Flexible, without end sleeve | Max. 4 mm² | | | | | |
| **Ambient conditions** | | | | | | | |
| Permissible ambient temperature | Storage/operation | –10 ... +60 °C/–10 ... +55 °C | | | | | |
| Resistance to climate | Acc. to EN 60068-1 | 10/055/21 | | | | | |
| Degree of protection | Acc. to EN 60529 | IP20, with connected conductors | | | | | |
| Protection class | Acc. to EN 61140 | II | | | | | |

## Accessories

**Holders for front panel installation**



- Universal application for devices from 1 MW ... 6 MW
- Cutout dimensions:
  - Height $45^{+0.5}$ mm
  - Width 23 mm, 41 mm, 59 mm, 77 mm, 95 mm or 113 mm

| Article No. |
|---|
| 7LF9006 |

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# 7LF6 timers for buildings

| | Stairwell lighting timers | |
|---|---|---|
| | **Standard** | **Multi** |
| **3-wire circuit** | ■ | ■ |
| **4-wire circuit** | ■ | ■ |
| **Zero crossing circuit** | ■ | ■ |
| **Operation** | Resettable | Resettable |
| |  |  |

| **Contacts** | **Warning of impending switch-off** | **Mounting width** | | |
|---|---|---|---|---|
| 1 NO | – | 1 MW | 7LF6310 | – |
| | Flickering | 1 MW | – | 7LF6311 |

## Further technical specifications

| | | 7LF6310 | 7LF6311 |
|---|---|---|---|
| **Supply** | | | |
| Rated operational current $I_e$ | At p.f. = 1 | 16 A | |
| Rated operational voltage $U_e$ | | 250 V AC | |
| Rated control supply voltage $U_c$ | | 230 V AC | |
| Frequency range | | 50/60 Hz | |
| Rated power dissipation $P_v$ | | 1 W | |
| Rated impulse voltage $U_{imp}$ | | 4 kV | |
| **Contacts** | | | |
| Channels | | 1 | |
| Max. glow lamp load | | 25 mA | 50 mA |
| Separate multi-voltage input | | – | 8 ... 230 V AC/DC |
| Switching capacity | Inductive p.f. = 0.6 | 2000 VA | |
| Incandescent lamp load | Max. | 3680 W | |
| Fluorescent lamp load | Series p.f. correction | 2000 VA | |
| | Parallel p.f. correction at 70 µF | 1000 W | |
| Compact fluorescent lamp load | | 1000 W | |
| LED | | 1000 W | |
| Electronic transformers | | 2000 VA | |
| Conventional transformers | | 2000 VA | |
| **Function** | | | |
| Setting range | | 0.5 ... 10 min | 0.5 ... 12 min |
| Manual switches | | Yes | |
| Programs | | – | 7 [1] |
| **Ambient conditions** | | | |
| Permissible ambient temperature | For operation | –20 ... +55 °C | |
| | For storage | –20 ... +60 °C | |
| Degree of protection | Installed | IP30 | |
| Pollution degree | | 2 | |

[1] 7 functions, can be selected using selector switch on the device

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# 5TT3 timers for industrial applications

| | | Multifunction timers | Delay timers |
|---|---|---|---|
| **Programmable for:** | | • Response delay<br>• Passing make contact function<br>• Pulse generator, delayed<br>• Clock generator, starting with impulse<br>• OFF-delay<br>• Pulse converter<br>• Passing break contact function<br>• Response delay/OFF-delay | – |
| | |  |  |
| **Contacts** | **Mounting width** | | |
| 1 CO | 1 MW | 5TT3185 | 5TT3181 |

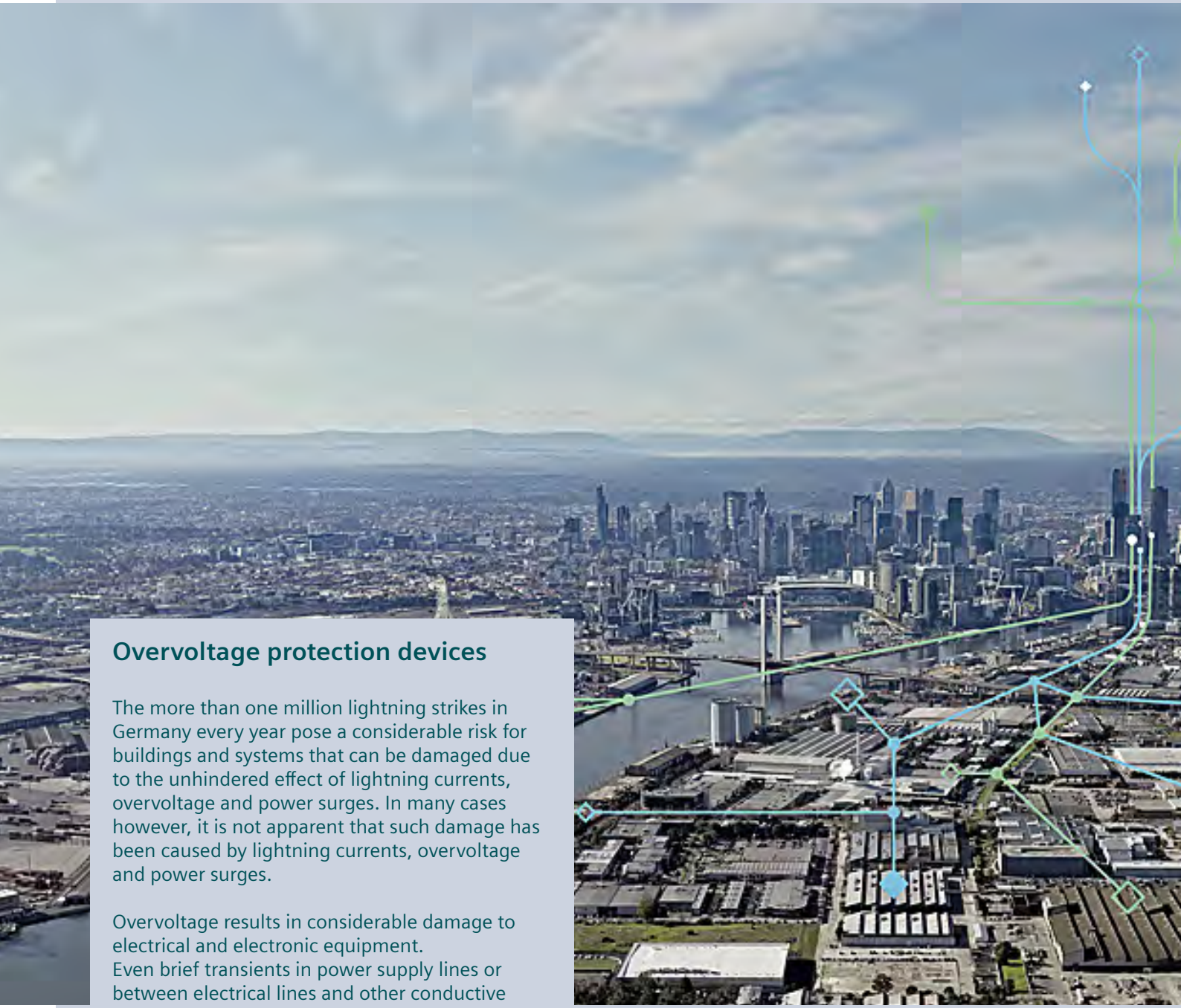
## Further technical specifications

| | | 5TT3185 | 5TT3181 |
|---|---|---|---|
| **Standards** | | | |
| Standards | | EN 60255; DIN VDE 0435-110 | |
| **Supply** | | | |
| Rated operational current $I_e$ | | 4 A | 8 A |
| Rated operational voltage $U_e$ | | 250 V AC | |
| Rated control supply voltage $U_c$ | | 12 ... 240 V AC | 220 ... 240 V AC |
| | | 12 ... 240 V DC | – |
| Primary operating range | $U_c$ 230 V AC, 50/60 Hz | 0.8 ... 1.1 × $U_c$ | |
| Rated frequency $f_n$ | | 45 ... 400 Hz | 50/60 Hz |
| Rated power dissipation $P_v$ | | Approx. 3 VA | Approx. 5 VA |
| **Contacts** | | | |
| Contact gap | | µm contact | |
| Minimum contact load | | 10 V/300 mA | |
| Electrical endurance | Switching cycles | $1.5 \times 10^5$ | – |
| | At AC-15 | – | $1.5 \times 10^5$ |
| **Safety** | | | |
| Rated impulse voltage $U_{imp}$ | Input/output | > 4 kV | |
| **Function** | | | |
| Setting range | | 1 s ... 300 h | |
| Recovery time | | 15 ... 80 ms | Approx. 40 ms |
| **Connections** | | | |
| Terminals | ± Screw (Pozidriv) | PZ2 | |
| Conductor cross-sections of main conducting path | Rigid | Max. 2 × 2.5 mm² | |
| | Flexible, with end sleeve | Min. 2 × 1.5 mm² | |
| **Ambient conditions** | | | |
| Permissible ambient temperature | | –40 ... +60 °C | |
| Resistance to climate | Acc. to EN 60068-1 | 40/60/4 | |

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## Overvoltage protection devices

The more than one million lightning strikes in Germany every year pose a considerable risk for buildings and systems that can be damaged due to the unhindered effect of lightning currents, overvoltage and power surges. In many cases however, it is not apparent that such damage has been caused by lightning currents, overvoltage and power surges.

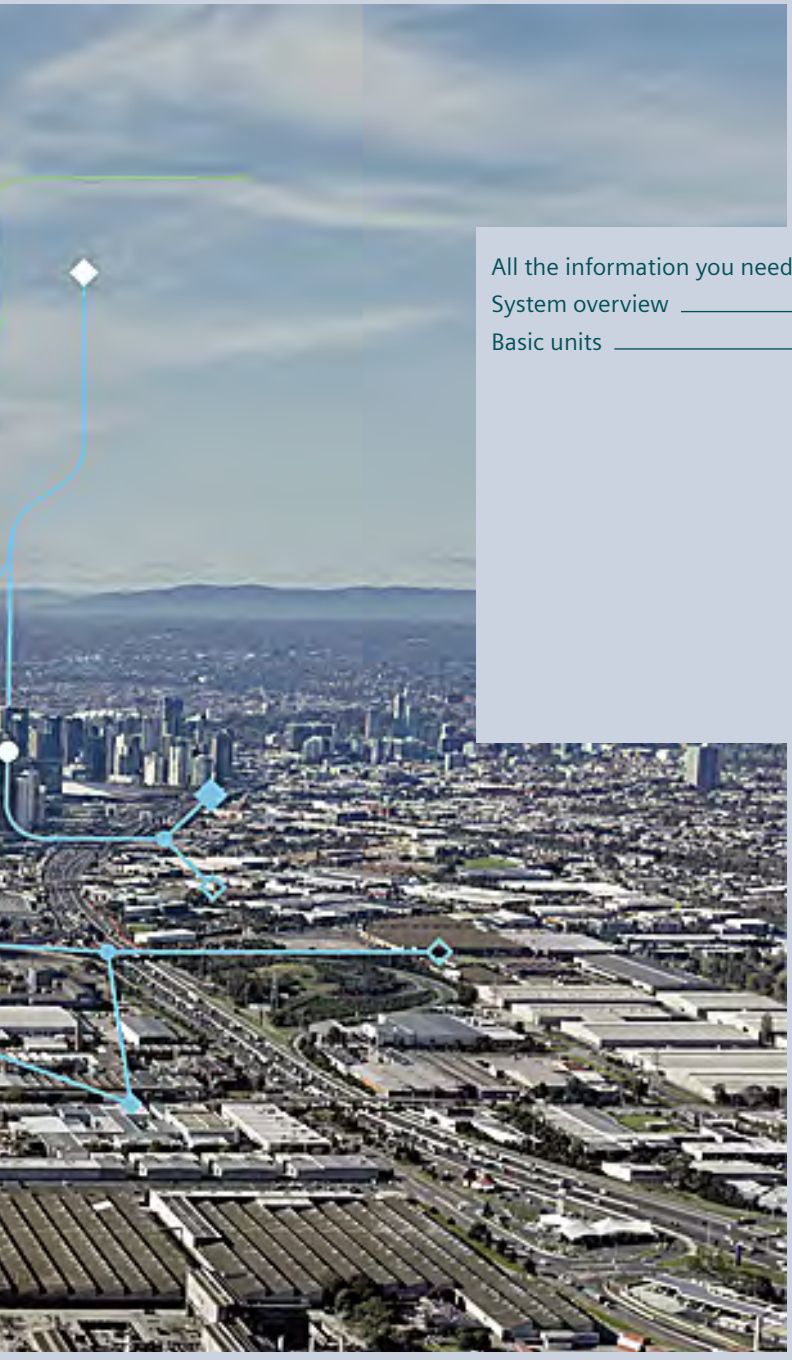
Overvoltage results in considerable damage to electrical and electronic equipment.
Even brief transients in power supply lines or between electrical lines and other conductive parts (e.g. grounded metallic parts, ground) are sufficient to cause such damage. The damage patterns of destroyed lines, printed circuit boards or switchgear demonstrate this. Such damage can be prevented employing suitable overvoltage protection means.

Reliably protected by Siemens lightning and surge arresters !

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# Overvoltage Protection Devices




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# A multitude of additional information ...

## Information + ordering

### All the important things at a glance

For information about overvoltage protection devices, please visit our website
**www.siemens.com/overvoltage-protection**

### Your product in detail

The SiePortal platform (knowledge base) provides comprehensive information
**www.siemens.com/lowvoltage/product-support**

- Technology Primer
  - Overvoltage protection devices **(109756965)**

The relevant tender specifications can be found at
**www.siemens.com/tenderspecifications**

Use our conversion tool for quick and easy conversion to Siemens products **www.siemens.com/conversion-tool**

### Everything you need for your order

Refer to SiePortal to find an overview of your products (product catalog)

- Overvoltage protection devices **sie.ag/3ZMwRuw**

Direct forwarding to the individual products in SiePortal by clicking on the article number in the catalog or entering this web address incl. article number
**www.siemens.com/product_catalog_SIEP?Article No.**



### The fast track to the experts

#### Contact persons in your region

We offer a comprehensive portfolio of services.
You can find your local contacts at
**www.siemens.com/lowvoltage/components/contact**

You will find further information on services at
**www.siemens.com/service-offers**

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at
**www.siemens.com/support-request**

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# … can be found in our online services

## Commissioning + operation

### Your product in detail

The SiePortal platform (knowledge base) provides detailed technical information
**www.siemens.com/lowvoltage/product-support**

- Operating instructions
- Certificates

Online Support app available for download from the **App Store** and **Play Store**
You will find further information at
**www.siemens.com/support-app**

Provision of 3D data (step and u3d data formats)
- SiePortal (product catalog)
  **www.siemens.com/lowvoltage/product-catalog**
- Image database
  **www.siemens.com/lowvoltage/picturedb**

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
**www.siemens.com/cax**

### Manuals

Manuals can be found in SiePortal at
**www.siemens.com/lowvoltage/manuals**

- Configuration Manual
  – Overvoltage protection devices **(45315289)**

### Face-to-face or online training

Our training courses can be found at
**www.siemens.com/sitrain-lowvoltage**

- Basic principles of electrical engineering (WT-LVBGET)
- Protection concept (WT-LVBPC)

### Technical overview – Overvoltage protection devices

#### The fast way to get you to our online services

This page provides you with comprehensive information and links on overvoltage protection devices
**www.siemens.com/lowvoltage/product-support (109769084)**

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# System overview

## Basic units



5SD74 lightning arresters, type 1



5SD74 combination surge arresters, type 1 + type 2



5SD74 combination surge arresters with integrated back-up fuse



5SD74 surge arresters, type 1 + type 2 + type 3 for 40 mm busbar system



5SD74 combination surge arresters, type 1/type 2



5SD74 surge arresters, type 2 (standard design)



5SD74 surge arresters, type 3



5SD74 surge arresters, type 1 (UL) new

## Spare part plugs



N-PE



L-N, L-PEN (type 1)



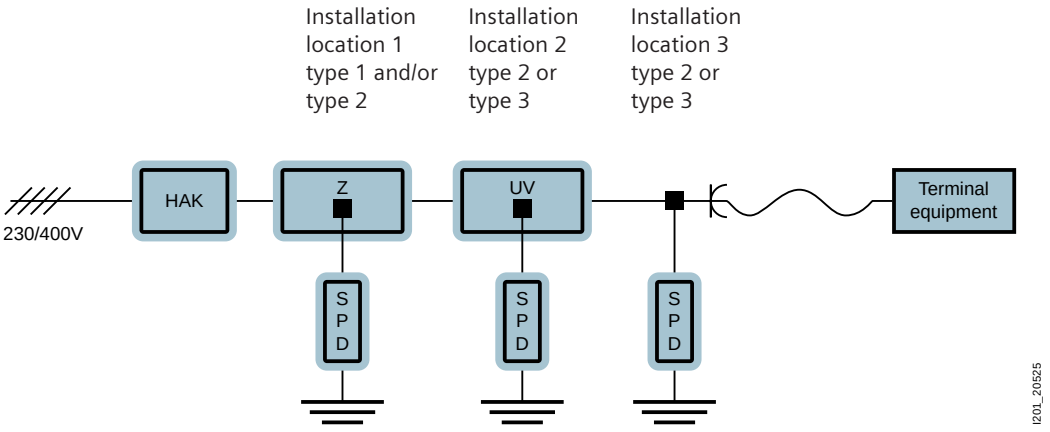
L-PEN

**Note:**
You will find a detailed range of accessories with the basic units.

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# Installation locations for surge protection devices (SPDs)




HAK: Main terminal box Z/HV: In or close to the central meter system/main distribution board UV: Subdistribution board

Installation location 1 must be as close as possible to the supply point for the electrical system, so that the downstream installations are protected. The SPDs at installation locations 2 and 3 shall not be used without SPDs at installation location 1, and they must be coordinated with these SPDs (i.e. SPDs all from the same manufacturer).

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# 5SD74 lightning arresters, type 1

| | For TN-C systems and IT networks | For TN-C systems | For TN-S and TT systems | |
|---|---|---|---|---|
| **Protection paths** | L-PE | L-PEN | L-N, L-PE and N-PE | L-N, L-PE and N-PE |
| **Rated voltage $U_n$** | 690 V AC | 240/415 V AC | 240 V AC | 240/415 V AC |
| **Maximum continuous voltage $U_c$** | 800 V AC | 350 V AC | 350 V AC | 350 V AC |
| |  |  |  |  |

| Circuit | Mounting width | | | | |
|---|---|---|---|---|---|
| **With remote signaling** | | | | | |
| 1 + 0 | – [1] | 5SD7411-2 | – | – | – |
| 1 + 1 | 4 MW | – | – | 5SD7412-1 | – |
| 3 + 0 | 6 MW | – | 5SD7413-1 | – | – |
| 3 + 1 | 8 MW | – | – | – | 5SD7414-1 |

[1] No modular installation device.

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## Further technical specifications

| | | 5SD7411-2 | 5SD7412-1 | 5SD7413-1 | 5SD7414-1 |
|---|---|---|---|---|---|
| **Standards** | | | | | |
| Standards | | IEC 61643-11; EN 61643-11 | | | |
| Approvals | | – | KEMA, UL/cUL | | |
| **Voltage** | | | | | |
| Protection level $U_p$ | L-N and L-PEN | ≤ 4.50 kV | ≤ 1.50 kV | | |
| | L-PE | – | ≤ 2.50 kV | – | ≤ 2.50 kV |
| | N-PE | – | ≤ 1.50 kV | – | ≤ 1.50 kV |
| **Current** | | | | | |
| Lightning impulse current $I_{imp}$ (10/350 µs) | L-N and L-PEN, 1P/3P | 35 kA | 25 kA | 25/75 kA | |
| | N-PE | – | 100 kA | – | 100 kA |
| Rated discharge surge current $I_n$ (8/20 µs) | L-N and L-PEN, 1P/3P | 35 kA | 25 kA | 25/75 kA | |
| | N-PE | – | 100 kA | – | 100 kA |
| Follow current discharge capacity $I_{fi}$ (AC) | L-N and L-PEN for 264/350 V | – | 50/25 kA | | |
| | N-PE | – | 100 A | – | 100 A |
| **Function** | | | | | |
| Response time $t_A$ | L-N and L-PEN | ≤ 100 ns | | | |
| | L-N and N-PE | – | ≤ 100 ns | – | ≤ 100 ns |
| **Connections** | | | | | |
| Conductor cross-section | Finely stranded | 16 ... 50 mm² | 2.5 ... 25 mm² | | |
| | Solid | 16 ... 50 mm² | 2.5 ... 35 mm² | | |
| **Protection devices** | | | | | |
| Max. back-up fuse acc. to IEC 61643-1 | For stub wiring (gL/gG) | 400 A | 315 A | | |
| | For V wiring (gL/gG) | 125 A | 125 A | | |
| Short-circuit strength | With max. back-up fuse | 50 kA | 50 kA | | |
| **Ambient conditions** | | | | | |
| Degree of protection | | IP20, with connected conductors | | | |
| Temperature range | | –40 ... +80 °C | | | |

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## Accessories

**Spare part plugs**





| Protection paths | Basic units | Article No. |
|---|---|---|
| N-PE | 5SD7412-1 and 5SD7414-1 | 5SD7418-0 |
| L-N and L-PEN | For 5SD7412-1, 5SD7413-1 and 5SD7414-1 | 5SD7418-1 |



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# 5SD74 combination surge arresters, type 1 + type 2

| | For TN-C systems | For TN-S and TT systems | |
|---|---|---|---|
| Protection paths | L-PEN | L-N, L-PE and N-PE | L-N, L-PE and N-PE |
| Rated voltage $U_n$ | 240/415 V AC | 240 V AC | 240 V AC |
| Maximum continuous voltage $U_c$ | 350 V AC | 350 V AC | 350 V AC |
| |  |  |  |

| Circuit | Mounting width | | | |
|---|---|---|---|---|
| **With remote signaling** | | | | |
| 1 + 1 | 4 MW | – | 5SD7442-1 | – |
| 3 + 0 | 6 MW | 5SD7443-1 | – | – |
| 3 + 1 | 8 MW | – | – | 5SD7444-1 |

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## Further technical specifications

| | | 5SD7442-1 | 5SD7443-1 | 5SD7444-1 |
|---|---|---|---|---|
| **Standards** | | | | |
| Standards | | IEC 61643-11; DIN EN 61643-11 | | |
| Approvals | | KEMA, UL/cUL | | |
| **Voltage** | | | | |
| Protection level $U_p$ | L-N and L-PEN | ≤ 1.50 kV | | |
| | L-PE | ≤ 2.20 kV | – | ≤ 2.20 kV |
| | N-PE | ≤ 1.50 kV | – | ≤ 1.50 kV |
| **Current** | | | | |
| Lightning impulse current $I_{imp}$ (10/350 µs) | L-N and L-PEN | 25 kA | | |
| | N-PE | 100 kA | – | 100 kA |
| Rated discharge surge current $I_n$ (8/20 µs) | L-N and L-PEN | 25 kA | | |
| | N-PE | 100 kA | – | 100 kA |
| Follow current discharge capacity $I_{fi}$ (AC) | L-N and L-PEN | 25 kA | | |
| | N-PE | 100 A | – | 100 A |
| **Function** | | | | |
| Response time $t_A$ | L-N and L-PEN | ≤ 25 ns | | |
| | L-N and N-PE | ≤ 100 ns | – | ≤ 100 ns |
| **Connections** | | | | |
| Conductor cross-section | Finely stranded | 2.5 ... 25 mm² | | |
| | Solid | 2.5 ... 35 mm² | | |
| **Protection devices** | | | | |
| Max. back-up fuse acc. to IEC 61643-1 | For stub wiring (gL/gG) | 315 A | | |
| | For V wiring (gL/gG) | 125 A | | |
| Short-circuit strength | With max. back-up fuse | 25 kA | | |
| **Ambient conditions** | | | | |
| Degree of protection | | IP20, with connected conductors | | |
| Temperature range | | –40 ... +80 °C | | |
| **Display** | | | | |
| Visual function/fault indication | | Yes | | |

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## Accessories

**Spare part plugs**







| Protection paths | Type | Basic units | Article No. |
|---|---|---|---|
| N-PE | – | 5SD7442-1 and 5SD7444-1 | 5SD7418-0 |
| L-N and L-PEN | 1 | 5SD7442-1, 5SD7443-1 and 5SD7444-1 | 5SD7448-1 |
| | 2 | 5SD7442-1, 5SD7443-1 and 5SD7444-1 | 5SD7428-1 |

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# 5SD74 combination surge arresters with integrated back-up fuse

| | For TN-S and TT systems |
|---|---|
| Protection paths | L-N |
| Rated voltage $U_n$ | 230 V AC |
| Maximum continuous voltage $U_c$ | 255 V AC |



| Circuit | Mounting width | |
|---|---|---|
| 1+0 | 2 MW | 5SD7441-1KF00 |

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## Further technical specifications

| | | 5SD7441-1KF00 |
|---|---|---|
| **Standards** | | |
| Standards | | EN 61643-11/... IEC 61643-11 |
| Approvals | | KEMA |
| **Voltage** | | |
| Protection level $U_p$ | L-N and L-N/PE | ≤ 1.50 kV |
| **Current** | | |
| Lightning impulse current $I_{imp}$ (10/350 µs) | L-N and L-N/PE | 25 kA |
| Rated discharge surge current $I_n$ (8/20 µs) | L-N and L-N/PE | 25 kA |
| Follow current discharge capacity $I_{fi}$ (AC) | L-N and L-N/PE | 50 kA |
| **Function** | | |
| Response time $t_A$ | L-N and L-N/PE | ≤ 100 ns |
| **Connections** | | |
| Conductor cross-section | Finely stranded | 25 mm² |
| | Solid/stranded | 35 mm² |
| **Protection devices** | | |
| Max. back-up fuse | | None necessary because integrated coordinated back-up fuse contained in the device |
| **Ambient conditions** | | |
| Degree of protection | | IP20, with connected conductors |
| Temperature range | | –40 ... +80 °C |

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## Accessories

**Connection bars**





| Version | Number of poles | Article No. |
|---|---|---|
| 1-phase | 3-pole | 5SD7490-6 |
| | 4-pole | 5SD7490-7 |



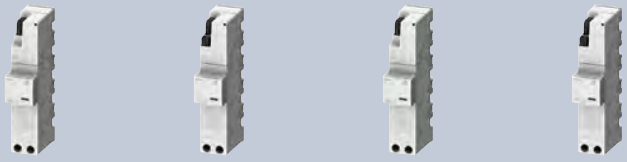
System overview, page 6/4

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# 5SD74 surge arresters, type 1 + type 2 + type 3 for 40 mm busbar system

| | For TN-C systems | | | |
|---|---|---|---|---|
| **Protection paths** | L-PEN | | | |
| **Lightning impulse current $I_{imp}$ (10/350 µs)** | 12.5 kA | | 7.5 kA | |
| **Rated voltage $U_n$** | 240/415 V AC | 240/415 V AC | 240/415 V AC | 240/415 V AC |
| **Maximum continuous voltage $U_c$** | 300 V AC | 300 V AC | 300 V AC | 300 V AC |



| Circuit | Mounting width | | | | |
|---|---|---|---|---|---|
| **With remote signaling** | | | | | |
| 3 + 0 | 47 mm | 5SD7443-8KK21 | – | 5SD7443-8KK11 | – |
| 3 + 1 | 47 mm | – | – | – | – |
| **With remote signaling and phase tap** | | | | | |
| 3 + 0 | 47 mm | – | 5SD7443-8KK22 | – | 5SD7443-8KK12 |
| 3 + 1 | 47 mm | – | – | – | – |

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## Further technical specifications

| | | 5SD7443-8KK21 | 5SD7443-8KK22 | 5SD7443-8KK11 | 5SD7443-8KK12 |
|---|---|---|---|---|---|
| **Standards** | | | | | |
| Standards | | IEC 61643-11 | | | |
| Approvals | | VDE | | | |
| **Voltage** | | | | | |
| Protection level $U_p$ | L-N and L-PEN | ≤ 1.50 kV | | | |
| | L-N/N-PE | – | | | ≤ 1.5/1.5 kV |
| **Current** | | | | | |
| Lightning impulse current $I_{imp}$ (10/350 µs) | L-N/N-PEN and N-PE | 12.5 kA | | 7.5 kA | |
| Rated discharge surge current $I_n$ (8/20 µs) | L-N/L-PEN and N-PE | 20 kA | | | |
| Follow current discharge capacity $I_{fi}$ (AC) | N-PE | – | | | |
| **Connections** | | | | | |
| Conductor cross-section | Finely stranded | 25 mm² | | | |
| | Solid | 35 mm² | | | |
| **Type of mounting** | | | | | |
| 40 mm busbar system | | 5 and 10 mm | | | |
| **Protection devices** | | | | | |
| Max. back-up fuse acc. to IEC 61643-1 | For stub wiring (gL/gG) | 315 A | | | |
| Short-circuit strength | With max. back-up fuse | 25 kA | | | |
| **Ambient conditions** | | | | | |
| Degree of protection | | IP20 | | | |
| Temperature range | | –40 ... +80 °C | | | |
| **Display** | | | | | |
| Visual function/fault indication | | Yes | | | |

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| For TN-S and TT systems | | | |
|---|---|---|---|
| L-N, L-PE and N-PE | | | |
| 12.5 kA | | 7.5 kA | |
| 240/415 V AC | 240/415 V AC | 240/415 V AC | 240/415 V AC |
| 300 V AC | 300 V AC | 300 V AC | 300 V AC |
|  |  |  |  |
| | | | |
| | | | |
| – | – | – | – |
| 5SD7444-8KK21 | – | 5SD7444-8KK11 | – |
| | | | |
| – | – | – | – |
| – | 5SD7444-8KK22 | – | 5SD7444-8KK12 |

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| 5SD7444-8KK21 | 5SD7444-8KK22 | 5SD7444-8KK11 | 5SD7444-8KK12 |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| 12.5 kA | | 7.5 kA | |
| 20/80 kA | | | |
| 100 A RMS | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

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# 5SD74 combination surge arresters, type 1/type 2

| | For TN-C systems and IT networks | For TN-C systems | For TN-S and TT systems | | For photovoltaic systems |
|---|---|---|---|---|---|
| Protection paths | L-PE | L-PEN | L-N, L-PE and N-PE | L-N, L-PE and N-PE | (L+) – (L–) |
| Rated voltage $U_n$ | 690 V AC | 240/415 V AC | 240 V AC | 240/415 V AC | – |
| Maximum continuous voltage $U_c$ | 800 V AC | 335 V AC | 335 V AC | 335 V AC | 1000 V DC |
| |  |  |  |  |  |

| Circuit | Mounting width | | | | | Plug-in |
|---|---|---|---|---|---|---|
| **With remote signaling** | | | | | | |
| 1 + 0 | – [1] | 5SD7411-2 | – | – | – | – |
| 3 + 0 | 3 MW | – | 5SD7413-3 | – | – | |
| 3 + 1 | 4 MW | – | – | – | 5SD7414-3 | – |
| **Without remote signaling** | | | | | | |
| 1 + 1 | 2 MW | – | – | 5SD7412-2 | – | – |
| 3 + 0 | 3 MW | – | 5SD7413-2 | – | – | 5SD7483-6 |
| 3 + 1 | 4 MW | – | – | – | 5SD7414-2 | – |

[1] No modular installation device.

## Further technical specifications

| | | 5SD7411-2 | 5SD7412-2 | 5SD7413-2<br>5SD7413-3 | 5SD7414-2<br>5SD7414-3 | 5SD7483-6 |
|---|---|---|---|---|---|---|
| **Standards** | | | | | | |
| Standards | | IEC 61643-11 | | | | EN 61643-31 |
| Approvals | | – | KEMA | | | |
| **Voltage** | | | | | | |
| Protection level $U_p$ | L-N and L-PEN | ≤ 4.50 kV | ≤ 1.20 kV | | | ≤ 3.50 kV |
| | L-PE | – | | | ≤ 2.0 kV | – |
| | N-PE | – | ≤ 1.70 kV | – | ≤ 1.70 kV | – |
| **Current** | | | | | | |
| Lightning impulse current $I_{imp}$ (10/350 µs) | L-N and L-PEN | 35 kA | 12.5 kA | | | ≤ 5 kA |
| | N-PE | – | 50 kA | – | 50 kA | – |
| Rated discharge surge current $I_n$ (8/20 µs) | L-N and L-PEN | 35 kA | 12.5 kA | | | 15 kA |
| | N-PE | – | 50 kA | – | | |
| Max. discharge surge current $I_{max.}$ (8/20 µs) | L-N | 100 kA | 12.5 kA | 50 kA | | 40 kA |
| | N-PE | – | 50 kA | – | 50 kA | – |
| **Function** | | | | | | |
| Response time $t_A$ | L-N and L-PEN | < 100 ns | ≤ 25 ns | | | |
| | L-N and N-PE | – | ≤ 100 ns | – | ≤ 100 ns | ≤ 25 ns |
| **Connections** | | | | | | |
| Conductor cross-section | Finely stranded | 16 ... 50 mm² | 1.5 ... 25 mm² | | | |
| | Solid | 16 ... 50 mm² | 1.5 ... 35 mm² | | | |
| **Protection devices** | | | | | | |
| Max. back-up fuse acc. to IEC 61643-1 | For stub wiring (gL/gG) | 400 A | 160 A | | | – |
| | For V wiring (gL/gG) | 125 A | 80 A | | | – |
| Short-circuit strength | With max. back-up fuse | 50 kA | 25 kA | | | – |
| **Ambient conditions** | | | | | | |
| Degree of protection | | IP20, with connected conductors | | | | |
| Temperature range | | –40 ... +80 °C | | | | |

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## Accessories

**Spare part plugs**

| | Protection paths | Type | Basic units | Article No. |
|---|---|---|---|---|
|  | N-PE | – | 5SD7412-2, 5SD7412-3, 5SD7414-2 and 5SD7414-3 | 5SD7418-2 |
|  | L-N and L-PEN | 1 | 5SD7412-2, 5SD7412-3, 5SD7413-2, 5SD7413-3, 5SD7414-2 and 5SD7414-3 | 5SD7418-3 |
|  | L-PE (PV) | 2 | 5SD7483-6 | 5SD7498-3 |



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# 5SD74 surge arresters, type 2

## Standard design

| | | For TN and TT systems | | For TN-C systems and IT networks | For TN-C systems | For IT networks | |
|---|---|---|---|---|---|---|---|
| Protection paths | | N-PE | L-PEN and L-N | L-PEN and L-N | L-PEN | L-PEN and L-PE | L-PEN and L-PE |
| Rated voltage $U_n$ | | 240/415 V AC | 240/415 V AC | 400/690 V AC | 240/415 V AC | 400/690 V AC | 554/960 V AC |
| Maximum continuous voltage $U_c$ | | 260 V AC | 350 V AC | 800 V AC | 350 V AC | 580 V AC | 760 V AC |
| | |  |  |  |  |  |  |
| **Circuit** | **Mounting width** | | | | | | |
| **With remote signaling** | | | | | | | |
| 1 + 0 | 1 MW | – | 5SD7461-1 | – | – | – | – |
| | 2 MW | – | – | 5SD7481-1 | – | – | – |
| 3 + 0 | 3 MW | – | – | – | 5SD7463-1 | 5SD7473-1 | 5SD7483-5 |
| 3 + 1 | 4 MW | – | – | – | – | – | – |
| **Without remote signaling** | | | | | | | |
| 1 + 0 | 1 MW | 5SD7481-0 | 5SD7461-0 | – | – | – | – |
| 3 + 0 | 3 MW | – | – | – | 5SD7463-0 | – | – |
| 3 + 1 | 4 MW | – | – | – | – | – | – |

## Further technical specifications

| | | 5SD7481-0 | 5SD7461-0<br>5SD7461-1 | 5SD7481-1 | 5SD7463-0<br>5SD7463-1 | 5SD7464-0<br>5SD7464-1 | 5SD7473-1 | 5SD7483-5 |
|---|---|---|---|---|---|---|---|---|
| **Standards** | | | | | | | | |
| Standards | | IEC 61643-11; DIN EN 61643-11 | | | | | | |
| Approvals | | KEMA | | | | | – | KEMA,<br>UL/cUL |
| **Voltage** | | | | | | | | |
| Protection level $U_p$ | L-N and L-PEN | – | ≤ 1.50 kV | ≤ 5 kV | ≤ 1.50 kV | ≤ 1.60 kV | ≤ 2.50 kV | ≤ 2.90 kV |
| | L-PE | – | | | | ≤ 1.90 kV | – | |
| | N-PE | ≤ 1.50 kV | – | | | ≤ 1.50 kV | – | |
| **Current** | | | | | | | | |
| Rated discharge surge current $I_n$ (8/20 µs) | L-N and L-PEN | – | 20 kA | 15 kA | 20 kA | | 15 kA | |
| | N-PE | 20 kA | – | | | 20 kA | – | |
| Max. discharge surge current $I_{max.}$ (8/20 µs) | L-N | – | 40 kA | 30 kA | 40 kA | | 30 kA | |
| | N-PE | 40 kA | – | | | 40 kA | – | |
| **Function** | | | | | | | | |
| Response time $t_A$ | L-N and L-PEN | – | ≤ 25 ns | ≤ 100 ns | ≤ 25 ns | | | |
| | L-N and N-PE | ≤ 100 ns | – | | | ≤ 100 ns | – | |
| **Connections** | | | | | | | | |
| Conductor cross-section | Finely stranded | 1.5 ... 25 mm² | | | | | | |
| | Solid | 1.5 ... 35 mm² | | | | | | |
| **Protection devices** | | | | | | | | |
| Max. back-up fuse acc. to IEC 61643-1 | For stub wiring (gL/gG) | – | 125 A | 100 A | 125 A | | | 100 A |
| | For V wiring (gL/gG) | – | | 80 A | | | | |
| Short-circuit strength | With max. back-up fuse | 25 kA | | | | | | |
| **Ambient conditions** | | | | | | | | |
| Degree of protection | | IP20, with connected conductors | | | | | | |
| Temperature range | | –40 ... +80 °C | | | | | | |

System overview, page 6/4

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| For TN-S and TT systems | Fuse bases for photovoltaic fuses | |
|---|---|---|
| L-N, L-PE and N-PE | (L+) – (L–); (L+) – PE; (L–) – PE | (L+) – (L–); (L+) – PE; (L–) – PE |
| 240/415 V AC | – | – |
| 350 V AC (L-N, L-PE)<br>260 V AC (N-PE) | 1000 V DC | 600 V DC |
|  |  |  |
| | | |
| | | |
| – | – | – |
| – | – | – |
| – | – | – |
| 5SD7464-1 | – | – |
| | | |
| – | – | – |
| – | 5SD7483-0KK02 | 5SD7483-0KK01 |
| 5SD7464-0 | – | – |

| 5SD7483-0KK01<br>5SD7483-0KK02 |
|---|
| |
| EN 61643-31 |
| KEMA |
| |
| ≤ 3.70 kV |
| – |
| – |
| |
| 15 kA |
| – |
| 40 kA |
| – |
| |
| ≤ 25 ns |
| ≤ 25 ns |
| |
| 1.5 ... 25 mm² |
| 1.5 ... 35 mm² |
| |
| – |
| – |
| – |
| |
| IP20, with connected conductors |
| –40 ... +80 °C |

## Accessories

**Spare part plugs**

| | Protection paths | Basic units | Article No. |
|---|---|---|---|
|  | N-PE | 5SD7481-0, 5SD7464-0 und 5SD7464-1 | 5SD7488-0 |
|  | L-N and L-PEN | 5SD7461-0, 5SD7461-1, 5SD7463-0, 5SD7463-1, 5SD7464-0 und 5SD7464-1 | 5SD7468-1 |
|  | L-PEN | 5SD7481-1 und 5SD7483-5 | 5SD7488-2 |
|  | | 5SD7481-1 | 5SD7488-4 |
|  | L-PE (PV) | 5SD7483-0KK02 | 5SD7498-4 |
| | | 5SD7483-0KK01 | 5SD7498-5 |

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# 5SD74 surge arresters, type 2

## Narrow design

| | For TN-S and TT systems | |
|---|---|---|
| **Protection paths** | L-N and N-PE | L-N and N-PE |
| **Rated voltage $U_n$** | 240 V AC | 240/415 V AC |
| **Rated arrester voltage $U_C$; L-N, N-PE, L-(PE)N** | 350 V AC | 350 V AC |
| **Rated arrester voltage $U_C$; N-PE** | 264 V AC | 264 V AC |
| |  |  |
| **Circuit** / **Mounting width** | | |
| **With remote signaling** | | |
| 1 + 1 / 24 mm (1 1/3 MW) | 5SD7422-1 | – |
| 3 + 1 / 48 mm (2 2/3 MW) | – | 5SD7424-1 |
| **Without remote signaling** | | |
| 1 + 1 / 24 mm (1 1/3 MW) | 5SD7422-0 | – |
| 3 + 1 / 48 mm (2 2/3 MW) | – | 5SD7424-0 |

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## Further technical specifications

| | | 5SD7422-0<br>5SD7422-1 | 5SD7424-0<br>5SD7424-1 |
|---|---|---|---|
| **Standards** | | | |
| Standards | | IEC 61643-11; DIN EN 61643-11 | |
| Approvals | | KEMA/UL/cUL | |
| **Voltage** | | | |
| Protection level $U_p$ | L-N and L-PEN | ≤ 1.50 kV | |
| | L-PE | ≤ 1.90 kV | |
| | N-PE | ≤ 1.50 kV | |
| **Current** | | | |
| Rated discharge surge current $I_n$ (8/20 µs) | L-N and L-PEN | 20 kA | |
| | N-PE | 20 kA | |
| Max. discharge surge current $I_{max.}$ (8/20 µs) | L-N | 40 kA | |
| | N-PE | 40 kA | |
| **Function** | | | |
| Response time $t_A$ | L-N and L-PEN | ≤ 25 ns | |
| | L-N and N-PE | ≤ 100 ns | |
| **Connections** | | | |
| Conductor cross-section | Finely stranded | 2.5 ... 16 mm² | |
| | Solid | 2.5 ... 25 mm² | |
| **Protection devices** | | | |
| Max. back-up fuse acc. to IEC 61643-1 | For stub wiring (gL/gG) | 315 A | |
| | For V wiring (gL/gG) | 63 A | |
| Short-circuit strength | With max. back-up fuse | 25 kA | |
| **Ambient conditions** | | | |
| Degree of protection | | IP20, with connected conductors | |
| Temperature range | | –40 ... +80 °C | |

System overview, page 6/4

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## Accessories

**Spare part plugs**

| | Protection paths | Basic units | Article No. |
|---|---|---|---|
|  | N-PE | 5SD7422-0, 5SD7422-1, 5SD7424-0 and 5SD7424-1 | 5SD7428-0 |
|  | L-N and L-PEN | 5SD7422-0, 5SD7422-1, 5SD7424-0 and 5SD7424-1 | 5SD7428-1 |



System overview, page 6/4

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# 5SD74 surge arresters, type 3

| | | For TN-S and TT systems | | |
|---|---|---|---|---|
| **Protection paths** | | L-N, L-PE, N-PE, (L+) – (L–) and (L+/L–) – PE | L-N, L-PE, N-PE, (L+) – (L–) and (L+/L–) – PE | L-N, L-PE, N-PE, (L+) – (L–) and (L+/L–) – PE |
| **Rated voltage $U_n$** | | 24 V AC | 120 V AC | 230 V AC |
| **Rated arrester voltage $U_C$** | | 34 V AC | 150 V AC | 264 V AC |
| | |  |  |  |
| **Circuit** | **Mounting width** | | | |
| **With remote signaling** | | | | |
| 1 + 0 | 1 MW | 5SD7432-5 | 5SD7432-6 | 5SD7432-7 |

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## Further technical specifications

| | | 5SD7432-5 | 5SD7432-6 | 5SD7432-7 |
|---|---|---|---|---|
| **Standards** | | | | |
| Standards | | IEC 61643-11; DIN EN 61643-11 | | |
| Approvals | | KEMA/UR | KEMA/UL | KEMA/UR |
| **Voltage** | | | | |
| Protection level $U_p$ | L-N, L-PE and N-PE | ≤ 200/≤ 600 V | ≤ 750/≤ 850 V | ≤ 1250/≤ 1400 V |
| **Current** | | | | |
| Rated load current $I_L$ (at 30 °C) | | 26 A | | |
| Rated discharge surge current $I_n$ (8/20 µs) | | 1 kA | 5 kA | |
| Combined surge $U_{oc}$ | | 2 kV | 6 kV | |
| **Function** | | | | |
| Response time $t_A$ | | ≤ 100 ns | | |
| **Connections** | | | | |
| Conductor cross-section | Finely stranded | 0.2 ... 2.5 mm² | | |
| | Solid | 0.2 ... 4 mm² | | |
| **Protection devices** | | | | |
| Required back-up fuse, max. | (gG/B/C) | 25 A | | |
| **Ambient conditions** | | | | |
| Degree of protection | | IP20, with connected conductors | | |
| Temperature range | | –40 ... +80 °C | | |
| **Display** | | | | |
| Visual function/fault indication | | Yes | | |

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# 5SD74 surge arresters, type 1 (UL) new

## Without CE marking

| | For wye (star) | | | | For delta |
|---|---|---|---|---|---|
| **Protection paths** | L-G and L-L | L-N, L-G, L-L and N-G | L-G and L-L | L-N, L-G, L-L and N-G | L-G and L-L |
| **Rated voltage $U_n$: L-N** | – | 277 V AC | – | 347 V AC | – |
| **L-G** | 277 V AC | 277 V AC | 347 V AC | 347 V AC | 480 V AC |
| **L-L** | 480 V AC | 480 V AC | 600 V AC | 600 V AC | 480 V AC |
| **N-G** | – | 0 V AC | – | 0 V AC | – |
| **Rated arrester voltage $U_C$: L-N** | – | 385 V AC | – | 510 V AC | – |
| **L-G** | 385 V AC | 565 V AC | 510 V AC | 690 V AC | 550 V AC |
| **L-L** | 770 V AC | 770 V AC | 1020 V AC | 1020 V AC | 1100 V AC |
| **N-G** | – | 180 V AC | – | 180 V AC | – |
| |  |  |  |  |  |

| Circuit | Mounting width | | | | | |
|---|---|---|---|---|---|---|
| **With remote signaling** | | | | | | |
| 3 + 0 | 3 TE | 5SD7413-1KU02 | – | 5SD7413-1KU03 | – | 5SD7413-1KU04 |
| 3 + 1 | 4 TE | – | 5SD7414-1KU02 | – | 5SD7414-1KU03 | – |

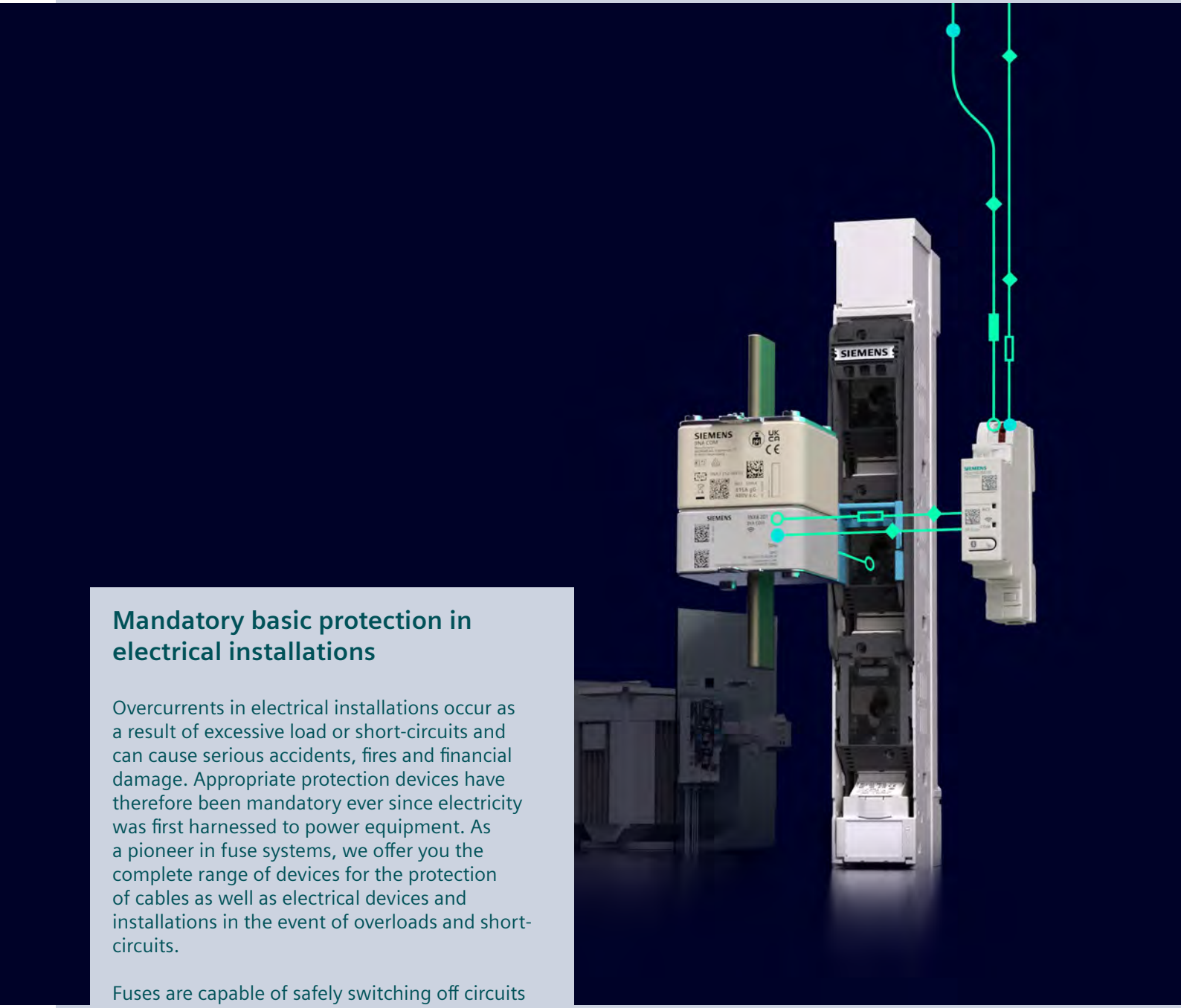
## Further technical specifications

| | | 5SD7413-1KU02 | 5SD7414-1KU02 | 5SD7413-1KU03 | 5SD7414-1KU03 | 5SD7413-1KU04 |
|---|---|---|---|---|---|---|
| **Standards** | | | | | | |
| Standards | | ANSI UL 1449; CSA C22.2 No. 269.1 | | | | |
| Approvals | | UL, CSA | | | | |
| **Voltage** | | | | | | |
| Protection level $U_p$ | L-N | – | ≤ 1.20 kV | – | ≤ 1.50 kV | – |
| | L-G | ≤ 1.20 kV | ≤ 1.80 kV | ≤ 1.50 kV | ≤ 2.0 kV | ≤ 1.80 kV |
| | L-L | ≤ 2.50 kV | ≤ 2.50 kV | ≤ 3.0 kV | ≤ 3.0 kV | ≤ 3.0 kV |
| | N-G | – | ≤ 0.60 kV | – | ≤ 0.60 kV | – |
| **Current** | | | | | | |
| Rated discharge surge current $I_n$ (8/20 µs) | L-N, L-G and L-L | 20 kA | | | | |
| | N-G | 20 kA | | | | |
| Max. discharge surge current $I_{max}$ (8/20 µs) | L-N, L-G and L-L | 50 kA | | | | |
| | N-G | 50 kA | | | | |
| **Connections** | | | | | | |
| Conductor cross-section | Finely stranded/ Solid | 2.5 ... 25 mm² | | | | |
| | Busbar | 16 mm² | | | | |
| | Remote signaling contact | 0.34 ... 1.5 mm² | | | | |
| **Protection devices** | | | | | | |
| Short-circuit strength | | 200 kA | | | | |
| **Ambient conditions** | | | | | | |
| Degree of protection | | IP20 | | | | |
| Temperature range | | –40 ... +85 °C | | | | |
| **Display** | | | | | | |
| Visual/ Electrical function/fault indication | | Yes | | | | |

System overview, page 6/4

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## Mandatory basic protection in electrical installations

Overcurrents in electrical installations occur as a result of excessive load or short-circuits and can cause serious accidents, fires and financial damage. Appropriate protection devices have therefore been mandatory ever since electricity was first harnessed to power equipment. As a pioneer in fuse systems, we offer you the complete range of devices for the protection of cables as well as electrical devices and installations in the event of overloads and short-circuits.

Fuses are capable of safely switching off circuits as soon as an overload or short-circuit occurs. This prevents damage to electrical equipment or extended power failures. Specific variants of fuse systems are used for different applications.

Among other things, our fuses are used for protecting cables and lines, switching devices and semiconductors as well as in photovoltaics and wind power.

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# Fuse Systems


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Fuse holders and bases 7/8
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# A multitude of additional information ...

## Information + ordering

### All the important things at a glance

For information about fuse systems, please visit our website **www.siemens.com/fuses**

### Your product in detail

The SiePortal platform (knowledge base) provides comprehensive information **www.siemens.com/lowvoltage/product-support**

- Technology Primer
  - Fuse systems **(109482303)**

The relevant tender specifications can be found at **www.siemens.com/tenderspecifications**

Use our conversion tool for quick and easy conversion to Siemens products **www.siemens.com/conversion-tool**

### Siemens YouTube channel

- Siemens fuse systems **sie.ag/2J9ihb**

### Smart Control Panel Design

With the Smart Control Panel Design in the TIA Selection Tool, it is possible to design and dimension the electrical equipment of a machine in conformity with the standards – from the suitable switching devices to the correctly dimensioned cables
**www.siemens.com/controlpanel/cpd**

### Everything you need for your order

Refer to SiePortal to find an overview of your products (product catalog)

- Fuse systems **sie.ag/2kW3pnU**

Direct forwarding to the individual products in SiePortal by clicking on the article number in the catalog or entering this web address incl. article number **www.siemens.com/product_catalog_SIEP?Article No.**

### Configurators

The configurator reduces the time and effort required in the planning and ordering process, and allows for individual adaptations. Configure your fuse systems under **www.siemens.com/lowvoltage/fusesystems-configurator**

### The fast track to the experts

#### Contact persons in your region

We offer a comprehensive portfolio of services.
You can find your local contacts at
**www.siemens.com/lowvoltage/components/contact**

You will find further information on services at
**www.siemens.com/service-offers**

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at
**www.siemens.com/support-request**

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# … can be found in our online services

## Commissioning + operation

### Your product in detail

The SiePortal platform (knowledge base) provides detailed technical information
**www.siemens.com/lowvoltage/product-support**

- Operating instructions
- Characteristic curves
- Certificates

Online Support app available for download from the **App Store** and **Play Store**
You will find further information at
**www.siemens.com/support-app**

Provision of 3D data (step and u3d data formats)
- SiePortal (product catalog)
  **www.siemens.com/lowvoltage/product-catalog**
- Image database
  **www.siemens.com/lowvoltage/picturedb**

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
**www.siemens.com/cax**

### Manuals

Manuals can be found in SiePortal at
**www.siemens.com/lowvoltage/manuals**

- Configuration Manual
  – Fuse systems **(45314810)**
- Planning Manual
  – Planning with SIVACON 8PS **(109478425)**
- Installation Manual
  – Circuit protection devices with communication and measuring function **(109791805)**
- System Manual
  – Circuit protection devices with communication and measuring function **(109791806)**

### Face-to-face or online training

Our training courses can be found at
**www.siemens.com/sitrain-lowvoltage**

- SENTRON circuit protection devices with measuring and communication function (WT-LVBCOM)

### Technical overview – Fuse systems

#### The fast way to get you to our online services

This page provides you with comprehensive information and links on fuse systems
**www.siemens.com/lowvoltage/product-support (109769085)**

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# System overview

## Fuse holders and bases

### IEC fuse holders and bases


MINIZED


NEOZED


DIAZED


Bus-mounting bases for busbars


Photovoltaic fuses (LV HRC design)

### IEC/UL fuse holders and bases


LV HRC fuses


Cylindrical fuses


SITOR semiconductor fuses (LV HRC design)


SITOR semiconductor fuses (cylindrical fuse design)

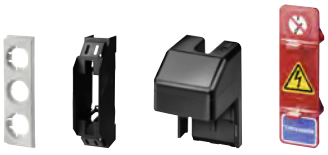

Photovoltaic fuses (cylindrical fuse design)

### UL fuse holders and bases


Class CC


Class J

### Accessories for fuse holders and bases


Covers


Screw caps


Adapter sleeves


Isolating blades

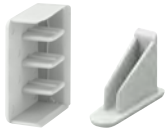

LV HRC signal detectors

### Busbars and accessories


Can be cut


Terminals


Touch protection


End caps

**Note:**
You will find a detailed range of accessories with the basic units.

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# Fuse links

## IEC fuse links



NEOZED



DIAZED



LV HRC



LV HRC
(3NA COM)



Cylindrical
fuses





SILIZED



Photovoltaic fuses
(LV HRC design)



Photovoltaic fuses
(cylindrical fuse design)

## IEC/UL fuse links



SITOR semiconductor fuses
(LV HRC design)



SITOR semiconductor fuses
(cylindrical fuse design)

## UL fuse links



Class CC

**Note:**
You will find a detailed range of accessories with the basic units.

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# Overview of fuse systems according to IEC

## Fuse links





| | | |
|---|---|---|
| **Standard** | IEC | IEC |
| **Rated current $I_n$** | 2 ... 100 A | 2 ... 100 A |
| **Rated voltage $U_n$ (AC)** | 400 V | 500 ... 750 V |
| **Rated voltage $U_n$ (DC)** | 250 V | 500 ... 750 V |
| **Design/ application** | NEOZED/SILIZED | DIAZED/SILIZED |

### Selection according to protection task

| | | |
|---|---|---|
| **Cables and conductors, general (gG, gFF)** | ■ | ■ |
| **Motor protection (aM)** | – | – |
| **Power semiconductor (aR, gR, gS)** | ■ | ■ |
| **Photovoltaic protection (gPV)** | – | – |
| **Battery protection (aR, gR, gBAT)** | – | – |
| **Type** | 5SE | 5SA, 5SB, 5SC, 5SD |
| **Further information** | See page 7/32, 7/34 | See page 7/33, 7/34 |

## Fuse holders and bases

### For protection tasks

Overview, see page 7/8

| | Floor mounting | DIN rail | Busbar | Type | Standard | Further information | | |
|---|---|---|---|---|---|---|---|---|
| Fuse bases | – | ■ | ■ | 5SG | IEC | See page 7/12 | ■ | – |
| | ■ | ■ | ■ | 5SF | IEC | See page 7/18 | – | ■ |
| | ■ | – | – | 3NH | IEC/UL | See page 7/22 | – | – |
| | ■ | – | – | 3NH7 | IEC | See page 7/22 | – | – |
| | – | ■ | ■ | 3NW7 | IEC/UL | See page 7/24 | – | – |
| | – | ■ | – | 3NC.. | IEC/UL | See page 7/25 | – | – |
| | – | ■ | – | 3NW7...-4 | IEC | See page 7/26 | – | – |



### For protection and switching tasks

System overview, see page 8/76, 8/110

| | Floor mounting | DIN rail | Busbar | Type | Standard | Further information | | |
|---|---|---|---|---|---|---|---|---|
| Fuse switch disconnectors | ■ | ■ | ■ | 3NP1 | IEC/UL | See page 8/78 | – | – |
| | ■ | – | ■ | 3NP5 | IEC/UL | See page 8/92 | – | – |
| | – | ■ | ■ | 5SG76 | IEC | See page 8/108 | ■ | – |
| | – | – | ■ | 3NJ4 | IEC | See page 8/96 | – | – |
| Switch disconnector with fuse | ■ | ■ | – | 3KF LV HRC | IEC | See page 8/114 | – | – |
| | ■ | ■ | – | 3KF SITOR | IEC/UL | See page 8/114 | – | – |
| | – | – | ■ | 3NJ63 | IEC | See page 8/130 | – | – |
| | – | ■ | ■ | 5SG71 | IEC | See page 8/138 | ■ | – |





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Overview, see page 7/30

| | | | | | | |
|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |
| IEC | IEC | IEC | IEC/UL | IEC/UL | IEC | UL |
| 2 ... 1250 A | 80 ... 315 A | 0.5 ... 100 A | 2 ... 2400 A | 1 ... 125 A | 2 ... 630 A | 0.5 ...30 A |
| 400 ... 690 V | 400 V | 400 ... 690 V | 500 ... 2500 V | 600 ... 1500 V | – | 600 V |
| 250 ... 400 V | 250 V | – | 440 ... 3000 V | 250 ... 1000 V | 1000 ... 1500 V | 150 ... 300 V |
| LV HRC | LV HRC | Cylindrical | SITOR LV HRC | SITOR cylindrical | Photovoltaic | Class CC |
| ■ | ■ | ■ | – | – | – | ■ |
| ■ | – | ■ | – | – | – | ■ |
| – | – | – | ■ | ■ | – | – |
| – | – | – | – | – | ■ | – |
| – | – | – | ■ | ■ | – | – |
| 3NA, 3ND | 3NA COM | 3NW6, 3NW8 | 3NE, 3NC | 3NC10 | 3NE..., 3NW... | 3NW1, 3NW2, 3NW3 |
| **See page 7/36, 7/48** | **See page 7/50** | **See page 7/52** | **See page 7/54, 7/58** | **See page 7/78** | **See page 7/84** | **See page 7/86** |
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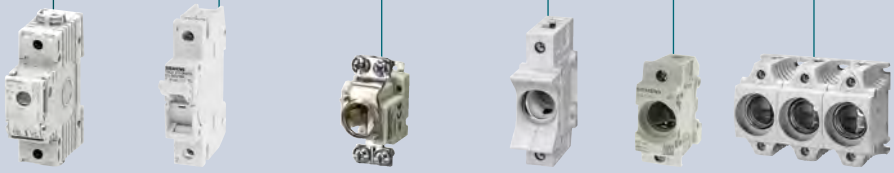
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# Quick selection guide of fuse holders, bases and D0 fuse switching devices



## IEC



| | | | MINIZED switch disconnectors with fuses | MINIZED fuse switch disconnectors | NEOZED fuse bases | | | NEOZED comfort bases | NEOZED fuse bases | DIAZED fuse bases |
|---|---|---|---|---|---|---|---|---|---|---|
| **Basic data** | | | | | | | | | | |
| Size/for fuses of size | | | D02 | D01 | D01 | D02 | D03 | D01, D02 | D01, D02 | NDz, DII, DIII |
| Type | | | 5SG71 | 5SG76 | 5SG15<br>5SG55 | 5SG16<br>5SG56 | 5SG18 | 5SG1301<br>5SG1701<br>5SG5301<br>5SG5701 | 5SG1302<br>5SG1702<br>5SG5302<br>5SG5702 | 5SF |
| Direction of incoming supply | | | Any | Any | From below | | | From below | From below | From below |
| **Standards** | | | | | | | | | | |
| Standards | | | DIN VDE 0638; IEC/EN 60947-3 (VDE 0660-107) IEC/EN 60947-3 | DIN VDE 0638; IEC/EN 60947-3 (VDE 0660-107) IEC/EN 60947-3 | IEC 60269-3; DIN VDE 0636-3 | | | IEC 60269-3; DIN VDE 0636-3 | IEC 60269-3; DIN VDE 0636-3 | IEC 60269-3; DIN VDE 0635; DIN VDE 0636-3; CEE 16 |
| Approvals | | | – | – | – | | | – | – | – |
| Certifications | | | – | – | – | | | – | – | – |
| **Technical specifications AC** | | | | | | | | | | |
| Rated voltage $U_n$ | | V AC | 230/400, 240/415 | 230/400, 240/415 | 400 | 400 | 400 | – | – | 500, 690, 750 |
| Rated insulation voltage | | V AC | 500 | 690 | – | – | – | – | – | – |
| Short-circuit strength | | kA AC | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Rated current $I_n$ | | A | 63 | 16 | 16 | 63 | 100 | 16/63 | 16/63 | 2 ... 100 |
| Rated impulse withstand voltage | | kV AC | 6 | 6 | – | – | – | – | – | – |
| Utilization category | Acc. to VDE 0638 | A | AC-22 | AC-22 | – | – | – | – | – | – |
| | Acc. to EN 60947-3 | A | AC-22B, AC-23B (35A) | AC-22A | – | – | – | – | – | – |
| **Technical specifications DC** | | | | | | | | | | |
| Rated voltage | $U_n$ | V DC | 65 (1P), 130 (2P) | 48 (1P), 110 (2P) | 250 | 250 | 250 | – | – | 500, 600, 750 |
| | $U_n$ acc. to UL | V DC | – | – | – | – | – | – | – | – |
| Short-circuit strength | | kA DC | – | – | 8 | 8 | 8 | 8 | 8 | – |
| Utilization category | Acc. to EN 60947-3 | A | DC-22B | – | – | – | – | – | – | – |
| **Further technical specifications** | | | | | | | | | | |
| Overvoltage category | | | IV | IV | – | | | – | – | III; II (DIAZED fuse bases made of molded plastic for use at 690 V AC/ 600 V DC) |
| Max. power dissipation of fuse links (conductor cross-section used) | | W | – | – | – | | | – | – | – |
| Pollution degree | | | – | – | – | | | – | – | – |
| **Further information** | | | | | | | | | | |
| | | | See page 7/13 | See page 7/12 | See page 7/16 | | | | | See page 7/18 |

[1] Extended rated voltage up to 1000 V

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# IEC








| Cylindrical fuse holders | | LV HRC fuse bases | | | | | | Fuse bases for photovoltaic fuses | NEOZED bus-mounting bases for 8US 60 mm compact busbar systems | NEOZED bus-mounting bases for 8US 60 mm busbar systems | DIAZED bus-mounting bases for 8US 60 mm busbar systems | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | |
| 8 × 32 mm | 22 × 58 mm | 000/ 00 | 0 | 1 | 2 | 3 | 4 | 1 | D02 | D02 | DII | DII |
| 3NW73.. | 3NW72.. | – | – | – | – | – | – | 3NH7...-4 | 5SG6208 | 5SG6202<br>5SG6206<br>5SG6207 | 5SF6014<br>5SF6015<br>5SF6020 | 5SF6214<br>5SF6215<br>5SF6220 |
| Any | | Any | | | | | | Any | From the busbar | From the busbar | From the busbar | |
| | | | | | | | | | | | | |
| IEC 60269-1, -2, -3; NF C 60-200, NF C 63-210, -211; NBN C 63269-2-1; CEI 32-4, -12; UL 4248-1 | | IEC 60269-1, -2; EN 60269-1; DIN VDE 0636-2, UL 4248-1 (only downstream from the branch protection) | | | | | | IEC 60269, IEC 60269-2 | IEC 60269-3, DIN VDE 0636-3 | IEC 60269-3, DIN VDE 0636-3 | IEC 60269-3, DIN VDE 0636-3 | IEC 60269-3, DIN VDE 0636-3 |
| UL File number E171267 | | KEMA; UL file number E171267-IZLT2 | | | | | | – | – | – | – | – |
| – | – | – | | | | | | – | – | – | – | – |
| | | | | | | | | | | | | |
| 400 | 690 | 690 [1] | 690 [1] | 690 [1] | 690 [1] | 690 [1] | 690 | – | 400 | 400 | 500 | 690 |
| – | – | – | – | – | – | – | – | – | – | – | – | – |
| 20 | 100 | – | – | – | – | – | – | – | – | – | – | – |
| 20 | 100 | 160 | 160 | 250 | 400 | 630 | 1250 | 160 | 63 | 63 | 25 | 63 |
| – | – | – | – | – | – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – | – | – | – | – | – |
| AC-20B (switching without load) | | – | – | – | – | – | – | – | – | – | – | – |
| | | | | | | | | | | | | |
| – | – | 250 | 440 | 440 | 440 | 440 | 440 | 1000 | 250 | 250 | – | 600 |
| – | – | – | – | – | – | – | – | – | – | – | – | – |
| – | – | 25 | 25 | 25 | 25 | 25 | 25 | – | 8 | 8 | 8 | 8 |
| DC-20B (switching without load) | | – | – | – | – | – | – | DC-20B (switching without load) | – | – | – | – |
| | | | | | | | | | | | | |
| – | | – | – | – | – | – | – | – | – | – | – | – |
| – | | 12 | 25 | 32 | 45 | 60 | 90 | 40 | – | – | – | – |
| – | | – | – | – | – | – | – | – | – | – | – | – |
| | | | | | | | | | | | | |
| See page 7/24 | | See page 7/22 | | | | | | See page 7/26 | See page 7/20 | | | |

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# Quick selection guide of fuse holders, bases and D0 fuse switching devices

## IEC/UL





| | | | LV HRC fuse bases | | | | | Fuse holders for SITOR semiconductor fuses (cylindrical fuse design) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Basic data** | | | | | | | | | | | |
| Size/for fuses of size | | | 000/00 | 0 | 1 | 2 | 3 | 10 × 38 mm | 14 × 51 mm | 22 × 58 mm | 22 × 127 mm |
| Type [2] | | | 3NH3030 3NH4030 | 3NH3120 | 3NH3230 | 3NH3330 | 3NH3420 3NH3430 | 3NC10 | 3NC14 | 3NC22 | 3NC23 |
| Direction of incoming supply | | | Any | | | | | Any | | | |
| **Standards** | | | | | | | | | | | |
| Standards | | | IEC 60269-1, -2; EN 60269-1; DIN VDE 0636-2, UL 4248-1 (only downstream from the branch protection) | | | | | UL 4248-1; CSA C22.2; IEC 60269-2, IEC 60947-3 | UL 4248-1; CSA C22.2; IEC 60269-2, IEC 60947-3 | UL 4248-1; CSA C22.2; IEC 60269-2, IEC 60947-3 | IEC 60269-2, IEC 60947-3 |
| Approvals | | | KEMA; UL file number E171267-IZLT2 | | | | | UL 4248-1; UL File number E171267; CSA C22.2 No. 39-M | | | – |
| Certifications | | | – | | | | | ㊊, ㊋ | ㊊, ㊋ | ㊊, ㊋ | – |
| **Technical specifications AC** | | | | | | | | | | | |
| Rated voltage | $U_n$ | V AC | 690 [1] | 690 [1] | 690 [1] | 690 [1] | 690 [1] | 690 | 690 | 690 | 1500 |
| | $U_n$ acc. to UL | V AC | 690 | 690 | 1000 | 1000 | 1000 | 600 | 600 | 600 | – |
| | $U_n$ acc. to CSA | V AC | 600 | 600 | 600 | 600 | 600 | – | – | – | – |
| Rated insulation voltage | | V AC | – | – | – | – | – | – | – | – | – |
| Short-circuit strength | | kA AC | – | – | – | – | – | 50 | 50 (100 at 400 V) | 50 (100 at 500 V) | 30 |
| Rated current | $I_n$ | A | 160 | 160 | 250 | 400 | 630 | 32 | 50 | 100 | 63 |
| | $I_n$ acc. to UL | A | 160 | 160 | 250 | – | 500 | 30 | 50 | 80 | – |
| | $I_n$ acc. to CSA | A | 160 | 160 | 250 | – | 850 | 30 | 40 | 80 | – |
| Rated impulse withstand voltage | | kV AC | – | – | – | – | – | 6 | 6 | 6 | – |
| Utilization category | Acc. to VDE 0638 | A | – | – | – | – | – | – | – | – | – |
| | Acc. to EN 60947-3 | A | – | – | – | – | – | AC-22B (400 V) | AC-22B (400 V) | AC-20B (690 V) | AC-20B |
| **Technical specifications DC** | | | | | | | | | | | |
| Rated voltage | $U_n$ | V DC | 250 | 440 | 440 | 440 | 440 | 800 | | | 1000 |
| | $U_n$ acc. to UL | V DC | – | – | – | – | – | – | – | – | – |
| Short-circuit strength | | kA DC | 25 | 25 | 25 | 25 | 25 | – | – | – | 50 |
| Utilization category | Acc. to EN 60947-3 | A | – | – | – | – | – | – | – | – | DC-20B |
| **Further technical specifications** | | | | | | | | | | | |
| Overvoltage category | | | – | – | – | – | – | – | – | – | – |
| Max. power dissipation of fuse links (conductor cross-section used) | | W | 12 | 25 | 32 | 45 | 60 | 3 (6 mm²), 4.3 (10 mm²) | 5 (10 mm²), 6.5 (25 mm²) | 9.5 (35 mm²), 11 (50 mm²) | 15 (1 ... 50 mm²) |
| Pollution degree | | | – | – | – | – | – | 2 | 2 | 2 | – |
| **Further information** | | | | | | | | | | | |
| | | | See page 7/22 | | | | | See page 7/25 | | | |

[1] Extended rated voltage up to 1000 V

[2] Types with UL approval and types with CSA approval may differ



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## IEC/UL

## UL









| Cylindrical fuse holders | | Cylindrical fuse holders for PV fuses | | Class CC fuse holders | Class J fuse holders | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 10 × 38 mm | 14 × 51 mm | 10 × 38 mm | 10 × 85 mm | – | – | | | | |
| 3NW70..<br>3NW703.-1 | 3NW71.. | 3NW70..-4 | 3NW76..-4 | 3NW75.3-0HG<br>3NW753.-1HG | 3NW75.3-3HG, 3NW75.3-5HG, 3NW75.3-6HG, 3NW75.3-7HG, 3NW75.3-8HG, 3NW7431-6HG, 3NW7431-7HG, 3NW7431-8HG | | | | |
| Any | | Any | | Any | Any | | | | |
| IEC 60269-1, -2, -3;<br>NF C 60-200,<br>NF C 63-210, -211;<br>NBN C 63269-2-1;<br>CEI 32-4, -12; UL 4248-1 | | IEC 60269,<br>IEC 60269-2,<br>IEC 60947,<br>UL 4248-1, -18 | IEC 60269,<br>IEC 60269-2,<br>IEC 60947,<br>UL 4248-1, -18 | UL 4248-1;<br>CSA C22.2 | UL 4248-1 Ed.1, UL 4248-8 Ed.1 | | | | |
| UL File number E171267 | | (File number E469670, CCC) (types without signal detector) | (E355487) | UL 4248-1;<br>UL File number E171267;<br>CSA C22.2 | UL File number E171267;<br>CSA File number 233322;<br>Class number 6225-01 | | | | |
| , | | – | – | – | , | , | | | , Busbar device: |
| 690 | 690 | – | – | – | – | – | – | – | – |
| 600 | 700 | – | – | 600 | 600 | 600 | 600 | 600 | 600 |
| – | – | – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – | – | – |
| 100 | 100 | – | – | 200 | 200 | 200 | 200 | 200 | 200 |
| 32 | 50 | 30 | 32 | 30 | 30 | 60 | 100 | 200 | 400 |
| – | – | – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – | – | – |
| – | – | 6 | – | 6 | No information as the devices are only tested and certified to UL/CSA and not to IEC | | | | |
| – | – | – | – | – | – | | | | |
| AC-20B (switching without load) | | – | – | AC-20B (switching without load) | AC-20B (switching without load) | | | | |
| – | – | 1000 | 1500 | 300 | – | – | – | – | – |
| – | – | – | – | – | 600 | 600 | 600 | 600 | 600 |
| – | – | – | – | – | – | – | – | – | – |
| DC-20B (switching without load) | | – | – | DC-20B (switching without load) | DC-20B (switching without load) | | | | |
| – | | II | – | II | No information as the devices are only tested and certified to UL/CSA and not to IEC | | | | |
| – | | 4 | 6 | 3 (6 mm²),<br>4.3 (10 mm²) | – | | | | |
| – | | 2 | – | 2 | No information as the devices are only tested and certified to UL/CSA and not to IEC | | | | |
| See page 7/24 | | See page 7/26 | | See page 7/29 | See page 7/28 | | | | |

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# MINIZED fuse switch disconnectors

| Number of poles | 1P | 1P+N | 2P | 3P | 3P+N |
|---|---|---|---|---|---|
| |  |  |  |  |  |
| **Size** | **$I_n$** | | | | | |
| D01 | 2 ... 6 A | 5SG7611-0KK06 | – | – | 5SG7631-0KK06 | – |
| | 10 A | 5SG7611-0KK10 | – | – | 5SG7631-0KK10 | – |
| | 16 A | 5SG7611-0KK16 | 5SG7651-0KK16 | 5SG7621-0KK16 | 5SG7631-0KK16 | 5SG7661-0KK16 |

**Note:**
NEOZED adapter sleeves are not required for these devices

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## Accessories

**Electronic fuse monitor**



- For all low-voltage fuse systems
- For monitoring all types and versions of melting fuses that cannot be equipped with a fault signal contact
- Can be used in asymmetric systems afflicted with harmonics and regenerative feedback motors
- Signal also for disconnected loads

| $U_e$ AC | $I_n$ | $U_c$ | Article No. |
|---|---|---|---|
| 230 V | 4 A | 3 AC 380 ... 415 V | 5TT3170 |

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# MINIZED switch disconnectors with fuses

| Number of poles | 1P | 1P+N | 2P | 3P | 3P+N |
|---|---|---|---|---|---|
| |  |  |  |  |  |
| **Size** | **$I_n$** | | | | | |
| D02 | 25 A | – | – | – | 5SG7133-8BA25 [1] | – |
| | 35 A | – | – | – | 5SG7133-8BA35 [1] | – |
| | 50 A | – | | – | 5SG7133-8BA50 [1] | – |
| | 63 A | 5SG7113 | 5SG7153 | 5SG7123 | 5SG7133 | 5SG7163 |

[1] Versions for Austria only, with permanently fitted adapter sleeves and incl. fuse link

**Note:**
NEOZED adapter sleeves are required for these devices, see page 7/16
Use fuse links from 35 A with silver-plated contact caps, see page 7/32

## Accessories

**Reducers**



| Use | Article No. |
|---|---|
| For D01 fuse links in MINIZED switch disconnectors with fuses D02 | 5SH5527 |

**Auxiliary switches (AS)**



| Version | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3010 |
| 2 NO | 5ST3011 |
| 2 NC | 5ST3012 |

**Auxiliary switches (AS) with TEST button**



| Version | Article No. |
|---|---|
| 1 NO + 1 NC | 5ST3010-2 |
| 2 NO | 5ST3011-2 |
| 2 NC | 5ST3012-2 |

**5ST3 COM Auxiliary switches and fault signal contacts (AS+FC) with measuring and communication functions**



- Wireless information about manual ON/OFF, temperature, operating cycles, operating hours, warnings

| Article No. |
|---|
| 5ST3062-0MC |

**Electronic fuse monitor**



- For all low-voltage fuse systems
- For monitoring all types and versions of melting fuses that cannot be equipped with a fault signal contact
- Can be used in asymmetric systems afflicted with harmonics and regenerative feedback motors
- Signal also for disconnected loads

| $U_e$ AC | $I_n$ | $U_c$ | Article No. |
|---|---|---|---|
| 230 V | 4 A | 3 AC 380 ... 415 V | 5TT3170 |

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# NEOZED bus-mounting switch disconnectors with fuses

## For 8US 60 mm busbar systems

| | | | | | | | Size D02 | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Mounting width | 1.5 MW | 1.5 MW | 1.5 MW |
| | | | | | | |  |  |  |
| For flat copper profiles | $I_n$ IEC | UL 508 | $U_n$ IEC AC | IEC DC | UL 508 | Standard | Without LED signal detector | | With LED signal detector |
| **Box terminals** | | | | | | | | | |
| 5 mm and 10 mm | 63 A [1] | – | 400 V AC | – | – | IEC | 5SG7234-1 | – | 5SG7234-2 |
| | 63 A [2] | – | 400 V AC | 110 V DC | – | IEC | – | 5SG7230 | – |

[1] In the case of permanent load over 35 A, we recommend the use of lateral module 5SH5533. Please observe EN 60439-1, Table 1.
[2] In the case of permanent load over 35 A, we recommend the use of lateral module 5SH5526. Please observe EN 60439-1, Table 1.

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## Suitable accessories

**Auxiliary switches**



- For signaling the switching state for bus-mounting switch disconnectors

| Contacts | Mounting width | Article No. | Article No. | Article No. |
|---|---|---|---|---|
| 1 CO | 0.5 MW | – | 5SH5525 | – |

**Lateral modules**



- For greater heat dissipation for loads from 35 A

| Mounting width | Article No. | Article No. | Article No. |
|---|---|---|---|
| 0.5 MW | 5SH5533 | 5SH5526 | 5SH5533 |

**Reducers**



| Use | Article No. | Article No. | Article No. |
|---|---|---|---|
| For NEOZED D01 fuse links in bus-mounting switch disconnectors | 5SH5527 | 5SH5527 | 5SH5527 |

**Electronic fuse monitor**



- For all low-voltage fuse systems
- For monitoring all types and versions of melting fuses that cannot be equipped with a fault signal contact
- Can be used in asymmetric systems afflicted with harmonics and regenerative feedback motors
- Signal also for disconnected loads

| $U_e$ AC | $I_n$ | $U_c$ | Article No. | Article No. | Article No. |
|---|---|---|---|---|---|
| 230 V | 4 A | 3 AC 380 ... 415 V AC | 5TT3170 | 5TT3170 | 5TT3170 |

See Busbar systems, **from page 13/1 onwards**



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# NEOZED fuse bases

| | | Comfort bases made of molded plastic | | Fuse bases made of molded plastic | | | |
|---|---|---|---|---|---|---|---|
| | | | | Without LED signal detector | | With LED signal detector | |
| Number of poles | | 1P | 3P | 1P | 3P | 1P | 3P |
| | |  |  |  |  |  |  |
| **Size** | $I_n$ | | | | | | |
| D01 | 16 A | 5SG1301 | 5SG5301 | 5SG1302 | 5SG5302 | 5SG1302-1 | 5SG5302-1 |
| D02 | 63 A | 5SG1701 | 5SG5701 | 5SG1702 | 5SG5702 | 5SG1702-1 | 5SG5702-1 |
| D03 | 100 A | – | – | – | – | – | – |

## Accessories

### NEOZED screw caps

| | Material | Version | Fuse size | Article No. |
|---|---|---|---|---|
|  | Molded plastic | With inspection hole | D01 | 5SH4116 |
| | | | D02 | 5SH4163 |
|  | Ceramic | Without inspection hole, sealable | D01 | 5SH4316 |
| | | | D02 | 5SH4363 |
| | | Without inspection hole | D03 | 5SH4100 |
|  | | With inspection hole | D01 | 5SH4317 |
| | | | D02 | 5SH4362 |

### NEOZED adapter sleeves

| | Fuse size | $I_n$ | Color | Article No. |
|---|---|---|---|---|
|  | D01 | 2 A | Pink | 5SH5002 |
|  | | 4 A | Brown | 5SH5004 |
| | | 6 A | Green | 5SH5006 |
|  | | 10/13 A | Red | 5SH5010 |
| | D02 | 20 A | Blue | 5SH5020 |
| | | 25 A | Yellow | 5SH5025 |
| | | 32 A | Violet | 5SH5032 |
|  | | 35/40 A | Black | 5SH5035 |
| | | 50 A | White | 5SH5050 |
| | D03 | 80 A | Silver | 5SH5080 |
| | D01 fuse links in D02 base or MINIZED switch disconnectors with fuses D02 | 2 A | Pink | 5SH5402 |
| | | 4 A | Brown | 5SH5404 |
| | | 6 A | Green | 5SH5406 |
| | | 10/13 A | Red | 5SH5410 |
| | | 16 A | Gray | 5SH5416 |

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| Fuse bases made of ceramic | | | | | |
|---|---|---|---|---|---|
| With clamp-type terminal, on both sides | | With saddle terminal, on both sides | | With screw head contact at incoming feeder, clamp-type terminal at outgoing feeder | |
| 1P | 3P | 1P | 3P | 1P | 3P |
|  |  |  |  |  |  |
| 5SG1553 | 5SG5553 | – | – | – | – |
| – | – | 5SG1653 | 5SG5653 | 5SG1693 | 5SG5693 |
| – | – | – | – | 5SG1812 | – |

## NEOZED covers



| Fuse size | Article No. |
|---|---|
| D03 | 5SH5233 |

## NEOZED adapter sleeve fitters



| | Article No. |
|---|---|
| | 5SH5100 |

## NEOZED retaining springs



| Use | Article No. |
|---|---|
| For D01 fuse links in D02 screw caps, 2 ... 16 A | 5SH5400 |

## Electronic fuse monitor



- For all low-voltage fuse systems
- For monitoring all types and versions of melting fuses that cannot be equipped with a fault signal contact
- Can be used in asymmetric systems afflicted with harmonics and regenerative feedback motors
- Signal also for disconnected loads

| $U_e$ AC | $I_n$ | $U_c$ | Article No. |
|---|---|---|---|
| 230 V | 4 A | 3 AC 380 ... 415 V | 5TT3170 |

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# DIAZED fuse bases

| | | | Fuse bases made of molded plastic<br>With box terminal | | Fuse bases made of ceramic<br>With clamp-type terminal, on both sides |
|---|---|---|---|---|---|
| | | Number of poles | 1P | 3P | 1P |
| | | |  |  |  |
| **Size** | $I_n$ | $U_n$ AC/DC | | | |
| DII | 25 A | 500 V/500 V | 5SF1060 | 5SF5068 | 5SF1005 |
| DIII | 63 A | 500 V/500 V | 5SF1260 [1] | 5SF5268 [1] | – |
| | | 750 V/750 V | – | – | – |

[1] Can also be used for 690 V AC/600 V DC.

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## Accessories

**DIAZED screw caps**

| | Material | Version | Fuse size | Rated voltage AC/DC | Article No. |
|---|---|---|---|---|---|
|  | Molded plastic | With inspection hole | NDz | 500 V/500 V | 5SH1112 |
| | | | DII | 500 V/500 V | 5SH1221 |
| | | | DIII | 500 V/500 V | 5SH1231 |
|  | Ceramic | Without inspection hole | DII | 500 V/500 V | 5SH112 |
| | | | DIII | 500 V/500 V | 5SH113 |
|  | | With inspection hole, sealable | DII | 500 V/500 V | 5SH122 |
| | | | DIII | 500 V/500 V | 5SH123 |
|  | | Extended version | DIII | 690 V/600 V | 5SH1170 |
|  | | With fine thread | DIII | 750 V/750 V | 5SH1161 |

**DIAZED screw adapters**

- Also for 5SF230 up to 750 V

| | Fuse size | $I_n$ | Article No. |
|---|---|---|---|
|  | DII | 2 A | 5SH310 |
| | | 4 A | 5SH311 |
| | | 6 A | 5SH312 |
| | | 10 A | 5SH313 |
| | | 16 A | 5SH314 |
| | | 20 A | 5SH315 |
| | | 25 A | 5SH316 |
|  | DIII | 32 A | 5SH327 |
| | | 35 A | 5SH317 |
| | | 50 A | 5SH318 |
| | | 63 A | 5SH320 |

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| With clamp-type terminal at incoming feeder, saddle terminal at outgoing feeder | With screw head contact, on both sides |
|---|---|
| 1P | 1P |
|  |  |
| – | – |
| 5SF1205 [1] | – |
| – | 5SF4230 |



**DIAZED reduction sleeves for screw caps**



| Use | Article No. |
|---|---|
| For DII fuse links in DIII base | 5SH302 |

**DIAZED screw adapter keys**



| Use | Article No. |
|---|---|
| For DII/DIII screw adapters | 5SH3703 |

**DIAZED cover rings**



| Fuse size | Material | Article No. |
|---|---|---|
| DII | Molded plastic | 5SH3401 |
| DIII | Molded plastic | 5SH3411 |

**Electronic fuse monitor**



- For all low-voltage fuse systems
- For monitoring all types and versions of melting fuses that cannot be equipped with a fault signal contact
- Can be used in asymmetric systems afflicted with harmonics and regenerative feedback motors
- Signal also for disconnected loads

| $U_e$ AC | $I_n$ | $U_c$ | Article No. |
|---|---|---|---|
| 230 V | 4 A | 3 AC 380 ... 415 V | 5TT3170 |

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# Bus-mounting bases

## For busbar systems

| | | | | 60 mm compact busbar systems | 60 mm busbar systems | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | NEOZED design | NEOZED design | | DIAZED design | |
| | | | Number of poles | 3P | 3P | | 3P | |
| | | | |  |  |  |  |  |
| **Size** | **$I_n$** | **Mounting width** | **$U_n$ AC/DC** | **With touch protection cover** | **Standard** | **With touch protection cover** | **Standard** | **With touch protection cover** |
| D02 | 63 A | 1.5 MW | – | – | 5SG6202 [1] | 5SG6206 [1] | – | – |
| | | 2 MW | – | 5SG6208 | – | 5SG6207 | – | – |
| DII | 25 A | – | 500 V/500 V | – | – | – | 5SF6015 | 5SF6020 |
| DIII | 63 A | – | 500 V/500 V [2] | – | – | – | 5SF6215 | 5SF6220 |

[1] From 35 A continuous current load, mount the fuse base with spacing and use a wider cover.
[2] Can also be used for 690 V AC/ 600 V DC

**Note:**
NEOZED adapter sleeves and DIAZED screw adapters as well as the respective screw caps are required, see page 7/16 and 7/18

## Accessories

**Covers for bus-mounting base standard version for 60 mm busbar systems**

| | Design | Fuse size | Version | Mounting width (1 MW = 18 mm) | Article No. |
|---|---|---|---|---|---|
|  | NEOZED | D02 | Standard | 1.5 MW | 5SH5241 |
| | | | Extra wide | 2 MW | 5SH5242 |
|  | | | Double width | 3 MW | 5SH5243 |
|  | DIAZED | DII | | | 5SH2042 |
| | | DIII | | | 5SH2242 |

**Electronic fuse monitor**



- For all low-voltage fuse systems
- For monitoring all types and versions of melting fuses that cannot be equipped with a fault signal contact
- Can be used in asymmetric systems afflicted with harmonics and regenerative feedback motors
- Signal also for disconnected loads

| $U_e$ AC | $I_n$ | $U_c$ | Article No. |
|---|---|---|---|
| 230 V | 4 A | 3 AC 380 ... 415 V | 5TT3170 |

See Busbar systems, from page 13/1 onwards



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# LV HRC fuse bases

| | Ceramic | | | | |
|---|---|---|---|---|---|
| Number of poles | 1P | | | | |
| |  |  |  |  | |
| **Size** | **$I_n$** | **Flat terminals** | **Plug-in terminal** | **Saddle-type terminal** | **Double busbar terminal** |
| 000/00 | 160 A | 3NH3030 | 3NH3031 | 3NH3032 | – |
| 0 [1] | 160 A | 3NH3120 | – | – | – |
| 1 | 250 A | 3NH3230 | – | – | – |
| 2 | 400 A | 3NH3330 | – | – | – |
| 3 | 630 A | 3NH3430 | – | – | 3NH3420 |
| 4 | 1250 A | 3NH3530 | – | – | – |
| 4a | 1250 A | – | – | – | – |

[1] No longer to be used for new installations!

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## Accessories

**LV HRC protective covers for LV HRC fuse bases**



- As touch protection for contact pieces

| Size | Article No. |
|---|---|
| 000/00 | 3NX3105 |
| 0 | 3NX3114 |
| 1 | 3NX3106 |
| 2 | 3NX3107 |
| 3 | 3NX3108 |

**LV HRC partitions for LV HRC fuse bases**



- As intermediate phase and end barrier

| Size | Type | Article No. |
|---|---|---|
| 000/00 | 3NH30/3NH40 | 3NX2023 |
| 0 | 3NH31 | 3NX2030 |
| 1 | 3NH32 | 3NX2024 |
| 2 | 3NH33 | 3NX2025 |
| 3 | 3NH34 | 3NX2026 |

**LV HRC protective covers**



| Size | Number of poles | Article No. |
|---|---|---|
| 000/00 | 1P and 3P | 3NX3115 |

**Grip lug cover for plugging into the LV HRC protective cover**



| Size | Use | Article No. |
|---|---|---|
| 000/00 | When using fuse links with non-insulated grip lugs | 3NX3116 |

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| | | Molded plastic | With swivel device |
|---|---|---|---|
| 3P | | 1P | 1P |
|  |  |  |  |
| **Flat terminals** | **Saddle-type terminal** | **Flat terminals** | **Flat terminals** |
| 3NH4030 | 3NH4032 | 3NH3051 | – |
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |
| – | – | – | 3NH7520 |

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## Blanking covers for LV HRC fuse bases (instead of LV HRC fuse link)



- Red color
- With inscription "Isolating point"
- Observe width 60 mm of the blank insert when using for size 1

| Size | Article No. |
|---|---|
| 000/00 | 3NX1003 |
| 1, 2, 3 | 3NX1004 |

## Fuse pullers for LV HRC fuse links





| Size | Version | Article No. |
|---|---|---|
| 000 ... 3 | Without sleeve | 3NX1013 |
| | With sleeve | 3NX1014 |

## Isolating blades for LV HRC fuse bases and fuse switch disconnectors





| Version | Contacts | Size | Article No. |
|---|---|---|---|
| With insulated grip lugs | Silver-plated | 000/00 | 3NG1002 |
| | | 0 | 3NG1102 |
| | | 1 | 3NG1202 |
| | | 2 | 3NG1302 |
| | | 3 | 3NG1402 |
| With non-insulated grip lugs | Tin-coated | 4 | 3NG1503 |
| | Nickel-plated | 4a | 3NG1505 |

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# Cylindrical fuse holders

| Number of poles | | 1P | 1P+N | 2P | 3P | | | 3P+N |
|---|---|---|---|---|---|---|---|---|
| | |  |  |  |  |  |  |  |
| **For fuses of size** | **$I_n$** | **Standard** | **Standard** | **Standard** | **Standard** | **Compact** | **Bus-mounting fuse holders** | **Standard** |
| **Without LED signal detector** | | | | | | | | |
| 8 × 32 mm | 20 A | 3NW7313 | 3NW7353 | 3NW7323 | 3NW7333 | – | – | 3NW7363 |
| 10 × 38 mm | 30 A | – | – | – | – | – | 3NW7431 | – |
| | 32 A | 3NW7013 | 3NW7053 | 3NW7023 | 3NW7033 | 3NW7033-1 | – | 3NW7063 |
| 14 × 51 mm | 50 A | 3NW7111 | 3NW7151 | 3NW7121 | 3NW7131 | – | – | 3NW7161 |
| 22 × 58 mm | 100 A | 3NW7211 | 3NW7251 | 3NW7221 | 3NW7231 | – | – | 3NW7261 |
| **With LED signal detector** | | | | | | | | |
| 8 × 32 mm | 20 A | 3NW7314 | 3NW7354 | 3NW7324 | 3NW7334 | – | – | 3NW7364 |
| 10 × 38 mm | 32 A | 3NW7014 | 3NW7054 | 3NW7024 | 3NW7034 | 3NW7034-1 | – | 3NW7064 |
| 14 × 51 mm | 50 A | 3NW7112 | 3NW7152 | 3NW7122 | 3NW7132 | – | – | 3NW7162 |
| 22 × 58 mm | 100 A | 3NW7212 | 3NW7252 | 3NW7222 | 3NW7232 | – | – | 3NW7262 |

**Note:**
Semiconductor fuses heat up substantially more than standard fuses of operational classes gG and aM.
We therefore recommend only using SITOR cylindrical fuses in the intended SITOR fuse holders and complying with the maximum permissible current-carrying capacity.

## Accessories

**Auxiliary switches for cylindrical fuse holders, standard**



- For retrofitting using the factory-fitted brackets

| Display | Fuse link size | Article No. |
|---|---|---|
| Disconnection of the fuse link, only for striker fuse links | 14 × 51 mm | 3NW7901 |
| | 22 × 58 mm | 3NW7902 |
| Switching state of fuse holder | 8 × 32 mm and 10 × 38 mm | 3NW7903 |

**Busbars for cylindrical fuse holders, compact**



| Number of poles | $I_n$ | Pin spacing | Length | Article No. |
|---|---|---|---|---|
| 2 × 3P | 63 A | 15 mm | 45 mm | 5ST2601 |
| 3 × 3P | 63 A | 15 mm | 90 mm | 5ST2602 |
| 4 × 3P | 63 A | 15 mm | 135 mm | 5ST2603 |
| 5 × 3P | 63 A | 15 mm | 180 mm | 5ST2604 |

**Terminals for cylindrical fuse holders, compact**



| Version | Article No. |
|---|---|
| For conductor cross-sections 2.5 ... 35 mm² | 5ST2600 |

See Busbar systems, from page 13/1 onwards

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# Fuse holders and bases for SITOR semiconductor fuses

## For SITOR fuses with bolt-on links or blade contacts

| | | | | Ceramic | Metal |
|---|---|---|---|---|---|
| | | | |  |  |
| $I_n$ | $U_n$ AC/DC | For fuse series | Mounting dimensions | | |
| 50 A | 690 V | 3NC18 | 75 mm | 3NH5723 | – |
| 315 A | 690 V | 3NE87, 3NC26 | 80 mm | 3NH5023 | – |
| 400 A | 690 V | 3NE80..-3MK | 80 mm | 3NH5323 | – |
| 630 A | 1800 V | 3NE53, 3NE56 | 170 mm | – | 3NH5473 |
| 1250 A | 1250 V | 3NC24, 3NC33..-1U, 3NC34..-1U, 3NC84, 3NE1..-3, NE32, 3NE33 | 110 mm | – | 3NH5463 |
| 1600 A | 690 V | 3NE82..-3MK | 80 mm | – | 3NH5423 |

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## For cylindrical fuses

| | Cylindrical fuse holders, can be used as fuse switch disconnectors | | | |
|---|---|---|---|---|
| Number of poles | 1P | | 2P | 3P |
| |  |  |  |  |
| For fuses of size | $U_n$ AC/DC | | With signaling switch | | |
| 10 × 38 mm | 600 V/– | – | – | – | – |
| | 690 V/800 V | 3NC1091 | – | 3NC1092 | 3NC1093 |
| 14 × 51 mm | 690 V/800 V | 3NC1491 | 3NC1491-5 | 3NC1492 | 3NC1493 |
| 22 × 58 mm | 690 V/800 V | 3NC2291 | 3NC2291-5 | 3NC2292 | 3NC2293 |
| 22 × 127 mm | 1500 V/1000 V | 3NC2391-0MK | – | 3NC2392-0MK | 3NC2393-0MK |

**Note:**
Please comply with the maximum permissible current-carrying capacity.

### Accessories

**Fuse tongs**



| For fuses of size | Article No. |
|---|---|
| 10 × 38 mm<br>14 × 51 mm<br>22 × 58 mm | 3NC1000 |

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# Fuse holders and bases for photovoltaic fuses

## Cylindrical fuse holders for PV fuses

| | | | Without signal detector | | | With signal detector | |
|---|---|---|---|---|---|---|---|
| | | Number of poles | 1P | 1P | 2P | 1P | 2P |
| | | |  |  |  |  |  |
| For fuses of size | $I_n$ | $U_n$ DC | | | | | |
| 10 × 38 mm | 30 A | 1000 V | 3NW7013-4 | – | 3NW7023-4 | 3NW7014-4 | 3NW7024-4 |
| 10 × 85 mm | 32 A | 1500 V | – | 3NW7613-4 | – | – | – |

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# LV HRC fuse bases for PV fuses

| | | | With flat terminals, ceramic |
|---|---|---|---|
| | | |  |
| **Size** | **$I_n$** | **$U_n$ DC** | |
| 1 | 250 A | 1000 V | 3NH3230 |



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# Class J fuse holders

| | | | For mounting on DIN mounting rail | | | For screwing onto mounting plate | Bus-mounting fuse holders for 8US 60 mm busbar systems | | |
|---|---|---|---|---|---|---|---|---|---|
| Number of poles | | | 1P | 2P | 3P | 3P | 3P | 3P | 3P |
| | | |  |  |  |  |  |  |  |
| For fuses of size | $I_n$ | $U_n$ | | | | | | | |
| 21 × 57 mm | 30 A | 600 V | 3NW7511-3HG | 3NW7521-3HG | 3NW7531-3HG | – | – | – | – |
| 27 × 60 mm | 60 A | 600 V | 3NW7511-5HG | 3NW7521-5HG | 3NW7531-5HG | – | – | – | – |
| 28 × 118 mm | 100 A | 600 V | – | – | – | 3NW7531-6HG | 3NW7431-6HG | – | – |
| 41 × 146 mm | 200 A | 600 V | – | – | – | 3NW7531-7HG | – | 3NW7431-7HG | – |
| 54 × 181 mm | 400 A | 600 V | – | – | – | 3NW7531-8HG | – | – | 3NW7431-8HG |

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# Class CC fuse holders

| | | Standard | | | Compact | | Bus-mounting fuse holders for 8US 60 mm busbar systems |
|---|---|---|---|---|---|---|---|
| Number of poles | | 1P | 2P | 3P | 3P | | 3P |
| | |  |  |  |  |  |  |
| $I_n$ | $U_n$ | | | | Signal detector without | with | |
| 30 A | 600 V | 3NW7513-0HG | 3NW7523-0HG | 3NW7533-0HG | 3NW7533-1HG | 3NW7534-1HG | 3NW7431-0HG |

## Accessories

**Busbars for Class CC fuse holders, compact**



| Number of poles | $I_n$ | Pin spacing | Length | Article No. |
|---|---|---|---|---|
| 2 × 3P | 63 A | 15 mm | 45 mm | 5ST2601 |
| 3 × 3P | 63 A | 15 mm | 90 mm | 5ST2602 |
| 4 × 3P | 63 A | 15 mm | 135 mm | 5ST2603 |
| 5 × 3P | 63 A | 15 mm | 180 mm | 5ST2604 |

**Terminals for Class CC fuse holders, compact**



| Version | Article No. |
|---|---|
| For conductor cross-sections 2.5 ... 35 mm² | 5ST2600 |

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# Quick selection guide of fuse links

IEC



| | | NEOZED fuse links | DIAZED fuse links | SILIZED fuse links | LV HRC fuse links | 3NA COM LV HRC fuse links [1] |
|---|---|---|---|---|---|---|
| **Basic data** | | | | | | |
| Design | | NEOZED | DIAZED | NEOZED, DIAZED | LV HRC | LV HRC |
| Size/for fuses of size | | D01, D02, D03 | NDz, DII, DIII | D01, D02, DII, DIII, DIV | 000/00, 0, 1, 2, 3, 4, 4a | 2 |
| Operational class | | gG | gG | gR | gG, aM | gG, gFF |
| Rated current | A | 2 ... 100 | 2 ... 100 | 10 ... 100 | 2 ... 1250 | 80 ... 315 |
| **Standards** | | | | | | |
| Standard | | IEC 60269-3; DIN VDE 0636-3 | IEC 60269-3; DIN VDE 0635, DIN VDE 0636-3; CEE 16 | IEC 60269-3/-4; DIN VDE 0636-3; EN 60269-4 (VDE 0636-4) | IEC 60269-1/-2; EN 60269-1/-2; DIN VDE 0636-1/-2 | IEC 60269-1/-2; EN 60269-1/-2; DIN VDE 0636-1/-2 |
| Approvals | | VDE | VDE | – | CSA 22.2, VDE | VDE, KEMA |
| **Technical specifications AC** | | | | | | |
| Rated voltage AC | V | 400 | 500 ... 750 | 400 ... 500 | 400 ... 690<br>600 (CSA) | 400 |
| Rated breaking capacity AC | kA | 50 | 50 | 50 | 120 | 100 |
| **Technical specifications DC** | | | | | | |
| Rated voltage DC | V | 250 | 500 ... 750 | 250 ... 500 | 250 ... 440 | – |
| Rated breaking capacity DC | kA | 8 | 8 | 8 | 25 | – |
| **Further information** | | | | | | |
| | | See page 7/32 | See page 7/33 | See page 7/34 | See page 7/36 | See page 7/50 |

[1] With current measuring function and wireless communication





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| IEC | | | IEC/UL | | UL |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
| **Cylindrical fuse links** | **Photovoltaic fuse links, cylindrical fuse design** | **Photovoltaic fuse links, LV HRC design** | **SITOR semiconductor fuse links, LV HRC design (AC/DC) and LV HRC design (DC)** | **SITOR semiconductor fuse links, cylindrical fuse design (AC/DC)** | **Class CC fuse links** |
| Cylindrical | Cylindrical | LV HRC | LV HRC | Cylindrical | Cylindrical |
| 8 × 32 mm,<br>10 × 38 mm,<br>14 × 51 mm,<br>22 × 58 mm | 10 × 38 mm,<br>10 × 85 mm | 1, 1L, 2L, 3L,<br>1XL, 2XL | 000, 00, 1, 2, 3 | 10 × 38 mm,<br>14 × 51 mm,<br>22 × 58 mm | – |
| gG, aM | gPV | gPV | gS, gR, aR | gS, gR, aR | – |
| 0.5 ...100 | 2 ... 20 | 63 ... 630 | 6 ... 2400 | 1 ... 125 | 0.6 ... 30 |
| IEC 60269-1/-2;<br>NF C 60-200,<br>NF C 63-210/-211;<br>NBN C 63269-2;<br>IEC 32-4/-12 | IEC 60269-6 | IEC 60269-6 | IEC 60269-4 | IEC 60269-2 | – |
| UL 248-1, CSA | – | – | UL 248-1,<br>UL 248-13 | UL 248-1,<br>UL 248-13 | UL 248-1;<br>CSA C22.2 |
| 400 ... 690<br>400 ... 600 (UL/CSA) | – | – | 500 ... 2500 | 690 ... 1500<br>600 ... 1500 (UL/CSA) | 600 |
| 20 ... 120 | – | – | 100 ... 150 | 100 | 200 |
| – | 1000 ... 1500 | 1000 ... 1500 | 400 ... 1500 | 250 ... 1000 | 150 ... 300 |
| – | 30 | 30 | – | – | – |
| See page 7/52 | See page 7/84 | See page 7/84 | See page 7/54 | See page 7/76 | See page 7/86 |



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# NEOZED fuse links

## Operational class gG

| | | | | Size D01 | Size D02 | Size D03 |
|---|---|---|---|---|---|---|
| | | | |  |  |  |
| $I_n$ | Identification color | Contacts | $U_n$ AC/DC | | | |
| 2 A | Pink | – | 400 V/250 V | 5SE2302 | – | – |
| 4 A | Brown | – | 400 V/250 V | 5SE2304 | – | – |
| 6 A | Green | – | 400 V/250 V | 5SE2306 | – | – |
| 10 A | Red | – | 400 V/250 V | 5SE2310 | – | – |
| 13 A | Black | – | 400 V/250 V | 5SE2013-2A | – | – |
| 16 A | Gray | – | 400 V/250 V | 5SE2316 | – | – |
| 20 A | Blue | Tin-coated | 400 V/250 V | – | 5SE2320 | – |
| 25 A | Yellow | Tin-coated | 400 V/250 V | – | 5SE2325 | – |
| 32 A | Violet | Tin-coated | 400 V/250 V | – | 5SE2332 | – |
| 35 A | Black | Tin-coated | 400 V/250 V | – | 5SE2335 | – |
| 40 A | Black | Silver-plated | 400 V/250 V | – | 5SE2340 | – |
| 50 A | White | Silver-plated | 400 V/250 V | – | 5SE2350 | – |
| 63 A | Copper | Silver-plated | 400 V/250 V | – | 5SE2363 | – |
| 80 A | Blue | – | 400 V/250 V | – | – | 5SE2280 |
| 100 A | Red | – | 400 V/250 V | – | – | 5SE2300 |



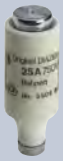


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# DIAZED fuse links

| | | | Size DII<br>E27 | Size DIII [1]<br>E33 | | Size DIV<br>R 1 1/4" | Size TNDz<br>E16 |
|---|---|---|---|---|---|---|---|
| | | Operational class | gG | gG | quick | gG | slow |
| | | |  |  |  |  |  |
| $I_n$ | Identification color | $U_n$ AC/DC | | | | | |
| 2 A | Pink | 500 V/500 V | 5SB211 | – | – | – | 5SA211 |
| | | 690 V/600 V | – | 5SD8002 | – | – | – |
| | | 750 V/750 V | – | – | 5SD601 | – | – |
| 4 A | Brown | 500 V/500 V | 5SB221 | – | – | – | 5SA221 |
| | | 690 V/600 V | – | 5SD8004 | – | – | – |
| | | 750 V/750 V | – | – | 5SD602 | – | – |
| 6 A | Green | 500 V/500 V | 5SB231 | – | – | – | 5SA231 |
| | | 690 V/600 V | – | 5SD8006 | – | – | – |
| | | 750 V/750 V | – | – | 5SD603 | – | – |
| 10 A | Red | 500 V/500 V | 5SB251 | – | – | – | 5SA251 |
| | | 690 V/600 V | – | 5SD8010 | – | – | – |
| | | 750 V/750 V | – | – | 5SD604 | – | – |
| 16 A | Gray | 500 V/440 V | 5SB2611 | – | – | – | 5SA2611 |
| | | 690 V/600 V | – | 5SD8016 | – | – | – |
| | | 750 V/750 V | – | – | 5SD605 | – | – |
| 20 A | Blue | 500 V/440 V | 5SB2711 | – | – | – | 5SA2711 |
| | | 690 V/600 V | – | 5SD8020 | – | – | – |
| | | 750 V/750 V | – | – | 5SD606 | – | – |
| 25 A | Yellow | 500 V/440 V | 5SB2811 | – | – | – | 5SA2811 |
| | | 690 V/600 V | – | 5SD8025 | – | – | – |
| | | 750 V/750 V | – | – | 5SD607 | – | – |
| 32 A | Violet | 500 V/440 V | – | 5SB4011 | – | – | – |
| 35 A | Black | 500 V/440 V | – | 5SB4111 | – | – | – |
| | | 690 V/600 V | – | 5SD8035 | – | – | – |
| | | 750 V/750 V | – | – | 5SD608 | – | – |
| 50 A | White | 500 V/440 V | – | 5SB4211 | – | – | – |
| | | 690 V/600 V | – | 5SD8050 | – | – | – |
| | | 750 V/750 V | – | – | 5SD610 | – | – |
| 63 A | Copper | 500 V/440 V | – | 5SB4311 | – | – | – |
| | | 690 V/600 V | – | 5SD8063 | – | – | – |
| | | 750 V/750 V | – | – | 5SD611 | – | – |
| 80 A | Silver | 500 V/400 V | – | – | – | 5SC211 | – |
| 100 A | Red | 500 V/400 V | – | – | – | 5SC221 | – |

[1] For 2 ... 25 A use screw adaptor DII

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# SILIZED fuse links

## Operational class gR

| | | | | NEOZED design | | DIAZED design | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Size D01 | Size D02 | Size DII | Size DIII | Size DIV |
| | | | |  |  |  |  |  |
| $I_n$ | Switch-off $I^2t$ value | Power loss $P_v$ | $U_n$ AC/DC | | | | | |
| 10 A | 73 $A^2s$ | 6.9 W | 400 V/250 V | 5SE1310 | – | – | – | – |
| 16 A | 60 $A^2s$ | 12.1 W | 500 V/500 V | – | – | 5SD420 | – | – |
| | 120 $A^2s$ | 6.2 W | 400 V/250 V | 5SE1316 | – | – | – | – |
| 20 A | 139 $A^2s$ | 12.3 W | 500 V/500 V | – | – | 5SD430 | – | – |
| | 190 $A^2s$ | 8.1 W | 400 V/250 V | – | 5SE1320 | – | – | – |
| 25 A | 205 $A^2s$ | 12.5 W | 500 V/500 V | – | – | 5SD440 | – | – |
| | 215 $A^2s$ | 8.2 W | 400 V/250 V | – | 5SE1325 | – | – | – |
| 30 A | 310 $A^2s$ | 13.5 W | 500 V/500 V | – | – | 5SD480 | – | – |
| 35 A | 470 $A^2s$ | 16.7 W | 400 V/250 V | – | 5SE1335 | – | – | – |
| | 539 $A^2s$ | 14.8 W | 500 V/500 V | – | – | – | 5SD450 | – |
| 50 A | 1250 $A^2s$ | 18.5 W | 500 V/500 V | – | – | – | 5SD460 | – |
| | 1960 $A^2s$ | 12.0 W | 400 V/250 V | – | 5SE1350 | – | – | – |
| 63 A | 1890 $A^2s$ | 28.0 W | 500 V/500 V | – | – | – | 5SD470 | – |
| | 4230 $A^2s$ | 15.5 W | 400 V/250 V | – | 5SE1363 | – | – | – |
| 80 A | 4200 $A^2s$ | 34.3 W | 500 V/500 V | – | – | – | – | 5SD510 |
| 100 A | 8450 $A^2s$ | 41.5 W | 500 V/500 V | – | – | – | – | 5SD520 |





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# LV HRC fuse links

## Operational class gG, with combination alarm

| | | Size 000 | Size 00 | Size 1 |
|---|---|---|---|---|
| **Mounting width** | | 21 mm | 30 mm | 30 mm |
| | |  |  |  |
| $I_n$ | $U_n$ AC/DC | | | |
| **Insulated grip lugs** | | | | |
| 2 A | 500 V/250 V | 3NA6802 | – | – |
| | 690 V [1]/250 V | 3NA6802-6 | – | – |
| 4 A | 500 V/250 V | 3NA6804 | – | – |
| | 690 V [1]/250 V | 3NA6804-6 | – | – |
| 6 A | 500 V/250 V | 3NA6801 | – | – |
| | 690 V [1]/250 V | 3NA6801-6 | – | – |
| 10 A | 400 V/– | 3NA6803-4 | – | – |
| | 500 V/250 V | 3NA6803 | – | – |
| | 690 V [1]/250 V | 3NA6803-6 | – | – |
| 16 A | 400 V/– | 3NA6805-4 | – | – |
| | 500 V/250 V | 3NA6805 | – | – |
| | 690 V [1]/250 V | 3NA6805-6 | – | – |
| | 500 V/440 V | – | – | 3NA6105 |
| 20 A | 400 V/– | 3NA6807-4 | – | – |
| | 500 V/250 V | 3NA6807 | – | – |
| | 690 V [1]/250 V | 3NA6807-6 | – | – |
| | 500 V/440 V | – | – | 3NA6107 |
| 25 A | 400 V/– | 3NA6810-4 | – | – |
| | 500 V/250 V | 3NA6810 | – | – |
| | 690 V [1]/250 V | 3NA6810-6 | – | – |
| | 500 V/440 V | – | – | 3NA6110 |
| 32 A | 400 V/– | 3NA6812-4 | – | 3NA6114-4 |
| | 500 V/250 V | 3NA6812 | – | – |
| | 690 V [1]/250 V | 3NA6812-6 | – | – |
| 35 A | 400 V/– | 3NA6814-4 | – | – |
| | 500 V/250 V | 3NA6814 | – | – |
| | 690 V [1]/250 V | 3NA6814-6 | – | – |
| | 500 V/440 V | – | – | 3NA6114 |
| 40 A | 400 V/– | 3NA6817-4 | – | 3NA6117-4 |
| | 500 V/250 V | 3NA6817 | – | – |
| | 690 V [1]/250 V | 3NA6817-6KJ | 3NA6817-6 | – |
| | 500 V/440 V | – | – | 3NA6117 |
| 50 A | 400 V/– | 3NA6820-4 | – | 3NA6120-4 |
| | 500 V/250 V | 3NA6820 | – | – |
| | 690 V [1]/250 V | 3NA6820-6KJ | 3NA6820-6 | – |
| | 500 V/440 V | – | – | 3NA6120 |
| | 690 V [1]/440 V | – | – | 3NA6120-6 |

[1] Manufacturer's confirmation for 690 V +10% rated voltage available on request.





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| Size 1 | Size 2 | Size 2 |
|---|---|---|
| 47.2 mm | 47.2 mm | 57.8 mm |
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| – | 3NA6220-4 | – |
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# LV HRC fuse links

## Operational class gG, with combination alarm (continued)

| | Size 000 | Size 00 | Size 1 |
|---|---|---|---|
| **Mounting width** | 21 mm | 30 mm | 30 mm |
| |  |  |  |

| $I_n$ | $U_n$ AC/DC | | | |
|---|---|---|---|---|
| **Insulated grip lugs** | | | | |
| 63 A | 400 V/– | 3NA6822-4 | – | 3NA6122-4 |
| | 500 V/250 V | 3NA6822 | – | – |
| | 690 V [1]/250 V | – | 3NA6822-6 | – |
| | 500 V/440 V | – | – | 3NA6122 |
| | 690 V [1]/440 V | – | – | 3NA6122-6 |
| 80 A | 400 V/– | 3NA6824-4 | 3NA6824-4KK | 3NA6124-4 |
| | 500 V/250 V | 3NA6824 | 3NA6824-7 | – |
| | 690 V [1]/250 V | – | 3NA6824-6 | – |
| | 500 V/440 V | – | – | 3NA6124 |
| | 690 V [1]/440 V | – | – | 3NA6124-6 |
| 100 A | 400 V/– | 3NA6830-4 | 3NA6830-4KK | 3NA6130-4 |
| | 500 V/250 V | 3NA6830 | 3NA6830-7 | – |
| | 690 V [1]/250 V | – | 3NA6830-6 | – |
| | 500 V/440 V | – | – | 3NA6130 |
| | 690 V [1]/440 V | – | – | 3NA6130-6 |
| 125 A | 400 V/– | – | 3NA6832-4 | – |
| | 500 V/250 V | – | 3NA6832 | – |
| | 500 V/440 V | – | – | 3NA6132 |
| | 690 V [1]/440 V | – | – | 3NA6132-6 |
| 160 A | 400 V/– | – | 3NA6836-4 | 3NA6136-4 |
| | 500 V/250 V | – | 3NA6836 | – |
| | 500 V/440 V | – | – | 3NA6136 |
| | 690 V [1]/440 V | – | – | 3NA6136-6 |
| 200 A | 400 V/– | – | – | – |
| | 500 V/440 V | – | – | – |
| | 690 V [1]/440 V | – | – | – |
| 224 A | 400 V/– | – | – | – |
| | 500 V/440 V | – | – | – |
| | 690 V [1]/440 V | – | – | – |
| 250 A | 400 V/– | – | – | – |
| | 500 V/440 V | – | – | – |
| | 690 V [1]/440 V | – | – | – |
| 300 A | 400 V/– | – | – | – |
| | 500 V/440 V | – | – | – |
| | 690 V [1]/440 V | – | – | – |
| 315 A | 400 V/– | – | – | – |
| | 500 V/440 V | – | – | – |
| | 690 V [1]/440 V | – | – | – |
| 355 A | 400 V/– | – | – | – |
| | 500 V/440 V | – | – | – |
| 400 A | 400 V/– | – | – | – |
| | 500 V/440 V | – | – | – |

[1] Manufacturer's confirmation for 690 V +10% rated voltage available on request.

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| Size 1 | Size 2 | Size 2 |
|---|---|---|
| 47.2 mm | 47.2 mm | 57.8 mm |
|  |  |  |
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| – | 3NA6222-4 | – |
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| – | 3NA6224-4 | – |
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| – | 3NA6230-4 | – |
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| – | 3NA6232-4 | – |
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| – | 3NA6232-6 | – |
| – | 3NA6236-4 | – |
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| – | 3NA6236 | – |
| – | 3NA6236-6 | – |
| 3NA6140-4 | 3NA6240-4 | – |
| 3NA6140 | 3NA6240 | – |
| 3NA6140-6 | 3NA6240-6 | – |
| 3NA6142-4 | 3NA6242-4 | – |
| 3NA6142 | 3NA6242 | – |
| – | – | 3NA6242-6 |
| 3NA6144-4 | 3NA6244-4 | – |
| 3NA6144 | 3NA6244 | – |
| – | – | 3NA6244-6 |
| – | – | 3NA6250-4 |
| – | – | 3NA6250 |
| – | – | 3NA6250-6 |
| – | – | 3NA6252-4 |
| – | – | 3NA6252 |
| – | – | 3NA6252-6 |
| – | – | 3NA6254-4 |
| – | – | 3NA6254 |
| – | – | 3NA6260-4 |
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# LV HRC fuse links

## Operational class gG, with combination alarm

| | | Size 000 | Size 00 | Size 1 |
|---|---|---|---|---|
| | Mounting width | 21 mm | 30 mm | 30 mm |
| | |  |  |  |
| $I_n$ | $U_n$ AC/DC | | | |
| **Non-insulated grip lugs** | | | | |
| 2 A | 500 V/250 V | 3NA7802 | – | – |
| | 690 V [1]/250 V | 3NA7802-6 | – | – |
| 4 A | 500 V/250 V | 3NA7804 | – | – |
| | 690 V [1]/250 V | 3NA7804-6 | – | – |
| 6 A | 500 V/250 V | 3NA7801 | – | – |
| | 690 V [1]/250 V | 3NA7801-6 | – | – |
| 10 A | 500 V/250 V | 3NA7803 | – | – |
| | 690 V [1]/250 V | 3NA7803-6 | – | – |
| 16 A | 500 V/250 V | 3NA7805 | – | – |
| | 690 V [1]/250 V | 3NA7805-6 | – | – |
| | 500 V/440 V | – | – | 3NA7105 |
| 20 A | 500 V/250 V | 3NA7807 | – | – |
| | 690 V [1]/250 V | 3NA7807-6 | – | – |
| | 500 V/440 V | – | – | 3NA7107 |
| 25 A | 500 V/250 V | 3NA7810 | – | – |
| | 690 V [1]/250 V | 3NA7810-6 | – | – |
| | 500 V/440 V | – | – | 3NA7110 |
| 32 A | 500 V/250 V | 3NA7812 | – | – |
| | 690 V [1]/250 V | 3NA7812-6 | – | – |
| 35 A | 500 V/250 V | 3NA7814 | – | – |
| | 690 V [1]/250 V | 3NA7814-6 | – | – |
| | 500 V/440 V | – | – | 3NA7114 |
| 40 A | 500 V/250 V | 3NA7817 | – | – |
| | 690 V [1]/250 V | 3NA7817-6KJ | 3NA7817-6 | – |
| | 500 V/440 V | – | – | 3NA7117 |
| 50 A | 500 V/250 V | 3NA7820 | – | – |
| | 690 V [1]/250 V | 3NA7820-6KJ | 3NA7820-6 | – |
| | 500 V/440 V | – | – | 3NA7120 |
| | 690 V [1]/440 V | – | – | 3NA7120-6 |
| 63 A | 500 V/250 V | 3NA7822 | – | – |
| | 690 V [1]/250 V | – | 3NA7822-6 | – |
| | 500 V/440 V | – | – | 3NA7122 |
| | 690 V [1]/440 V | – | – | 3NA7122-6 |
| 80 A | 500 V/250 V | 3NA7824 | 3NA7824-7 | – |
| | 690 V [1]/250 V | – | 3NA7824-6 | – |
| | 500 V/440 V | – | – | 3NA7124 |
| | 690 V [1]/440 V | – | – | 3NA7124-6 |
| 100 A | 500 V/250 V | 3NA7830 | 3NA7830-7 | – |
| | 690 V [1]/250 V | – | 3NA7830-6 | – |
| | 500 V/440 V | – | – | 3NA7130 |
| | 690 V [1]/440 V | – | – | 3NA7130-6 |
| 125 A | 500 V/250 V | – | 3NA7832 | – |
| | 500 V/440 V | – | – | 3NA7132 |
| | 690 V [1]/440 V | – | – | 3NA7132-6 |

[1] Manufacturer's confirmation for 690 V +10% rated voltage available on request.





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| Size 1 | Size 2 | Size 2 |
|---|---|---|
| 47.2 mm | 47.2 mm | 57.8 mm |
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| – | 3NA7224 | – |
| – | 3NA7224-6 | – |
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| – | 3NA7230 | – |
| – | 3NA7230-6 | – |
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| – | 3NA7232 | – |
| – | 3NA7232-6 | – |

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# LV HRC fuse links

## Operational class gG, with combination alarm (continued)

| | | Size 000 | Size 00 | Size 1 |
|---|---|---|---|---|
| | Mounting width | 21 mm | 30 mm | 30 mm |
| | |  |  |  |
| $I_n$ | $U_n$ AC/DC | | | |
| **Non-insulated grip lugs** | | | | |
| 160 A | 500 V/250 V | – | 3NA7836 | – |
| | 500 V/440 V | – | – | 3NA7136 |
| | 690 V [1]/440 V | – | – | 3NA7136-6 |
| 200 A | 500 V/440 V | – | – | – |
| | 690 V [1]/440 V | – | – | – |
| 224 A | 500 V/440 V | – | – | – |
| | 690 V [1]/440 V | – | – | – |
| 250 A | 500 V/440 V | – | – | – |
| | 690 V [1]/440 V | – | – | – |
| 300 A | 690 V [1]/440 V | – | – | – |
| 315 A | 500 V/440 V | – | – | – |
| | 690 V [1]/440 V | – | – | – |
| 355 A | – | – | – | – |
| 400 A | 500 V/440 V | – | – | – |

[1] Manufacturer's confirmation for 690 V +10% rated voltage available on request.





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| Size 1 | Size 2 | Size 2 |
|---|---|---|
| 47.2 mm | 47.2 mm | 57.8 mm |
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| – | 3NA7236 | – |
| – | 3NA7236-6 | – |
| 3NA7140 | 3NA7240 | – |
| 3NA7140-6 | 3NA7240-6 | – |
| 3NA7142 | 3NA7242 | – |
| – | – | 3NA7242-6 |
| 3NA7144 | 3NA7244 | – |
| – | – | 3NA7244-6 |
| – | – | 3NA7250-6 |
| – | – | 3NA7252 |
| – | – | 3NA7252-6 |
| – | – | – |
| – | – | 3NA7260 |

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# LV HRC fuse links

## Operational class gG, with front indicator

| | | Size 000 | Size 00 | Size 0 | Size 1 | |
|---|---|---|---|---|---|---|
| **Mounting width** | | 21 mm | 30 mm | 30 mm | 30 mm | 47.2 mm |
| | |  |  |  |  |  |
| $I_n$ | $U_n$ AC/DC | | | | | |
| **Non-insulated grip lugs** | | | | | | |
| 2 A | 500 V/250 V | 3NA3802 | – | – | – | – |
| | 690 V [1]/250 V | 3NA3802-6 | – | – | – | – |
| 4 A | 500 V/250 V | 3NA3804 | – | – | – | – |
| | 690 V [1]/250 V | 3NA3804-6 | – | – | – | – |
| 6 A | 500 V/250 V | 3NA3801 | – | – | – | – |
| | 690 V [1]/250 V | 3NA3801-6 | – | – | – | – |
| | 500 V/440 V | – | – | 3NA3001 | – | – |
| 10 A | 500 V/250 V | 3NA3803 | – | – | – | – |
| | 690 V [1]/250 V | 3NA3803-6 | – | – | – | – |
| | 500 V/440 V | – | – | 3NA3003 | – | – |
| 16 A | 500 V/250 V | 3NA3805 | – | – | – | – |
| | 690 V [1]/250 V | 3NA3805-6 | – | – | – | – |
| | 500 V/440 V | – | – | 3NA3005 | 3NA3105 | – |
| 20 A | 500 V/250 V | 3NA3807 | – | – | – | – |
| | 690 V [1]/250 V | 3NA3807-6 | – | – | – | – |
| | 500 V/440 V | – | – | 3NA3007 | 3NA3107 | – |
| 25 A | 500 V/250 V | 3NA3810 | – | – | – | – |
| | 690 V [1]/250 V | 3NA3810-6 | – | – | – | – |
| | 500 V/440 V | – | – | 3NA3010 | 3NA3110 | – |
| 32 A | 500 V/250 V | 3NA3812 | – | – | – | – |
| | 690 V [1]/250 V | 3NA3812-6 | – | – | – | – |
| | 500 V/440 V | – | – | 3NA3012 | – | – |
| 35 A | 500 V/250 V | 3NA3814 | 3NA3814-7 | – | – | – |
| | 690 V [1]/250 V | – | – | – | – | – |
| | 500 V/440 V | – | – | 3NA3014 | 3NA3114 | – |
| 40 A | 500 V/250 V | 3NA3817 | – | – | – | – |
| | 690 V [1]/250 V | 3NA3817-6KJ | 3NA3817-6 | – | – | – |
| | 500 V/440 V | – | – | 3NA3017 | 3NA3117 | – |
| 50 A | 500 V/250 V | 3NA3820 | 3NA3820-7 | – | – | – |
| | 690 V [1]/250 V | 3NA3820-6KJ | 3NA3820-6 | – | – | – |
| | 500 V/440 V | – | – | 3NA3020 | 3NA3120 | – |
| | 690 V [1]/440 V | – | – | – | 3NA3120-6 | – |
| 63 A | 500 V/250 V | 3NA3822 | 3NA3822-7 | – | – | – |
| | 690 V [1]/250 V | – | 3NA3822-6 | – | – | – |
| | 500 V/440 V | – | – | 3NA3022 | 3NA3122 | – |
| | 690 V [1]/440 V | – | – | – | 3NA3122-6 | – |
| 80 A | 500 V/250 V | 3NA3824 | 3NA3824-7 | – | – | – |
| | 690 V [1]/250 V | – | 3NA3824-6 | – | – | – |
| | 500 V/440 V | – | – | 3NA3024 | 3NA3124 | – |
| | 690 V [1]/440 V | – | – | – | 3NA3124-6 | – |
| 100 A | 500 V/250 V | 3NA3830 | 3NA3830-7 | – | – | – |
| | 690 V [1]/250 V | – | 3NA3830-6 | – | – | – |
| | 500 V/440 V | – | – | 3NA3030 | 3NA3130 | – |
| | 690 V [1]/440 V | – | – | – | – | – |

[1] Manufacturer's confirmation for 690 V +10% rated voltage available on request.





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| Size 2 | | Size 3 | | Size 4 (IEC design) | Size 4a |
|---|---|---|---|---|---|
| 47.2 mm | 57.8 mm | 57.8 mm | 71.2 mm | 101.8 mm | 101.8 mm |
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| 3NA3224-6 | – | – | – | – | – |
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| 3NA3230 | – | – | – | – | – |
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# LV HRC fuse links

## Operational class gG, with front indicator (continued)

| | | Size 000 | Size 00 | Size 0 | Size 1 | |
|---|---|---|---|---|---|---|
| **Mounting width** | | 21 mm | 30 mm | 30 mm | 30 mm | 47.2 mm |
| | |  |  |  |  |  |
| $I_n$ | $U_n$ AC/DC | | | | | |
| **Non-insulated grip lugs** | | | | | | |
| 125 A | 400 V/250 V | 3NA3832-8 | – | – | – | – |
| | 500 V/250 V | – | 3NA3832 | – | – | – |
| | 500 V/440 V | – | – | 3NA3032 | 3NA3132 | – |
| | 690 V [1]/440 V | – | – | – | 3NA3132-6 | – |
| 160 A | 400 V/250 V | 3NA3836-8 | – | – | – | – |
| | 500 V/250 V | – | 3NA3836 | – | – | – |
| | 500 V/440 V | – | – | 3NA3036 | 3NA3136 | – |
| | 690 V [1]/440 V | – | – | – | 3NA3136-6 | – |
| 200 A | 500 V/440 V | – | – | – | – | 3NA3140 |
| | 690 V [1]/440 V | – | – | – | – | 3NA3140-6 |
| 224 A | 500 V/440 V | – | – | – | – | 3NA3142 |
| | 690 V [1]/440 V | – | – | – | – | – |
| 250 A | 500 V/440 V | – | – | – | – | 3NA3144 |
| | 690 V [1]/440 V | – | – | – | – | 3NA3144-6 |
| 300 A | 500 V/440 V | – | – | – | – | – |
| | 690 V [1]/440 V | – | – | – | – | – |
| 315 A | 500 V/440 V | – | – | – | – | – |
| | 690 V [1]/440 V | – | – | – | – | – |
| 355 A | 500 V/440 V | – | – | – | – | – |
| | 690 V [1]/440 V | – | – | – | – | – |
| 400 A | 500 V/440 V | – | – | – | – | – |
| | 690 V [1]/440 V | – | – | – | – | – |
| 425 A | 500 V/440 V | – | – | – | – | – |
| | 690 V [1]/440 V | – | – | – | – | – |
| 500 A | 500 V/440 V | – | – | – | – | – |
| | 690 V [1]/440 V | – | – | – | – | – |
| 630 A | 500 V/440 V | – | – | – | – | – |
| 800 A | 500 V/440 V | – | – | – | – | – |
| 1000 A | 500 V/440 V | – | – | – | – | – |
| 1250 A | 500 V/440 V | – | – | – | – | – |

[1] Manufacturer's confirmation for 690 V +10% rated voltage available on request.





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| Size 2 | | Size 3 | | Size 4 (IEC design) | Size 4a |
|---|---|---|---|---|---|
| 47.2 mm  | 57.8 mm  | 57.8 mm  | 71.2 mm  | 101.8 mm  | 101.8 mm  |
| | | | | | |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| 3NA3232 | – | – | – | – | – |
| 3NA3232-6 | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| 3NA3236 | – | – | – | – | – |
| 3NA3236-6 | – | – | – | – | – |
| 3NA3240 | – | 3NA3340 | – | – | – |
| 3NA3240-6 | – | – | – | – | – |
| 3NA3242 | – | 3NA3342 | – | – | – |
| – | 3NA3242-6 | – | – | – | – |
| 3NA3244 | – | 3NA3344 | – | – | – |
| – | 3NA3244-6 | 3NA3344-6 | – | – | – |
| – | 3NA3250 | 3NA3350 | – | – | – |
| – | 3NA3250-6 | – | – | – | – |
| – | 3NA3252 | 3NA3352 | – | – | – |
| – | 3NA3252-6 | 3NA3352-6 | – | – | – |
| – | 3NA3254 | 3NA3354 | – | – | – |
| – | – | – | 3NA3354-6 | – | – |
| – | 3NA3260 | 3NA3360 | – | – | – |
| – | – | – | 3NA3360-6 | – | – |
| – | – | – | 3NA3362 | – | – |
| – | – | – | 3NA3362-6 | – | – |
| – | – | – | 3NA3365 | – | 3NA3665 |
| – | – | – | 3NA3365-6 | – | – |
| – | – | – | 3NA3372 | 3NA3472 | 3NA3672 |
| – | – | – | – | 3NA3475 | 3NA3675 |
| – | – | – | – | 3NA3480 | 3NA3680 |
| – | – | – | – | 3NA3482 | 3NA3682 |



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# LV HRC fuse links

## Operational class aM, with front indicator

| | Size 000 | Size 00 | Size 1 | | Size 2 | | Size 3 | |
|---|---|---|---|---|---|---|---|---|
| **Mounting width** | 21 mm | 30 mm | 30 mm | 47.2 mm | 47.2 mm | 57.8 mm | 57.8 mm | 71.2 mm |
| |  |  |  |  |  |  |  |  |
| **$I_n$** | **$U_n$ AC** | | | | | | | |
| **Non-insulated grip lugs** | | | | | | | | |
| 6 A | 500 V | 3ND1801 | – | – | – | – | – | – | – |
| 10 A | 500 V | 3ND1803 | – | – | – | – | – | – | – |
| 16 A | 500 V | 3ND1805 | – | – | – | – | – | – | – |
| 20 A | 500 V | 3ND1807 | – | – | – | – | – | – | – |
| 25 A | 500 V | 3ND1810 | – | – | – | – | – | – | – |
| 32 A | 500 V | 3ND1812 | – | – | – | – | – | – | – |
| 35 A | 500 V | 3ND1814 | – | – | – | – | – | – | – |
| 40 A | 500 V | 3ND1817 | – | – | – | – | – | – | – |
| 50 A | 500 V | 3ND1820 | – | – | – | – | – | – | – |
| 63 A | 500 V | 3ND1822 | – | – | – | – | – | – | – |
| | 690 V | – | – | 3ND2122 | – | – | – | – | – |
| 80 A | 500 V | 3ND1824 | – | – | – | – | – | – | – |
| | 690 V | – | – | 3ND2124 | – | – | – | – | – |
| 100 A | 500 V | 3ND1830-8 | 3ND1830 | – | – | – | – | – | – |
| | 690 V | – | – | 3ND2130 | – | – | – | – | – |
| 125 A | 500 V | – | 3ND1832 | – | – | – | – | – | – |
| | 690 V | – | – | – | 3ND2132 | 3ND2232 | – | – | – |
| 160 A | 500 V | – | 3ND1836 | – | – | – | – | – | – |
| | 690 V | – | – | – | 3ND2136 | 3ND2236 | – | – | – |
| 200 A | 690 V | – | – | – | 3ND2140 | 3ND2240 | – | – | – |
| 250 A | 690 V | – | – | – | 3ND2144 | 3ND2244 | – | – | – |
| 315 A | 690 V | – | – | – | – | – | 3ND2252 | 3ND2352 | – |
| 355 A | 690 V | – | – | – | – | – | 3ND2254 | 3ND2354 | – |
| 400 A | 690 V | – | – | – | – | – | 3ND2260 | 3ND2360 | – |
| 500 A | 690 V | – | – | – | – | – | – | – | 3ND1365 |
| 630 A | 690 V | – | – | – | – | – | – | – | 3ND1372 |

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# 3NA COM LV HRC fuse links with measuring and communication functions

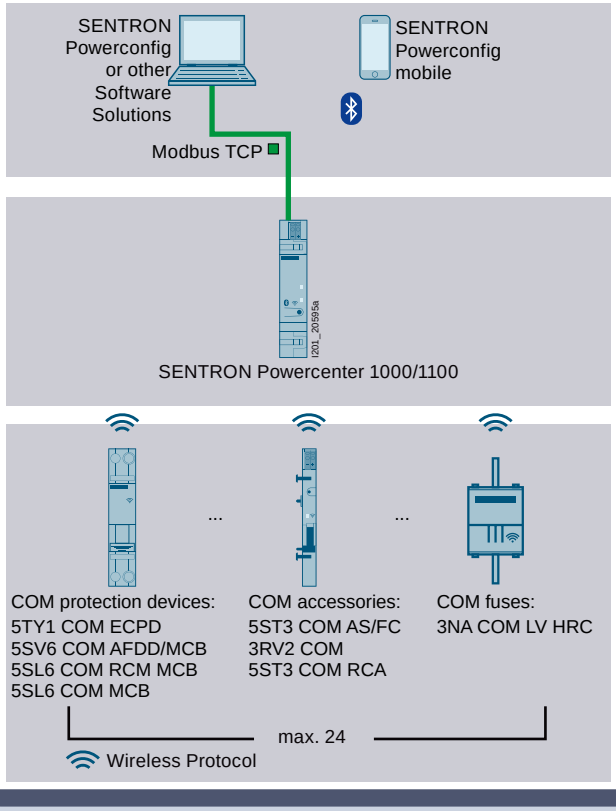
## With front indicator and non-insulated grip lugs

| | | Size 2, with electronic module [1] | | Size 2, without electronic module [2] | |
|---|---|---|---|---|---|
| | | Operational class gG | Operational class gFF (for the Netherlands) | Operational class gG | Operational class gFF (for the Netherlands) |
| Mounting width | | 59 mm | 59 mm | 59 mm | 59 mm |
| | |  |  |  |  |
| $I_n$ | $U_n$ AC | | | | |
| 80 A | 400 V | – | 3NA3224-4KK03 | – | 3NA3224-4KK04 |
| 100 A | 400 V | 3NA3230-4KK01 | 3NA3230-4KK03 | 3NA3230-4KK02 | 3NA3230-4KK04 |
| 125 A | 400 V | 3NA3232-4KK01 | 3NA3232-4KK03 | 3NA3232-4KK02 | 3NA3232-4KK04 |
| 160 A | 400 V | 3NA3236-4KK01 | 3NA3236-4KK03 | 3NA3236-4KK02 | 3NA3236-4KK04 |
| 200 A | 400 V | 3NA3240-4KK01 | 3NA3240-4KK03 | 3NA3240-4KK02 | 3NA3240-4KK04 |
| 224 A | 400 V | 3NA3242-4KK01 | – | 3NA3242-4KK02 | – |
| 250 A | 400 V | 3NA3244-4KK01 | 3NA3244-4KK03 | 3NA3244-4KK02 | 3NA3244-4KK04 |
| 315 A | 400 V | 3NA3252-4KK01 | – | 3NA3252-4KK02 | – |

[1] Electronic module is mounted by simple insertion
[2] For spare part purposes (electronic module can be reused after the fuse has been replaced!)



## SENTRON Powercenter 1000/1100 data transceiver




- Wireless radio transmission of measured values and data to the SENTRON Powercenter 1000/1100 data transceiver
- Commissioning, parameter assignment, firmware updates and further processing of the data via the SENTRON Powercenter 1000/1100 data transceiver



| SENTRON Powercenter | Article No. |
|---|---|
| SENTRON Powercenter 1000 | 7KN1110-0MC00 |
| SENTRON Powercenter 1100 | 7KN1111-0MC00 |

See page 10/26

You will find further information at www.siemens.com/lowvoltage/manuals

Installation Manual – Circuit protection devices with communication and measuring function (109791805)

System Manual – Circuit protection devices with communication and measuring function (109791806)

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## Measuring functions

- Rms value of the current (average 10 s)
- Temperature (measured in electronic module)

## Monitoring functions (alarm) with limit monitoring

- Limit values can be set for:
  - Current/overcurrent > Limit value 1
  - Current/overcurrent > Limit value 2
  - Overtemperature
  - Operating hours counter
  - Operating hours counter with load current > Limit value
  - Values

| Technical specifications | Electronic module for 3NA COM |
|---|---|
| | |
| Rated current/current measuring range | 400 A/2.5 ... 440 A (rms value) |
| Measuring accuracy of current measurement/5-minute average of rms value | |
| • At reference temperature 25 °C | ±1% (8 ... 440 A), ±2% (2.5 ... 8 A) |
| • In the range –10 °C ... +70 °C | ±2.2% (8 ... 440 A), ±3.2% (2.5 ... 8 A) |
| Minimum current (to maintain the radio connection) | 2 A for operation, 3.5 A for commissioning |
| Temperature measuring range | +10 ... +150 °C |
| Measuring accuracy of temperature measurement | ±2.5 °C |
| Maximum transmit power | 8 dBm |
| Minimum/maximum ambient temperature during operation | –25 °C/+70 °C |
| Minimum/maximum ambient temperature during storage | –25 °C/+85 °C |
| Relative humidity at 25 °C without condensation | Max. 95% |
| Degree of protection IP | IP20 |
| Pollution degree | 3 |
| Reference condition for measuring accuracy | IEC 61557-12 |
| Measuring method | TRMS |
| Power supply | CT Harvesting |
| **European standards** | |
| RED Safety | EN 60669-2-5 |
| RED Health | EN 62479 |
| RED EMV | EN 63044-3/-5-3, EN 301489-17 |
| RED Radio Spec | EN 300328 |
| **International standards** | |
| For EMC | EN 63044-5-3, IEC 61000-6-2, IEC 61000-4-2/-3/-4/-5/-6/-8/-11 |
| For shocks, bumps, free fall, environmental tests | IEC 60068-2-1/-2/-6/-27/-30/-32 |
| Approvals | VDE, KEMA KEUR |

| Measured values | | Measuring interval | Storage time |
|---|---|---|---|
| **Current** | | | |
| Current (rms value) | A | 2 s | 1 h |
| Average current (rms value) | A | Adjustable from 3 ... 2600 s | 7 d |
| Minimum current | A | 1 d | 10 d |
| Maximum current | A | No limit | 10 d |
| **Temperature** | | | |
| Temperature | °C | 2 s | 1 h |
| Average temperature | °C | Adjustable | 7 d |
| Minimum temperature | °C | 1 d | 10 d |
| Maximum temperature | °C | 1 d | 10 d |
| **Operating hours counter** | | | |
| Operating hours counter | h | Unlimited | Unlimited |
| Operating hours counter with load current > Limit value | h | Unlimited | Unlimited |

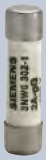
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# Cylindrical fuse links

## Operational class gG

| | | Size 8 × 32 mm | Size 10 × 38 mm | Size 14 × 51 mm | Size 22 × 58 mm |
|---|---|---|---|---|---|
| | |  |  |  |  |
| $I_n$ | $U_n$ AC | | | | |
| 0.5 A | 500 V | – | 3NW6000-1 | – | – |
| 1 A | 500 V | – | 3NW6011-1 | – | – |
| 2 A | 400 V | 3NW6302-1 | – | – | – |
| | 500 V | – | 3NW6002-1 | – | – |
| 4 A | 400 V | 3NW6304-1 | – | – | – |
| | 500 V | – | 3NW6004-1 | – | – |
| | 690 V | – | – | 3NW6104-1 | – |
| 6 A | 400 V | 3NW6301-1 | – | – | – |
| | 500 V | – | 3NW6001-1 | – | – |
| | 690 V | – | – | 3NW6101-1 | – |
| 8 A | 500 V | – | 3NW6008-1 | – | – |
| | 690 V | – | – | 3NW6108-1 | – |
| 10 A | 400 V | 3NW6303-1 | – | – | – |
| | 500 V | – | 3NW6003-1 | – | – |
| | 690 V | – | – | 3NW6103-1 | – |
| 12 A | 500 V | – | 3NW6006-1 | – | – |
| | 690 V | – | – | 3NW6106-1 | – |
| 16 A | 400 V | 3NW6305-1 | – | – | – |
| | 500 V | – | 3NW6005-1 | – | – |
| | 690 V | – | – | 3NW6105-1 | 3NW6205-1 |
| 20 A | 400 V | 3NW6307-1 | – | – | – |
| | 500 V | – | 3NW6007-1 | – | – |
| | 690 V | – | – | 3NW6107-1 | 3NW6207-1 |
| 25 A | 500 V | – | 3NW6010-1 | – | – |
| | 690 V | – | – | 3NW6110-1 | 3NW6210-1 |
| 32 A | 400 V | – | 3NW6012-1 | – | – |
| | 690 V | – | – | 3NW6112-1 | 3NW6212-1 |
| 40 A | 500 V | – | – | 3NW6117-1 | – |
| | 690 V | – | – | – | 3NW6217-1 |
| 50 A | 500 V | – | – | 3NW6120-1 | – |
| | 690 V | – | – | – | 3NW6220-1 |
| 63 A | 500 V | – | – | – | 3NW6222-1 |
| 80 A | 500 V | – | – | – | 3NW6224-1 |
| 100 A | 500 V | – | – | – | 3NW6230-1 |



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## Operational class aM

| | | Size 10 × 38 mm | Size 14 × 51 mm | Size 22 × 58 mm |
|---|---|---|---|---|
| | |  |  |  |
| $I_n$ | $U_n$ AC | | | |
| 0.5 A | 500 V | 3NW8000-1 | – | – |
| 1 A | 500 V | 3NW8011-1 | – | – |
| 2 A | 500 V | 3NW8002-1 | – | – |
| | 690 V | – | 3NW8102-1 | – |
| 4 A | 500 V | 3NW8004-1 | – | – |
| | 690 V | – | 3NW8104-1 | – |
| 6 A | 500 V | 3NW8001-1 | – | – |
| | 690 V | – | 3NW8101-1 | – |
| 8 A | 500 V | 3NW8008-1 | – | – |
| | 690 V | – | 3NW8108-1 | – |
| 10 A | 500 V | 3NW8003-1 | – | – |
| | 690 V | – | 3NW8103-1 | – |
| 12 A | 500 V | 3NW8006-1 | – | – |
| | 690 V | – | 3NW8106-1 | – |
| 16 A | 500 V | 3NW8005-1 | 3NW8105-1 | – |
| | 690 V | – | – | 3NW8205-1 |
| 20 A | 400 V | 3NW8007-1 | – | – |
| | 500 V | – | 3NW8107-1 | – |
| | 690 V | – | – | 3NW8207-1 |
| 25 A | 400 V | 3NW8010-1 | – | – |
| | 500 V | – | 3NW8110-1 | – |
| | 690 V | – | – | 3NW8210-1 |
| 32 A | 400 V | 3NW8012-1 | – | – |
| | 500 V | – | 3NW8112-1 | – |
| | 690 V | – | – | 3NW8212-1 |
| 40 A | 500 V | – | 3NW8117-1 | – |
| | 690 V | – | – | 3NW8217-1 |
| 50 A | 400 V | – | 3NW8120-1 | – |
| | 690 V | – | – | 3NW8220-1 |
| 63 A | 500 V | – | – | 3NW8222-1 |
| 80 A | 500 V | – | – | 3NW8224-1 |
| 100 A | 500 V | – | – | 3NW8230-1 |



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# SITOR semiconductor fuse links, LV HRC design (AC/DC)

## Operational class gS, with blade contacts without slots

| | | | | | Size 000 | Size 00 | Size 1 | Size 2 | Size 3 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | |  |  |  |  |  |
| $I_n$ | Switch-off $I^2t$ value | Power loss $P_v$ | Varying load factor WL | $U_n$ AC | | | | | |
| 16 A | 200 $A^2s$ | 4 W | 1.00 | 690 V [1] | 3NE1813-0 | – | – | – | – |
| 20 A | 430 $A^2s$ | 5 W | 1.00 | 690 V [1] | 3NE1814-0 | – | – | – | – |
| 25 A | 780 $A^2s$ | 5 W | 1.00 | 690 V [1] | 3NE1815-0 | – | – | – | – |
| 35 A | 1700 $A^2s$ | 3.5 W | 1.00 | 690 V [1] | 3NE1803-0 | – | – | – | – |
| 40 A | 3000 $A^2s$ | 3 W | 1.00 | 690 V [1] | 3NE1802-0 | – | – | – | – |
| 50 A | 4400 $A^2s$ | 6 W | 1.00 | 690 V [1] | 3NE1817-0 | – | – | – | – |
| 63 A | 9000 $A^2s$ | 7 W | 1.00 | 690 V [1] | 3NE1818-0 | – | – | – | – |
| 80 A | 18000 $A^2s$ | 8 W | 1.00 | 690 V [1] | 3NE1820-0 | – | – | – | – |
| 100 A | 33000 $A^2s$ | 10 W | 1.00 | 690 V [1] | – | 3NE1021-0 | – | – | – |
| 125 A | 63000 $A^2s$ | 11 W | 1.00 | 690 V [1] | – | 3NE1022-0 | – | – | – |
| 160 A | 60000 $A^2s$ | 24 W | 1.00 | 690 V [1] | – | – | 3NE1224-0 | – | – |
| 200 A | 100000 $A^2s$ | 27 W | 1.00 | 690 V [1] | – | – | 3NE1225-0 | – | – |
| 250 A | 200000 $A^2s$ | 30 W | 1.00 | 690 V [1] | – | – | 3NE1227-0 | – | – |
| 315 A | 310000 $A^2s$ | 38 W | 1.00 | 690 V [1] | – | – | 3NE1230-0 | – | – |
| 350 A | 430000 $A^2s$ | 42 W | 1.00 | 690 V [1] | – | – | – | 3NE1331-0 | – |
| 400 A | 590000 $A^2s$ | 45 W | 1.00 | 690 V [1] | – | – | – | 3NE1332-0 | – |
| 450 A | 750000 $A^2s$ | 53 W | 1.00 | 690 V [1] | – | – | – | 3NE1333-0 | – |
| 500 A | 950000 $A^2s$ | 56 W | 1.00 | 690 V [1] | – | – | – | 3NE1334-0 | – |
| 560 A | 1700000 $A^2s$ | 50 W | 1.00 | 690 V [1] | – | – | – | – | 3NE1435-0 |
| 630 A | 2350000 $A^2s$ | 55 W | 1.00 | 690 V [1] | – | – | – | – | 3NE1436-0 |
| 710 A | 3400000 $A^2s$ | 58 W | 1.00 | 690 V [1] | – | – | – | – | 3NE1437-0 |
| 800 A | 5000000 $A^2s$ | 58 W | 1.00 | 690 V [1] | – | – | – | – | 3NE1438-0 |
| **Further information** | | | | | | | | | |
| Installation in 3NH LV HRC fuse bases | | | | | ■ | ■ | ■ | ■ | ■ |
| Installation in 3NP and 3KF fuse switching devices | | | | | ■ | ■ | ■ | ■ | ■ |

[1] For the max. DC voltage, see the Configuration Manual – Fuse systems, chapter Configuration, Use with direct current www.siemens.com/lowvoltage/manuals (45314810)

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# Operational class gR, with bolt-on links

| | | | | | | Size 000 | Size 00 |
|---|---|---|---|---|---|---|---|
| | | | | | **Screw fixing, mounting dimension** | M8, 80 mm | M10, 80 mm |
| | | | | | |  |  |
| **$I_n$** | **Switch-off $I^2t$ value** | **Power loss $P_v$** | **Varying load factor WL** | **$U_n$ AC/DC (IEC)** | **$U_n$ DC (UL)** | | |
| 20 A | 83 $A^2s$ | 7 W | 0.90 | 690 V/600 V | 700 V | 3NE8714-1 | – |
| 25 A | 140 $A^2s$ | 9 W | 0.90 | 690 V/600 V | 700 V | 3NE8715-1 | – |
| 32 A | 285 $A^2s$ | 10 W | 0.90 | 690 V/600 V | 700 V | 3NE8701-1 | – |
| 40 A | 490 $A^2s$ | 12 W | 0.90 | 690 V/600 V | 700 V | 3NE8702-1 | – |
| 50 A | 815 $A^2s$ | 15 W | 0.90 | 690 V/600 V | 700 V | 3NE8717-1 | – |
| 63 A | 1550 $A^2s$ | 16 W | 0.95 | 690 V/700 V | 700 V | 3NE8718-1 | – |
| 80 A | 3200 $A^2s$ | 23 W | on req. | 690 V/440 V | – | – | 3NE8020-3MK |
| 100 A | 5200 $A^2s$ | 29 W | on req. | 690 V/440 V | – | – | 3NE8021-3MK |
| **Further information** | | | | | | | |
| Screw fixing | | | | | | ■ | ■ |
| Installation in SITOR fuse bases | | | | | | 3NH5023 | 3NH5023 |
| Further currents, operational class aR | | | | | | See page 7/60 | See page 7/60 |

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# SITOR semiconductor fuse links, LV HRC design (AC/DC)

## Operational class gS, with blade contacts without slots



| | | | | | Size 000 | Size 00 |
|---|---|---|---|---|---|---|
| | | | | |  |  |
| $I_n$ | Switch-off $I^2t$ value | Power loss $P_v$ | Varying load factor WL | $U_n$ AC/DC | | |
| 6 A | 37 A²s | 2.7 W | on req. | 690 V/400 V | 3NE8810-0MK | – |
| 10 A | 50 A²s | 4.5 W | on req. | 690 V/400 V | 3NE8812-0MK | – |
| 16 A | 73 A²s | 6.7 W | on req. | 690 V/400 V | 3NE8813-0MK | – |
| 20 A | 90 A²s | 8 W | on req. | 690 V/400 V | 3NE8814-0MK | – |
| 25 A | 150 A²s | 8.1 W | on req. | 690 V/400 V | 3NE8815-0MK | – |
| | 180 A²s | 7 W | 0.95 | 690 V [1]/– | – | 3NE8015-1 |
| 32 A | 280 A²s | 12 W | 0.90 | 1000 V [1]/– | – | – |
| | 350 A²s | 10.5 W | on req. | 690 V/400 V | 3NE8801-0MK | – |
| 35 A | 400 A²s | 9 W | 0.95 | 690 V [1]/– | – | 3NE8003-1 |
| 40 A | 480 A²s | 12 W | on req. | 690 V/400 V | 3NE8802-0MK | – |
| | 500 A²s | 13 W | 0.90 | 1000 V [1]/– | – | – |
| 50 A | 700 A²s | 14 W | 0.90 | 690 V [1]/– | – | 3NE8017-1 |
| | 800 A²s | 16 W | 0.90 | 1000 V [1]/– | – | – |
| | 1050 A²s | 14.5 W | on req. | 690 V/400 V | 3NE8817-0MK | – |
| 63 A | 1400 A²s | 16 W | 0.95 | 690 V [1]/– | – | 3NE8018-1 |
| | 1960 A²s | 23 W | on req. | 690 V/400 V | 3NE8818-0MK | – |
| 80 A | 5800 A²s | 10.5 W | 1.00 | 690 V [1]/– | – | 3NE1020-2 |
| 100 A | 11000 A²s | 12 W | 1.00 | 690 V [1]/– | – | 3NE1021-2 |
| 125 A | 23000 A²s | 13.5 W | 1.00 | 690 V [1]/– | – | 3NE1022-2 |
| 160 A | 18600 A²s | 32 W | 1.00 | 690 V [1]/– | – | – |
| 200 A | 51800 A²s | 35 W | 1.00 | 690 V [1]/– | – | – |
| 250 A | 80900 A²s | 37 W | 1.00 | 690 V [1]/– | – | – |
| 315 A | 168000 A²s | 40 W | 1.00 | 690 V [1]/– | – | – |
| 350 A | 177000 A²s | 43 W | 1.00 | 690 V [1]/– | – | – |
| 400 A | 224000 A²s | 50 W | 1.00 | 690 V [1]/– | – | – |
| 450 A | 276500 A²s | 58 W | 1.00 | 690 V [1]/– | – | – |
| 500 A | 398000 A²s | 64 W | 1.00 | 690 V [1]/– | – | – |
| 560 A | 890000 A²s | 60 W | 1.00 | 690 V [1]/– | – | – |
| 630 A | 1390000 A²s | 60 W | 1.00 | 690 V [1]/– | – | – |
| 670 A | 1640000 A²s | 64 W | 1.00 | 690 V [1]/– | – | – |
| 710 A | 1818000 A²s | 72 W | 1.00 | 690 V [1]/– | – | – |
| | 2460000 A²s | 65 W | 1.00 | 690 V [1]/– | – | – |
| 800 A | 2475000 A²s | 84 W | 1.00 | 690 V [1]/– | – | – |
| | 3350000 A²s | 72 W | 1.00 | 600 V [1]/– | – | – |
| 850 A | 3640000 A²s | 76 W | 1.00 | 690 V [1]/– | – | – |
| **Further information** | | | | | | |
| Installation in 3NH LV HRC fuse bases | | | | | ■ | ■ |
| Installation in 3NP and 3KF fuse switching devices | | | | | ■ | ■ |
| Further currents, operational class aR | | | | | See page 7/61 | – |

[1] For the max. DC voltage, see the Configuration Manual – Fuse systems, chapter Configuration, Use with direct current www.siemens.com/lowvoltage/manuals (45314810)



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| Size 0 | Size 1 | Size 2 | Size 3 | |
|---|---|---|---|---|
|  |  |  |  |  |
| | | | | |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| 3NE4101 | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| 3NE4102 | – | – | – | – |
| – | – | – | – | – |
| 3NE4117 | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| – | 3NE1224-2 | – | – | – |
| – | 3NE1225-2 | – | – | – |
| – | 3NE1227-2 | – | – | – |
| – | 3NE1230-2 | – | – | – |
| – | – | 3NE1331-2 | – | – |
| – | – | 3NE1332-2 | – | – |
| – | – | 3NE1333-2 | – | – |
| – | – | 3NE1334-2 | – | – |
| – | – | – | – | 3NE1435-2 |
| – | – | – | – | 3NE1436-2 |
| – | – | – | – | 3NE1447-2 |
| – | – | – | – | 3NE1437-2 |
| – | – | – | 3NE1437-1 | – |
| – | – | – | – | 3NE1438-2 |
| – | – | – | 3NE1438-1 | – |
| – | – | – | – | 3NE1448-2 |
| | | | | |
| ■ | ■ | ■ | ■ | ■ |
| ■ | ■ | ■ | ■ | ■ |
| See page 7/61 | – | – | – | – |

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# SITOR semiconductor fuse links, LV HRC design (AC/DC)

## Operational class gR, with slotted blade contacts

| | | | | | With 2 oblong slots<br>Size 3 | | With oblong and transverse slots<br>Size 1 | |
|---|---|---|---|---|---|---|---|---|
| | | | | Screw fixing, mounting dimension (lateral) | M10, 110 mm | | M10, 110 mm | |
| | | | | |  |  |  |  |
| $I_n$ | Switch-off $I^2t$ value | Power loss $P_v$ | Varying load factor WL | $U_n$ AC/DC | | | | |
| 32 A | 4500 A²s | 9 W | on req. | 1000 V/600 V | – | – | – | 3NE3201-0MK |
| 40 A | 900 A²s | 26 W | on req. | 1500 V/1000 V | – | – | – | – |
| | 6000 A²s | 13 W | on req. | 1000 V/600 V | – | – | – | 3NE3202-0MK |
| 50 A | 1800 A²s | 27 W | on req. | 1500 V/1000 V | – | – | – | – |
| | 8000 A²s | 18 W | on req. | 1000 V/600 V | – | – | – | 3NE3217-0MK |
| 63 A | 3100 A²s | 34 W | on req. | 1500 V/1000 V | – | – | – | – |
| | 9000 A²s | 25 W | on req. | 1000 V/600 V | – | – | – | 3NE3218-0MK |
| 150 A | 17600 A²s | 40 W | 0.85 | 690 V [1]/– | – | 3NC8423-0C | – | – |
| | 33000 A²s | 35 W | 0.85 | 500 V/– | 3NC2423-0C | – | – | – |
| 160 A | 18600 A²s | 32 W | 1.00 | 690 V [1]/– | – | – | 3NE1224-3 | – |
| 200 A | 38400 A²s | 55 W | 0.85 | 690 V [1]/– | – | 3NC8425-0C | – | – |
| | 51800 A²s | 35 W | 1.00 | 690 V [1]/– | – | – | 3NE1225-3 | – |
| | 64000 A²s | 40 W | 0.85 | 500 V/– | 3NC2425-0C | – | – | – |
| 250 A | 70400 A²s | 72 W | 0.85 | 690 V [1]/– | – | 3NC8427-0C | – | – |
| | 80900 A²s | 37 W | 1.00 | 690 V [1]/– | – | – | 3NE1227-3 | – |
| | 99000 A²s | 50 W | 0.85 | 500 V/– | 3NC2427-0C | – | – | – |
| 300 A | 132000 A²s | 65 W | 0.85 | 500 V/– | 3NC2428-0C | – | – | – |
| 315 A | 168000 A²s | 40 W | 1.00 | 690 V [1]/– | – | – | 3NE1230-3 | – |
| 350 A | 176000 A²s | 95 W | 0.85 | 690 V [1]/– | – | 3NC8431-0C | – | – |
| | 177000 A²s | 43 W | 1.00 | 690 V [1]/– | – | – | – | – |
| | 249000 A²s | 60 W | 0.85 | 500 V/– | 3NC2431-0C | – | – | – |
| 400 A | 224000 A²s | 50 W | 1.00 | 690 V [1]/– | – | – | – | – |
| 450 A | 276500 A²s | 58 W | 1.00 | 690 V [1]/– | – | – | – | – |
| 500 A | 398000 A²s | 64 W | 1.00 | 690 V [1]/– | – | – | – | – |
| | 448000 A²s | 130 W | 0.85 | 690 V [1]/– | – | 3NC8434-0C | – | – |
| 560 A | 890000 A²s | 60 W | 1.00 | 690 V [1]/– | – | – | – | – |
| 630 A | 1390000 A²s | 60 W | 1.00 | 690 V [1]/– | – | – | – | – |
| 670 A | 1640000 A²s | 64 W | 1.00 | 690 V [1]/– | – | – | – | – |
| 710 A | 1818000 A²s | 72 W | 1.00 | 690 V [1]/– | – | – | – | – |
| 800 A | 2475000 A²s | 84 W | 1.00 | 690 V [1]/– | – | – | – | – |
| 850 A | 3640000 A²s | 76 W | 1.00 | 690 V [1]/– | – | – | – | – |
| 1000 A | 1400000 A²s | 138 W | 1.00 | 690 V [3]/– | – | – | – | – |
| 1100 A | 3000000 A²s | 110 W | 1.00 | 690 V [3]/– | – | – | – | – |
| 1250 A | 4100000 A²s | 104 W | 1.00 | 690 V [3]/– | – | – | – | – |
| 1350 A | 4800000 A²s | 126 W | 1.00 | 690 V [3]/– | – | – | – | – |
| 1400 A | 5200000 A²s | 127 W | 1.00 | 690 V [3]/– | – | – | – | – |
| 1600 A | 6900000 A²s | 152 W | 1.00 | 690 V [3]/– | – | – | – | – |
| 1700 A | 6400000 A²s | 179 W | 1.00 | 690 V [3]/– | – | – | – | – |
| 1700 A | 10000000 A²s | 143 W | 1.00 | 690 V [3]/– | – | – | – | – |
| 1900 A | 8200000 A²s | 196 W | 1.00 | 690 V [3]/– | – | – | – | – |
| **Further information** | | | | | | | | |
| Screw fixing | | | | | ■ | ■ | ■ | ■ |
| Installation in SITOR fuse bases | | | | | 3NH5463 | 3NH5463 | 3NH5463 | 3NH5463 |
| Installation in LV HRC fuse bases | | | | | ■ | ■ | ■ | ■ |
| Installation in fuse switching devices | | | | | ■ | ■ | ■ | ■ |
| Further currents, operational class aR | | | | | See page 7/64 | – | – | – |

[1] For the max. DC voltage, see the Configuration Manual – Fuse systems, chapter Configuration, Use with direct current www.siemens.com/lowvoltage/manuals (45314810)
[2] Minimum clearance 90 mm
[3] UL voltage 700 V AC

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| Size 2 | | Size 3 | | | Size 2 × 3 | Size 3 × 3 |
|---|---|---|---|---|---|---|
| M10, 110 mm | M10, 170 mm | M10, 110 mm | | M12, 110 mm | M12, 110 mm [2] | M12, 110 mm [2] |
|  |  |  |  |  |  |  |
| – | – | – | – | – | – | – |
| – | 3NE5302-0MK06 | – | – | – | – | – |
| – | – | – | – | – | – | – |
| – | 3NE5317-0MK06 | – | – | – | – | – |
| – | – | – | – | – | – | – |
| – | 3NE5318-0MK06 | – | – | – | – | – |
| – | – | – | – | – | – | – |
| – | – | – | 3NC8423-3C | – | – | – |
| – | – | 3NC2423-3C | – | – | – | – |
| – | – | – | – | – | – | – |
| – | – | – | 3NC8425-3C | – | – | – |
| – | – | – | – | – | – | – |
| – | – | 3NC2425-3C | – | – | – | – |
| – | – | – | 3NC8427-3C | – | – | – |
| – | – | – | – | – | – | – |
| – | – | 3NC2427-3C | – | – | – | – |
| – | – | 3NC2428-3C | – | – | – | – |
| – | – | – | – | – | – | – |
| – | – | – | 3NC8431-3C | – | – | – |
| 3NE1331-3 | – | – | – | – | – | – |
| – | – | 3NC2431-3C | – | – | – | – |
| 3NE1332-3 | – | – | – | – | – | – |
| 3NE1333-3 | – | – | – | – | – | – |
| 3NE1334-3 | – | – | – | – | – | – |
| – | – | – | 3NC8434-3C | – | – | – |
| – | – | – | – | 3NE1435-3 | – | – |
| – | – | – | – | 3NE1436-3 | – | – |
| – | – | – | – | 3NE1447-3 | – | – |
| – | – | – | – | 3NE1437-3 | – | – |
| – | – | – | – | 3NE1438-3 | – | – |
| – | – | – | – | 3NE1448-3 | – | – |
| – | – | – | – | – | 3NB3350-1KK26 | – |
| – | – | – | – | – | 3NB3351-1KK26 | – |
| – | – | – | – | – | 3NB3352-1KK26 | – |
| – | – | – | – | – | 3NB3354-1KK26 | – |
| – | – | – | – | – | 3NB3355-1KK26 | – |
| – | – | – | – | – | 3NB3357-1KK26 | – |
| – | – | – | – | – | – | 3NB3358-1KK27 |
| – | – | – | – | – | 3NB3358-1KK26 | – |
| – | – | – | – | – | – | 3NB3362-1KK27 |
| | | | | | | |
| ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 3NH5463 | 3NH5473 | 3NH5463 | 3NH5463 | 3NH5463 | – | – |
| ■ | ■ | ■ | ■ | ■ | – | – |
| ■ | ■ | ■ | ■ | ■ | – | – |
| – | – | See page 7/64 | See page 7/64 | See page 7/64 | – | – |

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# SITOR semiconductor fuse links, LV HRC design (AC/DC)

## Operational class aR, with bolt-on links

| | | | | | | Size 000 | |
|---|---|---|---|---|---|---|---|
| | | | | | **Screw fixing, mounting dimension** | M8, 80 mm | M10, 80 mm |
| | | | | | |  |  |
| **$I_n$** | **Switch-off $I^2t$ value** | **Power loss $P_v$** | **Varying load factor WL** | **$U_n$ AC/DC (IEC)** | **$U_n$ DC (UL)** | | |
| 80 A | 2700 $A^2s$ | 18 W | 0.90 | 690 V/600 V | 700 V | 3NE8720-1 | – |
| 100 A | 4950 $A^2s$ | 19 W | 0.95 | 690 V/600 V | 700 V | 3NE8721-1 | – |
| 125 A | 9100 $A^2s$ | 23 W | 0.95 | 690 V/600 V | 700 V | 3NE8722-1 | – |
| 160 A | 17000 $A^2s$ | 31 W | 0.90 | 690 V/600 V | 700 V | 3NE8724-1 | – |
| 200 A | 30000 $A^2s$ | 36 W | 0.90 | 690 V/600 V | 700 V | 3NE8725-1 | – |
| 250 A | 55000 $A^2s$ | 42 W | 0.90 | 690 V/600 V | 700 V | 3NE8727-1 | – |
| 315 A | 85500 $A^2s$ | 54 W | 0.85 | 690 V/600 V | 700 V | 3NE8731-1 | – |
| 350 A | 135000 $A^2s$ | 58.8 W | on req. | 690 V/440 V | – | – | 3NE8031-3MK |
| 400 A | 170000 $A^2s$ | 74.5 W | on req. | 690 V/440 V | – | – | 3NE8032-3MK |
| **Further information** | | | | | | | |
| Screw fixing | | | | | | ■ | ■ |
| Installation in SITOR fuse bases | | | | | | 3NH5023 | 3NH5023 |
| Further currents, operational class gR | | | | | | See page 7/55 | See page 7/55 |

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## Operational class aR, with blade contacts without slots

| | | | | | Size 000 | Size 00 | Size 0 | Size 1 | Size 2 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | |  |  |  |  |  |
| $I_n$ | Switch-off $I^2t$ value | Power loss $P_v$ | Varying load factor WL | $U_n$ AC/DC | | | | | |
| 63 A | 1500 A²s | 20 W | 0.90 | 1000 V [1]/– | – | – | 3NE4118 | – | – |
| 80 A | 2200 A²s | 23.3 W | on req. | 690 V/440 V | 3NE8820-0MK | – | – | – | – |
| | 2400 A²s | 19 W | 0.95 | 690 V [1]/– | – | 3NE8020-1 | – | – | – |
| | 3000 A²s | 22 W | 0.90 | 1000 V [1]/– | – | – | 3NE4120 | – | – |
| 100 A | 3650 A²s | 27 W | on req. | 690 V/440 V | 3NE8821-0MK | – | – | – | – |
| | 6050 A²s | 25.5 W | on req. | 690 V/440 V | – | – | – | 3NE8221-0MK | – |
| | 4200 A²s | 22 W | 0.95 | 690 V [1]/– | – | 3NE8021-1 | – | – | – |
| | 6000 A²s | 24 W | 0.90 | 1000 V [1]/– | – | – | 3NE4121 | – | – |
| 125 A | 7800 A²s | 30 W | on req. | 690 V/440 V | 3NE8822-0MK | – | – | – | – |
| | 8900 A²s | 28.5 W | on req. | 690 V/440 V | – | – | – | 3NE8222-0MK | – |
| | 6500 A²s | 28 W | 0.95 | 690 V [1]/– | – | 3NE8022-1 | – | – | – |
| | 14000 A²s | 30 W | 0.90 | 1000 V [1]/– | – | – | 3NE4122 | – | – |
| 160 A | 14000 A²s | 34 W | on req. | 500 V/440 V | 3NE8824-0MK | – | – | – | – |
| | 16200 A²s | 37 W | on req. | 690 V/440 V | – | – | – | 3NE8224-0MK | – |
| | 13000 A²s | 38 W | 0.95 | 690 V [1]/– | – | 3NE8024-1 | – | – | – |
| | 29000 A²s | 35 W | 0.90 | 1000 V [1]/– | – | – | 3NE4124 | – | – |
| 200 A | 26000 A²s | 49 W | on req. | 690 V/440 V | – | – | – | 3NE8225-0MK | – |
| 250 A | 59000 A²s | 52 W | on req. | 690 V/440 V | – | – | – | 3NE8227-0MK | – |
| 315 A | 120000 A²s | 68 W | on req. | 690 V/440 V | – | – | – | 3NE8230-0MK | – |
| 350 A | 83500 A²s | 68.6 W | on req. | 690 V/440 V | – | – | – | – | 3NE8331-0MK |
| 400 A | 136000 A²s | 72.8 W | on req. | 690 V/440 V | – | – | – | – | 3NE8332-0MK |
| 450 A | 207000 A²s | 80.1 W | on req. | 690 V/440 V | – | – | – | – | 3NE8333-0MK |
| 500 A | 318000 A²s | 77.5 W | on req. | 690 V/440 V | – | – | – | – | 3NE8334-0MK |
| 550 A | 399000 A²s | 86.4 W | on req. | 690 V/440 V | – | – | – | – | 3NE8335-0MK |
| 630 A | 740000 A²s | 90.7 W | on req. | 690 V/440 V | – | – | – | – | 3NE8336-0MK |
| **Further information** | | | | | | | | | |
| Installation in 3NH LV HRC fuse bases | | | | | ■ | ■ | ■ | ■ | ■ |
| Installation in 3NP and 3KF fuse switching devices | | | | | ■ | ■ | ■ | ■ | ■ |
| Further currents, operational class gR | | | | | See page 7/56 | – | See page 7/56 | – | – |

[1] For the max. DC voltage, see the Configuration Manual – Fuse systems, chapter Configuration, Use with direct current www.siemens.com/lowvoltage/manuals (45314810)

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# SITOR semiconductor fuse links, LV HRC design (AC/DC)

## Operational class aR, with slotted blade contacts

| | | | | | With 2 oblong slots<br>Size 3 | With oblong and transverse slots<br>Size 1 | |
|---|---|---|---|---|---|---|---|
| | | | | Screw fixing, mounting dimension | M10, 110 mm | M8, 80 mm | M10, 110 mm |
| | | | | |  |  |  |
| $I_n$ | Switch-off $I^2t$ value | Power loss $P_v$ | Varying load factor WL | $U_n$ AC/DC | | | |
| 80 A | 3900 A²s | 42 W | on req. | 1500 V/1000 V | – | – | – |
| 100 A | 4800 A²s | 28 W | 0.95 | 1000 V [1]/– | – | – | 3NE3221 |
| | 3200 A²s | 25 W | on req. | 690 V/440 V | – | 3NE8221-3MK | – |
| | 8700 A²s | 45 W | on req. | 1500 V/1000 V | – | – | – |
| 125 A | 7200 A²s | 36 W | 0.95 | 1000 V [1]/– | – | – | 3NE3222 |
| | 6000 A²s | 28 W | on req. | 690 V/440 V | – | 3NE8222-3MK | – |
| | 11800 A²s | 59 W | on req. | 1500 V/1000 V | – | – | – |
| 160 A | 13000 A²s | 42 W | 1.00 | 1000 V [1]/– | – | – | 3NE3224 |
| | 10500 A²s | 35 W | on req. | 690 V/440 V | – | 3NE8224-3MK | – |
| | 37000 A²s | 54 W | on req. | 1500 V/1000 V | – | – | – |
| 200 A | 30000 A²s | 42 W | 1.00 | 1000 V [1]/– | – | – | 3NE3225 |
| | 17500 A²s | 42 W | on req. | 690 V/440 V | – | 3NE8225-3MK | – |
| | 70000 A²s | 56 W | on req. | 1500 V/1000 V | – | – | – |
| 250 A | 29700 A²s | 105 W | 0.85 | 800 V [1]/– | – | – | – |
| | 48000 A²s | 50 W | 1.00 | 1000 V [1]/– | – | – | 3NE3227 |
| | 28500 A²s | 53.5 W | on req. | 690 V/440 V | – | 3NE8227-3MK | – |
| | 165000 A²s | 59 W | on req. | 1500 V/1000 V | – | – | – |
| 315 A | 60700 A²s | 120 W | 0.85 | 800 V [1]/– | – | – | – |
| | 80000 A²s | 60 W | 0.95 | 1000 V [1]/– | – | – | 3NE3230-0B |
| | 300000 A²s | 245 W | on req. | –/3000 V | – | – | – |
| | 53500 A²s | 61 W | on req. | 690 V/440 V | – | 3NE8230-3MK | – |
| | 250000 A²s | 76 W | on req. | 1500 V/1000 V | – | – | – |
| 350 A | 100000 A²s | 75 W | 0.95 | 1000 V [1]/– | – | – | 3NE3231 |
| | 66000 A²s | 69 W | on req. | 690 V/440 V | – | 3NE8231-3MK | – |
| 400 A | 390000 A²s | 50 W | 0.85 | 500 V [1]/– | 3NC2432-0C | – | – |
| | 135000 A²s | 80 W | 1.00 | 1000 V [1]/– | – | – | – |
| | | 85 W | 0.90 | 1000 V [1]/– | – | – | 3NE3232-0B |
| | 110000 A²s | 70.5 W | on req. | 690 V/440 V | – | 3NE8232-3MK | – |
| | 470000 A²s | 89 W | on req. | 1500 V/1000 V | – | – | – |
| 450 A | 191000 A²s | 140 W | 0.85 | 800 V [1]/– | – | – | – |
| | 175000 A²s | 90 W | 1.00 | 1000 V [1]/– | – | – | – |
| | | 95 W | 0.90 | 1000 V [1]/– | – | – | 3NE3233 |
| | 180000 A²s | 71 W | on req. | 690 V/440 V | – | 3NE8233-3MK | – |
| 500 A | 276000 A²s | 155 W | 0.85 | 800 V [1]/– | – | – | – |
| | 260000 A²s | 90 W | 1.00 | 1000 V [1]/– | – | – | – |
| | 215000 A²s | 84 W | on req. | 690 V/440 V | – | 3NE8234-3MK | – |
| | 500000 A²s | 105 W | on req. | 1000 V/600 V | – | – | –3NE3234-0MK08 |
| | 800000 A²s | 109 W | on req. | 1500 V/1000 V | – | – | – |
| 550 A | 290000 A²s | 87 W | on req. | 690 V/440 V | – | 3NE8235-3MK | – |
| | 700000 A²s | 110 W | on req. | 1000 V/600 V | – | – | 3NE3235-0MK08 |
| 560 A | 360000 A²s | 95 W | 1.00 | 1000 V [1]/– | – | – | – |
| 630 A | 600000 A²s | 100 W | 1.00 | 1000 V [1]/– | – | – | – |
| | 440000 A²s | 96 W | on req. | 690 V/440 V | – | 3NE8236-3MK | – |
| | 850000 A²s | 127 W | on req. | 1000 V/600 V | – | – | 3NE3236-0MK08 |
| | 1100000 A²s | 163 W | on req. | 1500 V/1000 V | – | – | – |
| 710 A | 923000 A²s | 155 W | 0.95 | 800 V [1]/– | – | – | – |
| | 800000 A²s | 105 W | 1.00 | 900 V [1]/– | – | – | – |
| 800 A | 850000 A²s | 130 W | 0.95 | 800 V [1]/– | – | – | – |
| 900 A | 920000 A²s | 165 W | 0.95 | 690 V [1]/– | – | – | – |
| **Further information** | | | | | | | |
| Screw fixing | | | | | ■ | ■ | ■ |
| Installation in SITOR fuse bases | | | | | 3NH5463 | 3NH5423 | 3NH5463 |
| Installation in 3NH3 LV HRC fuse bases | | | | | ■ | – | ■ |
| Installation in 3NP and 3KF fuse switching devices | | | | | ■ | – | ■ |
| Further currents, operational class gR | | | | | See page 7/58 | – | – |

[1] For the max. DC voltage, see the Configuration Manual – Fuse systems, chapter Configuration, Use with direct current www.siemens.com/lowvoltage/manuals (45314810)

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| **Size 2** | | | |
|---|---|---|---|
| M10, 110 mm | M10, 170 mm | M10, 190 mm | M12, 260 mm |
|  |  |  |  |
| | | | |
| – | 3NE5320-0MK06 | – | – |
| – | – | – | – |
| – | – | – | – |
| – | 3NE5321-0MK06 | – | – |
| – | – | – | – |
| – | – | – | – |
| – | 3NE5322-0MK06 | – | – |
| – | – | – | – |
| – | – | – | – |
| – | 3NE5324-0MK06 | – | – |
| – | – | – | – |
| – | – | – | – |
| – | 3NE5325-0MK06 | – | – |
| 3NE4327-0B | – | – | – |
| – | – | – | – |
| – | – | – | – |
| – | 3NE5327-0MK06 | – | – |
| 3NE4330-0B | – | – | – |
| – | – | – | – |
| – | – | – | 3NE9330-0MK07 |
| – | – | – | – |
| – | 3NE5330-0MK06 | – | – |
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |
| 3NE3332-0B | – | – | – |
| – | – | – | – |
| – | – | – | – |
| – | 3NE5332-0MK06 | – | – |
| 3NE4333-0B | – | – | – |
| 3NE3333 | – | – | – |
| – | – | – | – |
| – | – | – | – |
| 3NE4334-0B | – | – | – |
| 3NE3334-0B | – | – | – |
| – | – | – | – |
| – | – | – | – |
| – | 3NE5334-0MK06 | – | – |
| – | – | – | – |
| – | – | – | – |
| 3NE3335 | – | – | – |
| 3NE3336 | – | – | – |
| – | – | – | – |
| – | – | – | – |
| – | 3NE5336-0MK06 | 3NE5336-0MK66 | – |
| 3NE4337 | – | – | – |
| 3NE3337-8 | – | – | – |
| 3NE3338-8 | – | – | – |
| 3NE3340-8 | – | – | – |
| | | | |
| ■ | ■ | ■ | ■ |
| 3NH5463 | 3NH5473 | 3NH5473 | – |
| ■ | – | – | – |
| ■ | – | – | – |
| – | See page 7/58 | – | – |

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# SITOR semiconductor fuse links, LV HRC design (AC/DC)

## Operational class aR, with slotted blade contacts

| | | | | | With oblong and transverse slots Size 3 | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Screw fixing, mounting dimension | M10, 110 mm | M10, 130 mm | M10, 170 mm | M10, 210 mm |
| | | | | |  |  |  |  |
| $I_n$ | Switch-off $I^2t$ value | Power loss $P_v$ | Varying load factor WL | $U_n$ AC [1] | | | | |
| 100 A | 13500 A²s | 25 W | 1.00 | 1000 V | – | 3NE3421-0C | – | – |
| 125 A | 34500 A²s | 78 W | 1.00 | 2500 V | – | – | – | – |
| 160 A | 54000 A²s | 56 W | 1.00 | 1500 V | – | – | – | 3NE5424-0C |
| 200 A | 138000 A²s | 75 W | 1.00 | 2000 V | – | – | – | 3NE7425-0U |
| 224 A | 54000 A²s | 85 W | 1.00 | 1000 V | – | 3NE3626-0C | – | – |
| | 138000 A²s | 80 W | 1.00 | 1500 V | – | – | – | 3NE5426-0C |
| 250 A | 84000 A²s | 130 W | 1.00 | 1500 V | – | – | 3NE5627-0C | – |
| | 218000 A²s | 110 W | 1.00 | 2000 V | – | – | – | 3NE7427-0U |
| 315 A | 218000 A²s | 80 W | 1.00 | 1000 V | – | 3NE3430-0C | – | – |
| | 72500 A²s | 80 W | 0.95 | 1250 V | – | – | – | – |
| | 311000 A²s | 115 W | 1.00 | 1500 V | – | – | – | 3NE5430-0C |
| 350 A | 428000 A²s | 135 W | 1.00 | 1500 V | – | – | – | 3NE5431-0C |
| | 555000 A²s | 120 W | 1.00 | 2000 V | – | – | – | 3NE7431-0U |
| 400 A | 390000 A²s | 50 W | 0.85 | 500 V | 3NC2432-3C | – | – | – |
| | 364000 A²s | 110 W | 1.00 | 1000 V | – | 3NE3432-0C | – | – |
| | 163000 A²s | 95 W | 0.95 | 1250 V | – | – | – | – |
| | 620000 A²s | 205 W | 1.00 | 2500 V | – | – | – | – |
| | 870000 A²s | 150 W | 1.00 | 2000 V | – | – | – | 3NE7432-0U |
| 450 A | 488000 A²s | 110 W | 1.00 | 1000 V | – | 3NE3635-0C | – | – |
| | 590000 A²s | 160 W | 1.00 | 1500 V | – | – | 3NE5633-0C | – |
| | 870000 A²s | 145 W | 0.95 | 1500 V | – | – | – | 3NE5433-0C |
| | 960000 A²s | 160 W | 1.00 | 2000 V | – | – | – | 3NE7633-0U |
| 500 A | 870000 A²s | 95 W | 1.00 | 1000 V | – | 3NE3434-0C | – | – |
| | 290000 A²s | 115 W | 0.90 | 1250 V | – | – | – | – |
| | 1270000 A²s | 235 W | 1.00 | 2500 V | – | – | – | – |
| 525 A | 1120000 A²s | 210 W | 1.00 | 2000 V | – | – | – | – |
| 600 A | 1950000 A²s | 145 W | 1.00 | 1500 V | – | – | 3NE5643-0C | – |
| 630 A | 244000 A²s | 120 W | 0.85 | 690 V | – | – | – | – |
| | 418000 A²s | 145 W | 0.85 | 1000 V | – | – | – | – |
| | 1280000 A²s | 132 W | 1.00 | 1000 V | – | 3NE3636-0C | – | – |
| | 650000 A²s | 120 W | 0.95 | 1250 V | – | – | – | – |
| | 1950000 A²s | 220 W | 1.00 | 2000 V | – | – | – | 3NE7636-0U |
| | 2800000 A²s | 275 W | 1.00 | 2500 V | – | – | – | – |
| 710 A | 346000 A²s | 130 W | 0.85 | 690 V | – | – | – | – |
| | 569000 A²s | 150 W | 0.85 | 1000 V | – | – | – | – |
| | 1950000 A²s | 145 W | 1.00 | 1000 V | – | 3NE3637-0C | – | – |
| | 3110000 A²s | 275 W | 1.00 | 2000 V | – | – | – | – |
| 800 A | 498000 A²s | 135 W | 0.90 | 690 V | – | – | – | – |
| | 819000 A²s | 155 W | 0.85 | 1000 V | – | – | – | – |
| | 985000 A²s | 145 W | 0.90 | 1100 V | – | – | – | – |
| 900 A | 677000 A²s | 145 W | 0.90 | 690 V | – | – | – | – |
| | 1160000 A²s | 165 W | 0.90 | 1000 V | – | – | – | – |
| 1000 A | 2480000 A²s | 140 W | 0.85 | 600 V | 3NC8444-3C | – | – | – |
| | 975000 A²s | 155 W | 0.95 | 690 V | – | – | – | – |
| | 1670000 A²s | 170 W | 0.90 | 1000 V | – | – | – | – |
| 1100 A | 1382000 A²s | 165 W | 0.95 | 690 V | – | – | – | – |
| | 1910000 A²s | 185 W | 0.90 | 800 V | – | – | – | – |
| 1250 A | 1990000 A²s | 175 W | 0.95 | 690 V | – | – | – | – |
| | 2600000 A²s | 210 W | 0.90 | 800 V | – | – | – | – |
| 1400 A | 2100000 A²s | 200 W | 0.95 | 500 V | – | – | – | – |
| 1600 A | 2860000 A²s | 240 W | 0.90 | 500 V | – | – | – | – |
| **Further information** | | | | | | | | |
| Screw fixing | | | | | ■ | ■ | ■ | ■ |
| Installation in SITOR fuse bases | | | | | 3NH5463 | – | 3NH5473 | – |
| Installation in 3NH LV HRC fuse bases | | | | | ■ | – | – | – |
| Installation in 3NP and 3KF fuse switching devices | | | | | ■ | – | – | – |
| Further currents, operational class gR | | | | | See page 7/58 | – | – | – |

[1] For the max. DC voltage, see the Configuration Manual – Fuse systems, chapter Configuration, Use with direct current www.siemens.com/lowvoltage/manuals (45314810)

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| M12, 80 mm | M12, 110 mm | M12, 140 mm | M12, 210 mm | M12, 260 mm |
|---|---|---|---|---|
|  |  |  |  |  |
| | | | | |
| – | – | – | – | – |
| – | – | – | – | 3NE9622-1C |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| – | 3NC3430-1U | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| – | 3NC3432-1U | – | – | – |
| – | – | – | – | 3NE9632-1C |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | 3NE5433-1C | – |
| – | – | – | 3NE7633-1U | – |
| – | – | – | – | – |
| – | 3NC3434-1U | – | – | – |
| – | – | – | – | 3NE9634-1C |
| – | – | – | 3NE7648-1U | – |
| – | – | – | – | – |
| 3NC3236-1U | – | – | – | – |
| – | 3NC3336-1U | – | – | – |
| – | – | – | – | – |
| – | 3NC3436-1U | – | – | – |
| – | – | – | 3NE7636-1U | – |
| – | – | – | – | 3NE9636-1C |
| 3NC3237-1U | – | – | – | – |
| – | 3NC3337-1U | – | – | – |
| – | – | 3NE3637-1C | – | – |
| – | – | – | 3NE7637-1U | – |
| 3NC3238-1U | – | – | – | – |
| – | 3NC3338-1U | – | – | – |
| – | 3NC3438-1U | – | – | – |
| 3NC3240-1U | – | – | – | – |
| – | 3NC3340-1U | – | – | – |
| – | – | – | – | – |
| 3NC3241-1U | – | – | – | – |
| – | 3NC3341-1U | – | – | – |
| 3NC3242-1U | – | – | – | – |
| – | 3NC3342-1U | – | – | – |
| 3NC3243-1U | – | – | – | – |
| – | 3NC3343-1U | – | – | – |
| 3NC3244-1U | – | – | – | – |
| 3NC3245-1U | – | – | – | – |
| | | | | |
| ■ | ■ | ■ | ■ | ■ |
| – | 3NH5463 | – | – | – |
| – | ■ | – | – | – |
| – | ■ | – | – | – |
| – | – | – | – | – |

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# SITOR semiconductor fuse links, LV HRC design (AC/DC)

## Operational class aR, with female thread at both ends

| | | | | | Size 3 | |
|---|---|---|---|---|---|---|
| | | | | **Screw fixing, flange dimension** | M10, 109 mm | M12, 52 mm |
| | | | | |  |  |
| **$I_n$** | **Switch-off $I^2t$ value** | **Power loss $P_v$** | **Varying load factor WL** | **$U_n$ AC [1]** | | |
| 315 A | 72500 A²s | 80 W | 0.95 | 1250 V | – | – |
| 400 A | 163000 A²s | 95 W | 0.95 | 1250 V | – | – |
| 450 A | 488000 A²s | 110 W | 1.00 | 1000 V | 3NE3635-6 | – |
| 500 A | 290000 A²s | 115 W | 0.90 | 1250 V | – | – |
| 630 A | 244000 A²s | 125 W | 0.90 | 690 V | – | 3NC3236-6U |
| | 418000 A²s | 130 W | 0.90 | 1000 V | – | – |
| | 650000 A²s | 120 W | 0.95 | 1250 V | – | – |
| 710 A | 346000 A²s | 130 W | 0.90 | 690 V | – | 3NC3237-6U |
| | 569000 A²s | 140 W | 0.90 | 1000 V | – | – |
| 800 A | 498000 A²s | 135 W | 0.95 | 690 V | – | 3NC3238-6U |
| | 819000 A²s | 150 W | 0.90 | 1000 V | – | – |
| | 985000 A²s | 145 W | 0.95 | 1100 V | – | – |
| 900 A | 677000 A²s | 140 W | 0.95 | 690 V | – | 3NC3240-6U |
| | 1160000 A²s | 160 W | 0.95 | 1000 V | – | – |
| 1000 A | 975000 A²s | 145 W | 1.00 | 690 V | – | 3NC3241-6U |
| | 1670000 A²s | 165 W | 0.95 | 1000 V | – | – |
| 1100 A | 1382000 A²s | 150 W | 1.00 | 690 V | – | 3NC3242-6U |
| | 1910000 A²s | 175 W | 0.95 | 800 V | – | – |
| 1250 A | 1990000 A²s | 155 W | 1.00 | 690 V | – | 3NC3243-6U |
| | 2600000 A²s | 185 W | 0.95 | 800 V | – | – |
| 1400 A | 2100000 A²s | 175 W | 1.00 | 500 V | – | 3NC3244-6U |
| 1600 A | 2860000 A²s | 195 W | 0.95 | 500 V | – | 3NC3245-6U |
| **Further information** | | | | | | |
| Screw fixing | | | | | ■ | ■ |

[1] For the max. DC voltage, see the Configuration Manual – Fuse systems, chapter Configuration, Use with direct current www.siemens.com/lowvoltage/manuals (45314810)

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| | |
|---|---|
| M12, 73 mm | M12, 73 mm |
|  |  |
| | |
| – | 3NC3430-6U |
| – | 3NC3432-6U |
| – | – |
| – | 3NC3434-6U |
| – | – |
| 3NC3336-6U | – |
| – | 3NC3436-6U |
| – | – |
| 3NC3337-6U | – |
| – | – |
| 3NC3338-6U | – |
| – | 3NC3438-6U |
| – | – |
| 3NC3340-6U | – |
| – | – |
| 3NC3341-6U | – |
| – | – |
| 3NC3342-6U | – |
| – | – |
| 3NC3343-6U | – |
| – | – |
| – | – |
| | |
| ■ | ■ |

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# SITOR semiconductor fuse links, LV HRC design (AC/DC)

## Operational class gR, special designs

| | | | | | Without installation bracket | With installation bracket For SITOR 6QG11 thyristor sets |
|---|---|---|---|---|---|---|
| | | | | Screw fixing, flange dimension | M10, 89 mm | |
| | | | | |  |  |
| $I_n$ | Switch-off $I^2t$ value | Power loss $P_v$ | Varying load factor WL | $U_n$ AC | | |
| 50 A | 1100 A²s | 20 W | 0.85 | 600 V | – | 3NE4117-5 |
| 850 A | 2480000 A²s | 85 W | 1.00 | 1000 V | 3NE9440-6 | – |
| **Further information** | | | | | | |
| Screw fixing | | | | | ■ | ■ |

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## Operational class aR, special designs

| | | | | | Without installation bracket | |
|---|---|---|---|---|---|---|
| | | | | | For screwing onto water-cooled busbars | For air-cooled rectifiers in electrolysis systems |
| | | | | Flange dimension | 83 mm | 89 mm |
| | | | | |  |  |
| $I_n$ | Switch-off $I^2t$ value | Power loss $P_v$ | Varying load factor WL | $U_n$ AC | | |
| 100 A | 7400 A²s | 35 W | 0.85 | 1000 V | – | – |
| 170 A | 60500 A²s | 43 W | 0.85 | 800 V | – | – |
| 200 A | 44000 A²s | 50 W | 0.85 | 1000 V | – | – |
| 250 A | 635000 A²s | 25 W | 0.90 | 680 V | – | – |
| | 29700 A²s | 105 W | 0.85 | 800 V | – | – |
| 315 A | 60700 A²s | 120 W | 0.85 | 800 V | – | – |
| 350 A | 1430000 A²s | 32 W | 0.90 | 680 V | – | – |
| | 260000 A²s | 80 W | 0.90 | 800 V | 3NC5531 | – |
| 350 A | 1430000 A²s | 32 W | 0.90 | 680 V | – | – |
| 450 A | 191000 A²s | 140 W | 0.85 | 800 V | – | – |
| | 395000 A²s | 90 W | 0.85 | 1000 V | – | – |
| 500 A | 276000 A²s | 155 W | 0.85 | 800 V | – | – |
| 600 A | 888000 A²s | 150 W | 0.90 | 1000 V | 3NC5840 | – |
| 630 A | 888000 A²s | 145 W | 0.90 | 800 V | 3NC5841 | – |
| 710 A | 923000 A²s | 155 W | 0.95 | 800 V | – | – |
| | 620000 A²s | 150 W | 0.90 | 900 V | 3NE6437-7 | 3NE6437 |
| 800 A | 1728000 A²s | 170 W | 0.90 | 1000 V | 3NC5838 | – |
| 900 A | 1920000 A²s | 170 W | 0.90 | 900 V | – | 3NE6444 |
| 1250 A | 2480000 A²s | 210 W | 0.90 | 600 V | 3NE9450-7 | 3NE9450 |
| **Further information** | | | | | | |
| Screw fixing | | | | | ■ | ■ |

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| | | With installation bracket | |
|---|---|---|---|
| **For mounting directly in the railway supply rectifier** | **For SITOR 6QG12 thyristor sets** | **For SITOR 6QG10 thyristor sets** | **For SITOR 6QG11 thyristor sets** |
| | 77 mm | | |
|  |  |  |  |
| | | | |
| – | – | – | 3NE4121-5 |
| – | – | – | 3NE4146-5 |
| – | – | 3NE3525-5 | – |
| 3NC7327-2 | – | – | – |
| – | 3NE4327-6B | – | – |
| – | 3NE4330-6B | – | – |
| 3NC7331-2 | – | – | – |
| – | – | – | – |
| 3NC7331-2 | – | – | – |
| – | 3NE4333-6B | – | – |
| – | – | 3NE3535-5 | – |
| – | 3NE4334-6B | – | – |
| – | – | – | – |
| – | – | – | – |
| – | 3NE4337-6 | – | – |
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |
| | | | |
| ■ | ■ | ■ | ■ |

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# SITOR semiconductor fuse links, LV HRC design (DC)

## Operational class aR, with slotted blade contacts

| | Size 1L | Size 2L | Size 3L | Size 2 × 3L |
|---|---|---|---|---|
| **Screw fixing, Mounting dimensions** | M10, 190 mm | M12, 190 mm | M12, 190 mm | M12, 190 mm |
| |  |  |  |  |

| $I_n$ | Switch-off $I^2t$ value at $U_{VSI}$ [1] | Power loss $P_v$ | $U_n$ DC/$U_{VSI}$ (IEC) | $U_n$ DC (UL) | | | | |
|---|---|---|---|---|---|---|---|---|
| 25 A | 100 A²s | 8.2 W | 440 V/700 V | 500 V | – | – | – | – |
| 32 A | 220 A²s | 10.8 W | 440 V/700 V | 500 V | – | – | – | – |
| 40 A | 270 A²s | 12.5 W | 440 V/700 V | 500 V | – | – | – | – |
| 50 A | 480 A²s | 16 W | 440 V/700 V | 500 V | – | – | – | – |
| 63 A | 1100 A²s | 18.5 | 440 V/700 V | 500 V | – | – | – | – |
| 80 A | 2600 A²s | 23 W | 440 V/700 V | 500 V | – | – | – | – |
| | 1800 A²s | 42 W | 1000 V/1250 V | 1100 V | – | – | – | – |
| 100 A | 4000 A²s | 29 W | 440 V/700 V | 500 V | – | – | – | – |
| | 4200 A²s | 28 W | 600 V/1250 V | 750 V | – | – | – | – |
| | 3100 A²s | 45 W | 1000 V/1250 V | 1100 V | – | – | – | – |
| 125 A | 4800 A²s | 28.4 W | 440 V/700 V | 500 V | – | – | – | – |
| | 6800 A²s | 36 W | 600 V/1250 V | 750 V | – | – | – | – |
| | 6000 A²s | 59 W | 1000 V/1250 V | 1100 V | – | – | – | – |
| 160 A | 9800 A²s | 35.5 W | 440 V/700 V | 500 V | – | – | – | – |
| | 12600 A²s | 42 W | 600 V/1250 V | 750 V | – | – | – | – |
| | 13000 A²s | 54 W | 1000 V/1250 V | 1100 V | – | – | – | – |
| 200 A | 16000 A²s | 45.5 W | 440 V/700 V | 500 V | – | – | – | – |
| | 24000 A²s | 42 W | 600 V/1250 V | 750 V | – | – | – | – |
| | 28400 A²s | 56 W | 1000 V/1250 V | 1100 V | – | – | – | – |
| | 100000 A²s | 75 W | 1100 V/1800 V | 1300 V | – | – | – | – |
| | 39000 A²s | 50 W | 1250 V/1500 V | 1250 V | 3NB1126-4KK11 | – | – | – |
| 250 A | 34600 A²s | 50 W | 600 V/1100 V | 750 V | – | – | – | – |
| | 60100 A²s | 59 W | 1000 V/1250 V | 1100 V | – | – | – | – |
| | 150000 A²s | 110 W | 1100 V/1800 V | 1300 V | – | – | – | – |
| | 80500 A²s | 51 W | 1250 V/1500 V | 1250 V | 3NB1128-4KK11 | – | – | – |
| 315 A | 69000 A²s | 65 W | 600 V/1100 V | 750 V | – | – | – | – |
| | 75000 A²s | 80 W | 900 V/1250 V | 1000 V | – | – | – | – |
| | 107000 A²s | 76 W | 1000 V/1250 V | 1100 V | – | – | – | – |
| | 129000 A²s | 63 W | 1250 V/1500 V | 1250 V | – | 3NB1231-4KK11 | – | – |
| 350 A | 82000 A²s | 75 W | 600 V/1100 V | 750 V | – | – | – | – |
| | 300000 A²s | 120 W | 1100 V/1800 V | 1300 V | – | – | – | – |
| 400 A | 109000 A²s | 85 W | 600 V/1100 V | 750 V | – | – | – | – |
| | 107000 A²s | 95 W | 900 V/1250 V | 1000 V | – | – | – | – |
| | 225000 A²s | 89 W | 1000 V/1250 V | 1100 V | – | – | – | – |
| | 520000 A²s | 150 W | 1100 V/1800 V | 1300 V | – | – | – | – |
| | 290000 A²s | 68 W | 1250 V/1500 V | 1250 V | – | 3NB1234-4KK11 | – | – |
| **Further information** | | | | | | | | |
| Screw fixing | | | | | ■ | ■ | ■ | ■ |
| Installation in SITOR fuse bases | | | | | – | – | – | – |
| Installation in 3NH LV HRC fuse bases | | | | | – | – | – | – |
| Installation in 3NP and 3KF fuse switching devices | | | | | – | – | – | – |

[1] For further $I^2t$ values at $U_n$ DC, see Configuration Manual – Fuse systems
www.siemens.com/lowvoltage/manuals (45314810)

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| Size 3 × 3L | Size 1 | Size 2 | Size 3 | Size 3 (long) | | Size 2 (long) | Size 00 |
|---|---|---|---|---|---|---|---|
| M12, 190 mm | M10, 110 mm | M10, 110 mm | M12, 110 mm | M10, 210 mm | M12, 210 mm | M10, 170 mm | M10, 80 mm<br>Bolt-on bracket |
|  |  |  |  |  |  |  |  |
| | | | | | | | |
| – | – | – | – | – | – | – | 3NB1713-0KK13 |
| – | – | – | – | – | – | – | 3NB1715-0KK13 |
| – | – | – | – | – | – | – | 3NB1717-0KK13 |
| – | – | – | – | – | – | – | 3NB1720-0KK13 |
| – | – | – | – | – | – | – | 3NB1721-0KK13 |
| – | – | – | – | – | – | – | 3NB1722-0KK13 |
| – | – | – | – | – | – | 3NB1222-3KK15 | – |
| – | – | – | – | – | – | – | 3NB1723-0KK13 |
| – | 3NB1123-1KK15 | – | – | – | – | – | – |
| – | – | – | – | – | – | 3NB1223-3KK15 | – |
| – | – | – | – | – | – | – | 3NB1724-0KK13 |
| – | 3NB1124-1KK15 | – | – | – | – | – | – |
| – | – | – | – | – | – | 3NB1224-3KK15 | – |
| – | – | – | – | – | – | – | 3NB1725-0KK13 |
| – | 3NB1125-1KK15 | – | – | – | – | – | – |
| – | – | – | – | – | – | 3NB1225-3KK15 | – |
| – | – | – | – | – | – | – | 3NB1726-0KK13 |
| – | 3NB1126-1KK15 | – | – | – | – | – | – |
| – | – | – | – | – | – | 3NB1226-3KK15 | – |
| – | – | – | – | 3NB1326-4KK11 | – | – | – |
| – | – | – | – | – | – | – | – |
| – | 3NB1128-1KK15 | – | – | – | – | – | – |
| – | – | – | – | – | – | 3NB1228-3KK15 | – |
| – | – | – | – | 3NB1328-4KK11 | – | – | – |
| – | – | – | – | – | – | – | – |
| – | 3NB1131-1KK15 | – | – | – | – | – | – |
| – | – | – | 3NB1331-3KK11 | – | – | – | – |
| – | – | – | – | – | – | 3NB1231-3KK15 | – |
| – | – | – | – | – | – | – | – |
| – | 3NB1132-1KK15 | – | – | – | – | – | – |
| – | – | – | – | 3NB1332-4KK11 | – | – | – |
| – | 3NB1134-1KK15 | 3NB1234-1KK15 | – | – | – | – | – |
| – | – | – | 3NB1334-3KK11 | – | – | – | – |
| – | – | – | – | – | – | 3NB1234-3KK15 | – |
| – | – | – | – | 3NB1334-4KK11 | – | – | – |
| – | – | – | – | – | – | – | – |
| | | | | | | | |
| ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| – | 3NH5463 | 3NH5463 | 3NH5463 | – | – | – | – |
| – | ■ | ■ | ■ | – | – | – | – |
| – | ■ | ■ | ■ | – | – | – | – |

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# SITOR semiconductor fuse links, LV HRC design (DC)

## Operational class aR, with slotted blade contacts (continued)



| | | | | | Size 1L | Size 2L | Size 3L | Size 2 × 3L |
|---|---|---|---|---|---|---|---|---|
| | | | | **Screw fixing, Mounting dimensions** | M10, 190 mm | M12, 190 mm | M12, 190 mm | M12, 190 mm |
| | | | | |  |  |  |  |
| $I_n$ | Switch-off $I^2t$ value at $U_{VSI}$ [1] | Power loss $P_v$ | $U_n$ DC/$U_{VSI}$ (IEC) | $U_n$ DC (UL) | | | | |
| 450 A | 125000 A²s | 95 W | 600 V/1100 V | 750 V | – | – | – | – |
| | 480000 A²s | 160 W | 1100 V/1800 V | 1300 V | – | – | – | – |
| 500 A | 178000 A²s | 105 W | 600 V/700 V | 700 V | – | – | – | – |
| | 182000 A²s | 90 W | 600 V/750 V | 750 V | – | – | – | – |
| | 200000 A²s | 115 W | 900 V/1250 V | 1000 | – | – | – | – |
| | 410000 A²s | 109 W | 1000 V/1250 V | 1100 V | 3NB1237-3KK15 | – | – | – |
| | 600000 A²s | 89 W | 1250 V/1500 V | 1250 V | – | – | 3NB1337-4KK11 | – |
| 525 A | 620000 A²s | 210 W | 1100 V/1800 V | 1300 V | – | – | – | – |
| 550 A | 230000 A²s | 110 W | 600 V/700 V | 700 V | – | – | – | – |
| 560 A | 240000 A²s | 95 W | 600 V/750 V | 750 V | – | – | – | – |
| 630 A | 280000 A²s | 127 W | 600 V/700 V | 700 V | – | – | – | – |
| | 350000 A²s | 100 W | 600 V/750 V | 750 V | – | – | – | – |
| | 290000 A²s | 120 W | 600 V/1000 V | 750 V | – | – | – | – |
| | 410000 A²s | 120 W | 900 V/1250 V | 1000 V | – | – | – | – |
| | 520000 A²s | 163 W | 1000 V/1250 V | 1100 V | – | – | – | – |
| | 1000000 A²s | 220 W | 1100 V/1800 V | 1300 V | – | – | – | – |
| 710 A | 430000 A²s | 105 W | 500 V/600 V | 600 V | – | – | – | – |
| | 390000 A²s | 130 W | 600 V/1000 V | 750 V | – | – | – | – |
| | 1150000 A²s | 275 W | 1100 V/1800 V | 1300 V | – | – | – | – |
| 800 A | 590000 A²s | 130 W | 500 V/600 V | 600 V | – | – | – | – |
| | 550000 A²s | 135 W | 600 V/1000 V | 750 V | – | – | – | – |
| | 620000 A²s | 145 W | 800 V/1000 V | 900 V | – | – | – | – |
| | 1910000 A²s | 135 W | 1250 V/1500 V | 1250 V | – | – | 3NB1345-4KK11 | – |
| | 1150000 A²s | 160 W | 1250 V/1500 V | 1250 V | – | – | – | 3NB2345-4KK16 |
| 900 A | 650000 A²s | 165 W | 500 V/600 V | 600 V | – | – | – | – |
| | 740000 A²s | 145 W | 600 V/1000 V | 750 V | – | – | – | – |
| 1000 A | 2250000 A²s | 195 W | 1250 V/1500 V | 1250 V | – | – | – | 3NB2350-4KK16 |
| | 1050000 A²s | 155 W | 600 V/1000 V | 750 V | – | – | – | – |
| 1100 A | 1600000 A²s | 165 W | 600 V/900 V | 750 V | – | – | – | – |
| 1250 A | 1800000 A²s | 175 W | 500 V/900 V | 600 V | – | – | – | – |
| 1400 A | 5100000 A²s | 250 W | 1250 V/1500 V | 1250 V | – | – | – | 3NB2355-4KK16 |
| 1600 A | 7450000 A²s | 275 W | 1250 V/1500 V | 1250 V | – | – | – | 3NB2357-4KK16 |
| 2100 A | 1195000 A²s | 365 W | 1250 V/1500 V | 1250 V | – | – | – | – |
| 2400 A | 18100000 A²s | 445 W | 1250 V/1500 V | 1250 V | – | – | – | – |
| **Further information** | | | | | | | | |
| Screw fixing | | | | | ■ | ■ | ■ | ■ |
| Installation in SITOR fuse bases | | | | | – | – | – | – |
| Installation in 3NH LV HRC fuse bases | | | | | – | – | – | – |
| Installation in 3NP and 3KF fuse switching devices | | | | | – | – | – | – |

[1] For further $I^2t$ values at $U_n$ DC, see Configuration Manual – Fuse systems
www.siemens.com/lowvoltage/manuals (45314810)

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| Size 3 × 3L | Size 1 | Size 2 | Size 3 | Size 3 (long) | | Size 2 (long) | Size 00 |
|---|---|---|---|---|---|---|---|
| M12, 190 mm | M10, 110 mm | M10, 110 mm | M12, 110 mm | M10, 210 mm | M12, 210 mm | M10, 170 mm | M10, 80 mm<br>Bolt-on bracket |
|  |  |  |  |  |  |  |  |
| | | | | | | | |
| – | 3NB1136-1KK15 | 3NB1236-1KK15 | – | – | – | – | – |
| – | – | – | – | 3NB1336-4KK11 | 3NB1336-4KK15 | – | – |
| – | 3NB1137-1KK11 | – | – | – | – | – | – |
| – | – | 3NB1237-1KK15 | – | – | – | – | – |
| – | – | – | 3NB1337-3KK11 | – | – | – | – |
| – | – | – | – | – | – | 3NB1237-3KK15 | – |
| – | – | – | – | – | – | – | – |
| – | – | – | – | – | 3NB1337-4KK15 | – | – |
| – | 3NB1138-1KK11 | – | – | – | – | – | – |
| – | – | 3NB1240-1KK15 | – | – | – | – | – |
| – | 3NB1142-1KK11 | – | – | – | – | – | – |
| – | – | 3NB1242-1KK15 | – | – | – | – | – |
| – | – | – | 3NB1342-1KK11 | – | – | – | – |
| – | – | – | 3NB1342-3KK11 | – | – | – | – |
| – | – | – | – | – | – | 3NB1242-3KK15 | – |
| – | – | – | – | 3NB1342-4KK11 | 3NB1342-4KK15 | – | – |
| – | – | 3NB1243-1KK15 | – | – | – | – | – |
| – | – | – | 3NB1343-1KK11 | – | | – | – |
| – | – | – | – | – | 3NB1343-4KK15 | – | – |
| – | – | 3NB1245-1KK15 | – | – | – | – | – |
| – | – | – | 3NB1345-1KK11 | – | – | – | – |
| – | – | – | 3NB1345-3KK11 | – | – | – | – |
| – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – |
| – | – | 3NB1247-1KK15 | – | – | – | – | – |
| – | – | – | 3NB1347-1KK11 | – | – | – | – |
| – | – | – | – | – | – | – | – |
| – | – | – | 3NB1350-1KK11 | – | – | – | – |
| – | – | – | 3NB1351-1KK11 | – | – | – | – |
| – | – | – | 3NB1352-1KK11 | – | – | – | – |
| – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – |
| 3NB2364-4KK17 | – | – | – | – | – | – | – |
| 3NB2366-4KK17 | – | – | – | – | – | – | – |
| | | | | | | | |
| ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| – | 3NH5463 | 3NH5463 | 3NH5463 | – | – | – | – |
| – | ■ | ■ | ■ | – | – | – | – |
| – | ■ | ■ | ■ | – | – | – | – |

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# SITOR semiconductor fuse links, LV HRC design (DC)

## Operational class aR, with blade contacts without slots

| | | | | | Size 00 | Size 0 | Size 1 | Size 2 |
|---|---|---|---|---|---|---|---|---|
| | | | | |  |  |  |  |
| $I_n$ | Switch-off $I^2t$ value at $U_{VSI}$ [1] | Power loss $P_v$ | $U_n$ DC/$U_{VSI}$ (IEC) | $U_n$ DC (UL) | | | | |
| 32 A | 280 A²s | 12 W | 600 V/900 V | 750 V | – | 3NB1015-1KK10 | – | – |
| 40 A | 330 A²s | 13 W | 600 V/900 V | 750 V | – | 3NB1017-1KK10 | – | – |
| 50 A | 520 A²s | 16 W | 600 V/900 V | 750 V | – | 3NB1020-1KK10 | – | – |
| 63 A | 900 A²s | 20 W | 600 V/900 V | 750 V | – | 3NB1021-1KK10 | – | – |
| 80 A | 2100 A²s | 22 W | 600 V/900 V | 750 V | – | 3NB1022-1KK10 | – | – |
| | 1100 A²s | 19 W | 440 V/700 V | 500 V | 3NB1722-0KK10 | – | – | – |
| 100 A | 3900 A²s | 24 W | 600 V/900 V | 750 V | – | 3NB1023-1KK10 | – | – |
| | 3100 A²s | 25.5 W | 440 V/600 V | 500 V | – | – | 3NB1123-0KK10 | – |
| | 3200 A²s | 22 W | 440 V/700 V | 500 V | 3NB1723-0KK10 | – | – | – |
| 125 A | 6800 A²s | 30 W | 600 V/900 V | 750 V | – | 3NB1024-1KK10 | – | – |
| | 5400 A²s | 28.5 W | 440 V/600 V | 500 V | – | – | 3NB1124-0KK10 | – |
| | 6200 A²s | 28 W | 440 V/700 V | 500 V | 3NB1724-0KK10 | – | – | – |
| 160 A | 13000 A²s | 35 W | 600 V/800 V | 750 V | – | 3NB1025-1KK10 | – | – |
| | 8500 A²s | 37 W | 440 V/600 V | 500 V | – | – | 3NB1125-0KK10 | – |
| | 8500 A²s | 38 W | 440 V/700 V | 500 V | 3NB1725-0KK10 | – | – | – |
| 200 A | 14500 A²s | 49 W | 440 V/600 V | 500 V | – | – | 3NB1126-0KK10 | – |
| 250 A | 30000 A²s | 52 W | 440 V/600 V | 500 V | – | – | 3NB1128-0KK10 | – |
| 315 A | 75000 A²s | 68 W | 440 V/500 V | 500 V | – | – | 3NB1131-0KK10 | – |
| 350 A | 45000 A²s | 68.6 W | 440 V/500 V | 500 V | – | – | – | 3NB1232-0KK10 |
| 400 A | 80000 A²s | 72.8 W | 440 V/500 V | 500 V | – | – | – | 3NB1234-0KK10 |
| 450 A | 100000 A²s | 80.1 W | 440 V/500 V | 500 V | – | – | – | 3NB1236-0KK10 |
| 500 A | 160000 A²s | 77.5 W | 440 V/500 V | 500 V | – | – | – | 3NB1237-0KK10 |
| 550 A | 230000 A²s | 86.4 W | 440 V/500 V | 500 V | – | – | – | 3NB1238-0KK10 |
| 630 A | 330000 A²s | 90.7 W | 440 V/500 V | 500 V | – | – | – | 3NB1242-0KK10 |
| **Further information** | | | | | | | | |
| Installation in 3NH LV HRC fuse bases | | | | | ■ | ■ | ■ | ■ |
| Installation in 3NP and 3KF fuse switching devices | | | | | ■ | ■ | ■ | ■ |

[1] For further $I^2t$ values at $U_n$ DC, see Configuration Manual – Fuse systems
www.siemens.com/lowvoltage/manuals (45314810)

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# Operational class aR, with female thread at both ends

| | | | | | Size 3 |
|---|---|---|---|---|---|
| | | | | **Screw fixing, mounting dimension** | M12, 73 mm |
| | | | | |  |
| **$I_n$** | **Switch-off $I^2t$ value at $U_{VSI}$ [1]** | **Power loss $P_v$** | **$U_n$ DC/$U_{VSI}$ (IEC)** | **$U_n$ DC (UL)** | |
| 315 A | 75000 A²s | 80 W | 900 V/1250 V | 1000 V | 3NB1331-3KK12 |
| 400 A | 107000 A²s | 95 W | 900 V/1250 V | 1000 V | 3NB1334-3KK12 |
| 500 A | 200000 A²s | 115 W | 900 V/1250 V | 1000 V | 3NB1337-3KK12 |
| 630 A | 290000 A²s | 130 W | 600 V/1000 V | 750 V | 3NB1342-1KK12 |
| | 410000 A²s | 120 W | 900 V/1250 V | 1000 V | 3NB1342-3KK12 |
| 710 A | 390000 A²s | 140 W | 600 V/1000 V | 750 V | 3NB1343-1KK12 |
| 800 A | 550000 A²s | 150 W | 600 V/1000 V | 750 V | 3NB1345-1KK12 |
| | 620000 A²s | 145 W | 800 V/1000 V | 900 V | 3NB1345-3KK12 |
| 900 A | 740000 A²s | 160 W | 600 V/1000 V | 750 V | 3NB1347-1KK12 |
| 1000 A | 1050000 A²s | 165 W | 600 V/1000 V | 750 V | 3NB1350-1KK12 |
| 1100 A | 1600000 A²s | 175 W | 600 V/900 V | 750 V | 3NB1351-1KK12 |
| 1250 A | 1800000 A²s | 185 W | 500 V/900 V | 600 V | 3NB1352-1KK12 |
| **Further information** | | | | | |
| Screw fixing | | | | | ■ |

1) For further $I^2t$ values at $U_n$ DC, see Configuration Manual – Fuse systems
www.siemens.com/lowvoltage/manuals (45314810)

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# SITOR semiconductor fuse links, cylindrical fuse design (AC/DC)

## Operational class gS

| | | | | Size 22 × 127 mm |
|---|---|---|---|---|
| | | | |  |
| $I_n$ | Switch-off $I^2t$ value | Power loss $P_v$ | $U_n$ AC/DC | |
| 1 A | 2 $A^2s$ | 2 W | 1500 V/1000 V | 3NC2301-0MK |
| 2 A | 4.4 $A^2s$ | 2.5 W | 1500 V/1000 V | 3NC2302-0MK |
| 4 A | 55 $A^2s$ | 5.3 W | 1500 V/1000 V | 3NC2304-0MK |
| 6 A | 150 $A^2s$ | 6.4 W | 1500 V/1000 V | 3NC2306-0MK |
| 10 A | 540 $A^2s$ | 3.1 W | 1500 V/1000 V | 3NC2310-0MK |
| 16 A | 1120 $A^2s$ | 4.7 W | 1500 V/1000 V | 3NC2316-0MK |
| 20 A | 2850 $A^2s$ | 5.4 W | 1500 V/1000 V | 3NC2320-0MK |
| 25 A | 3300 $A^2s$ | 6.9 W | 1500 V/1000 V | 3NC2325-0MK |
| 32 A | 9050 $A^2s$ | 6.7 W | 1500 V/1000 V | 3NC2332-0MK |
| **Further information** | | | | |
| Installation in SITOR fuse holders | | | | 3NC23 |
| Further currents, operational class gR | | | | See page 7/78 |
| Further currents, operational class aR | | | | See page 7/80 |





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# SITOR semiconductor fuse links, cylindrical fuse design (AC/DC)

## Operational class gR




Size 10 × 38 mm




Size 14 × 51 mm




Size 22 × 58 mm



Size 22 × 127 mm

| $I_n$ | Switch-off $I^2t$ value | Power loss $P_v$ | $U_n$ AC/DC | | | | |
|---|---|---|---|---|---|---|---|
| 2 A | 33 A²s | 0.5 W | –/1100 V [2] | 3NC1202-0MK | – | – | – |
| 4 A | 99 A²s | 0.7 W | –/1100 V [2] | 3NC1204-0MK | – | – | – |
| 6 A | 3,5 A²s | 3.1 W | 690 V/700 V [1] | – | 3NC1406-0MK | – | – |
| | 6,5 A²s | 2.5 W | 690 V/440 V | 3NC1006-0MK | – | – | – |
| | 120 A²s | 1.4 W | –/1100 V [2] | 3NC1206-0MK | – | – | – |
| 8 A | 210 A²s | 1.7 W | –/1100 V [2] | 3NC1208-0MK | – | – | – |
| 10 A | 15 A²s | 4.6 W | 690 V/700 V [1] | – | 3NC1410-0MK | – | – |
| | 17 A²s | 4.3 W | 690 V/440 V | – | – | – | – |
| | 18 A²s | 3.3 W | 690 V/440 V | 3NC1010-0MK | – | – | – |
| | 260 A²s | 2.3 W | –/1000 V [3] | 3NC1210-0MK | – | – | – |
| 12 A | 35 A²s | 4 W | 690 V/440 V | 3NC1012-0MK | – | – | – |
| 16 A | 32 A²s | 6.7 W | 690 V/600 V | – | 3NC1416-0MK | – | – |
| | 45 A²s | 6 W | 690 V/440 V | 3NC1016-0MK | – | – | – |
| | 52 A²s | 4.4 W | 690 V/440 V | – | – | – | – |
| 20 A | 68 A²s | 7.4 W | 690 V/600 V | – | 3NC1420-0MK | – | – |
| | 90 A²s | 6.5 W | 690 V/440 V | – | – | – | – |
| | 110 A²s | 7.8 W | 690 V/250 V | 3NC1020-0MK | – | – | – |
| 25 A | 108 A²s | 8.4 W | 690 V/600 V | – | 3NC1425-0MK | – | – |
| | 120 A²s | 9.5 W | 690 V/440 V | – | – | – | – |
| | 140 A²s | 8.7 W | 690 V/250 V | 3NC1025-0MK | – | – | – |
| | 160 A²s | 8.5 W | 690 V/440 V | – | – | – | – |
| | 180 A²s | 8.1 W | 690 V/700 V [1] | – | – | 3NC2225-0MK | – |
| 32 A | 175 A²s | 12.3 W | 690 V/600 V | – | 3NC1432-0MK | – | – |
| | 220 A²s | 12.3 W | 690 V/440 V | – | – | – | – |
| | 400 A²s | 8.9 W | 690 V/440 V | – | – | – | – |
| | 420 A²s | 9 W | 690 V/600 V | – | – | 3NC2232-0MK | – |
| | 450 A²s | 12 W | 690 V/250 V | 3NC1032-0MK | – | – | – |
| 40 A | 400 A²s | 14.8 W | 690 V/440 V | – | – | – | – |
| | 470 A²s | 11.7 W | 690 V/440 V | – | 3NC1440-0MK | – | – |
| | 600 A²s | 11 W | 690 V/440 V | – | – | – | – |
| | 700 A²s | 12.5 W | 690 V/440 V | – | – | 3NC2240-0MK | – |
| | 18500 A²s | 9.4 W | 1500 V/1000 V | – | – | – | 3NC2340-0MK |
| 50 A | 830 A²s | 16.3 W | 690 V/250 V | – | – | – | – |
| | 980 A²s | 17.5 W | 690 V/440 V | – | – | – | – |
| | 1250 A²s | 13.8 W | 690 V/440 V | – | – | – | – |
| | 1250 A²s | 15.2 W | 690 V/250 V | – | – | – | – |
| 63 A | 2050 A²s | 18.8 W | 690 V/440 V | – | – | – | – |
| | 2400 A²s | 17.5 W | 690 V/250 V | – | – | – | – |
| 80 A | 4400 A²s | 23 W | 690 V/250 V | – | – | – | – |
| 100 A | 11500 A²s | 28.7 W | 690 V/250 V | – | – | – | – |
| **Further information** | | | | | | | |
| Screw fixing | | | | – | – | – | – |
| Installation in SITOR fuse holders | | | | 3NC109. | 3NC149. | 3NC229. | 3NC23 |
| Installation in SITOR fuse bases | | | | – | – | – | – |
| Further currents, operational class gS | | | | – | – | – | See page 7/76 |
| Further currents, operational class aR | | | | – | – | – | See page 7/80 |

[1] Observe 600 V DC voltage according to IEC, 700 V according to UL, time constant and minimum breaking current MBC.
[2] DC voltage (IEC) at time constant 10 ms, VSI voltage 1150 V at time constant < 3 ms, UL voltage 1250 V at time constant 10 ms
[3] DC voltage (IEC) at time constant 10 ms, VSI voltage 1150 V at time constant < 3 ms, UL voltage 1100 V at time constant 10 ms

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| With M8 bolt-on links<br>Size 18 × 88 mm | Size 26 × 103 mm |
|---|---|
|  |  |
| | |
| – | – |
| – | – |
| – | – |
| – | – |
| – | – |
| – | – |
| – | – |
| 3NC1810-0MK | – |
| – | – |
| – | – |
| – | – |
| – | – |
| – | – |
| 3NC1816-0MK | – |
| – | – |
| 3NC1820-0MK | – |
| – | – |
| – | – |
| – | 3NC2625-0MK |
| – | – |
| 3NC1825-0MK | – |
| – | – |
| – | – |
| – | 3NC2632-0MK |
| 3NC1832-0MK | – |
| – | – |
| – | – |
| – | 3NC2640-0MK |
| – | – |
| 3NC1840-0MK | – |
| – | – |
| – | – |
| – | – |
| – | 3NC2650-0MK |
| 3NC1850-0MK | – |
| – | – |
| – | 3NC2663-0MK |
| – | – |
| – | – |
| – | – |
| | |
| ■ | ■ |
| – | – |
| 3NH5723 | 3NH5023 |
| – | – |
| – | – |

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# SITOR semiconductor fuse links, cylindrical fuse design (AC/DC)

## Operational class aR

| | | | | Size 10 × 38 mm [1] | Size 14 × 51 mm | |
|---|---|---|---|---|---|---|
| | | | | | Standard | With striker |
| | | | |  |  |  |
| $I_n$ | Switch-off $I^2t$ value | Power loss $P_v$ | $U_n$ AC/DC | | | |
| 1 A | 1.2 $A^2s$ | 5 W | 660 V/– | – | 3NC1401 | – |
| 2 A | 10 $A^2s$ | 3 W | 660 V/– | – | 3NC1402 | – |
| 3 A | 8 $A^2s$ | 1.2 W | 600/700 V [1] | 3NC1003 | – | – |
| | 15 $A^2s$ | 2.5 W | 660 V/– | – | 3NC1403 | – |
| 4 A | 25 $A^2s$ | 3 W | 660 V/– | – | 3NC1404 | – |
| 5 A | 11 $A^2s$ | 1.5 W | 690/700 V [1] | – | 3NC1405 | – |
| 6 A | 11 $A^2s$ | 1.5 W | 690/700 V [1] | – | 3NC1406 | – |
| | 20 $A^2s$ | 1.5 W | 600/700 V [1] | 3NC1006 | – | – |
| 8 A | 30 $A^2s$ | 2 W | 600/700 V [1] | 3NC1008 | – | – |
| 10 A | 22 $A^2s$ | 4 W | 690/700 V [1] | – | 3NC1410 | – |
| | 32 $A^2s$ | 4 W | 690/600 V [1] | – | – | 3NC1410-5 |
| | 60 $A^2s$ | 2.5 W | 600/700 V [1] | 3NC1010 | – | – |
| 12 A | 110 $A^2s$ | 3 W | 600/700 V [1] | 3NC1012 | – | – |
| 15 A | 63 $A^2s$ | 5.5 W | 690/600 V [1] | – | – | 3NC1415-5 |
| | 70 $A^2s$ | 5.5 W | 690/700 V [1] | – | 3NC1415 | – |
| 16 A | 150 $A^2s$ | 3.5 W | 600/700 V [1] | 3NC1016 | – | – |
| 20 A | 100 $A^2s$ | 6 W | 690/700 V [1] | – | 3NC1420 | – |
| | 200 $A^2s$ | 4.8 W | 600/700 V [1] | 3NC1020 | – | – |
| | 220 $A^2s$ | 4.6 W | 690/700 V [1] | – | – | – |
| | 234 $A^2s$ | 6 W | 690/600 V [1] | – | – | 3NC1420-5 |
| | 240 $A^2s$ | 5 W | 690/500 V [1] | – | – | – |
| 25 A | 250 $A^2s$ | 6 W | 600/700 V [1] | 3NC1025 | – | – |
| | 300 $A^2s$ | 5.6 W | 690/700 V [1] | – | – | – |
| | 320 $A^2s$ | 7 W | 690/700 V [1] | – | 3NC1425 | – |
| | 350 $A^2s$ | 6 W | 690/500 V [1] | – | – | – |
| | 378 $A^2s$ | 7 W | 690/600 V [1] | – | – | 3NC1425-5 |
| 30 A | 400 $A^2s$ | 9 W | 690/700 V [1] | – | 3NC1430 | – |
| | 466 $A^2s$ | 9 W | 690/600 V [1] | – | – | 3NC1430-5 |
| 32 A | 450 $A^2s$ | 7 W | 690/700 V [1] | – | – | – |
| | 500 $A^2s$ | 7.5 W | 660 V/– | 3NC1032 | – | – |
| | 500 $A^2s$ | 8 W | 690/500 V [1] | – | – | – |
| | 600 $A^2s$ | 7.6 W | 690/700 V [1] | – | 3NC1432 | |
| | 600 $A^2s$ | 7.6 W | 690/600 V [1] | | | 3NC1432-5 |
| 40 A | 700 $A^2s$ | 8.5 W | 690/700 V [1] | – | – | – |
| | 750 $A^2s$ | 8 W | 690/600 V [1] | | | 3NC1440-5 |
| | 750 $A^2s$ | 8 W | 690/700 V [1] | – | 3NC1440 | |
| | 800 $A^2s$ | 9 W | 690/500 V [1] | – | – | – |
| **Further information** | | | | | | |
| Screw fixing | | | | – | – | – |
| Installation in SITOR fuse holders | | | | 3NC109. | 3NC149. | 3NC149.-5 |
| Installation in SITOR fuse bases | | | | – | – | – |
| Further currents, operational class gR | | | | – | – | – |
| Further currents, operational class gS | | | | – | – | – |

[1] Observe DC voltage acc. to UL, time constant and minimum breaking current MBC

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| Size 22 × 58 mm | | Size 22 × 127 mm | Size 26 × 103 mm |
|---|---|---|---|
| Standard | With striker | | With M8 bolt-on links |
|  |  |  |  |
| | | | |
| – | – | – | – |
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| – | – | – | – |
| – | – | – | – |
| 3NC2220 | – | – | – |
| – | – | – | – |
| – | 3NC2220-5 | – | – |
| – | – | – | – |
| 3NC2225 | – | – | – |
| – | – | – | – |
| – | 3NC2225-5 | – | – |
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |
| 3NC2232 | – | – | – |
| – | – | – | – |
| – | 3NC2232-5 | – | – |
| – | – | – | – |
| | | | |
| 3NC2240 | – | – | – |
| | | | |
| – | – | – | – |
| – | 3NC2240-5 | – | – |
| | | | |
| – | – | – | ■ |
| 3NC229. | 3NC229.-5 | 3NC23 | – |
| – | – | – | 3NH5023 |
| – | – | See page 7/78 | – |
| – | – | See page 7/76 | – |

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# SITOR semiconductor fuse links, cylindrical fuse design (AC/DC)

## Operational class aR (continued)

| | | | | Size 10 × 38 mm [1] | Size 14 × 51 mm | |
|---|---|---|---|---|---|---|
| | | | | | Standard | With striker |
| | | | |  |  |  |
| **$I_n$** | **Switch-off $I^2t$ value** | **Power loss $P_v$** | **$U_n$ AC/DC** | | | |
| 50 A | 1350 $A^2s$ | 9.5 W | 690/700 V [1] | – | – | – |
| | 1500 $A^2s$ | 9.5 W | 690/500 V [1] | – | – | – |
| | 1800 $A^2s$ | 9 W | 690/600 V [1] | | | 3NC1450-5 |
| | 1800 $A^2s$ | 9 W | 690/700 V [1] | – | 3NC1450 | |
| | 26000 $A^2s$ | 11.6 W | 1500/1000 V | – | – | – |
| 63 A | 2100 $A^2s$ | 16.7 W | 690/250 V | – | 3NC1463-0MK | – |
| | 2600 $A^2s$ | 11 W | 690/700 V [1] | – | – | – |
| | 3000 $A^2s$ | 11 W | 690/500 V [1] | – | – | – |
| 80 A | 3500 $A^2s$ | 22.5 W | 690/440 V | – | – | – |
| | 5500 $A^2s$ | 13.5 W | 690/700 V [1] | – | – | – |
| | 6000 $A^2s$ | 13.5 W | 690/500 V [1] | – | – | – |
| 100 A | 5400 $A^2s$ | 31.5 W | 690/440 V | – | – | – |
| | 8000 $A^2s$ | 16 W | 690/700 V [1] | – | – | – |
| | 8500 $A^2s$ | 16 W | 600/500 V [1] | – | – | – |
| 125 A | 11800 $A^2s$ | 39 W | 690/440 V | – | – | – |
| | 29000 $A^2s$ | 35.3 W | 690/250 V | – | – | – |
| **Further information** | | | | | | |
| Screw fixing | | | | – | – | – |
| Installation in SITOR fuse holders | | | | 3NC109. | 3NC149. | 3NC149.-5 |
| Installation in SITOR fuse bases | | | | – | – | – |
| Further currents, operational class gR | | | | – | – | – |
| Further currents, operational class gS | | | | – | – | – |

[1] Observe DC voltage acc. to UL, time constant and minimum breaking current MBC

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| Size 22 × 58 mm | | Size 22 × 127 mm | Size 26 × 103 mm |
|---|---|---|---|
| Standard | With striker | | With M8 bolt-on links |
|  |  |  |  |
| | | | |
| 3NC2250 | – | – | – |
| – | 3NC2250-5 | – | – |
| | | | |
| – | – | – | – |
| – | – | 3NC2350-0MK | – |
| – | – | – | – |
| 3NC2263 | – | – | – |
| – | 3NC2263-5 | – | – |
| – | – | – | 3NC2680-0MK |
| 3NC2280 | – | – | – |
| – | 3NC2280-5 | – | – |
| – | – | – | 3NC2600-0MK |
| 3NC2200 | – | – | – |
| – | 3NC2200-5 | – | – |
| – | – | – | 3NC2611-0MK |
| 3NC2211-0MK | – | – | – |
| | | | |
| – | – | – | ■ |
| 3NC229. | 3NC229.-5 | 3NC23 | – |
| – | – | – | 3NH5023 |
| – | – | See page 7/78 | – |
| – | – | See page 7/76 | – |

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# Photovoltaic fuse links

## Cylindrical fuse de sign, operational class gPV

| | | | | Size 10 × 38 mm | Size 10 × 85 mm |
|---|---|---|---|---|---|
| | | | |  |  |
| $I_n$ DC | Power loss $P_v$ | Power loss $P_v$ at 70% [1] | $U_n$ DC | | |
| 2 A | 1.4 W | 0.6 W | 1000 V | 3NW6002-4 | – |
| 4 A | 1.6 W | 0.7 W | 1000 V | 3NW6004-4 | – |
| | 2.7 W | 1.1 W | 1500 V | – | 3NW6604-4 |
| 6 A | 1.7 W | 0.7 W | 1000 V | 3NW6001-4 | – |
| | 3.0 W | 1.2 W | 1500 V | – | 3NW6601-4 |
| 8 A | 1.9 W | 0.8 W | 1000 V | 3NW6008-4 | – |
| | 3.6 W | 1.5 W | 1500 V | – | 3NW6608-4 |
| 10 A | 2.3 W | 1.0 W | 1000 V | 3NW6003-4 | – |
| | 3.7 W | 1.6 W | 1500 V | – | 3NW6603-4 |
| 12 A | 2.7 W | 1.1 W | 1000 V | 3NW6006-4 | – |
| | 3.3 W | 1.4 W | 1500 V | – | 3NW6606-4 |
| 16 A | 3.2 W | 1.3 W | 1000 V | 3NW6005-4 | – |
| | 3.7 W | 1.6 W | 1500 V | – | 3NW6605-4 |
| 20 A | 3.4 W | 1.4 W | 1000 V | 3NW6007-4 | – |
| | 4.0 W | 1.7 W | 1200 V | – | 3NW6607-4 |
| **Further information** | | | | | |
| Installation in fuse holders | | | | 3NW70..-4 | 3NW76..-4 |

[1] Tested in fuse holders 3NW7013-4 and 3NW7613-4.





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# LV HRC design, operational class gPV

| | | | Size 1 | Size 1L | Size 2L | Size 3L | Size 1XL | Size 2XL |
|---|---|---|---|---|---|---|---|---|
| | | |  |  |  |  |  |  |
| $I_n$ DC | Power loss $P_v$ | $U_n$ DC | | | | | | |
| 63 A | 19 W | 1000 V | 3NE1218-4 | – | – | – | – | – |
| | 20 W | 1500 V | – | – | – | – | 3NE1218-5E | – |
| 80 A | 20 W | 1000 V | 3NE1220-4 | – | – | – | – | – |
| | 25 W | 1500 V | – | – | – | – | 3NE1220-5E | – |
| 100 A | 24 W | 1000 V | 3NE1221-4 | – | – | – | – | – |
| | 30 W | 1500 V | – | – | – | – | 3NE1221-5E | – |
| 125 A | 26 W | 1000 V | 3NE1222-4 | – | – | – | – | – |
| | 29 W | 1500 V | – | – | – | – | 3NE1222-5E | – |
| 160 A | 32 W | 1000 V | 3NE1224-4 | – | – | – | – | – |
| | 34 W | 1500 V | – | – | – | – | 3NE1224-5E | – |
| 200 A | 41 W | 1500 V | – | – | – | – | 3NE1225-5E | – |
| | 51 W | 1000 V | – | 3NE1225-4D | – | – | – | – |
| 250 A | 53 W | 1500 V | – | – | – | – | – | 3NE1327-5E |
| | 54 W | 1000 V | – | 3NE1227-4D | – | – | – | – |
| 315 A | 63 W | 1500 V | – | – | – | – | – | 3NE1330-5E |
| | 73 W | 1000 V | – | – | 3NE1330-4D | – | – | – |
| 400 A | 82 W | 1000 V | – | – | 3NE1332-4D | – | – | – |
| 500 A | 100 W | 1000 V | – | – | – | 3NE1434-4E | – | – |
| 630 A | 110 W | 1000 V | – | – | – | 3NE1436-4E | – | – |



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# Class CC fuse links

## Acc. to UL

| | | Characteristic: Slow | Characteristic: Slow, current-limiting | Characteristic: Quick |
|---|---|---|---|---|
| | |  |  |  |
| $I_n$ | $I_n$ [1] | | | |
| 0.6 A | 6/10 A | 3NW1006-0HG | – | – |
| 0.8 A | 8/10 A | 3NW1008-0HG | – | – |
| 1 A | – | 3NW1010-0HG | 3NW3010-0HG | 3NW2010-0HG |
| 1.5 A | 1.5 A | 3NW1015-0HG | – | – |
| 2 A | – | 3NW1020-0HG | 3NW3020-0HG | 3NW2020-0HG |
| 2.5 A | – | 3NW1025-0HG | – | – |
| 3 A | – | 3NW1030-0HG | 3NW3030-0HG | 3NW2030-0HG |
| 4 A | – | 3NW1040-0HG | 3NW3040-0HG | 3NW2040-0HG |
| 5 A | – | 3NW1050-0HG | 3NW3050-0HG | 3NW2050-0HG |
| 6 A | – | 3NW1060-0HG | 3NW3060-0HG | 3NW2060-0HG |
| 7.5 A | – | 3NW1075-0HG | – | – |
| 8 A | – | 3NW1080-0HG | 3NW3080-0HG | 3NW2080-0HG |
| 10 A | – | 3NW1100-0HG | 3NW3100-0HG | 3NW2100-0HG |
| 12 A | – | – | 3NW3120-0HG | 3NW2120-0HG |
| 15 A | – | 3NW1150-0HG | 3NW3150-0HG | 3NW2150-0HG |
| 20 A | – | 3NW1200-0HG | 3NW3200-0HG | 3NW2200-0HG |
| 25 A | – | 3NW1250-0HG | 3NW3250-0HG | 3NW2250-0HG |
| 30 A | – | 3NW1300-0HG | 3NW3300-0HG | 3NW2300-0HG |
| **Further information** | | | | |
| Installation in fuse holders | | 3NW75.3-0HG, 3NW753.-1HG, 3NW7431-0HG | 3NW75.3-0HG, 3NW753.-1HG, 3NW7431-0HG | 3NW75.3-0HG, 3NW753.-1HG, 3NW7431-0HG |

[1] American English wording





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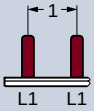
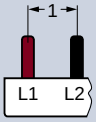
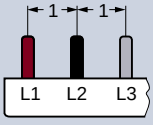
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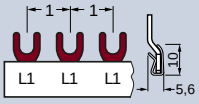
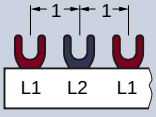
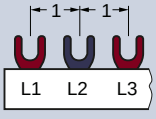
# Busbars

## According to IEC, can be cut

### Pin spacing 1 MW

| Pin spacing in MW (1 MW = 18 mm) | Application | Length | Version | Conductor cross-section | Article No. |
|---|---|---|---|---|---|
| **1-phase, angled** | | | | | |
|  | For cylindrical fuse holders 8 × 32 mm and 10 × 38 mm<br>For SITOR cylindrical fuse holders 10 × 38 mm | 214 mm | With end caps | 16 mm² | 5ST3700 |
| | | 1016 mm | Without end caps | 16 mm² | 5ST3701 |
| **2-phase** | | | | | **Article No.** |
|  | For cylindrical fuse holders 8 × 32 mm and 10 × 38 mm<br>For SITOR cylindrical fuse holders 10 × 38 mm | 214 mm | With end caps | 16 mm² | 5ST3704 |
| | | 1016 mm | Without end caps | 16 mm² | 5ST3705 |
| **3-phase** | | | | | **Article No.** |
|  | For cylindrical fuse holders 8 × 32 mm and 10 × 38 mm<br>For SITOR cylindrical fuse holders 10 × 38 mm | 214 mm | With end caps | 16 mm² | 5ST3708 |
| | | 1016 mm | Without end caps | 16 mm² | 5ST3710 |

### Fork spacing 1 MW

| Fork spacing in MW (1 MW = 18 mm) | Application | Length | Version | Conductor cross-section | Article No. |
|---|---|---|---|---|---|
| **1-phase** | | | | | |
|  | For MINIZED D01 fuse switch disconnectors | 1000 mm | Without end caps | 16 mm² | 5ST2190 |
| **2-phase** | | | | | **Article No.** |
|  | For MINIZED D01 fuse switch disconnectors | 1000 mm | Without end caps | 16 mm² | 5ST2191 |
| **3-phase** | | | | | **Article No.** |
|  | For MINIZED D01 fuse switch disconnectors | 1000 mm | Without end caps | 16 mm² | 5ST2192 |

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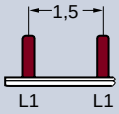
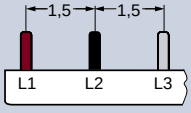
System overview, page 7/4

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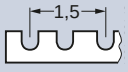
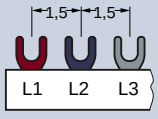


# According to IEC, can be cut

## Pin spacing 1.5 MW

| Pin spacing in MW (1.5 MW = 27 mm) | Application | Length | Version | Conductor cross-section | |
|---|---|---|---|---|---|
| **1-phase, angled** | | | | | **Article No.** |
|  | For 5SG71.3 MINIZED D02 switch disconnectors with fuses<br>For NEOZED D01/D02 fuse bases made of molded plastic 5SG1301, 5SG1701, 5SG1302, 5SG1702<br>For NEOZED D01/D02 fuse bases made of ceramic with saddle terminals<br>For cylindrical fuse holders 14 × 51 mm, 3NW7111<br>For SITOR cylindrical fuse holders 14 × 51 mm, 3NC1491 | 1016 mm | Without end caps | 16 mm² | 5ST3703 |
| **3-phase** | | | | | **Article No.** |
|  | For 5SG71.3 MINIZED D02 switch disconnectors with fuses<br>For NEOZED D01/D02 fuse bases made of molded plastic 5SG5301, 5SG5701, 5SG5302, 5SG5702<br>For NEOZED D01/D02 fuse bases made of ceramic with saddle terminals<br>For cylindrical fuse holders 14 × 51 mm, 3NW7131<br>For SITOR cylindrical fuse holders 14 × 51 mm, 3NC1493 | 1016 mm | Without end caps | 16 mm² | 5ST3714 |

## Fork spacing 1.5 MW

| Fork spacing in MW (1.5 MW = 27 mm) | Application | Length | Version | Conductor cross-section | |
|---|---|---|---|---|---|
| **1-phase** | | | | | **Article No.** |
|  | For NEOZED D01/D02 fuse bases made of ceramic with clamp-type terminal and screw head contacts | 1000 mm | Without end caps, non-insulated | 36 mm² | 5SH5322 |
| **3-phase** | | | | | **Article No.** |
|  | For NEOZED D01/D02 fuse bases made of ceramic with clamp-type terminals and screw head contacts | 1000 mm | Without end caps | 16 mm² | 5SH5320 |

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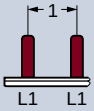
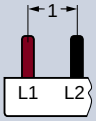
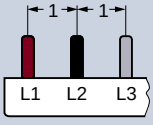
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# Busbars

## According to UL 508, can be cut

### Pin spacing 1 MW

| Pin spacing in MW (1 MW = 18 mm) | Application | Length | Version | Conductor cross-section | |
|---|---|---|---|---|---|
| **1-phase** | | | | | **Article No.** |
|  | For Class CC fuse holders 10 × 38 mm (3NC1091, 3NW7513-0HG) | 1000 mm | Without end caps | 18 mm² | 5ST3701-0HG |
| **2-phase** | | | | | **Article No.** |
|  | For Class CC fuse holders 10 × 38 mm (3NC1092, 3NW7523-0HG) | 1000 mm | Without end caps | 18 mm² | 5ST3705-0HG |
| **3-phase** | | | | | **Article No.** |
|  | For Class CC fuse holders 10 × 38 mm (3NC1093, 3NW7533-0HG) | 1000 mm | Without end caps | 18 mm² | 5ST3710-0HG |

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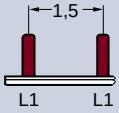
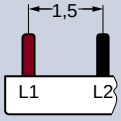
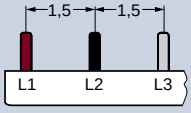
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# According to UL 508, can be cut

## Pin spacing 1.5 MW

| Pin spacing in MW (1 MW = 18 mm) | Application | Length | Version | Conductor cross-section | |
|---|---|---|---|---|---|
| **1-phase** | | | | | **Article No.** |
|  | For fuse holders 14 × 51 mm (3NC1491, 3NW7111) | 1000 mm | Without end caps | 18 mm² | 5ST3703-0HG |
| | | | | 25 mm² | 5ST3701-2HG |
| **2-phase** | | | | | |
|  | For fuse holders 14 × 51 mm (3NC1492, 3NW7121) | 1000 mm | Without end caps | 25 mm² | 5ST3705-2HG |
| **3-phase** | | | | | **Article No.** |
|  | For fuse holders 14 × 51 mm (3NC1493, 3NW7131) | 1000 mm | Without end caps | 18 mm² | 5ST3714-0HG |
| | | | | 25 mm² | 5ST3710-2HG |

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# Busbars

## Accessories

### For busbars according to IEC

**Terminals**

- For NEOZED D01/D02 fuse bases made of ceramic
- For DIAZED DII/DIII fuse bases made of ceramic

| | Terminal version | Conductor cross-section | Article No. |
|---|---|---|---|
|  | Terminal version S | 2 ... 25 mm² | 5SH5327 |
|  | Terminal versions B and K | 6 ... 25 mm² | 5SH5328 |

**Touch protection**



- For free connections, yellow (RAL 1004) 5 × 1 pin

| Article No. |
|---|
| 5ST3655 |

**End caps**

| | Version | For busbar type | Article No. |
|---|---|---|---|
|  | For 1-phase busbars | 5ST2190 | 5ST2196 |
| | | 5ST37 and 5SH55 | 5ST3748 |
|  | For 2-phase and 3-phase busbars | 5ST2191 and 5ST2192 | 5ST2197 |
|  | | 5ST37 and 5SH5320 | 5ST3750 |

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## For busbars according to UL 508

**Terminals according to UL 508**

| | Version | Infeed | Article No. |
|---|---|---|---|
|  | For busbars 35 mm² | Device | 5ST3770-0HG |
|  | For busbars 30 mm² | Busbar | 5ST3770-1HG |

**Busbar touch protection according to UL 508**



- For free connections, yellow (RAL 1004) 5 × 1 pin

| Article No. |
|---|
| 5ST3655-0HG |

**End caps for 5ST37. .-.HG**

| | Version | Article No. |
|---|---|---|
|  | For 1-phase busbars | 5ST3748-0HG |
|  | For 2 and 3-phase busbars | 5ST3750-0HG |

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# LV HRC signal detectors, electronic fuse monitoring

## LV HRC signal detectors



- Only for SIEMENS 3NA3, 3NA7, 3ND LV HRC fuse links with non-insulated grip lugs
- Rated voltage of up to 690 V AC/600 V DC
- Contact: Microswitches 250 V AC, 6 A
- Connection: flat male tab A2.8 × 0.5 mm acc. to DIN 46244

| Fuse size | Article No. |
|---|---|
| 000 ... 4 | 3NX1021 |

## Signal detector links



- Rated voltage of up to 690 V AC/600 V DC

| Fuse size | Response value | Application | Article No. |
|---|---|---|---|
| 000 ... 4 | > 9 V/2.5 A | For standard applications | 3NX1022 |
| | > 2 V/7 A | Only for meshed networks | 3NX1023 |

## Signal detector tops



- Only for SIEMENS 3NA3, 3NA7, 3ND LV HRC fuse links with non-insulated grip lugs
- Rated voltage of up to 690 V AC/600 V DC
- Contact: Microswitch 230 V AC, 5 A, 1 CO
- Connection: flat connector 2.3 mm

| Fuse size | Article No. |
|---|---|
| 000, 00, 1, 2 | 3NX1024 |

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## Electronic fuse monitor



- For all low-voltage fuse systems
- For monitoring all types and versions of melting fuses that cannot be equipped with a fault signal contact
- Can be used in asymmetric systems afflicted with harmonics and regenerative feedback motors
- Signal also for disconnected loads

| $U_e$ AC | $I_n$ | $U_c$ | Article No. |
|---|---|---|---|
| 230 V | 4 A | 3 AC 380 ... 415 V | 5TT3170 |

## Electronic fuse monitor for remote display of tripped fuses



- Remote display by auxiliary contact (1 CO)
- Local detection by integrated LED
- For all sizes
- For 3KF LV HRC and 3KF SITOR

| $U_e$ AC | $I_n$ | $U_c$ | Article No. |
|---|---|---|---|
| 230 V | 1.5 A | 3 AC 690 V | 3KF9010-1AA00 |

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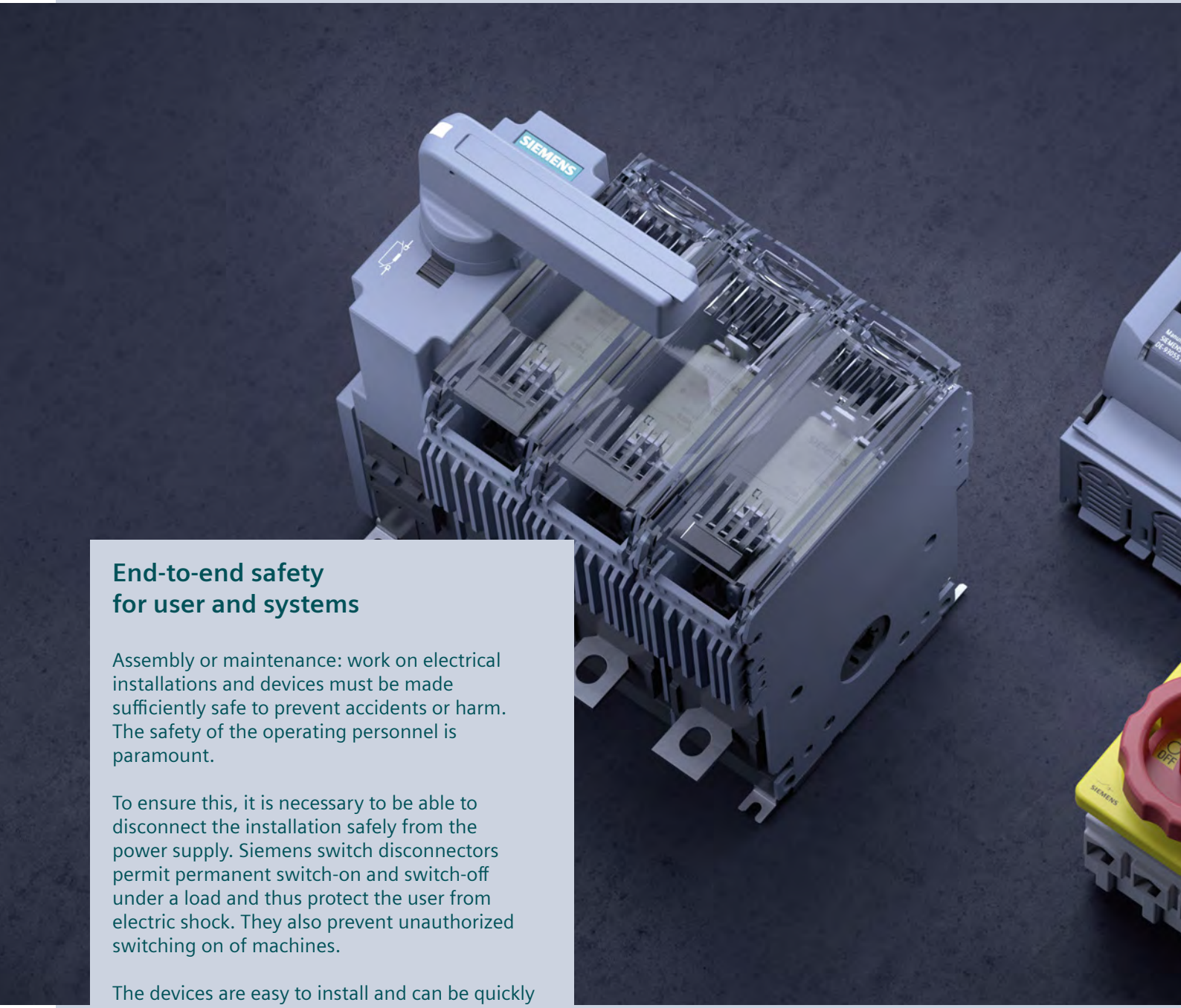




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## End-to-end safety for user and systems

Assembly or maintenance: work on electrical installations and devices must be made sufficiently safe to prevent accidents or harm. The safety of the operating personnel is paramount.

To ensure this, it is necessary to be able to disconnect the installation safely from the power supply. Siemens switch disconnectors permit permanent switch-on and switch-off under a load and thus protect the user from electric shock. They also prevent unauthorized switching on of machines.

The devices are easy to install and can be quickly put into operation. Additional functions can be retrofitted at any time – thanks to the modular design of the devices and a comprehensive range of accessories.

Convenient ordering processes and fast delivery optimize stock-keeping and save you time and money. You can also make use of our CAx data for automated, simplified planning and configuring.

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# Switch Disconnectors




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Quick selection guide 8/4
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5SG switch disconnectors with fuses 8/138

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# A multitude of additional information ...

## Information + ordering

### All the important things at a glance

For information about switch disconnectors, please visit our website **www.siemens.com/switching-devices**

### Your product in detail

The relevant tender specifications can be found at **www.siemens.com/tenderspecifications**

Use our conversion tool for quick and easy conversion to Siemens products **www.siemens.com/conversion-tool**

### Configurators

The configurator reduces the time and effort required in the planning and ordering process, and allows for individual adaptations.
Configure your switch disconnector at
**www.siemens.com/lowvoltage/3nj63-configurator**
**www.siemens.com/lowvoltage/3ld-configurator**
**www.siemens.com/lowvoltage/3kd-configurator**
your 3KF switch disconnector with fuses at
**www.siemens.com/lowvoltage/3kf-configurator**
and your 3NP1 fuse switch disconnector at
**www.siemens.com/lowvoltage/3np1-configurator**

Choose the right fuse systems for your application
**www.siemens.com/lowvoltage/fusesystems-configurator**

### Everything you need for your order

Refer to SiePortal to find an overview of your products (product catalog)

- Switch disconnectors **sie.ag/36HDiZp**

Direct forwarding to the individual products in SiePortal by clicking on the article number in the catalog or entering this web address incl. article number
**www.siemens.com/product_catalog_SIEP?Article No.**

You will find order support for the electrical wholesale trade carrying fast-selling items in SiePortal at
**www.siemens.com/lowvoltage/product-support**

- Order Support
  - 3KD switch disconnectors – End-to-end safety for user and systems **(109750228)**
  - 3LD2 main control and EMERGENCY-STOP-switching equipment – End-to-end safety for user and systems **(109755626)**
  - 3NP1 fuse switch disconnectors – End-to-end safety for user and systems **(109755624)**
  - 3KF switch disconnectors with fuses – End-to-end safety for user and systems **(109750229)**
  - 3NJ63 switch disconnectors with fuses – End-to-end safety for user and systems **(109755619)**

### Smart Control Panel Design

With the Smart Control Panel Design in the TIA Selection Tool, it is possible to design and dimension the electrical equipment of a machine in conformity with the standards – from the suitable switching devices to the correctly dimensioned cables
**www.siemens.com/controlpanel/cpd**

## The fast track to the experts

### Contact persons in your region

We offer a comprehensive portfolio of services.
You can find your local contacts at
**www.siemens.com/lowvoltage/components/contact**

You will find further information on services at
**www.siemens.com/service-offers**

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at
**www.siemens.com/support-request**

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# … can be found in our online services

## Commissioning + operation

### Your product in detail

The SiePortal platform (knowledge base) provides detailed technical information
**www.siemens.com/lowvoltage/product-support**

- Operating instructions
- Certificates

Online Support app available for download from the **App Store** and **Play Store**
You will find further information at
**http://www.siemens.com/support-app**

Provision of 3D data (step and u3d data formats)

- SiePortal (product catalog)
  **www.siemens.com/lowvoltage/product-catalog**
- Image database
  **www.siemens.com/lowvoltage/picturedb**

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
**www.siemens.com/cax**

### Manuals

Manuals can be found in SiePortal at
**www.siemens.com/lowvoltage/manuals**

- Configuration Manual
  - Switch disconnectors **(109769744)**
  - Fuse systems **(45314810)**
  - Transfer switching equipment and load transfer switches **(109769745)**
  - 8US busbar systems **(109769746)**
- System Manual
  - SENTRON 3NJ62 in-line plug-in switch disconnectors with fuses **(31753460)**
  - SENTRON 3NP1 fuse switch disconnector **(33515690)**
- Equipment Manual
  - 3KD switch disconnector **(109758120)**

### Technical overview – Switch disconnectors

#### The fast way to get you to our online services

This page provides you with comprehensive information and links on switch disconnectors
**www.siemens.com/lowvoltage/product-support (109764946)**

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# Quick selection guide

## Load switching devices for all applications



### Fuseless switch disconnectors [3]



### Functional switching [1]







| | | | | | | |
|---|---|---|---|---|---|---|
| | **Type** | 3LD3 | 3LD2 | 3LD5 UL | 3KD | 3VA |
| | **Uninterrupted current $I_u$** | 16 ... 63 A | 16 ... 250 A | 30 ... 160 A | 16 ... 2000 A | 63 ... 630 A |
| | **Short-circuit current max.** | 10 kA | 50 kA | 50 kA | 100 kA | 110 kA [5] |
| **Selection acc. to utilization category** | **AC max.** | AC-3 | AC-3 | AC-3 | AC-23A | AC-23A |
| | **DC max.** | – | DC-22A | – | DC-23A | DC-23A (up to 250 A) |
| | **Suitable fuses** | – | – | – | – | – |
| **Types of mounting** | **Floor mounting** | ■ | ■ | ■ | ■ | ■ |
| | **Mounting on a DIN rail** | ■ | ■ (up to 125 A) | ■ (up to 63 A) | ■ (up to 250 A) | ■ (up to 160 A) |
| | **Front mounting** | ■ | ■ | ■ | – | – |
| | **Mounting on busbar systems (spacing of the busbars)** | – | – | – | – | ■ |
| | **Draw-out technology** | – | – | – | – | ■ |
| **Methods of operation** | **Manual from the front** | ■ | ■ | ■ | ■ | ■ |
| | **Manual from the side** | – | – | – | ■ | ■ |
| | **Remote-controllable** | – | – | – | – | ■ |
| **Number of poles** | **1-pole** | – | – | – | – | – |
| | **2-pole** | – | – | – | – | – |
| | **3-pole** | ■ | ■ | ■ | ■ | ■ |
| | **4-pole** | ■ | ■ | ■ | ■ | ■ |
| | **6-pole** | – | ■ | – | ■ | – |
| **Switching function** | **All poles** | ■ | ■ | ■ | ■ | ■ |
| | **Individual poles switchable** | – | – | – | – | – |

**Further information** From page 8/6 From page 2/1

[1] According to DIN VDE 0100-200, functional switching is an operation intended to switch on or off or vary the supply of electric energy to an electrical installation or parts of it for normal operating purposes.

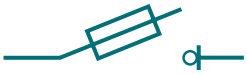
[2] Devices for occasional switching usually have a substantially lower electrical endurance and are switched no more than 1 × per minute in the tests.

[3] Pure switching without protection function

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## Fuse switch disconnectors [4]



### Occasional switching [2]



| 3NP1 | 3NP5 | 3NJ4 | 5SG76 |
|---|---|---|---|
| 160 ... 630 A | 160 ... 630 A | 160 ... 1600 A | 16 A |
| 120 kA | 100 kA | 120 kA | 50 kA |
| AC-23B | AC-23B | AC-23B | AC-22A |
| DC-23B | DC-23B | – | – |
| IEC NH | IEC NH | IEC NH | NEOZED |
| ■ | ■ | – | – |
| ■ | – | – | ■ |
| – | – | – | – |
| 40/60 mm | 40/60 mm | 60/100/185 mm | – |
| – | – | – | – |
| ■ | ■ | ■ | ■ |
| – | – | – | – |
| – | – | – | – |
| ■ | – | – | ■ |
| ■ | – | – | ■ |
| ■ | ■ | ■ | ■ |
| ■ | – | – | ■ |
| – | – | – | – |
| ■ | ■ | ■ | ■ |
| – | – | ■ | – |

From page 8/76

## Switch disconnectors with fuses [4]



### Functional switching [1]



### Occasional switching [2]



| 3KF NH | 3KF SITOR | 3NJ63 | 5SG71/72 |
|---|---|---|---|
| 32 ... 800 A | 32 ... 800 A | 63 ... 630 A | 63 A |
| 100 kA | 100 kA | 100 kA | 50 kA |
| AC-23A | AC-23A | AC-23B | AC-23A |
| DC-23A | DC-23A | DC-23B | DC-22B |
| IEC NH | IEC LV HRC, optimized for semiconductor protection | IEC NH | NEOZED |
| ■ | ■ | – | – |
| ■ | ■ | – | – |
| – | – | – | – |
| – | – | 185 mm | 60 mm |
| – | – | ■ | – |
| ■ | ■ | ■ | ■ |
| ■ | ■ | – | – |
| – | – | ■ | – |
| – | – | – | ■ |
| – | – | ■ | ■ |
| ■ | ■ | ■ | ■ |
| ■ | ■ | ■ | ■ |
| – | – | – | – |
| ■ | ■ | ■ | ■ |
| – | – | – | – |

From page 8/110

[4] The suitable fuses protect persons, motors, installations and generators against short circuit and overload
[5] With a line-side fuse for 415 V

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# Fuseless switch disconnectors

## Quick selection guide







| Type | | | 3LD30 | 3LD31 | 3LD32 | 3LD33 | 3LD34 | 3LD20 | 3LD21 | 3LD22 |
|---|---|---|---|---|---|---|---|---|---|---|
| **General technical specifications acc. to IEC 60947-3** | | | | | | | | | | |
| **General technical specifications** | | | | | | | | | | |
| Rated uninterrupted current $I_u$ | | A | 16 | 25 | 32 | 40 | 63 | 16 | 25 | 32 |
| Rated operational voltage $U_e$ | At 50/60 Hz AC | V | | | 690 | | | | 690 | |
| | At DC – 2 conducting paths in series | V | | | – | | | | – | |
| | At DC – 3 conducting paths in series | V | | | – | | | | – | |
| | At DC – 4 conducting paths in series | V | | | – | | | | – | |
| **Operating and short-circuit behavior** | | | | | | | | | | |
| Rated operational current $I_e$ [1] | At AC-20A \| AC-20B at 1000 V | A | – | – | – | – | – | – | – | – |
| | At AC-21A \| AC-21B at 400 V | A | 16 | 25 | 32 | 40 | 63 | 16 | 25 | 32 |
| | At AC-21A \| AC-21B at 690 V | A | 16 | 25 | 32 | 40 | 63 | 16 | 25 | 32 |
| | At AC-22A \| AC-22B at 400 V | A | 16 | 20 | 22 | 36 | 43 | 16 | 25 | 32 |
| | At AC-22A \| AC-22B at 690 V | A | 9 | 11 | 13 | 17 | 22 | 16 | 25 | 32 |
| | At AC-22A \| AC-22B at 1000 V | A | – | – | – | – | – | – | – | – |
| | At AC-23A \| AC-23B at 400 V | A | 16 | 20 | 22 | 36 | 43 | 16 | 20 | 22 |
| | At AC-23A \| AC-23B at 690 V | A | 9 | 11 | 13 | 17 | 22 | 9 | 11 | 13 |
| | At DC-20A \| DC-20B at 1000 V | A | – | – | – | – | – | – | – | – |
| | At DC-21A \| DC-21B at 110 V | A | – | – | – | – | – | – | – | – |
| | At DC-21A \| DC-21B at 220 V | A | – | – | – | – | – | – | – | – |
| | At DC-21A \| DC-21B at 440 V | A | – | – | – | – | – | – | – | – |
| | At DC-22A \| DC-22B at 220 V | A | – | – | – | – | – | – | – | – |
| | At DC-22A \| DC-22B at 440 V | A | – | – | – | – | – | – | – | – |
| | At DC-23A \| DC-23B at 220 V | A | – | – | – | – | – | – | – | – |
| | At DC-23A \| DC-23B at 440 V | A | – | – | – | – | – | – | – | – |
| Motor switching capacity | At AC-23A \| AC-23B at 400 V | kW | 7.5 | 9.5 | 11.5 | 18.5 | 22 | 7.5 | 9.5 | 11.5 |
| | At AC-23A \| AC-23B at 690 V | kW | 7.5 | 9 | 11.5 | 15 | 18.5 | 7.5 | 9.5 | 11.5 |
| | At AC-3 \| at 400 V | kW | 5.5 | 7.5 | 9.5 | 11.5 | 18.5 | 5.5 | 7.5 | 9.5 |
| | At AC-3 \| at 690 V | kW | 5.5 | 7.5 | 9.5 | 11.5 | 15 | 5.5 | 7.5 | 9.5 |
| Rated short-time withstand current $I_{cw}$ | At 690 V AC (t = 1 s) | kA | 0.5 | 0.5 | 0.5 | 1 | 1 | 0.34 | 0.64 | 0.64 |
| | At 1000 V AC (t = 1 s) | kA | – | – | – | – | – | – | – | – |
| Rated conditional short-circuit current with upstream fuse | At 400/415 V AC | kA | 10 | 10 | 10 | 10 | 10 | 50 | 50 | 50 |
| | At 690 V AC | kA | 6 | 6 | 6 | 6 | 6 | 50 | 50 | 50 |
| **Degree of protection** | | | | | | | | | | |
| Maximum achievable IP degree of protection (with a rotary operating mechanism) | | | | | IP65 | | | | IP65 | |
| **General technical specifications acc. to UL** | | | | | | | | | | |
| **General technical specifications** | | | | | | | | | | |
| Certification according to UL standard | | | | | UL 508 | | | | UL 508 | |
| $I_n$ acc. to UL 508/UL 60947-4-1 \| UL 489 | | A | 16 \| – | 25 \| – | 32 \| – | 40 \| – | 63 \| – | 16 \| – | 25 \| – | 32 \| – |
| $U_e$ acc. to UL 508/UL 60947-4-1 \| UL 489 | | V AC | | | 600 \| – | | | | 600 \| – | |
| **Operating and short-circuit behavior** | | | | | | | | | | |
| Operational power, 3-phase | At 480 V | hp | 7.5 | 10 | 20 | 20 | 25 | 7.5 | 10 | 20 |
| | At 600 V | hp | 10 | 15 | 20 | 20 | 30 | 10 | 15 | 20 |
| Short circuit current rating (SCCR) | At 480 V \| at 600 V | kA | | | 5 \| 5 | | | 5 \| 5 | 5 \| 5 | 5 \| 5 |
| Upstream fuse according to UL | | | | | RK5 | | | | RK5 | |
| **Further information** | | | | | | | | | | |
| | | | | | See page 8/12 | | | | See page 8/22 | |

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## 3LD2





## 3LD5 UL



| 3LD25 | 3LD27 | 3LD28 | 3LD23 | 3LD24 | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| | | | | | | | | | |
| 63 | 100 | 125 | 160 | 250 | 32 | 63 | 100 | 125 | 160 |
| | | 690 | | | | | 690 | | |
| | | – | | | | | – | | |
| | | – | | | | | – | | |
| | | – | | | | | – | | |
| | | | | | | | | | |
| – | – | – | – | – | – | – | – | – | – |
| 63 | 100 | 125 | 160 | 250 | 32 | 63 | 100 | 125 | 160 |
| 63 | 100 | 125 | 160 | 250 | 32 | 63 | 100 | 125 | 160 |
| 63 | 100 | 125 | 140 | 230 | 32 | 63 | 100 | 125 | 160 |
| 63 | 100 | 125 | 140 | 230 | 32 | 63 | 100 | 125 | 160 |
| – | – | – | – | – | – | – | – | – | – |
| 43 | 70 | 80 | 132 | 224 | 32 | 63 | 100 | 125 | 160 |
| 22 | 34 | 39 | 47 | 58 | 22 | 39 | 39 | 47 | 58 |
| – | – | – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – | – | – |
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| – | – | – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – | – | – |
| 22 | 37 | 45 | 75 | 132 | 15 | 30 | 45 | 55 | 75 |
| 18.5 | 30 | 37 | 45 | 55 | 18.5 | 37 | 37 | 45 | 55 |
| 18.5 | 30 | 37 | 50 | 110 | 15 | 30 | 45 | 55 | 75 |
| 15 | 22 | 30 | 37 | 45 | – | – | 30 | 37 | 45 |
| 1.26 | 2 | 2 | 4 | 4 | 1.26 | 2 | 4 | 4 | 4 |
| – | – | – | – | – | – | – | – | – | – |
| 50 | 50 | 25 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| 50 | 50 | 25 | 50 | 50 | 50 | 50 | 50 | 50 | 30 |
| | | | | | | | | | |
| | | IP65 | | | | | IP65 | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | UL 508 | | | | | UL 60947-4-1/UL 489 | | |
| 63 \| – | 100 \| – | 125 \| – | 160 \| – | 250 \| – | 30 \| 30 | 60 \| 60 | 100 \| 100 | 125 \| 125 | 150 \| 150 |
| | | 600 \| – | | | | | 480 \| 480 | | |
| | | | | | | | | | |
| 40 | 60 | 75 | 75 | 100 | 20 | 30 | 60 | 75 | 100 |
| 50 | 75 | 100 | 50 | 75 | – | – | – | – | – |
| 5 \| 5 | 10 \| 10 | 10 \| 10 | 10 \| 10 | 10 \| 10 | 50 \| – | 65 \| – | 65 \| – | 65 \| – | 50 \| – |
| | | RK5 | | | J \| CC | J | J | J | J |
| | | | | | | | | | |
| | | See page 8/22 | | | | | See page 8/52 | | |

8

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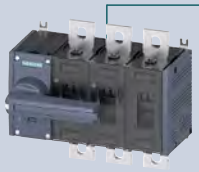


# Fuseless switch disconnectors

## Quick selection guide for AC and AC/DC applications



**3KD**



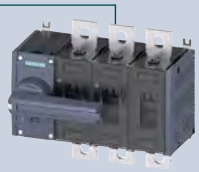
| Type | | | 3KD 16 | 3KD 22 | 3KD 26 | 3KD 28..–M. | 3KD 28..–N | 3KD 30..–M. | 3KD 30..–N. | 3KD 32 | 3KD 34 | 3KD 36..–.N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **General technical specifications acc. to IEC 60947-3** | | | | | | | | | | | | |
| **General technical specifications** | | | | | | | | | | | | |
| Rated uninterrupted current $I_u$ | | A | 16 | 32 | 63 | 80 | 80 | 100 | 100 | 125 | 160 | 200 |
| Rated operational voltage $U_e$ | At 50/60 Hz AC | V | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| | At DC – 2 conducting paths in series | V | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 |
| | At DC – 3 conducting paths in series | V | 440 | 440 | 440 | 440 | 440 | 440 | 440 | 440 | 440 | 440 |
| | At DC – 4 conducting paths in series | V | – | – | – | – | – | – | – | – | – | – |
| **Operating and short-circuit behavior** | | | | | | | | | | | | |
| Rated operational current $I_e$ [1] | At AC-20A \| AC-20B at 1000 V | A | 16 | 32 | 63 | 80 | 80 | 100 | 100 | 125 | 160 | 200 |
| | At AC-21A \| AC-21B at 400 V | A | 16 | 32 | 63 | 80 | 80 | 100 | 100 | 125 | 160 | 200 |
| | At AC-21A \| AC-21B at 690 V | A | 16 | 32 | 63 | 80 | 80 | 100 | 100 | 125 | 160 | 200 |
| | At AC-22A \| AC-22B at 400 V | A | 16 | 32 | 63 | 80 | 80 | 100 | 100 | 125 | 160 | 200 |
| | At AC-22A \| AC-22B at 690 V | A | 16 | 32 | 63 | 80 | 80 | 100 | 100 | 125 | 160 | 160 |
| | At AC-22A \| AC-22B at 1000 V | A | 16 | 32 | 63 | 80 | 80 | 80 | 100 | 125 | 160 | 160 |
| | At AC-23A \| AC-23B at 400 V | A | 16 | 32 | 63 | 80 | 80 | 80 | 100 | 125 | 160 | 160 |
| | At AC-23A \| AC-23B at 690 V | A | 16 | 32 | 63 | 80 | 80 | 80 | 100 | 125 | 160 | 160 |
| | At DC-20A \| DC-20B at 1000 V | A | 16 | 32 | 63 | 80 | 80 | 100 | 100 | 125 | 160 | 200 |
| | At DC-21A \| DC-21B at 110 V | A | 16 | 32 | 63 | 80 | 80 | 80 | 100 | 125 | 160 | 160 |
| | At DC-21A \| DC-21B at 220 V | A | 16 | 32 | 63 | 80 | 80 | 80 | 100 | 125 | 160 | 160 |
| | At DC-21A \| DC-21B at 440 V | A | 16 | 32 | 63 | 80 | 80 | 80 | 100 | 125 | 160 | 160 |
| | At DC-22A \| DC-22B at 220 V | A | 16 | 32 | 63 | 80 | 80 | 80 | 100 | 125 | 160 | 160 |
| | At DC-22A \| DC-22B at 440 V | A | 16 | 32 | 63 | 80 | 80 | 80 | 100 | 125 | 160 | 160 |
| | At DC-23A \| DC-23B at 220 V | A | 16 | 32 | 63 | 80 | 80 | 80 | 100 | 125 | 160 | 160 |
| | At DC-23A \| DC-23B at 440 V | A | 16 | 32 | 63 | 80 | 80 | 80 | 100 | 125 | 160 | 160 |
| Motor switching capacity | At AC-23A \| AC-23B at 400 V | kW | 7.5 | 15 | 30 | 45 | 45 | 45 | 55 | 55 | 90 | 90 |
| | At AC-23A \| AC-23B at 690 V | kW | 11 | 30 | 55 | 75 | 75 | 75 | 90 | 110 | 110 | 110 |
| | At AC-3 \| at 400 V | kW | – | – | – | – | – | – | – | – | – | – |
| | At AC-3 \| at 690 V | kW | – | – | – | – | – | – | – | – | – | – |
| Rated short-time withstand current $I_{cw}$ | At 690 V AC (t = 1 s) | kA | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 4 |
| | At 1000 V AC (t = 1 s) | kA | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 4 |
| Rated conditional short-circuit current with upstream fuse | At 400/415 V AC | kA | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| | At 690 V AC | kA | 100 | 100 | 100 | 100 | 80 | 100 | 80 | 80 | 80 | 80 |
| **Degree of protection** | | | | | | | | | | | | |
| Maximum achievable IP degree of protection (with a rotary operating mechanism) | | | | | | | IP65 | | | | | |
| **General technical specifications acc. to UL** | | | | | | | | | | | | |
| **General technical specifications** | | | | | | | | | | | | |
| Certification according to UL standard | | | | | | | – | | | | | |
| $I_n$ acc. to UL 508/UL 60947-4-1 \| UL 489 | | A | | | | | – | | | | | |
| $U_e$ acc. to UL 508/UL 60947-4-1 \| UL 489 | | V AC | | | | | – | | | | | |
| **Operating and short-circuit behavior** | | | | | | | | | | | | |
| Operational power, 3-phase | At 480 V | hp | | | | | – | | | | | |
| | At 600 V | hp | | | | | – | | | | | |
| Short circuit current rating (SCCR) | At 480 V \| at 600 V | kA | | | | | – | | | | | |
| Fuse type | | | | | | | – | | | | | |
| **Further information** | | | | | | | | | | | | |
| | | | | | | | See page 8/60 | | | | | |

[1] Applies to 415 V AC

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## 3KD



| 3KD 36..–.P | 3KD 38..–N. | 3KD 38..–P. | 3KD 40 | 3KD 42 | 3KD 44..–P. | 3KD 44..–Q. | 3KD 46 | 3KD 48 | 3KD 50..–Q. | 3KD 50..–R. | 3KD 52 | 3KD 54 | 3KD 56 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 200 | 250 | 250 | 315 | 400 | 500 | 500 | 630 | 800 | 1000 | 1000 | 1250 | 1600 | 2000 |
| 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 |
| 440 | 440 | 440 | 440 | 440 | 440 | 440 | 440 | 440 | 440 | 440 | 440 | 440 | 440 |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | | | | | | | | | | | | | |
| 200 | 250 | 250 | 315 | 400 | 500 | 500 | 630 | 800 | 1000 | 1000 | 1250 | 1600 | 2000 |
| 200 | 250 | 250 | 315 | 400 | 500 | 500 | 630 | 800 | 1000 | 1000 | 1250 | 1600 | 2000 |
| 200 | 200 | 250 | 315 | 400 | 400 | 500 | 630 | 800 | 1000 | 1000 | 1250 | 1600 | 2000 |
| 200 | 250 | 250 | 315 | 400 | 500 | 500 | 630 | 800 | 1000 | 1000 | 1250 | 1600 | 2000 |
| 200 | 200 | 250 | 315 | 400 | 400 | 500 | 630 | 800 | 1000 | 1000 | 1250 | 1600 | 2000 |
| 200 | 200 | 250 | 315 | 400 | 400 | 500 | 630 | 800 | 800 | 1000 | 1250 | 1600 | 1600 |
| 200 | 160 | 250 | 315 | 400 | 400 | 500 | 630 | 800 | 1000 | 1000 | 1250 | 1600 | 2000 |
| 200 | 160 | 250 | 315 | 400 | 400 | 500 | 630 | 800 | 1000 | 1000 | 1250 | 1600 | 2000 |
| 200 | 250 | 250 | 315 | 400 | 500 | 500 | 630 | 800 | 1000 | 1000 | 1250 | 1600 | 2000 |
| 200 | 160 | 250 | 315 | 400 | 400 | 500 | 630 | 800 | 800 | 1000 | 1250 | 1600 | 1600 |
| 200 | 160 | 250 | 315 | 400 | 400 | 500 | 630 | 800 | 800 | 1000 | 1250 | 1600 | 1600 |
| 200 | 160 | 250 | 315 | 400 | 400 | 500 | 630 | 800 | 800 | 1000 | 1250 | 1600 | 1600 |
| 200 | 160 | 250 | 315 | 400 | 400 | 500 | 630 | 800 | 800 | – | – | – | – |
| 200 | 160 | 250 | 315 | 400 | 400 | 500 | 630 | 800 | 800 | – | – | – | – |
| 200 | 160 | 250 | 315 | 400 | 400 | 500 | 630 | 800 | 800 | – | – | – | – |
| 200 | 160 | 250 | 315 | 400 | 400 | 500 | 630 | 800 | 800 | – | – | – | – |
| 110 | 90 | 132 | 160 | 200 | 200 | 250 | 355 | 400 | 560 | 560 | 710 | 900 | 1000 |
| 185 | 110 | 250 | 315 | 315 | 315 | 500 | 630 | 800 | 1000 | 1000 | 1000 | 1000 | 1000 |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 13 | 4 | 13 | 13 | 13 | 13 | 30 | 30 | 30 | 30 | 55 | 55 | 55 | 55 |
| 13 | 4 | 13 | 13 | 13 | 13 | 30 | 30 | 30 | 30 | 55 | 55 | 55 | 55 |
| 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 80 | 80 | 80 |
| 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 100 | 100 | 65 |
| | | | | | | | | | | | | | |
| IP65 | | | | | | | | | | | | | |
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# Fuseless switch disconnectors

## Quick selection guide for DC applications



3KD



| Type | | | 3KD 16 | 3KD 22 | 3KD 26 | 3KD 28 | 3KD 30 | 3KD 32 | 3KD 34 | 3KD 36 | 3KD 38 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **General technical specifications acc. to IEC 60947-3** | | | | | | | | | | | |
| **General technical specifications** | | | | | | | | | | | |
| Rated uninterrupted current $I_u$ | | A | 16 | 32 | 63 | 80 | 100 | 125 | 160 | 200 | 250 |
| Rated operational voltage $U_e$ | At DC - at degree of pollution 2 | V | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 |
| | At DC - at degree of pollution 3 | V | 1000 | 1000 | 1000 | 1000 [1] | 1000 [1] | 1000 [1] | 1000 [1] | 1200 | 1200 |
| **Operating and short-circuit behavior** | | | | | | | | | | | |
| Rated operational current $I_e$ | At DC-21A at 1200 V | A | 16 | 32 | 63 | 80 | 100 | 125 | 160 | – | – |
| | At DC-21B at 1200 V | A | 16 | 32 | 63 | 80 | 100 | 125 | 160 | 200 | 250 |
| Rated short-time withstand current $I_{cw}$ | At 1200 V DC (t = 1 s) | kA | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 10 | 10 |
| **Degree of protection** | | | | | | | | | | | |
| Maximum achievable IP degree of protection (with a rotary operating mechanism) | | | IP20 | | | | | | | | |
| **General technical specifications acc. to UL** | | | | | | | | | | | |
| **General technical specifications** | | | | | | | | | | | |
| Certification according to UL standard | | | – | | | | | | | | |
| $I_n$ acc. to UL 508/UL 60947-4-1 \| UL 489 | | A | – | | | | | | | | |
| $U_e$ acc. to UL 508/UL 60947-4-1 \| UL 489 | | V AC | – | | | | | | | | |
| **Operating and short-circuit behavior** | | | | | | | | | | | |
| Operational power, 3-phase | At 480 V | hp | – | | | | | | | | |
| | At 600 V | hp | – | | | | | | | | |
| Short circuit current rating (SCCR) | At 480 V \| at 600 V | kA | – | | | | | | | | |
| Fuse type | | | – | | | | | | | | |
| **Further information** | | | | | | | | | | | |
| | | | See page 8/60 | | | | | | | | |

[1] Valid for version with box terminal, version with flat terminal max. 1200 V

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## 3KD



| 3KD 40 | 3KD 42 | 3KD 44 | 3KD 46 | 3KD 48 | 3KD 50 | 3KD 52 | 3KD 54 |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| 315 | 400 | 500 | 630 | 800 | 1000 | 1250 | 1600 |
| 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 |
| 1200 | 1200 | 1000 | 1000 | 1000 | 1200 | 1200 | 1200 |
| | | | | | | | |
| – | – | – | – | – | – | – | – |
| 315 | 400 | 500 | 630 | 800 | 800 | 1250 | 1600 |
| 10 | 10 | 20 | 20 | 20 | 20 | 20 | 20 |
| | | | | | | | |
| IP20 | | | | | | | |
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# 3LD switch disconnectors

## System overview of 3LD3 main control and EMERGENCY-STOP switches

### Basic units for front mounting


3P rotary operating mechanisms


3P knob-operated mechanisms


3P+N rotary operating mechanisms


3P+N knob-operated mechanisms

### Basic units for floor mounting


3P rotary operating mechanisms


3P knob-operated mechanisms


3P+N rotary operating mechanisms


3P+N knob-operated mechanisms

### Basic units for installation in distribution boards and basic switches without knob-operated mechanism


3P knob-operated mechanisms (installation in distribution boards)


3P basic switches without knob-operated mechanism


3P+N knob-operated mechanisms (installation in distribution boards)


3P+N basic switches without knob-operated mechanism

### Additional poles and auxiliary switches


N switching contacts


N/PE terminals


Auxiliary switches

### Operating mechanisms



Rotary operating mechanisms for front or floor mounting (center hole)




Knob-operated mechanisms for front or floor mounting


Door-coupling rotary operating mechanisms


Door-coupling knob-operated mechanisms


Door-coupling knob-operated mechanisms, defeatable

### Further accessories



Terminal covers, 1 and 3-pole



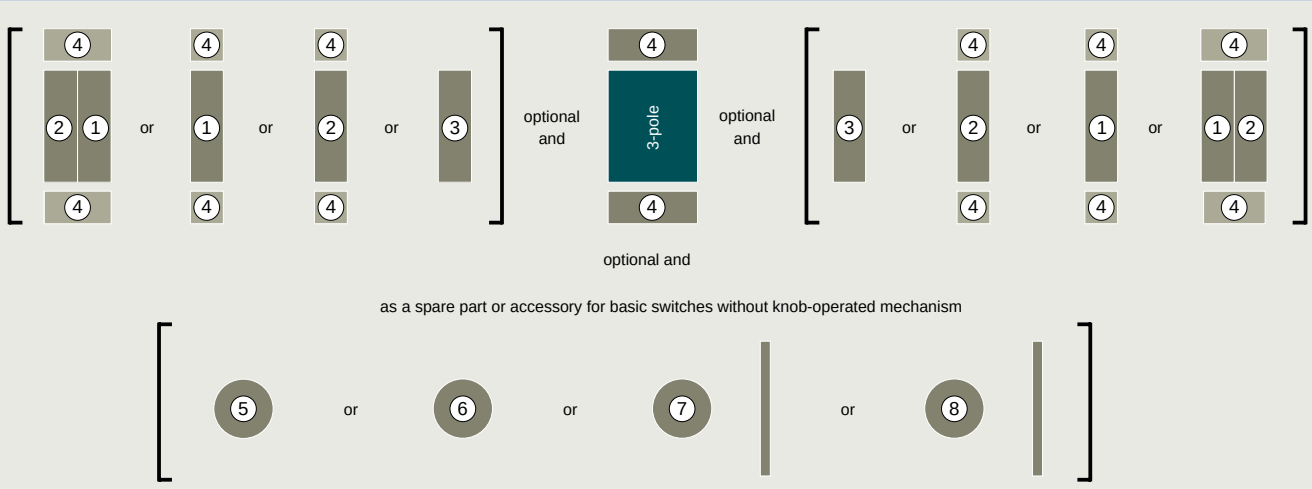

Inscription labels

**Note:**
You will find a detailed range of accessories with the basic units.

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# Mounting concept and accessories




**Legend**

1. N switching contact [1)]
2. N/PE terminal
3. Auxiliary switch
4. Terminal cover
5. Rotary operating mechanism, center-hole mounting
6. Knob-operated mechanism, center-hole mounting
7. Door-coupling rotary operating mechanism, center-hole mounting
8. Door-coupling knob-operated mechanism, center-hole mounting

[1)] N switching contact (1) must first be installed on the basic unit

I201_20482

8

## Mounting types

**You will find further information under:**
**sie.ag/2UlrAvy**

### Front mounting



The switches for front mounting are mounted on the inside of covers, side panels or, if applicable, control cabinet doors (depending on the applicable standard and switching function). The switches are mounted via the 22.5 mm diameter center hole.

### Floor mounting



The switches for floor mounting are snapped onto 35 mm DIN rails according to EN 60715 or screw-mounted on mounting panels. The actuators are connected to the lower section of the switch through a door coupling, which can be released in the 0 position, and a 300 mm long switch shaft. When the control cabinet door is open, the switch can be protected against inadvertent operation by removing the switch shaft from the lower section of the switch. The overall depth can be adapted to individual requirements by adjusting the switch shaft length.

### Distribution board mounting



The switches for distribution board mounting are suited for operation in distribution boards and for switching inside control cabinets or distributors. They have cap and mounting dimensions acc. to DIN 43880 and can be fitted under the same cover together with miniature circuit breakers. The selector switches can be locked in their OFF position with no more than one padlock with a shackle thickness of 4 to 6 mm.

### Basic switches without knob-operated mechanism



For the basic switch variant without knob-operated mechanism, the appropriate door-coupling rotary operating mechanism can be ordered separately.

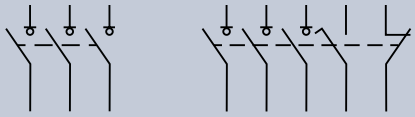
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# 3LD switch disconnectors

## 3LD3 main control and EMERGENCY-STOP switches, front mounting, 10 $kA_{rms}$





| Number of poles | Operating mechanisms, black | |
|---|---|---|
| | 3P | |
| **Uninterrupted current $I_u$ At AC-21A, 380 ... 440 V** | **Operational power *P* At AC-23A, 380 ... 440 V** | **Operational power *P* At AC-3, 380 ... 440 V** | **Without auxiliary switch** | **1 NO + 1 NC** |
| **Rotary operating mechanisms** | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD3054-0TK51 | 3LD3054-1TK51 |
| 25 A | 9 kW | 7.5 kW | 3LD3154-0TK51 | 3LD3154-1TK51 |
| 32 A | 11.5 kW | 9.5 kW | 3LD3254-0TK51 | 3LD3254-1TK51 |
| 40 A | 18.5 kW | 11.5 kW | 3LD3354-0TK51 | 3LD3354-1TK51 |
| 63 A | 22 kW | 18.5 kW | 3LD3454-0TK51 | 3LD3454-1TK51 |
| **Knob-operated mechanisms** | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD3050-0TK11 | 3LD3050-1TK11 |
| 25 A | 9 kW | 7.5 kW | 3LD3150-0TK11 | 3LD3150-1TK11 |
| 32 A | 11.5 kW | 9.5 kW | 3LD3250-0TK11 | 3LD3250-1TK11 |
| 40 A | 18.5 kW | 11.5 kW | 3LD3350-0TK11 | 3LD3350-1TK11 |
| 63 A | 22 kW | 18.5 kW | 3LD3450-0TK11 | 3LD3450-1TK11 |

**Scope of supply:**
- Including terminal covers for the infeed side

## Accessories

| | | | | 3LD30 (16 A) | 3LD31 (25 A) | 3LD32 (32 A) | 3LD33 (40 A) | 3LD34 (63 A) |
|---|---|---|---|---|---|---|---|---|
| **Additional poles** | | | | | | | | |
|  | **Type** | **Contacts** | **Article No.** | | | | | |
| | N switching contact (4th contact element) | Leading switch-on, lagging switch-off | 3LD9340-0B | ■ | ■ | ■ | ■ | ■ |
| | N terminal | Through-type | 3LD9340-2B | ■ | ■ | ■ | ■ | ■ |
| | PE terminal | Through-type | 3LD9340-3B | ■ | ■ | ■ | ■ | ■ |
| **Auxiliary switches** | | | | | | | | |
|  | • NO: lagging during switch-on, leading during switch-off of 3LD switch<br>• NC: leading during switch-on, lagging during switch-off of 3LD switch | | | | | | | |
| | **Contacts** | | **Article No.** | | | | | |
| | 1 NO + 1 NC | | 3LD9340-6B | ■ | ■ | ■ | ■ | ■ |
| **Rotary operating mechanisms** | | | | | | | | |
|  | **Version** | **Color** | **Article No.** | | | | | |
| | Lockable in 0 position with max. 3 padlocks | Black | 3LD9344-4C | ■ | ■ | ■ | ■ | ■ |
| | | Red/yellow | 3LD9344-5C | ■ | ■ | ■ | ■ | ■ |
| **Knob-operated mechanisms** | | | | | | | | |
|  | **Version** | **Color** | **Article No.** | | | | | |
| | Lockable in 0 position with max. 2 padlocks | Black | 3LD9343-6C | ■ | ■ | ■ | ■ | ■ |
| | | Red/yellow | 3LD9343-7C | ■ | ■ | ■ | ■ | ■ |

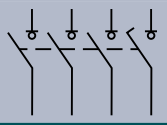
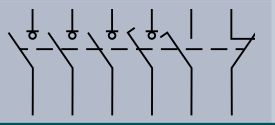
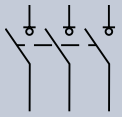
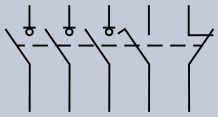
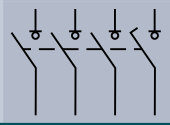
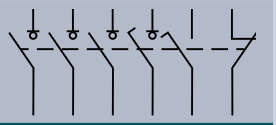
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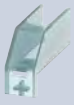






| Operating mechanisms, red/yellow | | | | | |
|---|---|---|---|---|---|
| 3P+N | | 3P | | 3P+N | |
|  |  |  |  |  |  |
| **Without auxiliary switch** | **1 NO + 1 NC** | **Without auxiliary switch** | **1 NO + 1 NC** | **Without auxiliary switch** | **1 NO + 1 NC** |
| 3LD3054-0TL51 | 3LD3054-1TL51 | 3LD3054-0TK53 | 3LD3054-1TK53 | 3LD3054-0TL53 | 3LD3054-1TL53 |
| 3LD3154-0TL51 | 3LD3154-1TL51 | 3LD3154-0TK53 | 3LD3154-1TK53 | 3LD3154-0TL53 | 3LD3154-1TL53 |
| 3LD3254-0TL51 | 3LD3254-1TL51 | 3LD3254-0TK53 | 3LD3254-1TK53 | 3LD3254-0TL53 | 3LD3254-1TL53 |
| 3LD3354-0TL51 | 3LD3354-1TL51 | 3LD3354-0TK53 | 3LD3354-1TK53 | 3LD3354-0TL53 | 3LD3354-1TL53 |
| 3LD3454-0TL51 | 3LD3454-1TL51 | 3LD3454-0TK53 | 3LD3454-1TK53 | 3LD3454-0TL53 | 3LD3454-1TL53 |
| 3LD3050-0TL11 | 3LD3050-1TL11 | 3LD3050-0TK13 | 3LD3050-1TK13 | 3LD3050-0TL13 | 3LD3050-1TL13 |
| 3LD3150-0TL11 | 3LD3150-1TL11 | 3LD3150-0TK13 | 3LD3150-1TK13 | 3LD3150-0TL13 | 3LD3150-1TL13 |
| 3LD3250-0TL11 | 3LD3250-1TL11 | 3LD3250-0TK13 | 3LD3250-1TK13 | 3LD3250-0TL13 | 3LD3250-1TL13 |
| 3LD3350-0TL11 | 3LD3350-1TL11 | 3LD3350-0TK13 | 3LD3350-1TK13 | 3LD3350-0TL13 | 3LD3350-1TL13 |
| 3LD3450-0TL11 | 3LD3450-1TL11 | 3LD3450-0TK13 | 3LD3450-1TK13 | 3LD3450-0TL13 | 3LD3450-1TL13 |

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| | | | 3LD30 (16 A) | 3LD31 (25 A) | 3LD32 (32 A) | 3LD33 (40 A) | 3LD34 (63 A) |
|---|---|---|---|---|---|---|---|
| **Terminal covers** | | | | | | | |
| | **Version** | **Article No.** | | | | | |
|  | For N switching contacts, N terminals or PE terminals | 3LD9341-2A | ■ | ■ | ■ | ■ | ■ |
|  | For 3-pole 3LD3 switch disconnectors | 3LD9341-0A | ■ | ■ | ■ | ■ | ■ |
| **Inscription labels** | | | | | | | |
|  | **Inscription** | **Article No.** | | | | | |
| | German/English (Hauptschalter/Main Switch) | 3LD9346-1A | ■ | ■ | ■ | ■ | ■ |
| | French/Spanish (Interrupteur Général/Interruptor Principal) | 3LD9346-2A | ■ | ■ | ■ | ■ | ■ |
| | Without inscription | 3LD9346-3A | ■ | ■ | ■ | ■ | ■ |

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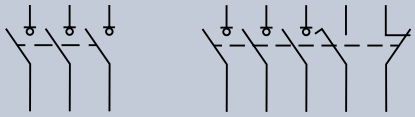
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# 3LD switch disconnectors

## 3LD3 main control and EMERGENCY-STOP switches, floor mounting, 10 $kA_{rms}$





| | Operating mechanisms, black | |
|---|---|---|
| Number of poles | 3P | |
| Uninterrupted current $I_u$ At AC-21A, 380 ... 440 V | Operational power $P$ At AC-23A, 380 ... 440 V | Operational power $P$ At AC-3, 380 ... 440 V | Without auxiliary switch | 1 NO + 1 NC |
| **Door-coupling rotary operating mechanisms, center-hole mounting Ø 22.5 mm** | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD3048-0TK51 | 3LD3048-1TK51 |
| 25 A | 9 kW | 7.5 kW | 3LD3148-0TK51 | 3LD3148-1TK51 |
| 32 A | 11.5 kW | 9.5 kW | 3LD3248-0TK51 | 3LD3248-1TK51 |
| 40 A | 18.5 kW | 11.5 kW | 3LD3348-0TK51 | 3LD3348-1TK51 |
| 63 A | 22 kW | 18.5 kW | 3LD3448-0TK51 | 3LD3448-1TK51 |
| **Door-coupling knob-operated mechanisms, center-hole mounting Ø 22.5 mm** | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD3040-0TK11 | 3LD3040-1TK11 |
| 25 A | 9 kW | 7.5 kW | 3LD3140-0TK11 | 3LD3140-1TK11 |
| 32 A | 11.5 kW | 9.5 kW | 3LD3240-0TK11 | 3LD3240-1TK11 |
| 40 A | 18.5 kW | 11.5 kW | 3LD3340-0TK11 | 3LD3340-1TK11 |
| 63 A | 22 kW | 18.5 kW | 3LD3440-0TK11 | 3LD3440-1TK11 |

**Scope of supply:**
- Including terminal covers for the infeed side

**Mounting:**
- Using screws- or snap-on mounting on 35 mm mounting rails

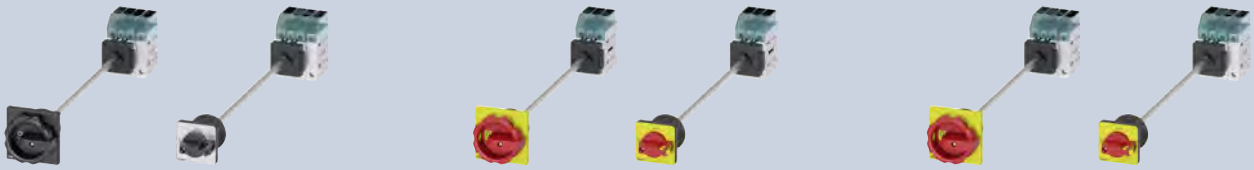
## Accessories

| | | | | 3LD30 (16 A) | 3LD31 (25 A) | 3LD32 (32 A) | 3LD33 (40 A) | 3LD34 (63 A) |
|---|---|---|---|---|---|---|---|---|
| **Additional poles** | | | | | | | | |
|  | Type | Contacts | Article No. | | | | | |
| | N switching contact (4th contact element) | Leading switch-on, lagging switch-off | 3LD9340-0C | ■ | ■ | ■ | ■ | ■ |
| | N terminal | Through-type | 3LD9340-2C | ■ | ■ | ■ | ■ | ■ |
| | PE terminal | Through-type | 3LD9340-3C | ■ | ■ | ■ | ■ | ■ |
| **Auxiliary switches** | | | | | | | | |
|  | • NO: lagging during switch-on, leading during switch-off of 3LD switch<br>• NC: leading during switch-on, lagging during switch-off of 3LD switch | | | | | | | |
| | Contacts | | Article No. | | | | | |
| | 1 NO + 1 NC | | 3LD9340-6C | ■ | ■ | ■ | ■ | ■ |
| **Rotary operating mechanisms** | | | | | | | | |
|  | Version | Color | Article No. | | | | | |
| | • Lockable in 0 position with max. 3 padlocks<br>• Incl. funnel | Black | 3LD9344-2C | ■ | ■ | ■ | ■ | ■ |
| | | Red/yellow | 3LD9344-3C | ■ | ■ | ■ | ■ | ■ |
| **Knob-operated mechanisms** | | | | | | | | |
|  | Version | Color | Article No. | | | | | |
| | • Lockable in 0 position with max. 2 padlocks<br>• Incl. funnel | Black | 3LD9343-4C | ■ | ■ | ■ | ■ | ■ |
| | | Red/yellow | 3LD9343-5C | ■ | ■ | ■ | ■ | ■ |
| **Switch shafts** | | | | | | | | |
|  | Cross-section | Length | Article No. | | | | | |
| | 6 × 6 mm | 600 mm | 3LD9345-1C | ■ | ■ | ■ | ■ | ■ |

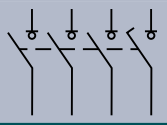
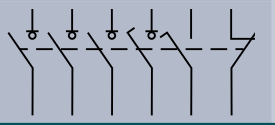
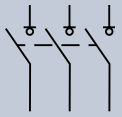
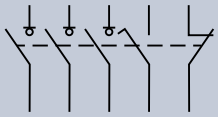
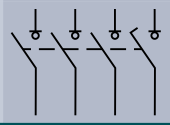
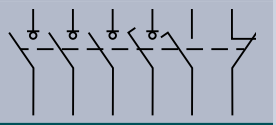
Quick selection guide, page 8/6

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## Operating mechanisms, red/yellow

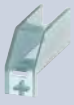
| 3P+N | | 3P | | 3P+N | |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
| **Without auxiliary switch** | **1 NO + 1 NC** | **Without auxiliary switch** | **1 NO + 1 NC** | **Without auxiliary switch** | **1 NO + 1 NC** |
| 3LD3048-0TL51 | 3LD3048-1TL51 | 3LD3048-0TK53 | 3LD3048-1TK53 | 3LD3048-0TL53 | 3LD3048-1TL53 |
| 3LD3148-0TL51 | 3LD3148-1TL51 | 3LD3148-0TK53 | 3LD3148-1TK53 | 3LD3148-0TL53 | 3LD3148-1TL53 |
| 3LD3248-0TL51 | 3LD3248-1TL51 | 3LD3248-0TK53 | 3LD3248-1TK53 | 3LD3248-0TL53 | 3LD3248-1TL53 |
| 3LD3348-0TL51 | 3LD3348-1TL51 | 3LD3348-0TK53 | 3LD3348-1TK53 | 3LD3348-0TL53 | 3LD3348-1TL53 |
| 3LD3448-0TL51 | 3LD3448-1TL51 | 3LD3448-0TK53 | 3LD3448-1TK53 | 3LD3448-0TL53 | 3LD3448-1TL53 |
| 3LD3040-0TL11 | 3LD3040-1TL11 | 3LD3040-0TK13 | 3LD3040-1TK13 | 3LD3040-0TL13 | 3LD3040-1TL13 |
| 3LD3140-0TL11 | 3LD3140-1TL11 | 3LD3140-0TK13 | 3LD3140-1TK13 | 3LD3140-0TL13 | 3LD3140-1TL13 |
| 3LD3240-0TL11 | 3LD3240-1TL11 | 3LD3240-0TK13 | 3LD3240-1TK13 | 3LD3240-0TL13 | 3LD3240-1TL13 |
| 3LD3340-0TL11 | 3LD3340-1TL11 | 3LD3340-0TK13 | 3LD3340-1TK13 | 3LD3340-0TL13 | 3LD3340-1TL13 |
| 3LD3440-0TL11 | 3LD3440-1TL11 | 3LD3440-0TK13 | 3LD3440-1TK13 | 3LD3440-0TL13 | 3LD3440-1TL13 |

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## Door-coupling rotary operating mechanisms

| | Type | Color | Article No. | 3LD30 (16 A) | 3LD31 (25 A) | 3LD32 (32 A) | 3LD33 (40 A) | 3LD34 (63 A) |
|---|---|---|---|---|---|---|---|---|
|  | Rotary operating mechanisms 66 × 66 mm | Black | 3LD9344-2CA | ■ | ■ | ■ | ■ | ■ |
| | | Red/yellow | 3LD9344-3CA | ■ | ■ | ■ | ■ | ■ |
|  | Knob-operated mechanisms 48 × 48 mm | Black | 3LD9343-4CA | ■ | ■ | ■ | ■ | ■ |
| | | Red/yellow | 3LD9343-5CA | ■ | ■ | ■ | ■ | ■ |

## Terminal covers

| | Version | Article No. | 3LD30 (16 A) | 3LD31 (25 A) | 3LD32 (32 A) | 3LD33 (40 A) | 3LD34 (63 A) |
|---|---|---|---|---|---|---|---|
|  | For N switching contacts, N terminals or PE terminals | 3LD9341-2A | ■ | ■ | ■ | ■ | ■ |
|  | For 3LD3 3-pole switch disconnectors | 3LD9341-0A | ■ | ■ | ■ | ■ | ■ |

## Inscription labels



- Not for installation in distribution boards

| Inscription | Article No. | 3LD30 (16 A) | 3LD31 (25 A) | 3LD32 (32 A) | 3LD33 (40 A) | 3LD34 (63 A) |
|---|---|---|---|---|---|---|
| German/English (Hauptschalter/Main Switch) | 3LD9346-1A | ■ | ■ | ■ | ■ | ■ |
| French/Spanish (Interrupteur Général/Interruptor Principal) | 3LD9346-2A | ■ | ■ | ■ | ■ | ■ |
| Without inscription | 3LD9346-3A | ■ | ■ | ■ | ■ | ■ |

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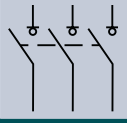
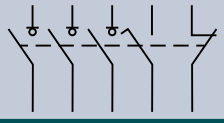
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# 3LD switch disconnectors

## 3LD3 main control and EMERGENCY-STOP switches, installation in distribution boards and basic switches without knob-operated mechanism, 10 $kA_{rms}$



| | Operating mechanisms, black | |
|---|---|---|
| Number of poles | 3P | |
| |  |  |
| Uninterrupted current $I_u$ At AC-21A, 380 ... 440 V | Operational power $P$ At AC-23A, 380 ... 440 V | Operational power $P$ At AC-3, 380 ... 440 V | Without auxiliary switch | 1 NO + 1 NC |
| **Switches for installation in distribution boards with masking plate and selector knob, DIN-rail mounting** | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD3030-0TK11 | 3LD3030-1TK11 |
| 25 A | 9 kW | 7.5 kW | 3LD3130-0TK11 | 3LD3130-1TK11 |
| 32 A | 11.5 kW | 9.5 kW | 3LD3230-0TK11 | 3LD3230-1TK11 |
| 40 A | 18.5 kW | 11.5 kW | 3LD3330-0TK11 | 3LD3330-1TK11 |
| 63 A | 22 kW | 18.5 kW | 3LD3430-0TK11 | 3LD3430-1TK11 |
| **Basic switches without knob-operated mechanism** | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD3010-0TK05 | 3LD3010-1TK05 |
| 25 A | 9 kW | 7.5 kW | 3LD3110-0TK05 | 3LD3110-1TK05 |
| 32 A | 11.5 kW | 9.5 kW | 3LD3210-0TK05 | 3LD3210-1TK05 |
| 40 A | 18.5 kW | 11.5 kW | 3LD3310-0TK05 | 3LD3310-1TK05 |
| 63 A | 22 kW | 18.5 kW | 3LD3410-0TK05 | 3LD3410-1TK05 |

**Scope of supply:**
- Basic switches without direct operating mechanism, incl. terminal covers for the infeed side

**Mounting:**
- Using screws or snap-on mounting on 35 mm mounting rails

**Accessories,** see page 8/20





Quick selection guide, page 8/6

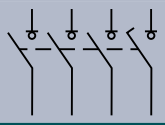
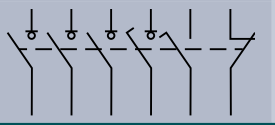
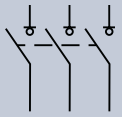
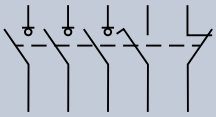
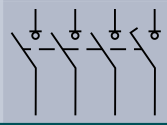
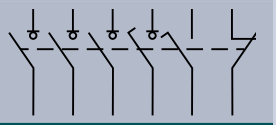
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| Operating mechanisms, red/yellow | | | | | |
|---|---|---|---|---|---|
| 3P+N | | 3P | | 3P+N | |
|  |  |  |  |  |  |
| **Without auxiliary switch** | **1 NO + 1 NC** | **Without auxiliary switch** | **1 NO + 1 NC** | **Without auxiliary switch** | **1 NO + 1 NC** |
| 3LD3030-0TL11 | 3LD3030-1TL11 | 3LD3030-0TK13 | 3LD3030-1TK13 | 3LD3030-0TL13 | 3LD3030-1TL13 |
| 3LD3130-0TL11 | 3LD3130-1TL11 | 3LD3130-0TK13 | 3LD3130-1TK13 | 3LD3130-0TL13 | 3LD3130-1TL13 |
| 3LD3230-0TL11 | 3LD3230-1TL11 | 3LD3230-0TK13 | 3LD3230-1TK13 | 3LD3230-0TL13 | 3LD3230-1TL13 |
| 3LD3330-0TL11 | 3LD3330-1TL11 | 3LD3330-0TK13 | 3LD3330-1TK13 | 3LD3330-0TL13 | 3LD3330-1TL13 |
| 3LD3430-0TL11 | 3LD3430-1TL11 | 3LD3430-0TK13 | 3LD3430-1TK13 | 3LD3430-0TL13 | 3LD3430-1TL13 |
| | | | | | |
| 3LD3010-0TL05 | 3LD3010-1TL05 | – | – | – | – |
| 3LD3110-0TL05 | 3LD3110-1TL05 | – | – | – | – |
| 3LD3210-0TL05 | 3LD3210-1TL05 | – | – | – | – |
| 3LD3310-0TL05 | 3LD3310-1TL05 | – | – | – | – |
| 3LD3410-0TL05 | 3LD3410-1TL05 | – | – | – | – |



Quick selection guide, page 8/6

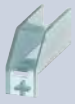
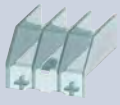
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# 3LD switch disconnectors

## 3LD3 main control and EMERGENCY-STOP switches, installation in distribution boards and basic switches without knob-operated mechanism, 10 $kA_{rms}$

### Accessories for switches for installation in distribution boards and basic switches without knob-operated mechanism

| | | | | 3LD30 (16 A) | 3LD31 (25 A) | 3LD32 (32 A) | 3LD33 (40 A) | 3LD34 (63 A) |
|---|---|---|---|---|---|---|---|---|
| **Additional poles** | | | | | | | | |
|  | **Type** | **Contacts** | **Article No.** | | | | | |
| | N switching contact (4th contact element) | Leading switch-on, lagging switch-off | 3LD9340-0C | ■ | ■ | ■ | ■ | ■ |
| | N terminal | Through-type | 3LD9340-2C | ■ | ■ | ■ | ■ | ■ |
| | PE terminal | Through-type | 3LD9340-3C | ■ | ■ | ■ | ■ | ■ |
| **Auxiliary switches** | | | | | | | | |
|  | • NO: lagging during switch-on, leading during switch-off of 3LD switch<br>• NC: leading during switch-on, lagging during switch-off of 3LD switch | | | | | | | |
| | **Contacts** | | **Article No.** | | | | | |
| | 1 NO + 1 NC | | 3LD9340-6C | ■ | ■ | ■ | ■ | ■ |
| **Terminal covers** | | | | | | | | |
|  | **Version** | | **Article No.** | | | | | |
| | For N switching contacts, N terminals or PE terminals | | 3LD9341-2A | ■ | ■ | ■ | ■ | ■ |
|  | For 3LD3 3-pole switch disconnectors | | 3LD9341-0A | ■ | ■ | ■ | ■ | ■ |

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## Accessories for basic switches without knob-operated mechanism

### Door-coupling rotary operating mechanisms



| Type | Color | Article No. | 3LD30 (16 A) | 3LD31 (25 A) | 3LD32 (32 A) | 3LD33 (40 A) | 3LD34 (63 A) |
|---|---|---|---|---|---|---|---|
| Rotary operating mechanisms 66 × 66 mm | Black | 3LD9344-2CA | ■ | ■ | ■ | ■ | ■ |
| | Red/yellow | 3LD9344-3CA | ■ | ■ | ■ | ■ | ■ |



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Knob-operated mechanisms 48 × 48 mm | Black | 3LD9343-4CA | ■ | ■ | ■ | ■ | ■ |
| | Red/yellow | 3LD9343-5CA | ■ | ■ | ■ | ■ | ■ |



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Knob-operated mechanisms, defeatable, 66 × 66 mm | Black | 3LD9343-2CA | ■ | ■ | ■ | ■ | ■ |
| | Red/yellow | 3LD9343-3CA | ■ | ■ | ■ | ■ | ■ |

### Rotary operating mechanisms



| Version | Color | Article No. | 3LD30 (16 A) | 3LD31 (25 A) | 3LD32 (32 A) | 3LD33 (40 A) | 3LD34 (63 A) |
|---|---|---|---|---|---|---|---|
| • Lockable in 0 position with max. 3 padlocks<br>• Incl. funnel | Black | 3LD9344-2C | ■ | ■ | ■ | ■ | ■ |
| | Red/yellow | 3LD9344-3C | ■ | ■ | ■ | ■ | ■ |

### Knob-operated mechanisms



| Type | Version | Color | Article No. | 3LD30 (16 A) | 3LD31 (25 A) | 3LD32 (32 A) | 3LD33 (40 A) | 3LD34 (63 A) |
|---|---|---|---|---|---|---|---|---|
| Knob-operated mechanisms | • Lockable in 0 position with max. 2 padlocks<br>• Incl. funnel | Black | 3LD9343-4C | ■ | ■ | ■ | ■ | ■ |
| | | Red/yellow | 3LD9343-5C | ■ | ■ | ■ | ■ | ■ |



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Knob-operated mechanisms, defeatable | • Lockable in 0 position with max. 3 padlocks<br>• Incl. funnel | Black | 3LD9343-2C | ■ | ■ | ■ | ■ | ■ |
| | | Red/yellow | 3LD9343-3C | ■ | ■ | ■ | ■ | ■ |

### Switch shafts



| Cross-section | Length | Article No. | 3LD30 (16 A) | 3LD31 (25 A) | 3LD32 (32 A) | 3LD33 (40 A) | 3LD34 (63 A) |
|---|---|---|---|---|---|---|---|
| 6 × 6 mm | 600 mm | 3LD9345-1C | ■ | ■ | ■ | ■ | ■ |

### Inscription labels



• Not for installation in distribution boards

| Inscription | Article No. | 3LD30 (16 A) | 3LD31 (25 A) | 3LD32 (32 A) | 3LD33 (40 A) | 3LD34 (63 A) |
|---|---|---|---|---|---|---|
| German/English (Hauptschalter/Main Switch) | 3LD9346-1A | ■ | ■ | ■ | ■ | ■ |
| French/Spanish (Interrupteur Général/Interruptor Principal) | 3LD9346-2A | ■ | ■ | ■ | ■ | ■ |
| Without inscription | 3LD9346-3A | ■ | ■ | ■ | ■ | ■ |

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Quick selection guide, page 8/6

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# 3LD switch disconnectors

## System overview of 3LD2 switch disconnectors

### Basic units for front mounting


3P rotary operating mechanisms


3P knob-operated mechanisms (3LD23/3LD24)


3P knob-operated mechanisms


3P+N rotary operating mechanisms


3P+N knob-operated mechanisms (3LD23/3LD24)


3P+N knob-operated mechanisms


6P rotary operating mechanisms

### Basic units for floor mounting


3P rotary operating mechanisms


3P knob-operated mechanisms (3LD23/3LD24)


3P knob-operated mechanisms, defeatable


3P+N rotary operating mechanisms


3P+N knob-operated mechanisms (3LD23/3LD24)


3P+N knob-operated mechanisms, defeatable


6P rotary operating mechanisms



### Basic units for installation in distribution boards/enclosures, DC


3P knob-operated mechanisms


3P+N knob-operated mechanisms


8P DC isolators

### Additional poles and auxiliary switches


N switching contacts


N/PE terminals (through-type)


Auxiliary switches (standard version)


Auxiliary switch for mounting on the front

### Operating mechanisms


Rotary operating mechanisms for 4-hole and center-hole mounting




Knob-operated mechanisms (3LD23/3LD24)


Switch shafts


Coupling pieces without ON-lock


Assembly tools for center-hole mounting

### Further accessories


Terminal covers, 1-pole


Terminal covers, 3 and 4-pole



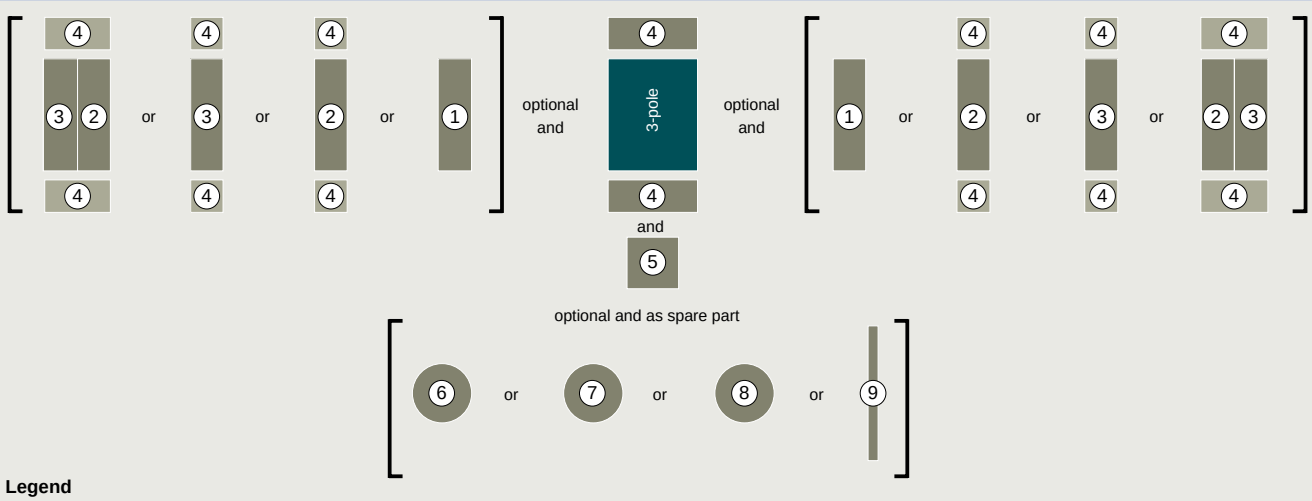
Inscription labels (with and without inscription)

**Note:**
You will find a detailed range of accessories with the basic units.

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# Mounting concept and accessories




**Legend**

1. Auxiliary switch
2. N switching contact [1]
3. N/PE terminal
4. Terminal cover
5. Auxiliary switch for mounting on the front [2]
6. Rotary operating mechanism, center-hole mounting
7. Rotary operating mechanism, four-hole mounting
8. Knob-operated mechanism, four-hole mounting
9. Switch shaft (300 or 600mm)

[1] N switching contact (2) must first be installed on the basic unit

[2] Can only be used with four-hole front mounting and floor mounting

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## Mounting types

**You will find further information under:**
**sie.ag/2UlrAvy**

### Front mounting



The switches for front mounting are mounted on the inside of covers, side panels or, if applicable, control cabinet doors (depending on the applicable standard and switching function). In addition to the 4-hole fastening of the handle, up to 63 A (3LD25) fastening with the 22.5 mm diameter center hole can also be chosen.

### Floor mounting



The switches for floor mounting up to 125 A (3LD28) are snapped onto 35 mm DIN rails according to EN 60715 or screw-mounted on mounting panels. The switches for 160 and 250 A (3LD23/3LD24) are exclusively screwed onto mounting panels. The actuators are connected to the lower section of the switch through a door coupling, which can be released in the 0 position, and a 300 mm long switch shaft. When the control cabinet door is open, the switch can be protected against inadvertent operation by removing the switch shaft from the lower section of the switch. The overall depth can be adapted to individual requirements by adjusting the switch shaft length.

### Distribution board mounting



The switches for distribution board mounting are suited for operation in distribution boards and for switching inside control cabinets or distributors. Up to 125 A (3LD28), they have cap and mounting dimensions according to DIN 43880 and can be fitted under the same cover together with miniature circuit breakers.

### DC isolators



The DC isolators in the enclosure are suitable for disconnecting loads of up to 800 V DC due to their 8-pole design. To provide additional safety, the isolators can be locked in the 0 position.

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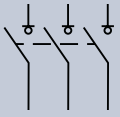
# 3LD switch disconnectors

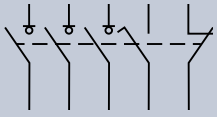
## 3LD2 main control switches, front mounting, 25 ... 50 $kA_{rms}$



**Operating mechanisms, black**

**Number of poles** 3P





| Version | Uninterrupted current $I_u$ At AC-21A, 380 ... 440 V | Operational power *P* At AC-23A, 380 ... 440 V | Operational power *P* At AC-3A, 380 ... 440 V | Without auxiliary switch | 1 NO + 1 NC (standard version) |
|---|---|---|---|---|---|
| **Rotary operating mechanism** | | | | | |
| Four-hole mounting | 16 A | 7.5 kW | 5.5 kW | 3LD2003-0TK51 | 3LD2003-1TP51 |
| | 25 A | 9.5 kW | 7.5 kW | 3LD2103-0TK51 | 3LD2103-1TP51 |
| | 32 A | 11.5 kW | 9.5 kW | 3LD2203-0TK51 | 3LD2203-1TP51 |
| | 63 A | 22 kW | 18.5 kW | 3LD2504-0TK51 | 3LD2504-1TP51 |
| | 100 A | 37 kW | 30 kW | 3LD2704-0TK51 | 3LD2704-1TP51 |
| | 125 A | 45 kW | 37 kW | 3LD2804-0TK51 | 3LD2804-1TP51 |
| Center-hole mounting Ø 22.5 mm | 16 A | 7.5 kW | 5.5 kW | 3LD2054-0TK51 | 3LD2054-1TP51 |
| | 25 A | 9.5 kW | 7.5 kW | 3LD2154-0TK51 | 3LD2154-1TP51 |
| | 32 A | 11.5 kW | 9.5 kW | 3LD2254-0TK51 | 3LD2254-0TK51 + 3LD9200-5B |
| | 63 A | 22 kW | 18.5 kW | 3LD2555-0TK51 | 3LD2555-0TK51 + 3LD9200-5B |
| **Knob-operated mechanism** | | | | | |
| Four-hole mounting | 16 A | 7.5 kW | 5.5 kW | 3LD2022-0TK11 | 3LD2022-0TK11 + 3LD9200-5B |
| | 25 A | 9.5 kW | 7.5 kW | 3LD2122-0TK11 | 3LD2122-0TK11 + 3LD9200-5B |
| | 32 A | 11.5 kW | 9.5 kW | 3LD2222-0TK11 | 3LD2222-0TK11 + 3LD9200-5B |
| | 160 A | 75 kW | 50 kW | 3LD2305-0TK11 | 3LD2305-0TK11 + 3LD9200-5B |
| | 250 A | 132 kW | 110 kW | 3LD2405-0TK11 | 3LD2405-0TK11 + 3LD9200-5B |
| Center-hole mounting Ø 22.5 mm | 16 A | 7.5 kW | 5.5 kW | 3LD2050-0TK11 | 3LD2050-0TK11 + 3LD9200-5B |
| | 25 A | 9.5 kW | 7.5 kW | 3LD2150-0TK11 | 3LD2150-0TK11 + 3LD9200-5B |
| | 32 A | 11.5 kW | 9.5 kW | 3LD2250-0TK11 | 3LD2250-0TK11 + 3LD9200-5B |

**Scope of supply:**
- Including terminal covers for the infeed side

**Accessories,** see page 8/28



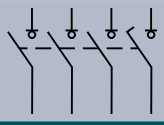
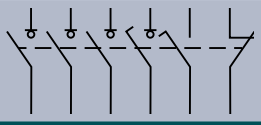
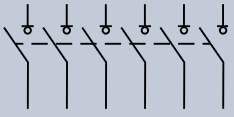
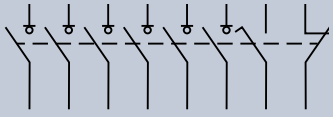


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| 3P+N | | 6P | |
|---|---|---|---|
|  |  |  |  |
| **Without auxiliary switch** | **1 NO + 1 NC (standard version)** | **Without auxiliary switch** | **1 NO + 1 NC (standard version)** |
| 3LD2003-1TL51 | 3LD2003-2EP51 | – | – |
| 3LD2103-1TL51 | 3LD2103-2EP51 | 3LD2103-3VK51 | 3LD2103-4VP51 |
| 3LD2203-1TL51 | 3LD2203-1TL51 + 3LD9200-5B | 3LD2203-3VK51 | 3LD2203-3VK51 + 3LD9200-5B |
| 3LD2504-1TL51 | 3LD2504-1TP51 + 3LD9250-0BA | 3LD2504-3VK51 | 3LD2504-3VK51 + 3LD9200-5B |
| 3LD2704-0TK51 + 3LD9280-0B | 3LD2704-0TK51 + 3LD9280-0B + 3LD9200-5B | – | – |
| 3LD2804-0TK51 + 3LD9280-0B | 3LD2804-0TK51 + 3LD9280-0B + 3LD9200-5B | – | – |
| 3LD2054-1TL51 | 3LD2054-2EP51 | – | – |
| 3LD2154-1TL51 | 3LD2154-2EP51 | – | – |
| 3LD2254-1TL51 | 3LD2254-1TL51 + 3LD9200-5B | – | – |
| 3LD2555-0TK51 + 3LD9250-0BA | 3LD2555-0TK51 + 3LD9250-0BA + 3LD9200-5B | – | – |
| 3LD2022-1TL11 | 3LD2022-1TL11 + 3LD9200-5B | – | – |
| 3LD2122-1TL11 | 3LD2122-1TL11 + 3LD9200-5B | 3LD2122-3VK11 | – |
| 3LD2222-0TK11 + 3LD9220-0B | 3LD2222-0TK11 + 3LD9220-0B + 3LD9200-5B | – | – |
| 3LD2305-1TL11 | 3LD2305-1TL11 + 3LD9200-5B | 3LD2305-3VK11 | 3LD2305-3VK11 + 3LD9200-5B |
| 3LD2405-1TL11 | 3LD2405-1TL11 + 3LD9200-5B | 3LD2405-3VK11 | 3LD2405-3VK11 + 3LD9200-5B |
| 3LD2050-1TL11 | 3LD2050-1TL11 + 3LD9200-5B | – | – |
| 3LD2150-0TK11 + 3LD9220-0B | 3LD2150-0TK11 + 3LD9220-0B + 3LD9200-5B | – | – |
| 3LD2250-0TK11 + 3LD9220-0B | 3LD2250-0TK11 + 3LD9220-0B + 3LD9200-5B | – | – |



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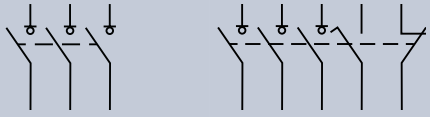
# 3LD switch disconnectors

## 3LD2 EMERGENCY-STOP switches, front mounting, 25 ... 50 $kA_{rms}$



**Operating mechanisms, red/yellow**

**Number of poles** 3P



| Version | Uninterrupted current $I_u$ At AC-21A, 380 ... 440 V | Operational power *P* At AC-23A, 380 ... 440 V | Operational power *P* At AC-3A, 380 ... 440 V | Without auxiliary switch | 1 NO + 1 NC (standard version) |
|---|---|---|---|---|---|
| **Rotary operating mechanism** | | | | | |
| Four-hole mounting | 16 A | 7.5 kW | 5.5 kW | 3LD2003-0TK53 | 3LD2003-1TP53 |
| | 25 A | 9.5 kW | 7.5 kW | 3LD2103-0TK53 | 3LD2103-1TP53 |
| | 32 A | 11.5 kW | 9.5 kW | 3LD2203-0TK53 | 3LD2203-1TP53 |
| | 63 A | 22 kW | 18.5 kW | 3LD2504-0TK53 | 3LD2504-1TP53 |
| | 100 A | 37 kW | 30 kW | 3LD2704-0TK53 | 3LD2704-1TP53 |
| | 125 A | 45 kW | 37 kW | 3LD2804-0TK53 | 3LD2804-1TP53 |
| Center-hole mounting Ø 22.5 mm | 16 A | 7.5 kW | 5.5 kW | 3LD2054-0TK53 | 3LD2054-1TP53 |
| | 25 A | 9.5 kW | 7.5 kW | 3LD2154-0TK53 | 3LD2154-1TP53 |
| | 32 A | 11.5 kW | 9.5 kW | 3LD2254-0TK53 | 3LD2254-0TK53 + 3LD9200-5B |
| | 63 A | 22 kW | 18.5 kW | 3LD2555-0TK53 | 3LD2555-0TK53 + 3LD9200-5B |
| **Knob-operated mechanism** | | | | | |
| Four-hole mounting | 16 A | 7.5 kW | 5.5 kW | 3LD2022-0TK13 | 3LD2022-0TK13 + 3LD9200-5B |
| | 25 A | 9.5 kW | 7.5 kW | 3LD2122-0TK13 | 3LD2122-0TK13 + 3LD9200-5B |
| | 32 A | 11.5 kW | 9.5 kW | 3LD2222-0TK13 | 3LD2222-0TK13 + 3LD9200-5B |
| | 160 A | 75 kW | 50 kW | 3LD2305-0TK13 | 3LD2305-0TK13 + 3LD9200-5B |
| | 250 A | 132 kW | 110 kW | 3LD2405-0TK13 | 3LD2405-0TK13 + 3LD9200-5B |
| Center-hole mounting Ø 22.5 mm | 16 A | 7.5 kW | 5.5 kW | 3LD2050-0TK13 | 3LD2050-0TK13 + 3LD9200-5B |
| | 25 A | 9.5 kW | 7.5 kW | 3LD2150-0TK13 | 3LD2150-0TK13 + 3LD9200-5B |
| | 32 A | 11.5 kW | 9.5 kW | 3LD2250-0TK13 | 3LD2250-0TK13 + 3LD9200-5B |

**Scope of supply:**
- Including terminal covers for the infeed side

**Accessories,** see page 8/28



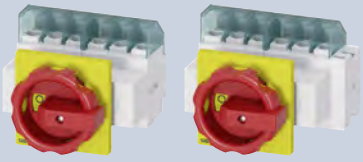


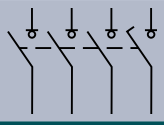
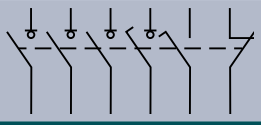
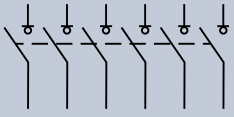
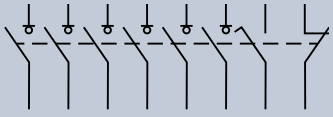
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| 3P+N | | 6P | |
|---|---|---|---|
|  |  |  |  |
| **Without auxiliary switch** | **1 NO + 1 NC (standard version)** | **Without auxiliary switch** | **1 NO + 1 NC (standard version)** |
| 3LD2003-1TL53 | 3LD2003-2EP53 | – | – |
| 3LD2103-1TL53 | 3LD2103-2EP53 | 3LD2103-3VK53 | 3LD2103-4VP53 |
| 3LD2203-1TL53 | 3LD2203-1TL53 + 3LD9200-5B | 3LD2203-3VK53 | 3LD2203-3VK53 + 3LD9200-5B |
| 3LD2504-1TL53 | 3LD2504-1TP53 + 3LD9250-0BA | 3LD2504-3VK53 | 3LD2504-3VK53 + 3LD9200-5B |
| 3LD2704-0TK53 + 3LD9280-0B | 3LD2704-0TK53 + 3LD9280-0B + 3LD9200-5B | – | – |
| 3LD2804-0TK53 + 3LD9280-0B | 3LD2804-0TK53 + 3LD9280-0B + 3LD9200-5B | – | – |
| 3LD2054-1TL53 | 3LD2054-2EP53 | – | – |
| 3LD2154-1TL53 | 3LD2154-2EP53 | – | – |
| 3LD2254-1TL53 | 3LD2254-1TL53 + 3LD9200-5B | – | – |
| 3LD2555-0TK53 + 3LD9250-0BA | 3LD2555-0TK53 + 3LD9250-0BA + 3LD9200-5B | – | – |
| 3LD2022-1TL13 | 3LD2022-1TL13 + 3LD9200-5B | – | – |
| 3LD2122-1TL13 | 3LD2122-1TL13 + 3LD9200-5B | 3LD2122-3VK13 | – |
| 3LD2222-0TK13 + 3LD9220-0B | 3LD2222-0TK13 + 3LD9220-0B + 3LD9200-5B | – | – |
| 3LD2305-1TL13 | 3LD2305-1TL13 + 3LD9200-5B | 3LD2305-3VK13 | 3LD2305-3VK13 + 3LD9200-5B |
| 3LD2405-1TL13 | 3LD2405-1TL13 + 3LD9200-5B | 3LD2405-3VK13 | 3LD2405-3VK13 + 3LD9200-5B |
| 3LD2050-1TL13 | 3LD2050-1TL13 + 3LD9200-5B | – | – |
| 3LD2150-0TK13 + 3LD9220-0B | 3LD2150-0TK13 + 3LD9220-0B + 3LD9200-5B | – | – |
| 3LD2250-0TK13 + 3LD9220-0B | 3LD2250-0TK13 + 3LD9220-0B + 3LD9200-5B | – | – |



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# 3LD switch disconnectors

## Accessories for front mounting

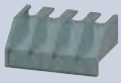
| | | | 3LD20 (16 A) | 3LD21 (25 A) | 3LD22 (32 A) | 3LD25 (63 A) | 3LD27 (100 A) | 3LD28 (125 A) | 3LD23 (160 A) | 3LD24 (250 A) |
|---|---|---|---|---|---|---|---|---|---|---|
| **N switching contacts (4th contact element)** | | | | | | | | | | |
|  | **Contacts** | **Article No.** | | | | | | | | |
| | Leading switch-on, lagging switch-off | 3LD9220-0B | | ■ | ■ | | | | | |
| | | 3LD9250-0BA | | | | ■ | | | | |
| | | 3LD9280-0B | | | | | ■ | ■ | | |
| | | 3LD9240-0B | | | | | | | ■ | ■ |
| **N/PE terminals** | | | | | | | | | | |
|  | **Contacts** | **Article No.** | | | | | | | | |
| | Through-type | 3LD9200-2B | ■ | | | | | | | |
| | | 3LD9220-2B | | ■ | ■ | | | | | |
| | | 3LD9250-2BA | | | | ■ | | | | |
| | | 3LD9280-2B | | | | | ■ | ■ | | |
| | | 3LD9240-2B | | | | | | | ■ | ■ |
| **Auxiliary switches (standard version)** | | | | | | | | | | |
|  | • For mounting on the left and/or right<br>• NO: lagging during switch-on, leading during switch-off of 3LD switch<br>• NC: leading during switch-on, lagging during switch-off of 3LD switch | | | | | | | | | |
| | **Contacts** | **Contact surface** | **Article No.** | | | | | | | |
| | 1 NO + 1 NC | Standard | 3LD9200-5B | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| | | Gold-plated | 3LD9200-5BF | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| **Auxiliary switches for mounting on the front** | | | | | | | | | | |
|  | • Mounted on the switch shaft<br>• For four-hole front mounting and floor mounting only<br>• NO: lagging during switch-on, leading (20 ... 150 ms) during switch-off of 3LD switch<br>• NC: leading during switch-on, lagging during switch-off of 3LD switch<br>• Not for 6-pole 3LD23 (160 A) and 3LD24 (250 A) | | | | | | | | | |
| | **Contacts** | **Contact surface** | **Article No.** | | | | | | | |
| | 1 NO + 1 NC | Standard | 3LD9280-5D | ■ | ■ | ■ | ■ | ■ | ■ | | |
| | | | 3LD9240-5D | | | | | | | ■ | ■ |
| | | Gold-plated | 3LD9280-5DF | ■ | ■ | ■ | ■ | ■ | ■ | | |
| | | | 3LD9240-5DF | | | | | | | ■ | ■ |
| **Rotary operating mechanisms** | | | | | | | | | | |
| | • Lockable in 0 position with up to 3 padlocks | | | | | | | | | |
| | **Version** | **Mounting** | **Article No.** | | | | | | | |
|  | For main control switches | Center-hole mounting | 3LD9224-1D | ■ | ■ | ■ | | | | | |
| | | | 3LD9284-1D | | | | ■ | ■ | ■ | | |
| | | Four-hole mounting | 3LD9224-1B | ■ | ■ | ■ | | | | | |
| | | | 3LD9284-1B | | | | ■ | ■ | ■ | | |
|  | For EMERGENCY-STOP switches | Center-hole mounting | 3LD9224-3D | ■ | ■ | ■ | | | | | |
| | | | 3LD9284-3D | | | | ■ | ■ | ■ | | |
| | | Four-hole mounting | 3LD9224-3B | ■ | ■ | ■ | | | | | |
| | | | 3LD9284-3B | | | | ■ | ■ | ■ | | |

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| | | | 3LD20 (16 A) | 3LD21 (25 A) | 3LD22 (32 A) | 3LD25 (63 A) | 3LD27 (100 A) | 3LD28 (125 A) | 3LD23 (160 A) | 3LD24 (250 A) |
|---|---|---|---|---|---|---|---|---|---|---|
| **Knob-operated mechanisms** | | | | | | | | | | |
|  | • Lockable in 0 position with up to 3 padlocks<br>• Only for 3P and 3P+N circuit breakers<br>• Including seal | | | | | | | | | |
| **Version** | **Mounting** | **Article No.** | | | | | | | | |
| For main control switches | Four-hole mounting | 3LD9243-1B | | | | | | | ■ | ■ |
| For EMERGENCY-STOP switches | Four-hole mounting | 3LD9243-3B | | | | | | | ■ | ■ |
| **Terminal covers** | | | | | | | | | | |
| | **Number of poles** | **Article No.** | | | | | | | | |
|  | 1-pole | 3LD9201-2A | ■ | | | | | | | |
| | | 3LD9221-2A | | ■ | ■ | | | | | |
| | | 3LD9251-2A | | | | ■ | | | | |
| | | 3LD9281-2A | | | | | ■ | ■ | | |
| | | 3LD9241-2A | | | | | | | ■ | ■ |
|  | 3-pole | 3LD9221-0A | | ■ | ■ | | | | | |
| | | 3LD9251-0A | | | | ■ | | | | |
|  | 4-pole | 3LD9201-1A | ■ | | | | | | | |
| **Inscription labels** | | | | | | | | | | |
|  | **Inscription** | **Article No.** | | | | | | | | |
| | German/English (Hauptschalter/Main Switch) | 3LD9286-1A | ■ | ■ | ■ | ■ | ■ | ■ | | |
| | Without inscription | 3LD9286-4A | ■ | ■ | ■ | ■ | ■ | ■ | | |
| **Assembly tools** | | | | | | | | | | |
|  | • For center-hole mounting with nut | | | | | | | | | |
| | **Version** | **Article No.** | | | | | | | | |
| | For main control switches and EMERGENCY-STOP switches | 3LD9256-0A | ■ | ■ | ■ | ■ | | | | |

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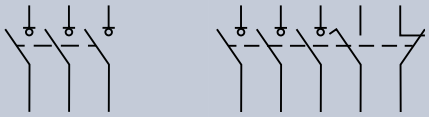
# 3LD switch disconnectors

## 3LD2 main control switches, floor mounting, 25 ... 50 $kA_{rms}$



**Operating mechanisms, black**

**Number of poles** 3P



| Version | Uninterrupted current $I_u$ At AC-21A, 380 ... 440 V | Operational power $P$ At AC-23A, 380 ... 440 V | Operational power $P$ At AC-3A, 380 ... 440 V | Without auxiliary switch | 1 NO + 1 NC (standard version) |
|---|---|---|---|---|---|
| **Door-coupling rotary operating mechanism** | | | | | |
| Four-hole mounting | 16 A | 7.5 kW | 5.5 kW | 3LD2013-0TK51 | 3LD2013-0TK51 + 3LD9200-5C |
| | 25 A | 9.5 kW | 7.5 kW | 3LD2113-0TK51 | 3LD2113-0TK51 + 3LD9200-5C |
| | 32 A | 11.5 kW | 9.5 kW | 3LD2213-0TK51 | 3LD2213-0TK51 + 3LD9200-5C |
| | 63 A | 22 kW | 18.5 kW | 3LD2514-0TK51 | 3LD2514-0TK51 + 3LD9200-5C |
| | 100 A | 37 kW | 30 kW | 3LD2714-0TK51 | 3LD2714-0TK51 + 3LD9200-5C |
| | 125 A | 45 kW | 37 kW | 3LD2814-0TK51 | 3LD2814-0TK51 + 3LD9200-5C |
| Center-hole mounting Ø 22.5 mm | 16 A | 7.5 kW | 5.5 kW | 3LD2044-0TK51 | 3LD2044-0TK51 + 3LD9200-5C |
| | 25 A | 9.5 kW | 7.5 kW | 3LD2144-0TK51 | 3LD2144-0TK51 + 3LD9200-5C |
| | 32 A | 11.5 kW | 9.5 kW | 3LD2244-0TK51 | 3LD2244-0TK51 + 3LD9200-5C |
| | 63 A | 22 kW | 18.5 kW | 3LD2545-0TK51 | 3LD2545-0TK51 + 3LD9200-5C |
| **Door-coupling knob-operated mechanisms** | | | | | |
| Four-hole mounting | 160 A | 75 kW | 50 kW | 3LD2318-0TK11 | 3LD2318-0TK11 + 3LD9200-5C |
| | 250 A | 132 kW | 110 kW | 3LD2418-0TK11 | 3LD2418-0TK11 + 3LD9200-5C |
| **Defeatable door-coupling knob-operated mechanism** | | | | | |
| Four-hole mounting | 16 A | 7.5 kW | 5.5 kW | 3LD2017-0TK11 | 3LD2017-0TK11 + 3LD9200-5C |
| | 32 A | 11.5 kW | 9.5 kW | 3LD2217-0TK11 | 3LD2217-0TK11 + 3LD9200-5C |
| | 63 A | 22 kW | 18.5 kW | 3LD2517-0TK11 | 3LD2517-0TK11 + 3LD9200-5C |

**Scope of supply:**
- Including terminal covers for the infeed side
- Up to 125 A with integrated tolerance compensation

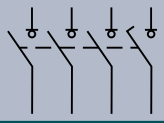
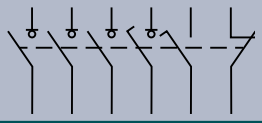
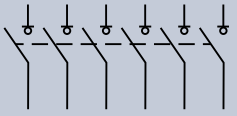
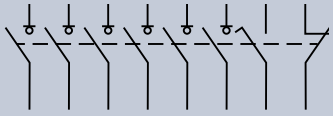
**Mounting:**
- Up to 125 A using screws or snap-on mounting on 35 mm mounting rails

**Accessories,** see page 8/34

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| 3P+N | | 6P | |
|---|---|---|---|
|  |  |  |  |
| **Without auxiliary switch** | **1 NO + 1 NC (standard version)** | **Without auxiliary switch** | **1 NO + 1 NC (standard version)** |
| 3LD2013-1TL51 | 3LD2013-1TL51 + 3LD9200-5C | – | – |
| 3LD2113-1TL51 | 3LD2113-1TL51 + 3LD9200-5C | 3LD2113-3VK51 | 3LD2113-4VP51 |
| 3LD2213-1TL51 | 3LD2213-1TL51 + 3LD9200-5C | – | – |
| 3LD2514-1TL51 | 3LD2514-1TL51 + 3LD9200-5C | – | – |
| 3LD2714-0TK51 + 3LD9280-0C | 3LD2714-0TK51 + 3LD9280-0C + 3LD9200-5C | – | – |
| 3LD2814-0TK51 + 3LD9280-0C | 3LD2814-0TK51 + 3LD9280-0C + 3LD9200-5C | – | – |
| 3LD2044-1TL51 | 3LD2044-1TL51 + 3LD9200-5C | – | – |
| 3LD2144-1TL51 | 3LD2144-1TL51 + 3LD9200-5C | – | – |
| 3LD2244-1TL51 | 3LD2244-1TL51 + 3LD9200-5C | – | – |
| 3LD2545-0TK51 + 3LD9250-0CA | 3LD2545-0TK51 + 3LD9250-0CA + 3LD9200-5C | – | – |
| 3LD2318-1TL11 | 3LD2318-1TL11 + 3LD9200-5C | 3LD2318-3VK11 | 3LD2318-3VK11 + 3LD9200-5C |
| 3LD2418-1TL11 | 3LD2418-1TL11 + 3LD9200-5C | 3LD2418-3VK11 | 3LD2418-3VK11 + 3LD9200-5C |
| 3LD2017-1TL11 | 3LD2017-1TL11 + 3LD9200-5C | – | – |
| 3LD2217-1TL11 | 3LD2217-1TL11 + 3LD9200-5C | – | – |
| 3LD2517-1TL11 | 3LD2517-1TL11 + 3LD9200-5C | – | – |



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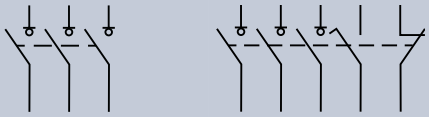
# 3LD switch disconnectors

## 3LD2 EMERGENCY-STOP switches, floor mounting, 25 ... 50 $kA_{rms}$



**Operating mechanisms, red/yellow**

**Number of poles** 3P



| Version | Uninterrupted current $I_u$ At AC-21A, 380 ... 440 V | Operational power $P$ At AC-23A, 380 ... 440 V | Operational power $P$ At AC-3A, 380 ... 440 V | Without auxiliary switch | 1 NO + 1 NC (standard version) |
|---|---|---|---|---|---|
| **Door-coupling rotary operating mechanism** | | | | | |
| Four-hole mounting | 16 A | 7.5 kW | 5.5 kW | 3LD2013-0TK53 | 3LD2013-0TK53 + 3LD9200-5C |
| | 25 A | 9.5 kW | 7.5 kW | 3LD2113-0TK53 | 3LD2113-0TK53 + 3LD9200-5C |
| | 32 A | 11.5 kW | 9.5 kW | 3LD2213-0TK53 | 3LD2213-0TK53 + 3LD9200-5C |
| | 63 A | 22 kW | 18.5 kW | 3LD2514-0TK53 | 3LD2514-0TK53 + 3LD9200-5C |
| | 100 A | 37 kW | 30 kW | 3LD2714-0TK53 | 3LD2714-0TK53 + 3LD9200-5C |
| | 125 A | 45 kW | 37 kW | 3LD2814-0TK53 | 3LD2814-0TK53 + 3LD9200-5C |
| Center-hole mounting Ø 22.5 mm | 16 A | 7.5 kW | 5.5 kW | 3LD2044-0TK53 | 3LD2044-0TK53 + 3LD9200-5C |
| | 25 A | 9.5 kW | 7.5 kW | 3LD2144-0TK53 | 3LD2144-0TK53 + 3LD9200-5C |
| | 32 A | 11.5 kW | 9.5 kW | 3LD2244-0TK53 | 3LD2244-0TK53 + 3LD9200-5C |
| | 63 A | 22 kW | 18.5 kW | 3LD2545-0TK53 | 3LD2545-0TK53 + 3LD9200-5C |
| **Door-coupling knob-operated mechanisms** | | | | | |
| Four-hole mounting | 160 A | 75 kW | 50 kW | 3LD2318-0TK13 | 3LD2318-0TK13 + 3LD9200-5C |
| | 250 A | 132 kW | 110 kW | 3LD2418-0TK13 | 3LD2418-0TK13 + 3LD9200-5C |
| **Defeatable door-coupling knob-operated mechanism** | | | | | |
| Four-hole mounting | 16 A | 7.5 kW | 5.5 kW | 3LD2017-0TK13 | 3LD2017-0TK13 + 3LD9200-5C |
| | 32 A | 11.5 kW | 9.5 kW | 3LD2217-0TK13 | 3LD2217-0TK13 + 3LD9200-5C |
| | 63 A | 22 kW | 18.5 kW | 3LD2517-0TK13 | 3LD2517-0TK13 + 3LD9200-5C |

**Scope of supply:**
- Including terminal covers for the infeed side
- Up to 125 A with integrated tolerance compensation

**Mounting:**
- Up to 125 A using screws or snap-on mounting on 35 mm mounting rails

**Accessories,** see page 8/34



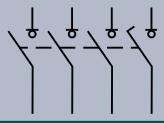
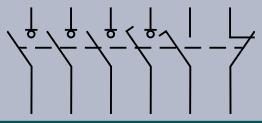
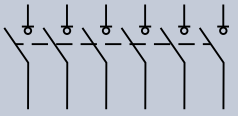
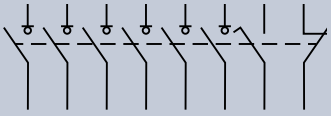


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| 3P+N | | 6P | |
|---|---|---|---|
|  |  |  |  |
| **Without auxiliary switch** | **1 NO + 1 NC (standard version)** | **Without auxiliary switch** | **1 NO + 1 NC (standard version)** |
| 3LD2013-1TL53 | 3LD2013-1TL53 + 3LD9200-5C | – | – |
| 3LD2113-1TL53 | 3LD2113-1TL53 + 3LD9200-5C | 3LD2113-3VK53 | 3LD2113-4VP53 |
| 3LD2213-1TL53 | 3LD2213-1TL53 + 3LD9200-5C | – | – |
| 3LD2514-1TL53 | 3LD2514-1TL53 + 3LD9200-5C | – | – |
| 3LD2714-0TK53 + 3LD9280-0C | 3LD2714-0TK53 + 3LD9280-0C + 3LD9200-5C | – | – |
| 3LD2814-0TK53 + 3LD9280-0C | 3LD2814-0TK53 + 3LD9280-0C + 3LD9200-5C | – | – |
| 3LD2044-1TL53 | 3LD2044-1TL53 + 3LD9200-5C | – | – |
| 3LD2144-1TL53 | 3LD2144-1TL53 + 3LD9200-5C | – | – |
| 3LD2244-1TL53 | 3LD2244-1TL53 + 3LD9200-5C | – | – |
| 3LD2545-0TK53 + 3LD9250-0CA | 3LD2545-0TK53 + 3LD9250-0CA + 3LD9200-5C | – | – |
| 3LD2318-1TL13 | 3LD2318-1TL13 + 3LD9200-5C | 3LD2318-3VK13 | 3LD2318-3VK13 + 3LD9200-5C |
| 3LD2418-1TL13 | 3LD2418-1TL13 + 3LD9200-5C | 3LD2418-3VK13 | 3LD2418-3VK13 + 3LD9200-5C |
| 3LD2017-1TL13 | 3LD2017-1TL13 + 3LD9200-5C | – | – |
| 3LD2217-1TL13 | 3LD2217-1TL13 + 3LD9200-5C | – | – |
| 3LD2517-1TL13 | 3LD2517-1TL13 + 3LD9200-5C | – | – |

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# 3LD switch disconnectors

## Accessories for floor mounting

| | | | 3LD20 (16 A) | 3LD21 (25 A) | 3LD22 (32 A) | 3LD25 (63 A) | 3LD27 (100 A) | 3LD28 (125 A) | 3LD23 (160 A) | 3LD24 (250 A) |
|---|---|---|---|---|---|---|---|---|---|---|
| **N switching contacts (4th contact element)** | | | | | | | | | | |
|  | **Contacts** | **Article No.** | | | | | | | | |
| | Leading switch-on, lagging switch-off | 3LD9220-0C | | ■ | ■ | | | | | |
| | | 3LD9250-0CA | | | | ■ | | | | |
| | | 3LD9280-0C | | | | | ■ | ■ | | |
| | | 3LD9240-0C | | | | | | | ■ | ■ |
| **N/PE terminals** | | | | | | | | | | |
|  | **Contacts** | **Article No.** | | | | | | | | |
| | Through-type | 3LD9200-2C | ■ | | | | | | | |
| | | 3LD9220-2C | | ■ | ■ | | | | | |
| | | 3LD9250-2CA | | | | ■ | | | | |
| | | 3LD9280-2C | | | | | ■ | ■ | | |
| | | 3LD9240-2C | | | | | | | ■ | ■ |
| **Auxiliary switches (standard version)** | | | | | | | | | | |
|  | • For mounting on the left and/or right<br>• NO: lagging during switch-on, leading during switch-off of 3LD switch<br>• NC: leading during switch-on, lagging during switch-off of 3LD switch | | | | | | | | | |
| | **Contacts** | **Contact surface** | **Article No.** | | | | | | | |
| | 1 NO + 1 NC | Standard | 3LD9200-5C | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| | | Gold-plated | 3LD9200-5CF | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| | 2 NO | Standard | 3LD9200-6C | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| **Auxiliary switches for mounting on the front** | | | | | | | | | | |
|  | • Mounted on the switch shaft<br>• NO: lagging during switch-on, leading (20 ... 150 ms) during switch-off of 3LD switch<br>• NC: leading during switch-on, lagging during switch-off of 3LD switch | | | | | | | | | |
| | **Contacts** | **Contact surface** | **Article No.** | | | | | | | |
| | 1 NO + 1 NC | Standard | 3LD9280-5D | ■ | ■ | ■ | ■ | ■ | ■ | | |
| | | | 3LD9240-5D | | | | | | | ■ | ■ |
| | | Gold-plated | 3LD9280-5DF | ■ | ■ | ■ | ■ | ■ | ■ | | |
| | | | 3LD9240-5DF | | | | | | | ■ | ■ |
| **Rotary operating mechanisms** | | | | | | | | | | |
| | • Lockable in 0 position with up to 3 padlocks | | | | | | | | | |
| | **Version** | **Mounting** | **Article No.** | | | | | | | |
|  | For main control switches | Center-hole mounting | 3LD9224-1D | ■ | ■ | ■ | | | | | |
| | | | 3LD9284-1D | | | | ■ | ■ | ■ | | |
| | | Four-hole mounting | 3LD9224-1B | ■ | ■ | ■ | | | | | |
| | | | 3LD9284-1B | | | | ■ | ■ | ■ | | |
|  | For EMERGENCY-STOP switches | Center-hole mounting | 3LD9224-3D | ■ | ■ | ■ | | | | | |
| | | | 3LD9284-3D | | | | ■ | ■ | ■ | | |
| | | Four-hole mounting | 3LD9224-3B | ■ | ■ | ■ | | | | | |
| | | | 3LD9284-3B | | | | ■ | ■ | ■ | | |
| **Knob-operated mechanisms** | | | | | | | | | | |
|  | • Lockable in 0 position with up to 3 padlocks<br>• Only for 3P and 3P+N circuit breakers<br>• Including seal | | | | | | | | | |
| | **Version** | **Mounting** | **Article No.** | | | | | | | |
| | For main control switches | Four-hole mounting | 3LD9243-1B | | | | | | ■ | ■ |
| | For EMERGENCY-STOP switches | Four-hole mounting | 3LD9243-3B | | | | | | ■ | ■ |

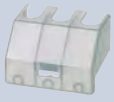
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| | | | 3LD20 (16 A) | 3LD21 (25 A) | 3LD22 (32 A) | 3LD25 (63 A) | 3LD27 (100 A) | 3LD28 (125 A) | 3LD23 (160 A) | 3LD24 (250 A) |
|---|---|---|---|---|---|---|---|---|---|---|
| **Knob-operated mechanisms, defeatable** | | | | | | | | | | |
|  • Can be used as a replacement for 3LD2.17<br>• Lockable in 0 position with max. 3 padlocks<br>• Incl. funnel | | | | | | | | | | |
| **Version** | **Mounting** | | | | | | | | | |
| For main control switches | Four-hole mounting | 3LD9343-2C | ■ | | ■ | ■ | | | | |
| For EMERGENCY-STOP switches | Four-hole mounting | 3LD9343-3C | ■ | | ■ | ■ | | | | |
| **8UC7 handle with masking plate, defeatable** | | | | | | | | | | |
|  • For implementing defeatability of 3LD27 (100 A) to 3LD24 (250 A) with the 8UC7 door mounted rotary operator | | | | | | | | | | |
| **Version** | **Mounting** | **Article No.** | | | | | | | | |
| For main control switches | Four-hole mounting | 8UC7110-1BB | | | | | ■ | ■ | | |
| | Four-hole mounting | 8UC7210-1BB | | | | | ■ | ■ | | |
| For EMERGENCY-STOP switches | Four-hole mounting | 8UC7120-3BB | | | | | | | ■ | ■ |
| | Four-hole mounting | 8UC7220-3BB | | | | | | | ■ | ■ |
| **Coupling drivers** | | | | | | | | | | |
|  | | | | | | | | | | |
| **Version** | | **Article No.** | | | | | | | | |
| For 8UC71 door-coupling rotary operating mechanisms | | 8UC6011 | | | | | ■ | ■ | | |
| For 8UC72 door-coupling rotary operating mechanisms | | 8UC6012 | | | | | | | ■ | ■ |
| **Switch shafts** | | | | | | | | | | |
|  | | | | | | | | | | |
| **Cross-section** | **Length** | **Article No.** | | | | | | | | |
| 6 × 6 mm | 300 mm | 3LD9205-0C | ■ | ■ | ■ | ■ | ■ | ■ | | |
| | 600 mm | 3LD9205-2C | ■ | ■ | ■ | ■ | ■ | ■ | | |
| 8 × 8 mm | 300 mm | 3LD9245-0C | | | | | | | ■ | ■ |
| | 600 mm | 3LD9245-2C | | | | | | | ■ | ■ |
| **Coupling pieces** | | | | | | | | | | |
|  • Without ON and OFF interlock<br>• Suitable for all non-defeatable door-coupling rotary operators/knob-operated mechanisms | | | | | | | | | | |
| **Version** | | **Article No.** | | | | | | | | |
| With tolerance compensation | | 3LD9202-4E new | ■ | ■ | ■ | ■ | ■ | ■ | | |
| Without tolerance compensation | | 3LD9242-4F | | | | | | | ■ | ■ |
| **Terminal covers** | | | | | | | | | | |
| **Number of poles** | | **Article No.** | | | | | | | | |
|  1-pole | | 3LD9201-2A | ■ | | | | | | | |
| | | 3LD9221-2A | | ■ | ■ | | | | | |
| | | 3LD9251-2A | | | | ■ | | | | |
| | | 3LD9281-2A | | | | | ■ | ■ | | |
| | | 3LD9241-2A | | | | | | | ■ | ■ |
|  3-pole | | 3LD9221-0A | | ■ | ■ | | | | | |
| | | 3LD9251-0A | | | | ■ | | | | |
|  4-pole | | 3LD9201-1A | ■ | | | | | | | |
| **Inscription labels** | | | | | | | | | | |
|   • Not for installation in distribution boards<br>• Cannot be used with defeatable 3LD2.17 door-coupling rotary operating mechanisms | | | | | | | | | | |
| **Inscription** | | **Article No.** | | | | | | | | |
| German/English (Hauptschalter/Main Switch) | | 3LD9286-1A | ■ | ■ | ■ | ■ | ■ | ■ | | |
| Without inscription | | 3LD9286-4A | ■ | ■ | ■ | ■ | ■ | ■ | | |
| **Assembly tools** | | | | | | | | | | |
|  • For center-hole mounting with nut | | | | | | | | | | |
| **Version** | | **Article No.** | | | | | | | | |
| For main control switches and EMERGENCY-STOP switches | | 3LD9256-0A | ■ | ■ | ■ | ■ | | | | |

System overview, page 8/22

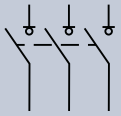
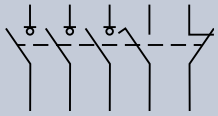
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# 3LD switch disconnectors

## 3LD2 main control switches, installation in distribution boards, 25 ... 50 $kA_{rms}$



| | Operating mechanisms, black | |
|---|---|---|
| Number of poles | 3P | |
| |  |  |
| Uninterrupted current $I_u$ At AC-21A, 380 ... 440 V | Operational power $P$ At AC-23A, 380 ... 440 V | Operational power $P$ At AC-3A, 380 ... 440 V | Without auxiliary switch | 1 NO + 1 NC (standard version) |
| **Knob-operated mechanisms with masking plate** | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD2030-0TK11 | 3LD2030-0TK11 + 3LD9200-5C |
| 25 A | 9.5 kW | 7.5 kW | 3LD2130-0TK11 | 3LD2130-0TK11 + 3LD9200-5C |
| 32 A | 11.5 kW | 9.5 kW | 3LD2230-0TK11 | 3LD2230-0TK11 + 3LD9200-5C |
| 63 A | 22 kW | 18.5 kW | 3LD2530-0TK11 | 3LD2530-0TK11 + 3LD9200-5C |
| 100 A | 37 kW | 30 kW | 3LD2730-0TK11 | 3LD2730-0TK11 + 3LD9200-5C |
| 125 A | 45 kW | 37 kW | 3LD2830-0TK11 | 3LD2830-0TK11 + 3LD9200-5C |
| 160 A | 75 kW | 50 kW | 3LD2330-0TK11 | 3LD2330-0TK11 + 3LD9200-5C |
| 250 A | 132 kW | 110 kW | 3LD2430-0TK11 | 3LD2430-0TK11 + 3LD9200-5C |

**Scope of supply:**
- 3LD23/3LD24 including terminal covers for the infeed side

**Mounting:**
- Up to 125 A using screws or snap-on mounting on 35 mm mounting rails
- Up to 125 A cap and mounting dimensions acc. to DIN 43880

**Accessories,** see page 8/40





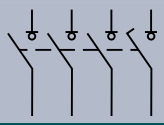
Quick selection guide, page 8/6

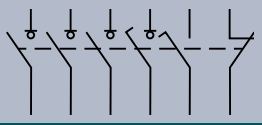
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3P+N





| Without auxiliary switch | 1 NO + 1 NC (standard version) |
|---|---|
| 3LD2030-1TL11 | 3LD2030-1TL11 + 3LD9200-5C |
| 3LD2130-0TK11 + 3LD9220-0C | 3LD2130-0TK11 + 3LD9220-0C + 3LD9200-5C |
| 3LD2230-0TK11 + 3LD9220-0C | 3LD2230-0TK11 + 3LD9220-0C + 3LD9200-5C |
| 3LD2530-0TK11 + 3LD9250-0CA | 3LD2530-0TK11 + 3LD9250-0CA + 3LD9200-5C |
| 3LD2730-0TK11 + 3LD9280-0C | 3LD2730-0TK11 + 3LD9280-0C + 3LD9200-5C |
| 3LD2830-0TK11 + 3LD9280-0C | 3LD2830-0TK11 + 3LD9280-0C + 3LD9200-5C |
| 3LD2330-0TK11 + 3LD9240-0C | 3LD2330-0TK11 + 3LD9240-0C + 3LD9200-5C |
| 3LD2430-0TK11 + 3LD9240-0C | 3LD2430-0TK11 + 3LD9240-0C + 3LD9200-5C |



Quick selection guide, page 8/6

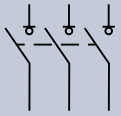
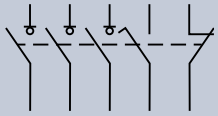
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# 3LD switch disconnectors

## 3LD2 EMERGENCY-STOP switches, installation in distribution boards, 25 ... 50 $kA_{rms}$



| | Operating mechanisms, red/yellow | |
|---|---|---|
| Number of poles | 3P | |
| |  |  |
| **Uninterrupted current $I_u$ At AC-21A, 380 ... 440 V** | **Operational power *P* At AC-23A, 380 ... 440 V** | **Operational power *P* At AC-3A, 380 ... 440 V** | **Without auxiliary switch** | **1 NO + 1 NC (standard version)** |
| Knob-operated mechanisms with masking plate | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD2030-0TK13 | 3LD2030-0TK13 + 3LD9200-5C |
| 25 A | 9.5 kW | 7.5 kW | 3LD2130-0TK13 | 3LD2130-0TK13 + 3LD9200-5C |
| 32 A | 11.5 kW | 9.5 kW | 3LD2230-0TK13 | 3LD2230-0TK13 + 3LD9200-5C |
| 63 A | 22 kW | 18.5 kW | 3LD2530-0TK13 | 3LD2530-0TK13 + 3LD9200-5C |
| 100 A | 37 kW | 30 kW | 3LD2730-0TK13 | 3LD2730-0TK13 + 3LD9200-5C |
| 125 A | 45 kW | 37 kW | 3LD2830-0TK13 | 3LD2830-0TK13 + 3LD9200-5C |
| 160 A | 75 kW | 50 kW | 3LD2330-0TK13 | 3LD2330-0TK13 + 3LD9200-5C |
| 250 A | 132 kW | 110 kW | 3LD2430-0TK13 | 3LD2430-0TK13 + 3LD9200-5C |

**Scope of supply:**
- 3LD23/3LD24 including terminal covers for the infeed side

**Mounting:**
- Up to 125 A using screws or snap-on mounting on 35 mm mounting rails
- Up to 125 A cap and mounting dimensions acc. to DIN 43880

**Accessories,** see page 8/40





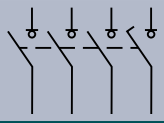
Quick selection guide, page 8/6

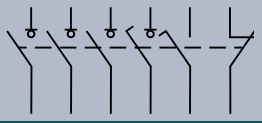
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3P+N





| Without auxiliary switch | 1 NO + 1 NC (standard version) |
|---|---|
| 3LD2030-1TL13 | 3LD2030-1TL13 + 3LD9200-5C |
| 3LD2130-0TK13 + 3LD9220-0C | 3LD2130-0TK13 + 3LD9220-0C + 3LD9200-5C |
| 3LD2230-0TK13 + 3LD9220-0C | 3LD2230-0TK13 + 3LD9220-0C + 3LD9200-5C |
| 3LD2530-0TK13 + 3LD9250-0CA | 3LD2530-0TK13 + 3LD9250-0CA + 3LD9200-5C |
| 3LD2730-0TK13 + 3LD9280-0C | 3LD2730-0TK13 + 3LD9280-0C + 3LD9200-5C |
| 3LD2830-0TK13 + 3LD9280-0C | 3LD2830-0TK13 + 3LD9280-0C + 3LD9200-5C |
| 3LD2330-0TK13 + 3LD9240-0C | 3LD2330-0TK13 + 3LD9240-0C + 3LD9200-5C |
| 3LD2430-0TK13 + 3LD9240-0C | 3LD2430-0TK13 + 3LD9240-0C + 3LD9200-5C |



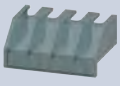
Quick selection guide, page 8/6

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# 3LD switch disconnectors

## Accessories for distribution board mounting

| Accessories | | | 3LD20 (16 A) | 3LD21 (25 A) | 3LD22 (32 A) | 3LD25 (63 A) | 3LD27 (100 A) | 3LD28 (125 A) | 3LD23 (160 A) | 3LD24 (250 A) |
|---|---|---|---|---|---|---|---|---|---|---|
| **N switching contacts (4th contact element)** | | | | | | | | | | |
|  | **Contacts** | **Article No.** | | | | | | | | |
| | Leading switch-on, lagging switch-off | 3LD9220-0C | | ■ | ■ | | | | | |
| | | 3LD9250-0CA | | | | ■ | | | | |
| | | 3LD9280-0C | | | | | ■ | ■ | | |
| | | 3LD9240-0C | | | | | | | ■ | ■ |
| **N/PE terminals** | | | | | | | | | | |
|  | **Contacts** | **Article No.** | | | | | | | | |
| | Through-type | 3LD9200-2C | ■ | | | | | | | |
| | | 3LD9220-2C | | ■ | ■ | | | | | |
| | | 3LD9250-2CA | | | | ■ | | | | |
| | | 3LD9280-2C | | | | | ■ | ■ | | |
| | | 3LD9240-2C | | | | | | | ■ | ■ |
| **Auxiliary switches (standard version)** | | | | | | | | | | |
|  | • For mounting on the left and/or right<br>• NO: lagging during switch-on, leading during switch-off of 3LD switch<br>• NC: leading during switch-on, lagging during switch-off of 3LD switch | | | | | | | | | |
| | **Contacts** | **Contact surface** / **Article No.** | | | | | | | | |
| | 1 NO + 1 NC | Standard | 3LD9200-5C | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| | | Gold-plated | 3LD9200-5CF | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| | 2 NO | Standard | 3LD9200-6C | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| **Terminal covers** | | | | | | | | | | |
| | **Number of poles** | **Article No.** | | | | | | | | |
|  | 1-pole | 3LD9201-2A | ■ | | | | | | | |
| | | 3LD9221-2A | | ■ | ■ | | | | | |
| | | 3LD9251-2A | | | | ■ | | | | |
| | | 3LD9281-2A | | | | | ■ | ■ | | |
| | | 3LD9241-2A | | | | | | | ■ | ■ |
|  | 3-pole | 3LD9221-0A | | ■ | ■ | | | | | |
| | | 3LD9251-0A | | | | ■ | | | | |
|  | 4-pole | 3LD9201-1A | ■ | | | | | | | |

8

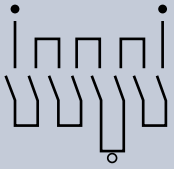
System overview, page 8/22

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# DC isolators, 50 $kA_{rms}$



| | Operating mechanisms, black |
|---|---|
| **Number of poles** | 8P |
| |  |

| Mains voltage | Rated operational current $I_e$ At DC-21A, 800 V DC | Rated operational current $I_e$ At DC-22A, 800 V DC | Without auxiliary switch |
|---|---|---|---|
| **Knob-operated mechanisms** | | | |
| 800 V DC | 32 A | 16 A | 3LD2230-8VQ11-0AF6 |

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Quick selection guide, page 8/6

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# 3LD switch disconnectors

## System overview of 3LD2 switch disconnectors in enclosure

### 3LD2 main control and EMERGENCY-STOP switches in enclosure



3P/3P+N
molded-plastic enclosures



3P/6P
molded-plastic enclosures



3P/3P+N/6P
molded-plastic enclosures

### 3LD2 maintenance and repair switches with EMC shield plate



3P
molded-plastic enclosures



3P/6P
molded-plastic enclosures



3P/6P
molded-plastic enclosures

8

### DC isolators in enclosure



8P DC isolators in a molded-plastic enclosure

### Additional poles and auxiliary switch modules



N switching
contact



N/PE terminals
(through-type)



Auxiliary switches
(standard version)



Auxiliary switch for mounting on
the front

### Operating mechanisms



Rotary operating mechanisms for center-hole mounting

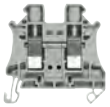


Knob-operated mechanisms for 3LD2 with EMC shield plate

### Further accessories



Shield terminal



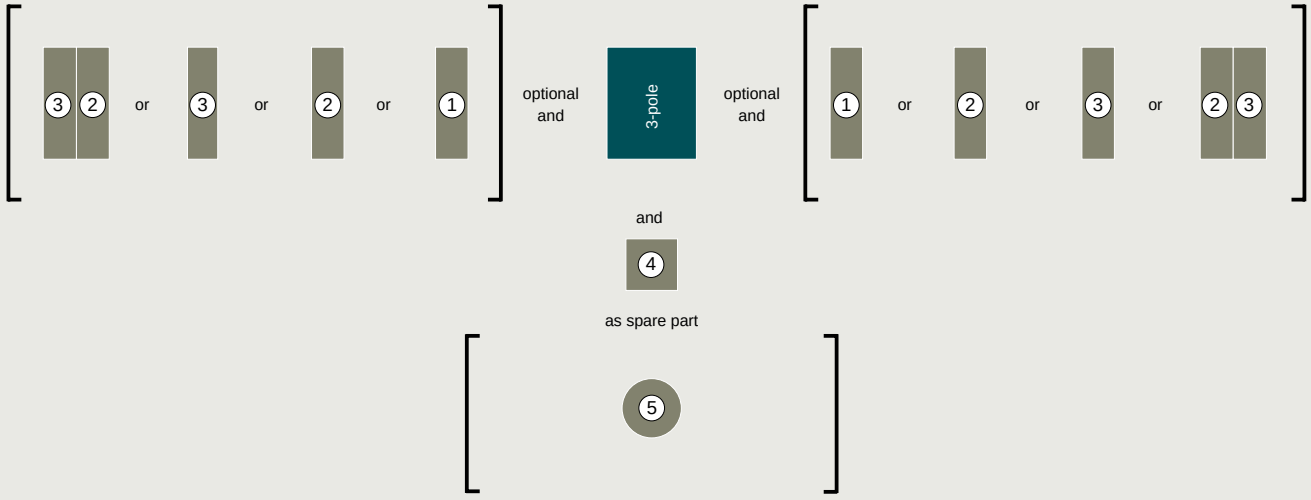
Through-type terminal

**Note:**
You will find a detailed range of accessories with the basic units.

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# Mounting concept and accessories




**Legend**

(1) Auxiliary switch
(2) N switching contact [1)]
(3) N/PE terminal
(4) Auxiliary switch for mounting on the front
(5) Rotary operating mechanism/knob-operated mechanisms

[1)] N switching contact (2) must first be installed on the basic unit
**Note:** Depending on the enclosure size, not all accessories can be used in combination

I201_20484a

8

## Mounting types

### 3LD2 main control and EMERGENCY-STOP switches in enclosure



For surface mounting of individual main control and EMERGENCY-STOP switches, molded plastic-enclosed switches with degree of protection IP65 are used. The molded-plastic enclosures each contain an N and/or a PE terminal. As the switches can be locked in the 0 position, they can also be used as maintenance and repair switches.

### DC isolators in enclosure



The DC isolators in the enclosure are suitable for disconnecting loads of up to 800 V DC due to their 8-pole design. To provide additional safety, the isolators can be locked in the 0 position.

### 3LD2 maintenance and repair switches with EMC shield plate



The 3LD2 maintenance and repair switch with EMC shield plate is ideal for use between converter and motor. A long leading (20 ... 150 ms) NO contact switches the converter group off before the main contacts of the switch open. This produces an AC20 state. The cable shield can be contacted over a large area inside the enclosure using the shield clamps or hose clips included in the scope of delivery.
The switch series provides the greatest possible safety for the user and can be locked in the 0 or I position. Tests have been performed in connection with SINAMICS converters and ratings are available for use at frequencies 0 ... 550 Hz.

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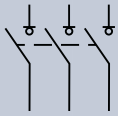
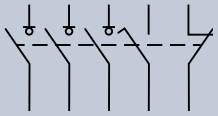
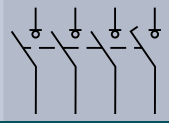


# 3LD switch disconnectors

## 3LD2 main control switches in enclosure, 25 ... 50 $kA_{rms}$





| | Operating mechanisms, black | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Number of poles | 3P | | | | | | 3P+N | | |
| |  | | |  | | |  | | |
| Uninterrupted current $I_u$ At AC-21A, 380 ... 440 V | Operational power *P* At AC-23A, 380 ... 440 V | Operational power *P* At AC-3A, 380 ... 440 V | Without auxiliary switch | | | 1 NO + 1 NC (standard version) | | | Without auxiliary switch | | |
| Rotary operating mechanisms with masking plate | | | Base terminal | | | Base terminal | | | Base terminal | | |
| 16 A | 7.5 kW | 5.5 kW | PE+N | 3LD2064-0TB51 | | N | 3LD2064-1GP51 | | PE | 3LD2064-1TC51 | |
| 25 A | 9.5 kW | 7.5 kW | PE+N | 3LD2164-0TB51 | | N | 3LD2164-1GP51 | | PE | 3LD2164-1TC51 | |
| 32 A | 11.5 kW | 9.5 kW | PE+N | 3LD2264-0TB51 | | N | 3LD2264-1GP51 | | PE | 3LD2264-1TC51 | |
| 63 A | 22 kW | 18.5 kW | PE+N | 3LD2565-0TB51 | | N | 3LD2565-1GP51 | | PE | 3LD2565-1TC51 | |
| 100 A | 37 kW | 30 kW | PE+N | 3LD2766-0TB51 | | N | 3LD2766-1GP51 | | PE+N | 3LD2766-0TB51 | + 3LD9280-0C |
| 125 A | 45 kW | 37 kW | PE+N | 3LD2866-0TB51 | | N | 3LD2866-1GP51 | | PE+N | 3LD2866-0TB51 | + 3LD9280-0C |

**Accessoires,** see page 8/48





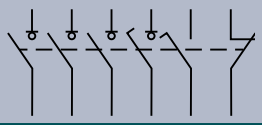
Quick selection guide, page 8/6

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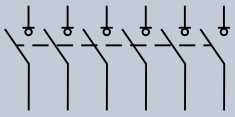




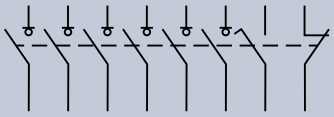
6P



**1 NO + 1 NC (standard version)**



**Without auxiliary switch**



**1 NO + 1 NC (standard version)**

| Base terminal | | | Base terminal | | Base terminal | |
|---|---|---|---|---|---|---|
| PE | 3LD2064-1TC51 | + 3LD9200-5C | | – | | – |
| PE | 3LD2164-1TC51 | + 3LD9200-5C | PE+N | 3LD2165-3VB51 | N | 3LD2165-4VD51 |
| PE | 3LD2264-1TC51 | + 3LD9200-5C | PE+N | 3LD2265-3VB51 | N | 3LD2265-4VD51 |
| PE | 3LD2565-1TC51 | + 3LD9200-5C | PE+N | 3LD2566-3VB51 | PE+N | 3LD2566-4VD51 |
| N | 3LD2766-1GP51 | + 3LD9280-0C | | – | | – |
| N | 3LD2866-1GP51 | + 3LD9280-0C | | – | | – |

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Quick selection guide, page 8/6

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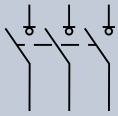
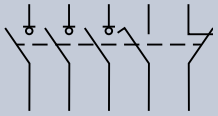
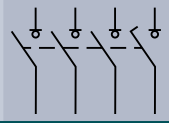


# 3LD switch disconnectors

## 3LD2 EMERGENCY-STOP switches in enclosure, 25 ... 50 $kA_{rms}$





| | | | Operating mechanisms, red/yellow | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Number of poles | 3P | | | 3P+N | |
| | | | |  |  | |  | |
| Uninterrupted current $I_u$ At AC-21A, 380 ... 440 V | Operational power $P$ At AC-23A, 380 ... 440 V | Operational power $P$ At AC-3A, 380 ... 440 V | Without auxiliary switch | | 1 NO + 1 NC (standard version) | | Without auxiliary switch | |
| Rotary operating mechanisms with masking plate | | | Base terminal | | Base terminal | | Base terminal | |
| 16 A | 7.5 kW | 5.5 kW | PE+N | 3LD2064-0TB53 | N | 3LD2064-1GP53 | PE | 3LD2064-1TC53 |
| 25 A | 9.5 kW | 7.5 kW | PE+N | 3LD2164-0TB53 | N | 3LD2164-1GP53 | PE | 3LD2164-1TC53 |
| 32 A | 11.5 kW | 9.5 kW | PE+N | 3LD2264-0TB53 | N | 3LD2264-1GP53 | PE | 3LD2264-1TC53 |
| 63 A | 22 kW | 18.5 kW | PE+N | 3LD2565-0TB53 | N | 3LD2565-1GP53 | PE | 3LD2565-1TC53 |
| 100 A | 37 kW | 30 kW | PE+N | 3LD2766-0TB53 | N | 3LD2766-1GP53 | PE+N | 3LD2766-0TB53 + 3LD9280-0C |
| 125 A | 45 kW | 37 kW | PE+N | 3LD2866-0TB53 | N | 3LD2866-1GP53 | PE+N | 3LD2866-0TB53 + 3LD9280-0C |



**Accessoires,** see page 8/48

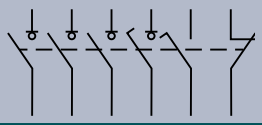
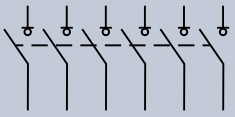
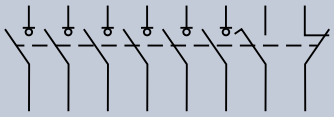


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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | 6P | | | | |
|  | | |  | | |  | |
| **1 NO + 1 NC (standard version)** | | | **Without auxiliary switch** | | | **1 NO + 1 NC (standard version)** | |
| **Base terminal** | | | **Base terminal** | | | **Base terminal** | |
| PE | 3LD2064-1TC53 | + 3LD9200-5C | | – | | | – |
| PE | 3LD2164-1TC53 | + 3LD9200-5C | PE+N | 3LD2165-3VB53 | | N | 3LD2165-4VD53 |
| PE | 3LD2264-1TC53 | + 3LD9200-5C | PE+N | 3LD2265-3VB53 | | N | 3LD2265-4VD53 |
| PE | 3LD2565-1TC53 | + 3LD9200-5C | PE+N | 3LD2566-3VB53 | | PE+N | 3LD2566-4VD53 |
| N | 3LD2766-1GP53 | + 3LD9280-0C | | – | | | – |
| N | 3LD2866-1GP53 | + 3LD9280-0C | | – | | | – |

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# 3LD switch disconnectors

## Accessories for 3LD2 switch disconnectors in enclosure

### Accessories

| | | | 3LD20 (16 A) | 3LD21 (25 A) | 3LD22 (32 A) | 3LD25 (63 A) | 3LD27 (100 A) | 3LD28 (125 A) |
|---|---|---|---|---|---|---|---|---|
| **N switching contacts (4th contact element)** | | | | | | | | |
|  | **Contacts** | **Article No.** | | | | | | |
| | Leading switch-on, lagging switch-off | 3LD9220-0C | | ■ | ■ | | | |
| | | 3LD9250-0CA | | | | ■ | | |
| | | 3LD9280-0C | | | | | ■ | ■ |
| **N/PE terminals** | | | | | | | | |
|  | **Contacts** | **Article No.** | | | | | | |
| | Through-type | 3LD9200-2C | ■ | | | | | |
| | | 3LD9220-2C | | ■ | ■ | | | |
| | | 3LD9250-2CA | | | | ■ | | |
| | | 3LD9280-2C | | | | | ■ | ■ |
| **Auxiliary switches (standard version)** | | | | | | | | |
|  | • For mounting on the left and/or right<br>• NO: lagging during switch-on, leading during switch-off of 3LD switch<br>• NC: leading during switch-on, lagging during switch-off of 3LD switch | | | | | | | |
| | **Contacts** | **Article No.** | | | | | | |
| | 1 NO + 1 NC, Standard | 3LD9200-5C | ■ | ■ | ■ | ■ | ■ | ■ |
| | 1 NO + 1 NC, Gold-plated | 3LD9200-5CF | ■ | ■ | ■ | ■ | ■ | ■ |
| | 2 NO, Standard | 3LD9200-6C | ■ | ■ | ■ | ■ | ■ | ■ |
| **Auxiliary switches for mounting on the front** | | | | | | | | |
|  | • Mounted on the front of the switch shaft<br>• NO: lagging during switch-on, leading (20 ... 150 ms) during switch-off of 3LD switch<br>• NC: leading during switch-on, lagging during switch-off of 3LD switch | | | | | | | |
| | **Contacts** | **Article No.** | | | | | | |
| | 1 NO + 1 NC, Standard | 3LD9280-5D | ■ | ■ | ■ | ■ | ■ | ■ |
| | 1 NO + 1 NC, Gold-plated | 3LD9280-5DF | ■ | ■ | ■ | ■ | ■ | ■ |
| **Rotary operating mechanisms** | | | | | | | | |
| | • Lockable in 0 position with up to 3 padlocks | | | | | | | |
| | **Type** | **Version** | **Article No.** | | | | | |
|  | Main control switches | 3P, 3P+N | 3LD9224-1GH [1] | ■ | ■ | ■ | | |
| | | | 3LD9284-1G | | | | ■ | ■ | ■ |
|  | | 6P | 3LD9284-1G | | ■ | ■ | ■ | |
|  | EMERGENCY-STOP switches | 3P, 3P+N | 3LD9224-3GH [1] | ■ | ■ | ■ | | |
| | | | 3LD9284-3G | | | | ■ | ■ | ■ |
|  | | 6P | 3LD9284-3G | | ■ | ■ | ■ | |

[1] Incl. enclosure cover

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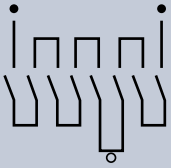
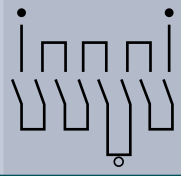
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# 3LD2 DC isolators in a molded-plastic enclosure





| | Operating mechanisms, black | Operating mechanisms, red/yellow |
|---|---|---|
| Number of poles | 8P | 8P |
| |  |  |

| Mains voltage | Rated operational current $I_e$ At DC-21A, 800 V DC | Rated operational current $I_e$ At DC-22A, 800 V DC | Without auxiliary switch | |
|---|---|---|---|---|
| **Rotary operating mechanisms** | | | | |
| 800 V DC | 32 A | 16 A | 3LD2265-8VQ51-0AF6 | 3LD2265-8VQ53-0AF6 |

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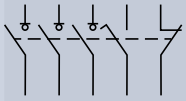
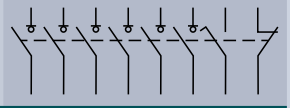


# 3LD switch disconnectors

## 3LD2 maintenance and repair switches with EMC shield plate, 25 ... 50 $kA_{rms}$



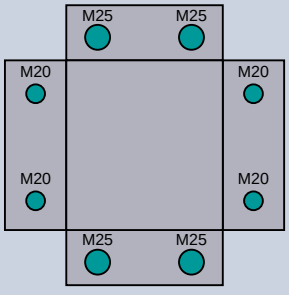


| Number of poles | Operating mechanisms, black | | | |
|---|---|---|---|---|
| | 3P | | 6P | |
| |  | |  | |
| **Uninterrupted current $I_u$ At AC-20, 0 ... 550 Hz, 380 ... 440 V** | **Operational power P At AC-20, 0 ... 550 Hz, 380 ... 440 V** | **Uninterrupted current $I_u$ At AC-21, 50/60 Hz, 380 ... 440 V** | **Operational power AC-23A, 50/60 Hz, 380 ... 440 V** | **1 NO + 1 NC (Auxiliary switch for mounting on the front)** | | **1 NO + 1 NC (Auxiliary switch for mounting on the front)** | |
| **Knob-operated mechanisms with masking plate** | | | | **Base terminal** | | **Base terminal** | |
| 10.2 A | 4 kW | 16 A | 7.5 kW | PE | 3LD2084-2GP21 | 2 × PE | – |
| 13.2 A | 5.5 kW | 25 A | 9 kW | PE | 3LD2184-2GP21 | 2 × PE | 3LD2185-5VD21 |
| 18 A | 7.5 kW | 32 A | 11.5 kW | PE | 3LD2284-2GP21 | 2 × PE | 3LD2285-5VD21 |
| 38 A | 18.5 kW | 63 A | 22 kW | PE | 3LD2585-2GP21 | 2 × PE | 3LD2586-5VD21 |
| 75 A | 37 kW | 100 A | 37 kW | PE | 3LD2786-2GP21 | 2 × PE | – |
| 90 A | 45 kW | 125 A | 45 kW | PE | 3LD2886-2GP21 | 2 × PE | – |

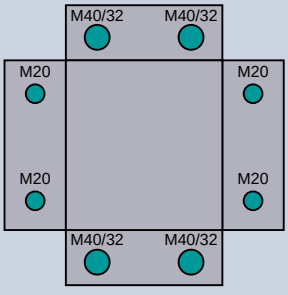
**Scope of supply:**
- Incl. shield clamps or hose clips for contacting the cable shield
- The PE terminal as a through-type terminal is insulated from the cable shield

### 3LD2 cable entries with EMC shield plate

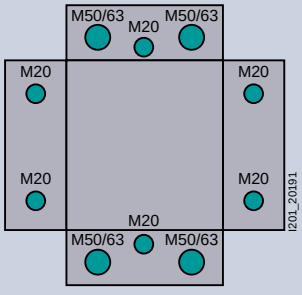
3LD2.84




3LD2.85




3LD2.86



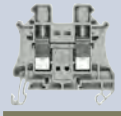



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## Accessories

| | | | 3LD20 (16 A) | 3LD21 (25 A) | 3LD22 (32 A) | 3LD25 (63 A) | 3LD27 (100 A) | 3LD28 (125 A) |
|---|---|---|---|---|---|---|---|---|
| **N switching contacts (4th contact element)** | | | | | | | | |
|  | **Contacts** | **Article No.** | | | | | | |
| | Leading switch-on, lagging switch-off | 3LD9220-0C | | ■ | ■ | | | |
| | | 3LD9250-0CA | | | | ■ | | |
| | | 3LD9280-0C | | | | | ■ | ■ |
| **N/PE terminals** | | | | | | | | |
|  | **Contacts** | **Article No.** | | | | | | |
| | Through-type | 3LD9200-2C | ■ | | | | | |
| | | 3LD9220-2C | | ■ | ■ | | | |
| | | 3LD9250-2CA | | | | ■ | | |
| | | 3LD9280-2C | | | | | ■ | ■ |
| **Auxiliary switches (standard version)** | | | | | | | | |
|  | • For mounting on the left and/or right<br>• NO: lagging during switch-on, leading during switch-off of 3LD switch<br>• NC: leading during switch-on, lagging during switch-off of 3LD switch | | | | | | | |
| | **Contacts** | **Contact surface** | **Article No.** | | | | | |
| | 1 NO + 1 NC | Standard | 3LD9200-5C | ■ | ■ | ■ | ■ | ■ | ■ |
| | | Gold-plated | 3LD9200-5CF | ■ | ■ | ■ | ■ | ■ | ■ |
| | 2 NO | Standard | 3LD9200-6C | ■ | ■ | ■ | ■ | ■ | ■ |
| **Auxiliary switches for mounting on the front** | | | | | | | | |
|  | • Mounted on the front of the switch shaft<br>• NO: lagging during switch-on, leading (20 ... 150 ms) during switch-off of 3LD switch<br>• NC: leading during switch-on, lagging during switch-off of 3LD switch | | | | | | | |
| | **Contacts** | **Contact surface** | **Article No.** | | | | | |
| | 1 NO + 1 NC | Standard | 3LD9280-5D | ■ | ■ | ■ | ■ | ■ | ■ |
| | | Gold-plated | 3LD9280-5DF | ■ | ■ | ■ | ■ | ■ | ■ |
| **Knob-operated mechanisms** | | | | | | | | |
| | • Can be used as a replacement<br>• Lockable in 0 and 1 position with up to 3 padlocks | | | | | | | |
| | **Version** | | **Article No.** | | | | | |
|  | Main control switches | | 3LD9283-2G | ■ | ■ | ■ | ■ | ■ | ■ |
|  | EMERGENCY-STOP switches | | 3LD9283-4G | ■ | ■ | ■ | ■ | ■ | ■ |
| **Rotary operating mechanisms** | | | | | | | | |
| | • Lockable in 0 position with up to 3 padlocks<br>• Only for 50/60 Hz applications | | | | | | | |
| | **Type** | **Version** | **Article No.** | | | | | |
|  | Main control switches | 3P | 3LD9224-1G | ■ | ■ | ■ | | | |
| | | | 3LD9284-1G | | | | ■ | ■ | ■ |
| | | 6P | 3LD9284-1G | | ■ | ■ | ■ | | |
|  | EMERGENCY-STOP switches | 3P | 3LD9224-3G | ■ | ■ | ■ | | | |
| | | | 3LD9284-3G | | | | ■ | ■ | ■ |
| | | 6P | 3LD9284-3G | | ■ | ■ | ■ | | |
| **Terminal blocks** | | | | | | | | |
|  | **Version** | | **Article No.** | | | | | |
| | Through-type terminal with screw connection | | 8WH1000-0AF00 | ■ | ■ | ■ | ■ | ■ | ■ |
| **Shield terminals** | | | | | | | | |
|  | **Terminal area** | | **Article No.** | | | | | |
| | 3 ...12 mm | | 3LD9228-1G | ■ | ■ | ■ | ■ | ■ | ■ |

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# 3LD switch disconnectors

## System overview of 3LD5 UL main control and EMERGENCY-STOP switches

### Basic units for front mounting


3LD5020 (3-pole)


3LD5020 (4-pole)


3LD5420 (3-pole)


3LD5420 (4-pole)

### Basic units, floor mounting with direct operating mechanism


3LD5000 (3-pole)


3LD5000 (4-pole)


3LD5400 (3-pole)


3LD5400 (4-pole)

### Basic units, floor mounting with door-coupling rotary operating mechanism


3LD5010 (3-pole)


3LD5010 (4-pole)


3LD5410 (3-pole)


3LD5410 (4-pole)

### Additional poles and auxiliary switches


N switching contact


N/PE terminals (through-type)


Auxiliary switches (standard version)


Auxiliary switch for mounting on the front

### Operating mechanisms



Rotary operating mechanisms



for four-hole mounting


Coupling heads with and without tolerance compensation


Supplementary handles for UL 508A/NFPA 79


Switch shafts

### Further accessories


Terminal covers, 1-pole


Terminal covers, 3 and 4-pole



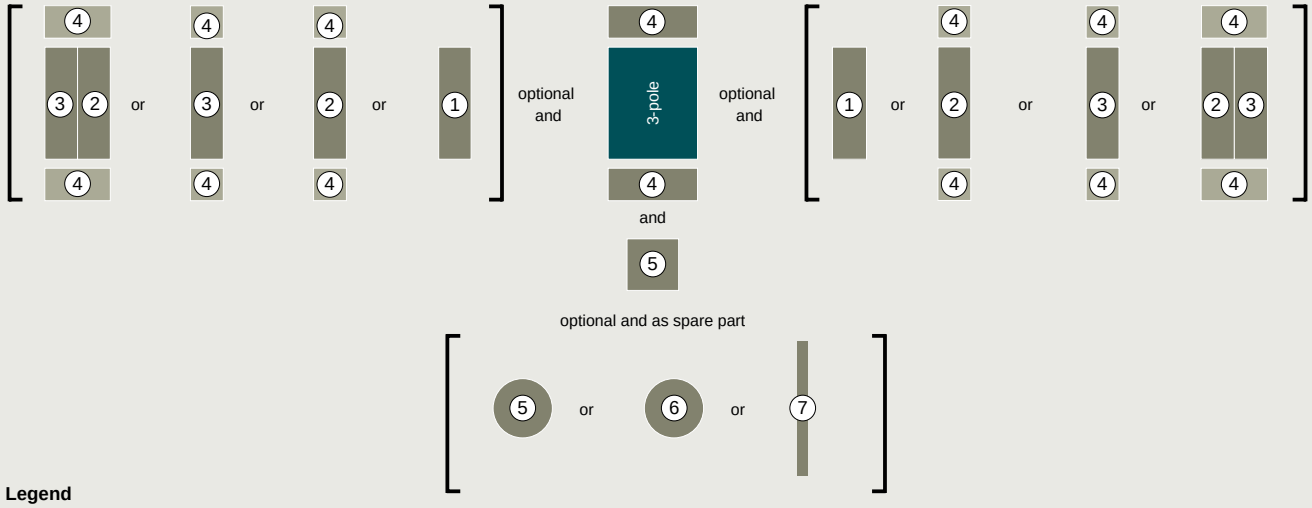
Inscription labels (with and without inscription)

**Note:**
You will find a detailed range of accessories with the basic units.

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## Mounting concept and accessories




**Legend**

(1) Auxiliary switch
(2) N switching contact [1)]
(3) N/PE terminal
(4) Terminal cover
(5) Rotary operating mechanism, four-hole mounting
(6) Knob-operated mechanism, four-hole mounting
(7) Switch shaft (300 or 600 mm)

[1)] N switching contact (2) must first be installed on the basic unit

I201_20485

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### Main control switches acc. to UL

The certification according to UL 489 makes the 3LD5 UL ideal for use as a main control switch for machinery and plants for export to the NAFTA states. The variety of accessories makes it especially suitable as a main disconnect switch for industrial machinery. The switch is also certified according to UL 508 and can also be used as a manual motor controller.

### Mounting types

#### Front mounting of basic units



The switches for front mounting are mounted on the inside of covers, side panels or, if applicable, control cabinet doors (depending on the applicable standard and switching function). Installation is achieved by 4-hole mounting of the handle. This switch is especially suitable when door interlocking is not required or is implemented in a different way.

#### Floor mounting with direct operating mechanism



The switches for floor mounting with direct operating mechanism up to 60 A are snapped onto 35 mm DIN rails according to EN 60715 or screw-mounted on mounting panels. The switches for 100 ... 160 A (3LD54 ... 3LD58) are exclusively screwed onto mounting panels.

#### Basic units, floor mounting with door-coupling rotary operating mechanism



The switches for floor mounting up to 30 A (3LD50) are snapped onto 35 mm DIN rails according to EN 60715 or screw-mounted on mounting panels. The switches for 100 to 160 A (3LD54 ... 3LD58) are exclusively screwed onto mounting panels. The actuators are connected to the lower section of the switch through a door coupling, which can be released in the 0 position, and a 300 mm long switch shaft. The rotary operating mechanisms are also defeatable, i.e. it is possible to open the control cabinet door with a deliberate action while the switch is in the ON position. To meet the requirement acc. to UL 508A/NFPA 79, a supplementary handle can be mounted on the switch. Combined with the intermediate handle, the shaft can no longer be removed.

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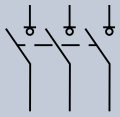
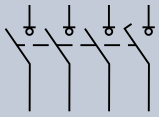


# 3LD switch disconnectors

## 3LD5 UL main control and EMERGENCY-STOP switches, front mounting, SCCR 50 - 65 kA





| | Operating mechanisms, black | |
|---|---|---|
| Number of poles | 3P | 3P+N |
| |  |  |

| Uninterrupted current $I_u$ At AC-21A, 380 ... 440 V | General use acc. to UL 489/60947-4-1 | Operational power $P$ At AC-23A, 380 ... 440 V | | |
|---|---|---|---|---|
| **Rotary operating mechanism, four-hole mounting** | | | | |
| 32 | 30 | 15 | 3LD5020-0TK11 | 3LD5020-0TL11 |
| 63 | 60 | 30 | 3LD5220-0TK11 | 3LD5220-0TL11 |
| **Knob-operated mechanism, four-hole mounting** | | | | |
| 100 | 100 | 45 | 3LD5420-0TK11 | 3LD5420-0TL11 |
| 125 | 125 | 55 | 3LD5620-0TK11 | 3LD5620-0TL11 |
| 160 | 150 | 75 | 3LD5820-0TK11 | 3LD5820-0TL11 |

**Scope of supply:**
- Including terminal covers for the infeed side

## Accessories

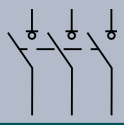
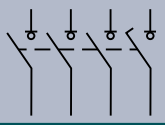
| | | | | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
|---|---|---|---|---|---|---|---|---|
| **N switching contacts (4th contact element)** | | | | | | | | |
|  | Contacts | | Article No. | | | | | |
| | Leading switch-on, lagging switch-off | | 3LD9250-0BA | ■ | | | | |
| | | | 3LD9280-0B | | ■ | | | |
| | | | 3LD9240-0B | | | ■ | ■ | ■ |
| **N/PE terminals** | | | | | | | | |
|  | Contacts | | Article No. | | | | | |
| | Through-type | | 3LD9250-2BA | ■ | | | | |
| | | | 3LD9280-2B | | ■ | | | |
| | | | 3LD9240-2B | | | ■ | ■ | ■ |
| **Auxiliary switches (standard version)** | | | | | | | | |
|  | • For mounting on the left and/or right<br>• NO: lagging during switch-on, leading during switch-off of 3LD switch<br>• NC: leading during switch-on, lagging during switch-off of 3LD switch | | | | | | | |
| | Contacts | Contact surface | Article No. | | | | | |
| | 1 NO + 1 NC | Standard | 3LD9200-5B | ■ | ■ | ■ | ■ | ■ |
| | | Gold-plated | 3LD9200-5BF | ■ | ■ | ■ | ■ | ■ |
| **Auxiliary switch for mounting on the front** | | | | | | | | |
|  | • Mounted on the front of the switch shaft<br>• NO: lagging during switch-on, leading (20 ... 150 ms) during switch-off of 3LD switch<br>• NC: leading during switch-on, lagging during switch-off of 3LD switch | | | | | | | |
| | Contacts | Contact surface | Article No. | | | | | |
| | 1 NO + 1 NC | Standard | 3LD9280-5D | ■ | ■ | | | |
| | | | 3LD9240-5D | | | ■ | ■ | ■ |
| | | Gold-plated | 3LD9280-5DF | ■ | ■ | | | |
| | | | 3LD9240-5DF | | | ■ | ■ | ■ |

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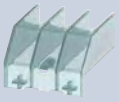
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| Operating mechanisms, red/yellow | |
|---|---|
| 3P | 3P+N |
|  |  |
| | |
| 3LD5020-0TK13 | 3LD5020-0TL13 |
| 3LD5220-0TK13 | 3LD5220-0TL13 |
| | |
| 3LD5420-0TK13 | 3LD5420-0TL13 |
| 3LD5620-0TK13 | 3LD5620-0TL13 |
| 3LD5820-0TK13 | 3LD5820-0TL13 |

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| | | | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
|---|---|---|---|---|---|---|---|
| **Rotary operating mechanisms** | | | | | | | |
|  | • Lockable in 0 position with up to 3 padlocks | | | | | | |
| | **Version** | **Article No.** | | | | | |
| | For main control switches | 3LD9284-1B | ■ | ■ | | | |
| | For EMERGENCY-STOP switches | 3LD9284-3B | ■ | ■ | | | |
| **Knob-operated mechanisms** | | | | | | | |
|  | • Lockable in 0 position with up to 3 padlocks<br>• Incl. funnel | | | | | | |
| | **Version** | **Article No.** | | | | | |
| | For main control switches | 3LD9243-1B | | | ■ | ■ | ■ |
| | For EMERGENCY-STOP switches | 3LD9243-3B | | | ■ | ■ | ■ |
| **Terminal covers** | | | | | | | |
| | **Number of poles** | **Article No.** | | | | | |
|  | 1-pole | 3LD9251-2A | ■ | | | | |
| | | 3LD9281-2A | | ■ | | | |
| | | 3LD9241-2A | | | ■ | ■ | ■ |
|  | 3-pole | 3LD9251-0A | ■ | | | | |
| **Inscription labels** | | | | | | | |
|  | **Inscription** | **Article No.** | | | | | |
| | German/English (Hauptschalter/Main Switch) | 3LD9286-1A | ■ | ■ | ■ | ■ | ■ |
| | Without inscription | 3LD9286-4A | ■ | ■ | ■ | ■ | ■ |

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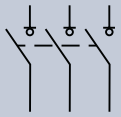
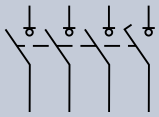


# 3LD switch disconnectors

## 3LD5 UL main control and EMERGENCY-STOP switches, floor mounting with direct operating mechanism, SCCR 50 ... 65 kA





| Number of poles | Operating mechanisms, black | |
|---|---|---|
| | 3P | 3P+N |
| |  |  |

| Uninterrupted current $I_u$ At AC-21A, 380 ... 440 V | General use acc. to UL 489/508 | Operational power $P$ At AC-23A, 380 ... 440 V | | |
|---|---|---|---|---|
| **Knob-operated mechanism, four-hole mounting** | | | | |
| 32 | 30 | 15 | 3LD5000-0TK11 | 3LD5000-0TL11 |
| 63 | 60 | 30 | 3LD5200-0TK11 | 3LD5200-0TL11 |
| 100 | 100 | 45 | 3LD5400-0TK11 | 3LD5400-0TL11 |
| 125 | 125 | 55 | 3LD5600-0TK11 | 3LD5600-0TL11 |
| 160 | 150 | 75 | 3LD5800-0TK11 | 3LD5800-0TL11 |

**Scope of supply:**
- Including terminal covers for the infeed side

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## Accessories

**N switching contacts (4th contact element)**



| Contacts | Article No. | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
|---|---|---|---|---|---|---|
| Leading switch-on, lagging switch-off | 3LD9250-0CA | ■ | | | | |
| | 3LD9280-0C | | ■ | | | |
| | 3LD9240-0C | | | ■ | ■ | ■ |

**N/PE terminals**



| Contacts | Article No. | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
|---|---|---|---|---|---|---|
| Through-type | 3LD9250-2CA | ■ | | | | |
| | 3LD9280-2C | | ■ | | | |
| | 3LD9240-2C | | | ■ | ■ | ■ |

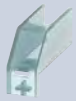
**Auxiliary switches**

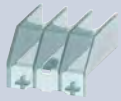


- For mounting on the left and/or right
- NO: lagging during switch-on, leading during switch-off of 3LD switch
- NC: leading during switch-on, lagging during switch-off of 3LD switch

| Contacts | Contact surface | Article No. | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
|---|---|---|---|---|---|---|---|
| 1 NO + 1 NC | Standard | 3LD9200-5C | ■ | ■ | ■ | ■ | ■ |
| | Gold-plated | 3LD9200-5CF | ■ | ■ | ■ | ■ | ■ |

**Terminal covers**





| Number of poles | Article No. | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
|---|---|---|---|---|---|---|
| 1-pole | 3LD9251-2A | ■ | | | | |
| | 3LD9281-2A | | ■ | | | |
| | 3LD9241-2A | | | ■ | ■ | ■ |
| 3-pole | 3LD9251-0A | ■ | | | | |

Quick selection guide, page 8/6

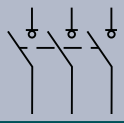
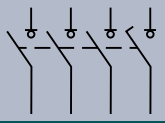
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**Operating mechanisms, red/yellow**

| 3P | 3P+N |
|---|---|
|  |  |
| 3LD5000-0TK13 | 3LD5000-0TL13 |
| 3LD5200-0TK13 | 3LD5200-0TL13 |
| 3LD5400-0TK13 | 3LD5400-0TL13 |
| 3LD5600-0TK13 | 3LD5600-0TL13 |
| 3LD5800-0TK13 | 3LD5800-0TL13 |

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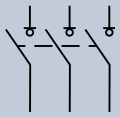
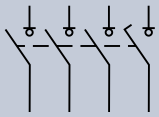


# 3LD switch disconnectors

## 3LD5 UL main control and EMERGENCY-STOP switches, floor mounting with door-coupling rotary operating mechanism, SCCR 50 ... 65 kA





| Number of poles | Operating mechanisms, black | |
|---|---|---|
| | 3P | 3P+N |
| |  |  |

| Uninterrupted current $I_u$ At AC-21A, 380 ... 440 V | General use acc. to UL 489/508 | Operational power $P$ At AC-23A, 380 ... 440 V | | |
|---|---|---|---|---|
| **Door-coupling rotary operating mechanism, four-hole mounting** | | | | |
| 32 | 30 | 15 | 3LD5010-0TK11 | 3LD5010-0TL11 |
| 63 | 60 | 30 | 3LD5210-0TK11 | 3LD5210-0TL11 |
| 100 | 100 | 45 | 3LD5410-0TK11 | 3LD5410-0TL11 |
| 125 | 125 | 55 | 3LD5610-0TK11 | 3LD5610-0TL11 |
| 160 | 150 | 75 | 3LD5810-0TK11 | 3LD5810-0TL11 |

**Scope of supply:**
- Including terminal covers for the infeed side
- Defeatable door-coupling rotary operating mechanisms with shaft 300 mm
- Without tolerance compensation

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## Accessories

**N switching contacts (4th contact element)**



| Contacts | Article No. | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
|---|---|---|---|---|---|---|
| Leading switch-on, lagging switch-off | 3LD9250-0CA | ■ | | | | |
| | 3LD9280-0C | | ■ | | | |
| | 3LD9240-0C | | | ■ | ■ | ■ |

**N/PE terminals**



| Contacts | Article No. | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
|---|---|---|---|---|---|---|
| Through-type | 3LD9250-2CA | ■ | | | | |
| | 3LD9280-2C | | ■ | | | |
| | 3LD9240-2C | | | ■ | ■ | ■ |

**Auxiliary switches (standard version)**



- For mounting on the left and/or right
- NO: lagging during switch-on, leading during switch-off of 3LD switch
- NC: leading during switch-on, lagging during switch-off of 3LD switch

| Contacts | Contact surface | Article No. | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
|---|---|---|---|---|---|---|---|
| 1 NO + 1 NC | Standard | 3LD9200-5C | ■ | ■ | ■ | ■ | ■ |
| | Gold-plated | 3LD9200-5CF | ■ | ■ | ■ | ■ | ■ |

**Auxiliary switch for mounting on the front**



- Mounted on the front of the switch shaft
- NO: lagging during switch-on, leading (20 ... 150 ms) during switch-off of 3LD switch
- NC: leading during switch-on, lagging during switch-off of 3LD switch

| Contacts | Contact surface | Article No. | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
|---|---|---|---|---|---|---|---|
| 1 NO + 1 NC | Standard | 3LD9280-5D | ■ | ■ | | | |
| | | 3LD9240-5D | | | ■ | ■ | ■ |
| | Gold-plated | 3LD9280-5DF | ■ | ■ | | | |
| | | 3LD9240-5DF | | | ■ | ■ | ■ |

**Handles**



- Supplied with a masking plate, but without an extension shaft or coupling driver
- Can be locked with up to max. 3 padlocks

| Inscription | Color | Article No. | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
|---|---|---|---|---|---|---|---|
| O-I | Gray | 8UD1771-2AD01 | ■ | ■ | | | |
| | | 8UD1731-2AD01 | | | ■ | ■ | ■ |
| | Red/yellow | 8UD1771-2AD05 | ■ | ■ | | | |
| | | 8UD1731-2AD05 | | | ■ | ■ | ■ |

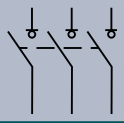
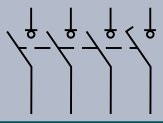
Quick selection guide, page 8/6

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**Operating mechanisms, red/yellow**

| 3P | 3P+N |
|---|---|
|  |  |
| 3LD5010-0TK13 | 3LD5010-0TL13 |
| 3LD5210-0TK13 | 3LD5210-0TL13 |
| 3LD5410-0TK13 | 3LD5410-0TL13 |
| 3LD5610-0TK13 | 3LD5610-0TL13 |
| 3LD5810-0TK13 | 3LD5810-0TL13 |

8

**Supplementary handles for door-coupling rotary operating mechanism**



- For requirements according to UL 508A/NFPA 79
- Can be locked with up to 1 padlocks in 0 position
- Can only be switched on by deliberate action

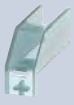
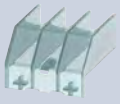
| Inscription | Color | Article No. | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
|---|---|---|---|---|---|---|---|
| O-I | Gray | 3LD9287-1C | ■ | ■ | | | |
| | | 3LD9247-1C | | | ■ | ■ | ■ |
| | Red/yellow | 3LD9287-3C | ■ | ■ | | | |
| | | 3LD9247-3C | | | ■ | ■ | ■ |

**Coupling drivers**



| Version | Article No. | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
|---|---|---|---|---|---|---|
| With tolerance compensation | 8UD1900-1GA00 | ■ | ■ | | | |
| | 8UD1900-2GA00 | | | ■ | ■ | ■ |
| Without tolerance compensation | 8UD1900-1HA00 | ■ | ■ | | | |
| | 8UD1900-2HA00 | | | ■ | ■ | ■ |

**Terminal covers**

| Number of poles | Article No. | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
|---|---|---|---|---|---|---|
| 1-pole | 3LD9251-2A | ■ | | | | |
| | 3LD9281-2A | | ■ | | | |
| | 3LD9241-2A | | | ■ | ■ | ■ |
| 3-pole | 3LD9251-0A | ■ | | | | |

**Inscription labels**



- Not for installation in distribution boards

| Inscription | Article No. | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
|---|---|---|---|---|---|---|
| German/English (Hauptschalter/Main Switch) | 3LD9286-1A | ■ | ■ | ■ | ■ | ■ |
| Without inscription | 3LD9286-4A | ■ | ■ | ■ | ■ | ■ |

**Switch shafts**



| Cross-section | Length | Article No. | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
|---|---|---|---|---|---|---|---|
| 6 × 6 mm | 300 mm | 3LD9205-0C | ■ | ■ | | | |
| | 600 mm | 3LD9205-2C | ■ | ■ | | | |
| 8 × 8 mm | 300 mm | 3LD9245-0C | | | ■ | ■ | ■ |
| | 600 mm | 3LD9245-2C | | | ■ | ■ | ■ |

Quick selection guide, page 8/6

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# 3KD switch disconnectors

## System overview

### Complete units with direct operating mechanisms



Front operating mechanisms, 3-pole



Front operating mechanisms, 4-pole

### Basic units



Front operating mechanisms, 3-pole



Front operating mechanisms, 4-pole



Lateral operating mechanisms, 3-pole



Lateral operating mechanisms, 4-pole



Front-mounted devices, 6-pole for DC applications



Front operating mechanisms, 3-pole

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### Additional poles and auxiliary switch modules



4th contact elements



N terminals



N/PE terminals



Auxiliary switch modules

### Operating mechanisms



Direct operating mechanisms



Door-coupling rotary operating mechanisms



Handles for door-coupling rotary operating mechanisms



Further accessories for door-coupling rotary operating mechanisms

### Further accessories and spare parts



Auxiliary switches



Terminal covers



Phase barriers



Blocking pin test function



Mounting elements



Accessories for DC applications

**Note:**
You will find a detailed range of accessories with the basic units.

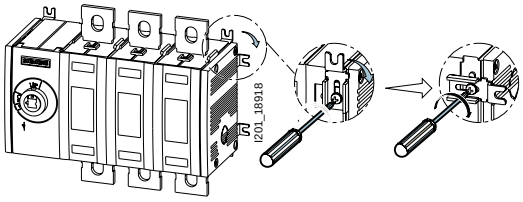
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## Types of mounting

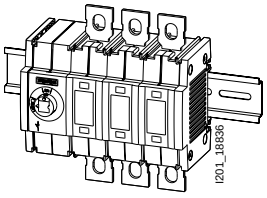
**You will find further information under:**
**sie.ag/2UlrAvy**

### Floor mounting




All 3KD switch disconnectors are designed for floor mounting. To ensure that the switch can be flexibly adapted to the relevant installation conditions, the mounting bracket can be rotated through 90° with size 3 or larger.

### DIN rail




Frame sizes 1 and 2 of the 3KD can be snapped onto a DIN rail (TH35 according to EN 60715) as an alternative mounting method.

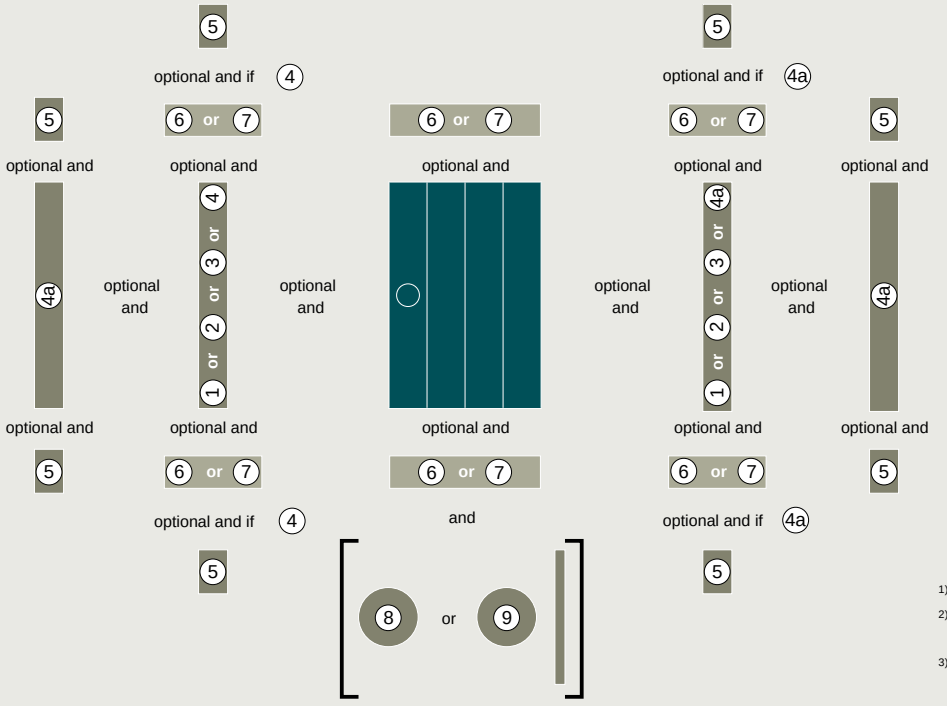
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# 3KD switch disconnectors

## Mounting concept and accessories

### Front operating mechanism left, sizes 1 and 2, 3/4-pole



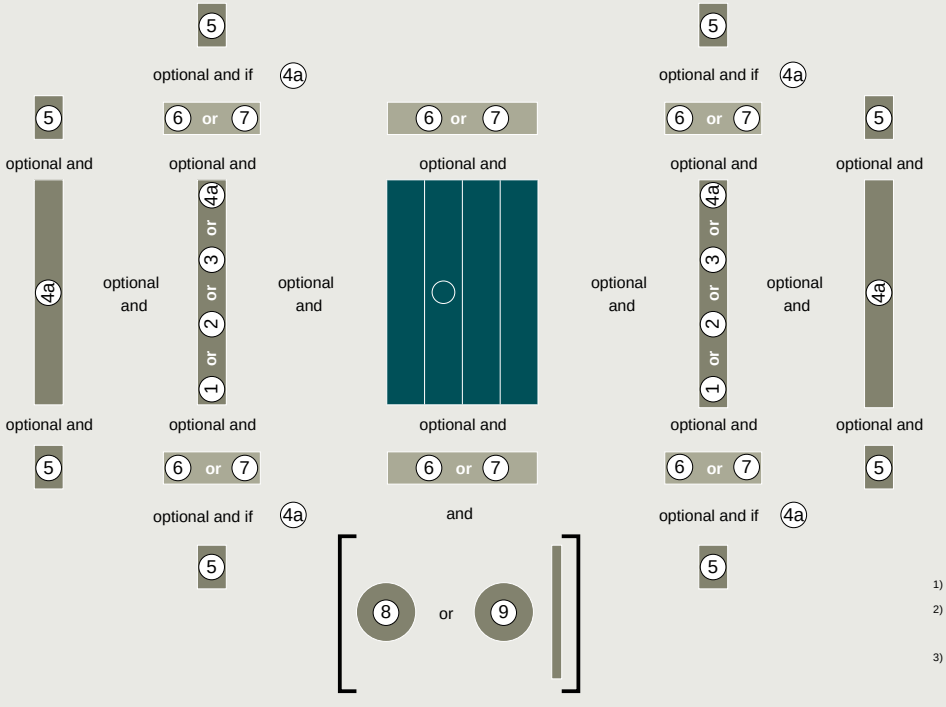

**Legend**

1. Neutral conductor terminal
2. N/PE terminal
3. 4th contact element[1)]
4. Auxiliary switch module, version with test function and version with leading NO contact and test function [2)]
4a. Auxiliary switch module for auxiliary switches, standard version [2)]
5. Auxiliary switch
6. Phase barrier [3)]
7. Terminal cover[3)]
8. Direct operating mechanism
9. Door-coupling rotary operating mechanism

[1)] Only for 3-pole 3K, max. 1× per switch
[2)] Max. 1× for each side of the switch, requires at least 1× auxiliary switch 5
[3)] Only for size 2, flat terminals

I201_20487

### Front operating mechanism center, sizes 1 and 2, 3/4-pole




**Legend**

1. Neutral conductor terminal
2. N/PE terminal
3. 4th contact element[1)]
4a. Auxiliary switch module for auxiliary switches, standard version [2)]
5. Auxiliary switch
6. Phase barrier [3)]
7. Terminal cover [3)]
8. Direct operating mechanism
9. Door-coupling rotary operating mechanism

[1)] Only for 3-pole 3K, max. 1× per switch
[2)] Max. 1× for each side of the switch, requires at least 1× auxiliary switch 5
[3)] Only for size 2, flat terminals

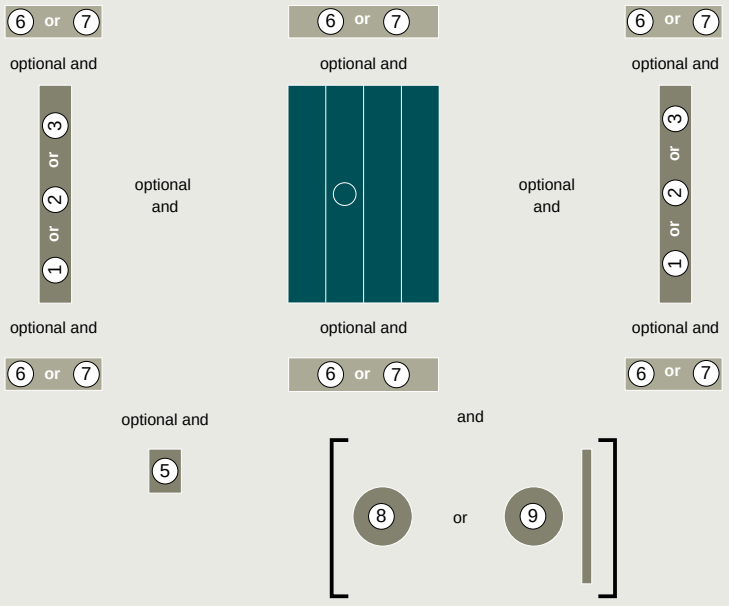
I201_20488

System overview, page 8/60

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## Front operating mechanism center or left, sizes 3 to 5, 3/4-pole




**Legend**

1. Neutral conductor terminal
2. N/PE terminal
3. 4th contact element [1)]
5. Auxiliary switch [2)]
6. Phase barrier
7. Terminal cover
8. Direct operating mechanism
9. Door-coupling rotary operating mechanism

[1)] Only for 3-pole 3K, max. 1× per switch
[2)] Up to 4× auxiliary switches (5)

I201_20489

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System overview, page 8/60

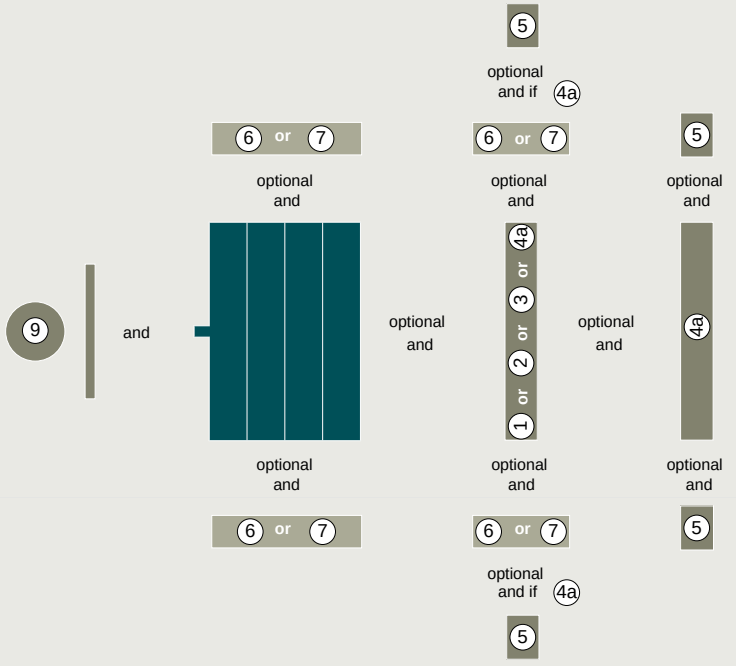
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# 3KD switch disconnectors

## Mounting concept and accessories

### Lateral operating mechanism left, sizes 1 and 2, 3/4-pole



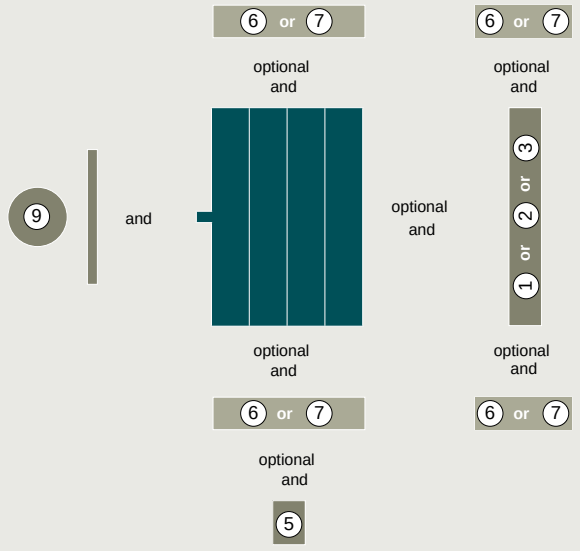

**Legend**

1. Neutral conductor terminal
2. N/PE terminal
3. 4th contact element [1]
4a. Auxiliary switch module for auxiliary switches, standard version [2]
5. Auxiliary switch
6. Phase barrier [3]
7. Terminal cover [3]
9. Door-coupling rotary operating mechanism

[1] Only for 3-pole 3K
[2] Max. 1× per switch, Requires at least 1× auxiliary switch 5
[3] Only for size 2, flat terminals

I201_20490

### Lateral operating mechanism left, sizes 3 to 5, 3/4-pole




**Legend**

1. Neutral conductor terminal
2. N/PE terminal
3. 4th contact element [1]
5. Auxiliary switch [2]
6. Phase barrier
7. Terminal cover
9. Door-coupling rotary operating mechanism

[1] Only for 3-pole 3K
[2] Up to 4× auxiliary switches

I201_20491

8

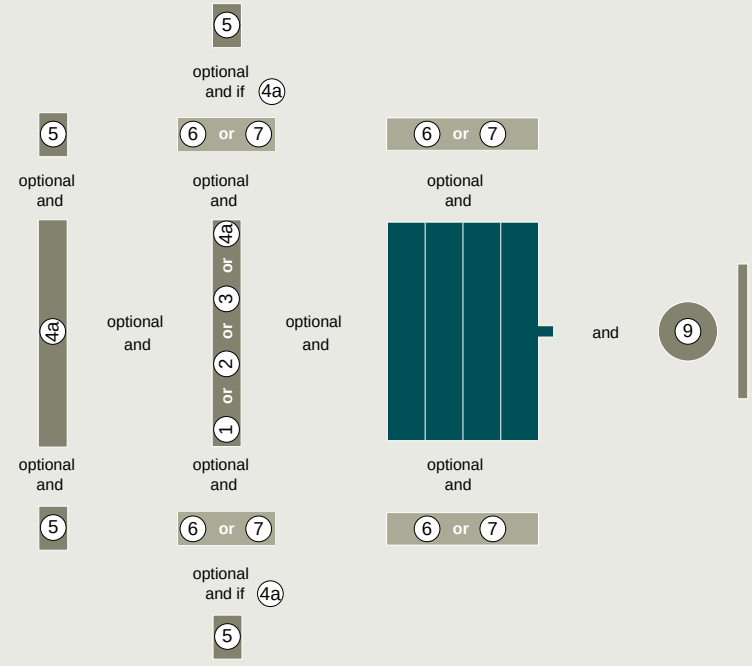


System overview, page 8/60

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## Lateral operating mechanism right, sizes 1 and 2, 3/4-pole




**Legend**

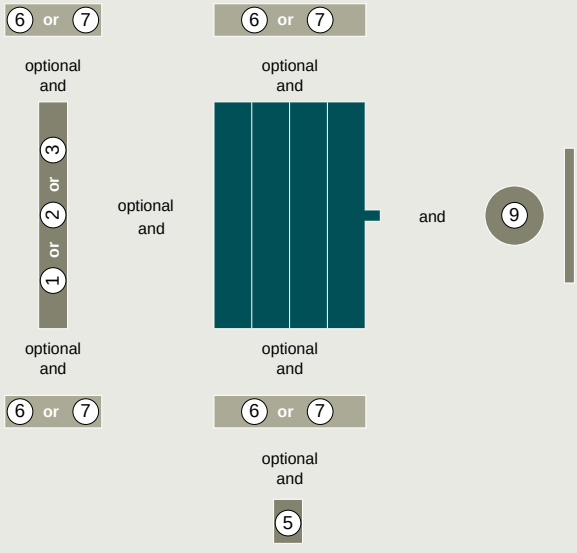
(1) Neutral conductor terminal
(2) N/PE terminal
(3) 4th contact element [1]
(4a) Auxiliary switch module for auxiliary switches, standard version [2]
(5) Auxiliary switch
(6) Phase barrier [3]
(7) Terminal cover [3]
(9) Door-coupling rotary operating mechanism

[1] Only for 3-pole 3K
[2] Max. 1× per switch, requires at least 1× auxiliary switch (5)
[3] Only for size 2, flat terminals

I201_20492

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## Lateral operating mechanism right, sizes 3 to 5, 3/4-pole




**Legend**

(1) Neutral conductor terminal
(2) N/PE terminal
(3) 4th contact element [1]
(5) Auxiliary switch [2]
(6) Phase barrier
(7) Terminal cover
(9) Door-coupling rotary operating mechanism

[1] Only for 3-pole 3K
[2] Up to 4× auxiliary switches (5)

I201_20493

System overview, page 8/60

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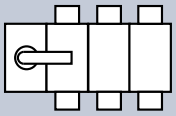
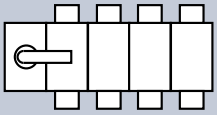


# 3KD switch disconnectors

## Complete units with direct operating mechanisms





| | | Operating mechanism, gray<br>Front operating mechanism left | |
|---|---|---|---|
| | **Application** | AC/DC | AC/DC |
| | **Number of poles** | 3P | 4P |
| | |  |  |
| **Size** | **Uninterrupted current $I_u$** | | |
| **Box terminals** | | | |
| 1 | 16 A | 3KD1632-2ME10-0 | 3KD1642-2ME10-0 |
| | 32 A | 3KD2232-2ME10-0 | 3KD2242-2ME10-0 |
| | 63 A | 3KD2632-2ME10-0 | 3KD2642-2ME10-0 |
| | 80 A | 3KD2832-2ME10-0 | 3KD2842-2ME10-0 |
| | 100 A | 3KD3032-2ME10-0 | 3KD3042-2ME10-0 |
| 2 | 80 A | 3KD2832-2NE10-0 | 3KD2842-2NE10-0 |
| | 100 A | 3KD3032-2NE10-0 | 3KD3042-2NE10-0 |
| | 125 A | 3KD3232-2NE10-0 | 3KD3242-2NE10-0 |
| | 160 A | 3KD3432-2NE10-0 | 3KD3442-2NE10-0 |
| **Flat terminals** | | | |
| 2 | 80 A | 3KD2832-0NE10-0 | 3KD2842-0NE10-0 |
| | 100 A | 3KD3032-0NE10-0 | 3KD3042-0NE10-0 |
| | 125 A | 3KD3232-0NE10-0 | 3KD3242-0NE10-0 |
| | 160 A | 3KD3432-0NE10-0 | 3KD3442-0NE10-0 |
| | 200 A | 3KD3632-0NE10-0 | 3KD3642-0NE10-0 |
| | 250 A | 3KD3832-0NE10-0 | 3KD3842-0NE10-0 |
| 3 | 200 A | 3KD3632-0PE10-0 | 3KD3642-0PE10-0 |
| | 250 A | 3KD3832-0PE10-0 | 3KD3842-0PE10-0 |
| | 315 A | 3KD4032-0PE10-0 | 3KD4042-0PE10-0 |
| | 400 A | 3KD4232-0PE10-0 | 3KD4242-0PE10-0 |
| | 500 A | 3KD4432-0PE10-0 | 3KD4442-0PE10-0 |
| 4 | 500 A | 3KD4432-0QE10-0 | 3KD4442-0QE10-0 |
| | 630 A | 3KD4632-0QE10-0 | 3KD4642-0QE10-0 |
| | 800 A | 3KD4832-0QE10-0 | 3KD4842-0QE10-0 |
| | 1000 A | 3KD5032-0QE10-0 | 3KD5042-0QE10-0 |
| 5 | 1000 A | 3KD5032-0RE10-0 | 3KD5042-0RE10-0 |
| | 1250 A | 3KD5232-0RE10-0 | 3KD5242-0RE10-0 |
| | 1600 A | 3KD5432-0RE10-0 | 3KD5442-0RE10-0 |
| | 2000 A | 3KD5632-0RE10-0 | 3KD5642-0RE10-0 |

**Scope of supply:**
- Incl. phase barriers on the input and output side for size 2 with flat terminals
- Terminal covers must be ordered separately for switch disconnectors with flat terminals and direct operating mechanisms

**Mounting:**
- The switch disconnectors are designed for floor mounting and the sizes 1 and 2 can optionally also be mounted on DIN rails

**Note:**
- The complete units with a direct operating mechanism are not suitable for conversion to door-coupling rotary operating mechanisms; the basic units are to be used for this purpose
- All basic units without handles are suitable for use with door-coupling rotary operating mechanisms, from size 1 to size 5 these can also be equipped with direct operating mechanisms
- The switch disconnectors with lateral operating mechanism are suitable for door-coupling rotary operating mechanisms
- For 3KD switch disconnectors and lateral operating mechanism (left or right), only 8UD door-coupling rotary operating mechanisms without the test function can be used

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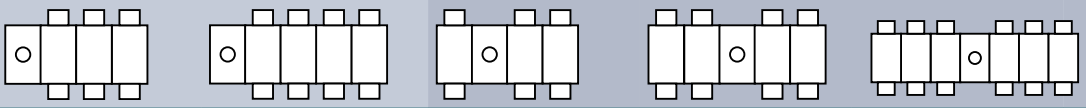


# 3KD switch disconnectors

## Basic units without handles



| | Front operating mechanism Left | | Front operating mechanism Center | | |
|---|---|---|---|---|---|
| **Application** | AC/DC | AC/DC | AC/DC | AC/DC | DC |
| **Number of poles** | 3P | 4P | 3P | 4P | 6P |



| Size | Uninterrupted current $I_u$ | | | | | |
|---|---|---|---|---|---|---|
| **Box terminals** | | | | | | |
| 1 | 16 A | 3KD1630-2ME10-0 | 3KD1640-2ME10-0 | 3KD1630-2ME20-0 | 3KD1640-2ME20-0 | 3KD1660-2ME20-0 |
| | 32 A | 3KD2230-2ME10-0 | 3KD2240-2ME10-0 | 3KD2230-2ME20-0 | 3KD2240-2ME20-0 | 3KD2260-2ME20-0 |
| | 63 A | 3KD2630-2ME10-0 | 3KD2640-2ME10-0 | 3KD2630-2ME20-0 | 3KD2640-2ME20-0 | 3KD2660-2ME20-0 |
| | 80 A | 3KD2830-2ME10-0 | 3KD2840-2ME10-0 | 3KD2830-2ME20-0 | 3KD2840-2ME20-0 | – |
| | 100 A | 3KD3030-2ME10-0 | 3KD3040-2ME10-0 | 3KD3030-2ME20-0 | 3KD3040-2ME20-0 | – |
| 2 | 80 A | 3KD2830-2NE10-0 | 3KD2840-2NE10-0 | 3KD2830-2NE20-0 | 3KD2840-2NE20-0 | 3KD2860-2NE20-0 |
| | 100 A | 3KD3030-2NE10-0 | 3KD3040-2NE10-0 | 3KD3030-2NE20-0 | 3KD3040-2NE20-0 | 3KD3060-2NE20-0 |
| | 125 A | 3KD3230-2NE10-0 | 3KD3240-2NE10-0 | 3KD3230-2NE20-0 | 3KD3240-2NE20-0 | 3KD3260-2NE20-0 |
| | 160 A | 3KD3430-2NE10-0 | 3KD3440-2NE10-0 | 3KD3430-2NE20-0 | 3KD3440-2NE20-0 | 3KD3460-2NE20-0 |
| **Flat terminals** | | | | | | |
| 2 | 80 A | 3KD2830-0NE10-0 | 3KD2840-0NE10-0 | 3KD2830-0NE20-0 | 3KD2840-0NE20-0 | 3KD2860-0NE20-0 |
| | 100 A | 3KD3030-0NE10-0 | 3KD3040-0NE10-0 | 3KD3030-0NE20-0 | 3KD3040-0NE20-0 | 3KD3060-0NE20-0 |
| | 125 A | 3KD3230-0NE10-0 | 3KD3240-0NE10-0 | 3KD3230-0NE20-0 | 3KD3240-0NE20-0 | 3KD3260-0NE20-0 |
| | 160 A | 3KD3430-0NE10-0 | 3KD3440-0NE10-0 | 3KD3430-0NE20-0 | 3KD3440-0NE20-0 | 3KD3460-0NE20-0 |
| | 200 A | 3KD3630-0NE10-0 | 3KD3640-0NE10-0 | 3KD3630-0NE20-0 | 3KD3640-0NE20-0 | – |
| | 250 A | 3KD3830-0NE10-0 | 3KD3840-0NE10-0 | 3KD3830-0NE20-0 | 3KD3840-0NE20-0 | – |
| 3 | 200 A | 3KD3630-0PE10-0 | 3KD3640-0PE10-0 | 3KD3630-0PE20-0 | 3KD3640-0PE20-0 | 3KD3660-0PE20-0 |
| | 250 A | 3KD3830-0PE10-0 | 3KD3840-0PE10-0 | 3KD3830-0PE20-0 | 3KD3840-0PE20-0 | 3KD3860-0PE20-0 |
| | 315 A | 3KD4030-0PE10-0 | 3KD4040-0PE10-0 | 3KD4030-0PE20-0 | 3KD4040-0PE20-0 | 3KD4060-0PE20-0 |
| | 400 A | 3KD4230-0PE10-0 | 3KD4240-0PE10-0 | 3KD4230-0PE20-0 | 3KD4240-0PE20-0 | 3KD4260-0PE20-0 |
| | 500 A | 3KD4430-0PE10-0 | 3KD4440-0PE10-0 | 3KD4430-0PE20-0 | 3KD4440-0PE20-0 | – |
| 4 | 500 A | 3KD4430-0QE10-0 | 3KD4440-0QE10-0 | 3KD4430-0QE20-0 | 3KD4440-0QE20-0 | 3KD4460-0QE20-0 |
| | 630 A | 3KD4630-0QE10-0 | 3KD4640-0QE10-0 | 3KD4630-0QE20-0 | 3KD4640-0QE20-0 | 3KD4660-0QE20-0 |
| | 800 A | 3KD4830-0QE10-0 | 3KD4840-0QE10-0 | 3KD4830-0QE20-0 | 3KD4840-0QE20-0 | 3KD4860-0QE20-0 |
| | 1000 A | 3KD5030-0QE10-0 | 3KD5040-0QE10-0 | 3KD5030-0QE20-0 | 3KD5040-0QE20-0 | – |
| 5 | 1000 A | 3KD5030-0RE10-0 | 3KD5040-0RE10-0 | 3KD5030-0RE20-0 | 3KD5040-0RE20-0 | 3KD5060-0RE20-0 |
| | 1250 A | 3KD5230-0RE10-0 | 3KD5240-0RE10-0 | 3KD5230-0RE20-0 | 3KD5240-0RE20-0 | 3KD5260-0RE20-0 |
| | 1600 A | 3KD5430-0RE10-0 | 3KD5440-0RE10-0 | 3KD5430-0RE20-0 | 3KD5440-0RE20-0 | 3KD5460-0RE20-0 |
| | 2000 A | 3KD5630-0RE10-0 | 3KD5640-0RE10-0 | 3KD5630-0RE20-0 | 3KD5640-0RE20-0 | – |

**Scope of supply:**
- Incl. phase barriers on the input and output side for size 2 with flat terminals
- Terminal covers must be ordered separately for switch disconnectors with flat terminals and direct operating mechanisms

**Mounting:**
- The switch disconnectors are designed for floor mounting and the sizes 1 and 2 can optionally also be mounted on DIN rails

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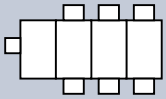
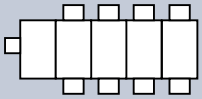
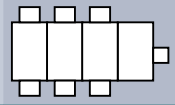
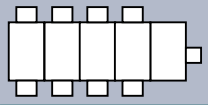
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| **Front operating mechanism**<br>**Left** | | **Right** | |
|---|---|---|---|
| AC/DC | AC/DC | AC/DC | AC/DC |
| 3P | 4P | 3P | 4P |
|  |  |  |  |
| | | | |
| 3KD1634-2ME10-0 | 3KD1644-2ME10-0 | 3KD1634-2ME40-0 | 3KD1644-2ME40-0 |
| 3KD2234-2ME10-0 | 3KD2244-2ME10-0 | 3KD2234-2ME40-0 | 3KD2244-2ME40-0 |
| 3KD2634-2ME10-0 | 3KD2644-2ME10-0 | 3KD2634-2ME40-0 | 3KD2644-2ME40-0 |
| 3KD2834-2ME10-0 | 3KD2844-2ME10-0 | 3KD2834-2ME40-0 | 3KD2844-2ME40-0 |
| 3KD3034-2ME10-0 | 3KD3044-2ME10-0 | 3KD3034-2ME40-0 | 3KD3044-2ME40-0 |
| 3KD2834-2NE10-0 | 3KD2844-2NE10-0 | 3KD2834-2NE40-0 | 3KD2844-2NE40-0 |
| 3KD3034-2NE10-0 | 3KD3044-2NE10-0 | 3KD3034-2NE40-0 | 3KD3044-2NE40-0 |
| 3KD3234-2NE10-0 | 3KD3244-2NE10-0 | 3KD3234-2NE40-0 | 3KD3244-2NE40-0 |
| 3KD3434-2NE10-0 | 3KD3444-2NE10-0 | 3KD3434-2NE40-0 | 3KD3444-2NE40-0 |
| | | | |
| 3KD2834-0NE10-0 | 3KD2844-0NE10-0 | 3KD2834-0NE40-0 | 3KD2844-0NE40-0 |
| 3KD3034-0NE10-0 | 3KD3044-0NE10-0 | 3KD3034-0NE40-0 | 3KD3044-0NE40-0 |
| 3KD3234-0NE10-0 | 3KD3244-0NE10-0 | 3KD3234-0NE40-0 | 3KD3244-0NE40-0 |
| 3KD3434-0NE10-0 | 3KD3444-0NE10-0 | 3KD3434-0NE40-0 | 3KD3444-0NE40-0 |
| 3KD3634-0NE10-0 | 3KD3644-0NE10-0 | 3KD3634-0NE40-0 | 3KD3644-0NE40-0 |
| 3KD3834-0NE10-0 | 3KD3844-0NE10-0 | 3KD3834-0NE40-0 | 3KD3844-0NE40-0 |
| 3KD3634-0PE10-0 | 3KD3644-0PE10-0 | 3KD3634-0PE40-0 | 3KD3644-0PE40-0 |
| 3KD3834-0PE10-0 | 3KD3844-0PE10-0 | 3KD3834-0PE40-0 | 3KD3844-0PE40-0 |
| 3KD4034-0PE10-0 | 3KD4044-0PE10-0 | 3KD4034-0PE40-0 | 3KD4044-0PE40-0 |
| 3KD4234-0PE10-0 | 3KD4244-0PE10-0 | 3KD4234-0PE40-0 | 3KD4244-0PE40-0 |
| 3KD4434-0PE10-0 | 3KD4444-0PE10-0 | 3KD4434-0PE40-0 | 3KD4444-0PE40-0 |
| 3KD4434-0QE10-0 | 3KD4444-0QE10-0 | 3KD4434-0QE40-0 | 3KD4444-0QE40-0 |
| 3KD4634-0QE10-0 | 3KD4644-0QE10-0 | 3KD4634-0QE40-0 | 3KD4644-0QE40-0 |
| 3KD4834-0QE10-0 | 3KD4844-0QE10-0 | 3KD4834-0QE40-0 | 3KD4844-0QE40-0 |
| 3KD5034-0QE10-0 | 3KD5044-0QE10-0 | 3KD5034-0QE40-0 | 3KD5044-0QE40-0 |
| 3KD5034-0RE10-0 | 3KD5044-0RE10-0 | 3KD5034-0RE40-0 | 3KD5044-0RE40-0 |
| 3KD5234-0RE10-0 | 3KD5244-0RE10-0 | 3KD5234-0RE40-0 | 3KD5244-0RE40-0 |
| 3KD5434-0RE10-0 | 3KD5444-0RE10-0 | 3KD5434-0RE40-0 | 3KD5444-0RE40-0 |
| 3KD5634-0RE10-0 | 3KD5644-0RE10-0 | 3KD5634-0RE40-0 | 3KD5644-0RE40-0 |

**Note:**
- The complete units with a direct operating mechanism are not suitable for conversion to door-coupling rotary operating mechanisms; the basic units are to be used for this purpose
- All basic units without handles are suitable for use with door-coupling rotary operating mechanisms, from size 1 to size 5 these can also be equipped with direct operating mechanisms
- The switch disconnectors with lateral operating mechanism are suitable for door-coupling rotary operating mechanisms
- For 3KD switch disconnectors and lateral operating mechanism (left or right), only 8UD door-coupling rotary operating mechanisms without the test function can be used

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# 3KD switch disconnectors

## Accessories

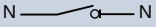
### Additional poles

**Note:**

- Additional poles (4th contact element, N or N/PE terminal) must always be mounted directly adjacent to the switch disconnector on the left or right. Accordingly, an auxiliary switch module must not be mounted between the basic unit and an additional pole on sizes 1 and 2.
- For installation, it is important to note that only a 3-pole 3KD switch disconnector may be retrofitted with an additional switching pole with contact system (4th contact element).

**4th contact elements (switching pole)**

- For upgrading a 3-pole to a 4-pole switch disconnector
- For sizes 1 to 5, identical to the factory-fitted poles

| | Connection | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|
|  | Box terminals<br>  | 3KD9105-2 | ■ | | | | |
| | | 3KD9205-2 | | ■ | | | |
|  | Flat terminals<br>  | 3KD9205-0 | | ■ | | | |
| | | 3KD9305-0 | | | ■ | | |
| | | 3KD9405-0 | | | | ■ | |
| | | 3KD9505-0 | | | | | ■ |

**N terminals (neutral conductor terminal) with removable jumper**

- A jumper can be removed in order to interrupt the electrical connection between the terminals

| | Connection | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|
|  | Box terminals<br> | 3KD9106-2 | ■ | | | | |
| | | 3KD9206-2 | | ■ | | | |
|  | Flat terminals<br> | 3KD9206-0 | | ■ | | | |
| | | 3KD9306-0 | | | ■ | | |
| | | 3KD9406-0 | | | | ■ | |
| | | 3KD9506-0 | | | | | ■ |

**N/PE terminals with permanent jumper**

- Permanent electrical connection between the terminals, cannot be broken

| | Connection | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|
|  | Box terminals<br> | 3KD9106-8 | ■ | | | | |
| | | 3KD9206-8 | | ■ | | | |
|  | Flat terminals<br> | 3KD9206-7 | | ■ | | | |
| | | 3KD9306-7 | | | ■ | | |
| | | 3KD9406-7 | | | | ■ | |
| | | 3KD9506-7 | | | | | ■ |

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## Operating mechanisms

### Direct operating mechanisms, standard version

- Can be locked with up to max. 3 padlocks
- Requires additional mounting depth in locked state
- Not suitable for basic units with a lateral operating mechanism





| Inscription | Color | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|
| Test – O – I | Gray | 3KD9101-1 | ■ | | | | |
| | | 3KD9201-1 | | ■ | | | |
| | | 3KD9301-1 | | | ■ | | |
| | | 3KD9401-1 | | | | ■ | |
| | | 3KD9501-1 | | | | | ■ |
| | Red/yellow | 3KD9101-2 | ■ | | | | |
| | | 3KD9201-2 | | ■ | | | |
| | | 3KD9301-2 | | | ■ | | |
| | | 3KD9401-2 | | | | ■ | |
| | | 3KD9501-2 | | | | | ■ |

### Direct operating mechanisms, flat version

- Suitable for distribution boards and only basic units with a front operating mechanism
- Can be locked with one padlock
- No additional mounting depth in locked state





| Inscription | Color | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|
| Test – O – I | Gray | 3KD9101-0 | ■ | | | | |
| | | 3KD9201-0 | | ■ | | | |
| | Red/yellow | 3KD9101-8 | ■ | | | | |
| | | 3KD9201-8 | | ■ | | | |

### Door-coupling rotary operating mechanisms, complete

- **Scope of supply:**
  - Handle with masking plate
  - Coupling driver
  - Shaft 300 mm
- Can be locked with up to max. 3 padlocks









| Inscription | Tolerance compensation | Defeat function | Color | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|---|---|
| O – I | Without | With | Gray | 8UD1171-2AD11 | ■ | ■ | | | |
| | | | Red/yellow | 8UD1171-2AD15 | ■ | ■ | | | |
| Test – O – I | With | With | Gray | 8UD1171-2AF21 | ■ | ■ | | | |
| | | | | 8UD1141-2AF21 | | | ■ | | |
| | | | | 8UD1151-3AF21 | | | | ■ | |
| | | | | 8UD1161-4AF21 | | | | | ■ |
| | | | Red/yellow | 8UD1171-2AF25 | ■ | ■ | | | |
| | | | | 8UD1141-2AF25 | | | ■ | | |
| | | | | 8UD1151-3AF25 | | | | ■ | |
| | | | | 8UD1161-4AF25 | | | | | ■ |

**Note:**

- For 3KD switch disconnectors and lateral operating mechanism (left or right), only 8UD door-coupling rotary operating mechanisms without the test function can be used

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# 3KD switch disconnectors

## Accessories

### Accessories for door-coupling rotary operating mechanisms

**Handles**

- Supplied with a masking plate, but without an extension shaft and without coupling driver
- Can be locked with up to max. 3 padlocks









| Inscription | Lighting | Color | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|---|
| O – I | Without | Gray | 8UD1771-2AD01 | ■ | ■ | | | |
| | | | 8UD1841-2AD01 | | | ■ | | |
| | | | 8UD1851-3AD01 | | | | ■ | |
| | | | 8UD1861-4AD01 | | | | | ■ |
| | | Red/yellow | 8UD1771-2AD05 | ■ | ■ | | | |
| | | | 8UD1841-2AD05 | | | ■ | | |
| | | | 8UD1851-3AD05 | | | | ■ | |
| | | | 8UD1861-4AD05 | | | | | ■ |
| | With | Gray | 8UD1771-2CD01 | ■ | ■ | | | |
| | | | 8UD1841-2CD01 | | | ■ | | |
| | | | 8UD1851-3CD01 | | | | ■ | |
| | | | 8UD1861-4CD01 | | | | | ■ |
| | | Red/yellow | 8UD1771-2CD05 | ■ | ■ | | | |
| | | | 8UD1841-2CD05 | | | ■ | | |
| | | | 8UD1851-3CD05 | | | | ■ | |
| | | | 8UD1861-4CD05 | | | | | ■ |
| Test – O – I | Without | Gray | 8UD1771-2AF01 | ■ | ■ | | | |
| | | | 8UD1841-2AF01 | | | ■ | | |
| | | | 8UD1851-3AF01 | | | | ■ | |
| | | | 8UD1861-4AF01 | | | | | ■ |
| | | Red/yellow | 8UD1771-2AF05 | ■ | ■ | | | |
| | | | 8UD1841-2AF05 | | | ■ | | |
| | | | 8UD1851-3AF05 | | | | ■ | |
| | | | 8UD1861-4AF05 | | | | | ■ |
| | With | Gray | 8UD1771-2CF01 | ■ | ■ | | | |
| | | | 8UD1841-2CF01 | | | ■ | | |
| | | | 8UD1851-3CF01 | | | | ■ | |
| | | | 8UD1861-4CF01 | | | | | ■ |
| | | Red/yellow | 8UD1771-2CF05 | ■ | ■ | | | |
| | | | 8UD1841-2CF05 | | | ■ | | |
| | | | 8UD1851-3CF05 | | | | ■ | |
| | | | 8UD1861-4CF05 | | | | | ■ |

**Extension shafts**

- A shaft jack is required for the 8UD1 handle when the 600 mm long shaft is used and for sizes 1 and 2





| Length | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|
| 300 mm | 8UC6032 | ■ | ■ | ■ | | |
| | 8UC6033 | | | | ■ | |
| | 8UC6034 | | | | | ■ |
| 600 mm | 8UC6082 | ■ | ■ | ■ | | |
| | 8UC6083 | | | | ■ | |
| | 8UC6084 | | | | | ■ |

**Shaft jack for 8UD1 handle**



| Version | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|
| For shaft 600 mm | 8UD1900-0FA00 | ■ | ■ | | | |

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## Accessories for door-coupling rotary operating mechanisms

**Coupling drivers**





| Version | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|
| With tolerance compensation | 8UD1900-2GA00 | ■ | ■ | | | |
| | 8UD1900-6GA00 | | | ■ | | |
| | 8UD1900-3GA00 | | | | ■ | |
| | 8UD1900-4GA00 | | | | | ■ |
| Without tolerance compensation | 8UD1900-2HA00 | ■ | ■ | | | |
| | 8UD1900-6HA00 | | | ■ | | |
| | 8UD1900-3HA00 | | | | ■ | |
| | 8UD1900-4HA00 | | | | | ■ |

**Adapters for shafts**



| Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|
| 8UC6022 | ■ | ■ | ■ | | |
| 8UC6023 | | | | ■ | |
| 8UC6024 | | | | | ■ |

## Further accessories and spare parts

**Auxiliary switch modules**



- Auxiliary switch modules are supplied without auxiliary switches. A maximum of 2 auxiliary switches can be installed per auxiliary module
- The 3KD9103-6 and 3KD9103-7 auxiliary switch modules can only be used with 3KD directly on the operating mechanism if the operating mechanism is on the front or on the left

| Type | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|
| Standard version | 3KD9103-5 | ■ | ■ | | | |
| With test function | 3KD9103-6 | ■ | ■ | | | |
| With leading NO contact and test function | 3KD9103-7 | ■ | ■ | | | |

**Auxiliary switches**

- Auxiliary switches for sizes 3 to 5 have a screw terminal and are mounted on the 3KD operating mechanism module. Auxiliary switches with spring-type terminals from the 3SU1 program can also be used.
- All auxiliary switches for sizes 3 to 5 can be used as leading auxiliary switches, depending on the mounting position of the auxiliary switch (see operating instructions).









| Type | Contacts | Contact surface | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|---|
| With connecting cables | 1 CO | Standard | 3KD9103-1 | ■ | ■ | | | |
| | | Solid-state compatible | 3KD9103-3 | ■ | ■ | | | |
| Without connecting cables | 1 CO | Standard | 3KD9103-2 | ■ | ■ | | | |
| | | Solid-state compatible | 3KD9103-4 | ■ | ■ | | | |
| | 1 NO | Standard | 3SU1400-1AA10-1BA0 | | | ■ | ■ | ■ |
| | | Gold-plated | 3SU1400-1AA10-1LA0 | | | ■ | ■ | ■ |
| | 1 NC | Standard | 3SU1400-1AA10-1CA0 | | | ■ | ■ | ■ |
| | | Gold-plated | 3SU1400-1AA10-1MA0 | | | ■ | ■ | ■ |
| | 1 NO + 1 NC | Standard | 3SU1400-1AA10-1FA0 | | | ■ | ■ | ■ |
| | | Gold-plated | 3SU1400-1AA10-1QA0 | | | ■ | ■ | ■ |
| | 2 NO | Standard | 3SU1400-1AA10-1DA0 | | | ■ | ■ | ■ |
| | | Gold-plated | 3SU1400-1AA10-1NA0 | | | ■ | ■ | ■ |
| | 2 NC | Standard | 3SU1400-1AA10-1EA0 | | | ■ | ■ | ■ |
| | | Gold-plated | 3SU1400-1AA10-1PA0 | | | ■ | ■ | ■ |

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# 3KD switch disconnectors

## Accessories

### Further accessories and spare parts

#### Phase barriers



- For 3KD with flat terminals
- For 3KD size 2 with flat terminals, phase barriers are already contained in the scope of supply

| Version | Scope of supply | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|
| For 3-pole devices | 6 units | 3KD9108-6 | | ■ | | | |
| | | 3KD9308-6 | | | ■ | | |
| | | 3KD9408-6 | | | | ■ | |
| | | 3KD9508-6 | | | | | ■ |
| For 4-pole devices | 8 units | 3KD9108-8 | | ■ | | | |
| | | 3KD9308-8 | | | ■ | | |
| | | 3KD9408-8 | | | | ■ | |
| | | 3KD9508-8 | | | | | ■ |

#### Terminal covers



- For 3KD with flat terminals
- Not permissible for 2000 A devices

| Version | Scope of supply | Type | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|---|
| For 3-pole devices | 6 units | Standard version | 3KD9504-6 | | | | | ■ |
| | | | 3KD9204-6 | | ■ | | | |
| | | Short version | 3KD9204-7 | | ■ | | | |
| | 8 units | Standard version | 3KD9304-6 | | | ■ | | |
| | | | 3KD9404-6 | | | | ■ | |
| | | Short version | 3KD9304-7 | | | ■ | | |
| | | | 3KD9404-7 | | | | ■ | |
| For 4-pole devices | 8 units | Standard version | 3KD9504-8 | | | | | ■ |
| | | | 3KD9204-8 | | ■ | | | |
| | | Short version | 3KD9204-5 | | ■ | | | |
| | 10 units | Standard version | 3KD9304-8 | | | ■ | | |
| | | | 3KD9404-8 | | | | ■ | |
| | | Short version | 3KD9304-5 | | | ■ | | |
| | | | 3KD9404-5 | | | | ■ | |

#### Spare part for terminal covers



- Not permissible for 2000 A devices

| Scope of supply | Type | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|
| 1 unit | Standard version | 3KD9504-1 | | | | | ■ |
| | Short version | 3KD9204-1 | | ■ | | | |
| | | 3KD9304-1 | | | ■ | | |
| | | 3KD9404-1 | | | | ■ | |

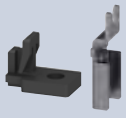
#### Blocking pin test function



- Enables permanent deactivation of the test function for auxiliary switches
- It is installed in the operating mechanism module of the 3KD switch disconnector

| Scope of supply | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|
| 10 units | 3KF9112-1AA00 | ■ | ■ | | | |
| | 3KF9412-1AA00 | | | ■ | ■ | |
| | 3KF9512-1AA00 | | | | | ■ |

#### Mounting brackets



- Spare part, included in the scope of supply of the 3KD

| Scope of supply | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|
| 4 units | 3KD9120-1 | ■ | ■ | | | |
| | 3KF9212-0AA00 | | | ■ | | |
| | 3KF9412-0AA00 | | | | ■ | |
| | 3KF9512-0AA00 | | | | | ■ |

#### Slide for mounting on a DIN rail



- Spare part, included in the scope of supply of the 3KD

| Scope of supply | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|
| 5 units | 3KF9112-0BA00 | ■ | ■ | | | |

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## Accessories for DC applications







| Connection | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|
| **Connecting bridges** | | | | | | |
| • Suitable for connecting 2 poles<br>• For 3KD switch disconnectors with 400 A, 800 A, 1250 A and 1600 A, two units are required. | | | | | | |
| Box terminals | 3KD9118-1 | ■ | | | | |
| | 3KD9218-1 | | ■ | | | |
| Flat terminals | 3KD9218-0 | | ■ | | | |
| | 3KD9318-0 | | | ■ | | |
| | 3KD9418-0 | | | | ■ | |
| | 3KD9518-0 | | | | | ■ |
| **Terminal covers for connecting bridges** | | | | | | |
| • For 3KD with flat terminals | | | | | | |
| | **Article No.** | | | | | |
| | 3KD9204-0 | | ■ | | | |
| | 3KD9304-0 | | | ■ | | |
| | 3KD9404-0 | | | | ■ | |
| | 3KD9504-0 | | | | | ■ |

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# Fuse switch disconnectors

## Quick selection guide



**3NP1**



| Size | | | 000 narrow | 000 | 00 | 1 | 2 | 3 |
|---|---|---|---|---|---|---|---|---|
| **General technical specifications acc. to IEC 60947-3** | | | | | | | | |
| **Basic data** | | | | | | | | |
| Rated uninterrupted current $I_u$ | | A | 125 | 125 [2] | 160 | 250 | 400 | 630 |
| For fuse links acc. to IEC 60269-2 | | Size | 000 | 000 | 00 and 000 | 1 and 0 | 2 and 1 | 3 and 2 |
| Rated operational voltage $U_e$ | At 50/60 Hz AC | V | 690 | 690 | 690 | | | |
| | At DC (3 conducting paths in series) | V | – | 440 | 440 | | | |
| | At DC (2 conducting paths in series) | V | – | 240 | 240 | | | |
| | At DC | V | – | – | – | | | |
| | For utilization category AC-20B or DC-20B | V | – | 690 [1] | 690 [1] | | | |
| **Operating and short-circuit behavior** | | | | | | | | |
| Rated operational current $I_e$ | At AC-21B, 400 V AC | A | 125 | 125 [2] | 160 | 250 | 400 | 630 |
| | At AC-22A, 400 V AC | A | – | – | – | – | – | – |
| | At AC-22B, 400 V AC | A | 125 | 125 [2] | 160 | 250 | 400 | 630 |
| | At AC-23B, 400 V AC | A | 63 | 125 [2] | 160 | 250 | 400 | 630 |
| | At AC-21B, 500 V AC | A | 125 | 125 [2] | 160 | 250 | 400 | 630 |
| | At AC-22B, 500 V AC | A | 125 | 125 | 160 | 250 | 400 | 630 |
| | At AC-23B, 500 V AC | A | – | 40 | 63 | 200 | 315 | 500 |
| | At AC-21B, 690 V AC | A | 80 | 125 [2] | 160 | 250 | 400 | 630 |
| | At AC-22B, 690 V AC | A | – | 50 | 125 | 250 | 400 | 500 |
| | At AC-23B, 690 V AC | A | – | 25 | 35 | 100 | 125 | 200 |
| | At DC-21B (2 conducting paths in series), 240 V DC | A | – | 125 [2] | 160 | 250 | 400 | 630 |
| | At DC-22B (2 conducting paths in series), 240 V DC | A | – | 100 | 160 | 250 | 400 | 630 |
| | At DC-23B (2 conducting paths in series), 240 V DC | A | – | 80 | 100 | 200 | 250 | 400 |
| | At DC-21B (3 conducting paths in series), 440 V DC | A | – | 100 | 160 | 250 | 400 | 630 |
| | At DC-22B (3 conducting paths in series), 440 V DC | A | – | 50 | 125 | 200 | 315 | 500 |
| | At DC-23B (3 conducting paths in series), 440 V DC | A | – | 25 | 63 | 100 | 160 | 250 |
| Rated conditional short-circuit current with fuses (by fast switch on) | Rated current at 400 V/500 V/690 V | kA | 80/80/80 | 80/80/80 | 80/80/80 | 80/80/50 | 80/80/50 | 50/50/50 |
| | Permissible let-through current of the fuses, peak value | kA | 10 | 10 | 15 | 25 | 40 | 50 |
| Short-circuit strength with fuses (with closed disconnector) | Rated current at 500 V/690 V | kA | 80/80 | 120/100 | 120/100 | 120/100 | 100/100 | 100/100 |
| | Permissible let-through $I^2t$ value of the fuses | $kA^2s$ | 59 | 223 | 223 | 780 | 2150 | 5400 |
| | Permissible let-through current of the fuses, peak value | kA | 10 | 15 | 23 | 32 | 40 | 60 |
| Rated making capacity | With isolating blades at 500 V AC | kA | – | 2 | 6 | 17 | 17 | 17 |
| Rated short-time withstand current $I_{cw}$ | | kA | – | – | – | – | – | – |
| Rated insulation voltage $U_i$ | | V | 690 | 690 [1] | 690 [1] | 690 [1] | 690 [1] | 690 [1] |
| Rated impulse withstand voltage $U_{imp}$ | | kV | 6 | 8 | 8 | 8 | 8 | 8 |
| Power loss per pole of the switch at $I_{th}$ (without fuses) | | W | 4.6 | 5 | 5 | 8 | 14 | 30 |
| Maximum power loss of the usable fuses (per fuse) | | W | 9 | 7.5 [3] | 12 | 23 | 34 | 48 |
| Mechanical endurance, operating cycles | | | 2000 | 2000 | 2000 | 1600 | 1000 | 1000 |
| **Degree of protection, on the front** | | | | | | | | |
| Without masking plate or terminal cover – switch closed/open | | | IP30/IP10 | IP30/IP20 | IP30/IP20 | IP30/IP20 | IP30/IP20 | IP30/IP20 |
| With masking plate or terminal cover – switch closed/open | | | IP30/IP10 | IP40/IP20 | IP40/IP20 | IP40/IP20 | IP40/IP20 | IP40/IP20 |
| **Certifications and approvals** | | | | | | | | |
| | | | | | VDE, CCC, LR, cULus [4] | | | |
| **Further information** | | | | | | | | |
| | | | | | See page 8/78 | | | |

The technical specifications apply to the standard types stated below.
For the complete specifications for all versions, see the Online Support
3NP1: 3-pole and 4-pole devices without fuse monitoring
3NP5: Devices without fuse monitoring

3NJ4/5: Disconnectors for cable and line protection without fuse monitoring, not for transformer protection

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| 3NP5 | | | | 3NJ4/3NJ5 | | | | | 5SG76 |
|---|---|---|---|---|---|---|---|---|---|
|  | | | |  | | | | |  |
| **00** | **1** | **2** | **3** | **00** | **1** | **2** | **3** | **4a** | **D01** |
| | | | | | | | | | |
| | | | | | | | | | |
| 160 | 250 | 400 | 630 | 160 | 250 | 400 | 630 | 1250 | 16 |
| 00 | 1 and 0 | 2 and 1 | 3 and 2 | 00 and 000 | 1 and 0 | 2 and 1 | 3 and 2 | 4a | D01 |
| 690 | | | | | | 690 | | | 400, 415 |
| 440 | | | | | | – | | | – |
| 220 | | | | | | – | | | 110 |
| – | | | | | | – | | | 48 |
| 690 | | | | | | – | | | – |
| | | | | | | | | | |
| 160 | 250 | 400 | 630 | 160 | 250 | 400 | 630 | 1250 | 16 |
| – | – | – | – | – | – | – | – | – | 16 |
| 160 | 250 | 400 | 630 | 160 | 250 | 400 | 630 | 1250 | – |
| 160 | 250 | 400 | 630 | – | 250 | 400 | – | – | – |
| 160 | 250 | 400 | 630 | 160 | 250 | 400 | 630 | 1250 | – |
| 160 | 250 | 400 | 630 | 160 | 250 | 400 | 630 | 1250 | – |
| 160 | 250 | 400 | 630 | – | – | – | – | – | – |
| 160 | 250 | 400 | 630 | 100 | 250 | 400 | 630 | 1250 | – |
| 160 | 250 | 400 | 630 | 100 | 250 | – | – | – | – |
| 100 | 160 | 315 | 400 | – | – | – | – | – | – |
| 160 | 250 | 400 | 630 | – | – | – | – | – | – |
| 160 | 250 | 400 | 630 | – | – | – | – | – | – |
| 160 | 250 | 400 | 630 | – | – | – | – | – | – |
| 160 | 250 | 400 | 630 | – | – | – | – | – | – |
| 160 | 250 | 400 | 630 | – | – | – | – | – | – |
| 160 | 250 | 400 | 630 | – | – | – | – | – | – |
| 50/50/– | 50/50/– | 50/50/– | 50/50/– | – | – | – | – | – | 50/–/– |
| 15 | 25 | 40 | 50 | – | – | – | – | – | – |
| 100/– | 100/– | 50/– | 50/– | 80 | 120 | 120 | 120 | 80 | – |
| 223 | 780 | 2150 | 5400 | – | – | – | – | – | – |
| 23 | 32 | 40 | 60 | – | – | – | – | – | – |
| 6 | 17 | 17 | 17 | – | – | – | – | – | – |
| – | – | – | – | – | 14.5 | 14.5 | 14.5 | 35 | – |
| 690 [1] | 690 [1] | 690 [1] | 690 [1] | 800 | 1000 | 1000 | 1000 | 1000 | 400 |
| 6 | 6 | 6 | 6 | 8 | 12 | 12 | 12 | 12 | 2.5 |
| 7.8 | 7.5 | 15 | 39 | 18 | 23 | 54 | 115 | 190 | – |
| 12 | 23 | 34 | 48 | 12 | 32 | 45 | 48 | 110 | 2.5 |
| 1600 | 1600 | 1600 | 1600 | 1400 | 1400 | 800 | 800 | 500 | – |
| | | | | | | | | | |
| IP00/IP00 | IP00/IP00 | IP00/IP00 | IP00/IP00 | IP00/IP00 | IP00/IP00 | IP00/IP00 | IP00/IP00 | IP00/IP00 | IP20/IP20 |
| IP30/IP10 | IP30/IP10 | IP30/IP10 | IP30/IP10 | IP30/IP10 | IP30/IP10 | IP30/IP10 | IP30/IP10 | IP10/IP00 | IP20/IP20 |
| | | | | | | | | | |
| | | CCC | | | | | | | |
| | | | | | | | | | |
| See page 8/92 | | | | See page 8/96 | | | | | See page 8/108 |

[1] Applies to degree of pollution 3 (for degree of pollution 2, use up to $U_i$ 1000 V possible)
[2] If optional infeed terminal is used max. 160 A
[3] Max. 9 W for operation up to 160 A
[4] 3NP1 NH000 in narrow design only has IEC approval

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# 3NP1 fuse switch disconnectors

## System overview

### Basic units



1, 3, 4-pole for floor mounting



3 and 4-pole mounting on busbar systems

### Connection parts



Terminals for retrofitting to 3NP1



Auxiliary conductor connections



3-phase busbars

### Assembly kits



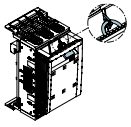
DIN-rail mounting



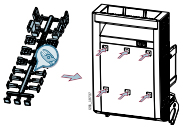
Mechanical connection



1/4-pole busbar mounting

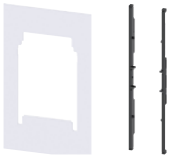


Locking function



Protection against power theft

### Masking frames and covers



Masking frames and supports



Cable connection covers



Reach-around protection for busbar

### Further accessories



Auxiliary switches



Isolating blades



Fuse carriers with and without fuse monitoring

**Note:**
You will find a detailed range of accessories with the basic units.

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# General information

## 3NA COM LV HRC fuse links



The new 3NA COM LV HRC fuse links with measuring and communication functions make your products communication-capable.

**See Fuse Systems, page 7/50**

## Modular design

**Directly to 3NP1 configurator under: sie.ag/3IlXQZH**

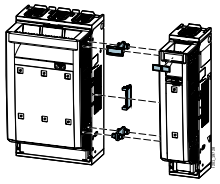


The 3NP1 fuse switch disconnector has a modular design.
A wide variety of switch combinations can be created by connecting two devices or by subsequently fitting accessories. All common switch combinations are available from the factory ready for installation and can be found on the following ordering overviews. An overview of the possibilities offered by the modular design is provided on these information pages.

The fastest and simplest way to find the right switch combination is to use our 3NP1 configurator at **sie.ag/3IlXQZH**.

## Number of poles

**You will find further information under: sie.ag/2UlrAvy**

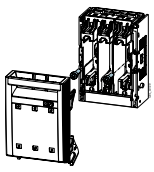


3NP1 fuse switch disconnectors are available from the factory in 1, 3 and 4-pole device versions.
4-pole types are available in all common versions from the factory ready for installation (without fuse monitoring, N-pole on the right-hand side).

All other conceivable device combinations, such as 2-pole 3NP1s, 4-pole with fuse monitoring or with a neutral conductor on the left-hand side can simply be put together on site by combining two 3NP1s.
All that is needed for this in addition to the two 3NP1 basic units is the matching connection assembly kit (see accessories).

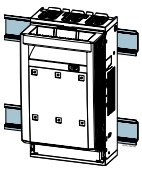
## Floor mounting and DIN rail

**You will find further information under: sie.ag/2UlrAvy**



All sizes of the 3NP1 fuse switch disconnectors are available in floor mounting versions.

The 3NP1 is mounted on a mounting panel with screws.



The devices for floor mounting of sizes 000, 00 and 1 can also be mounted on a DIN rail using accessories. For this purpose, the assembly kit for mounting on a DIN rail is simply mounted on the rear panel of the 3NP1.

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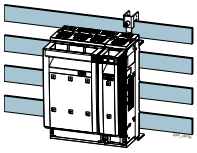


# 3NP1 fuse switch disconnectors

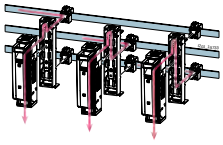
## General information

### Mounting on busbar systems

You will find further information under: sie.ag/2UlrAvy



3-pole and 4-pole 3NP1 are available for mounting on busbar systems. In the case of 4-pole devices, the infeed for the fourth pole is supplied by the neutral conductor bar located above the 3 phases.

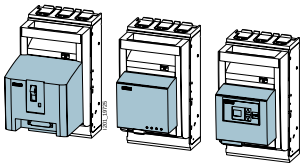


1-pole 3NP1 devices for wall mounting in sizes 000 and 00 can be adapted to the 8US 60 mm busbar system using the assembly kit for 1-pole busbar mounting. Due to the modular design of the assembly kit, any phase can be selected for the infeed.



### Fuse monitoring

You will find further information under: sie.ag/2UlrAvy



MFM EFM10/15 EFM20/25

The fuse monitoring is used to detect, indicate and signal that a fuse has tripped.

The fuse monitors are permanently installed on the handle of the 3NP1. They have floating contacts for remote signaling of a tripped fuse and also indicate this locally.

Various versions of fuse monitors are available, which can be selected to suit the requirements of the application (functionality, see table).

**MFM** electromechanical fuse monitoring with an installed SIRIUS circuit breaker

**EFM** electronic fuse monitoring with evaluation electronics
The EFM15 series is a cost-optimized version of the EFM10. EFM20/25 are versions with additional functions (display indication, detection and signaling of overvoltage/undervoltage with adjustable limits, phase failure detection).

Common combinations of the 3NP1 basic unit and fuse monitoring are available from the factory ready for installation. A fuse monitor can also be easily retrofitted by replacing the fuse carrier. (Fuse carriers for all fuse monitoring versions are available as accessories.)

**Note:**
Fuses with insulated grip lugs cannot be used for 3NP1 with fuse monitoring.

| | | MFM 3-pole | EFM10 3-pole | EFM15 | | | | | EFM20 3-pole | EFM25 3-pole |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1-pole | | | 3-pole | | | |
| | | | | AC/DC | AC | DC | AC | DC | | |
| Local indication | Toggle switch position | ■ | – | – | – | – | – | – | – | – |
| | Indication via LEDs for each phase | – | ■ | ■ | ■ | ■ | ■ | ■ | – | – |
| | Indication via display for each phase | – | – | – | – | – | – | – | ■ | ■ |
| External power supply required | | – | – | 24 V DC | 24 V DC | 24 V DC | 24 V DC | 24 V DC | – | – |
| Permissible operational voltage | AC | Max. 690 V | 230 ... 690 V | 24 ... 230 V | 110 ... 690 V | – | 190 ... 690 V | – | 230 ... 690 V | – |
| | DC | Max. 440 V | – | 24 ... 250 V | – | 120 ... 440 V | – | 220 ... 440 V | – | 220 ... 440 V |
| Detection and indication of | Overvoltage | – | – | – | – | – | – | – | ■ | ■ |
| | Undervoltage | – | – | – | – | – | – | – | ■ | ■ |
| | Phase failure | – | – | – | – | – | – | – | ■ | – |

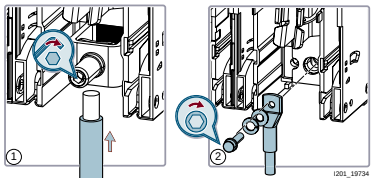
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## Electrical connection

**You will find further information under: sie.ag/2UlrAvy**



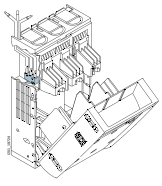

3NP1 are available in versions with box terminals (all sizes) or flat terminals (sizes 00 and larger).

Various additional types of terminal are available as accessories for adaptation to the respective wiring situation, e.g. prism, saddle or three-tier terminals.

## Further accessories

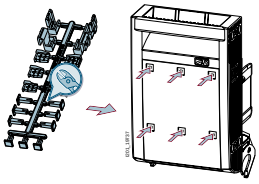
**You will find further information under: sie.ag/2UlrAvy**

### Auxiliary switches



Auxiliary switches enable remote querying of the switch position of the 3NP1. Up to two auxiliary switches can be installed.

### Power theft



The assembly kit for protection from power theft seals the holes on the front of the 3NP1 (for voltage testing) permanently, which reliably prevents unauthorized access to live parts.

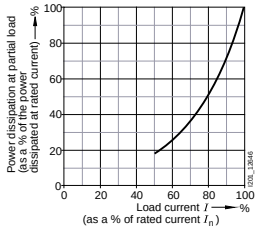
### Isolating blades



4-pole 3NP1s are used in 3-phase AC systems with switched neutral conductors. They are supplied without an isolating blade for the N pole. The switching instant is selected by choosing the appropriate isolating blade.

## Suitable fuses

**You will find further information under: sie.ag/2UlrAvy**




The 3NP5 fuse switch disconnector is suitable for all fuses with LV HRC design in sizes 000 to 3 that comply with IEC 60269-2, including fuses for cable and line protection and motor protection.
Fuses for semiconductor protection (Siemens trademark SITOR) can also be used. However, some of these fuses have substantially higher power losses than fuses according to IEC 60269-2. This means that the load current has to be reduced until the value that is permissible in the fuse switch disconnector is not exceeded.
For use of SITOR semiconductor fuses, ready-made derating tables are available in the linked document.

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# 3NP1 fuse switch disconnectors

**For a complete and valid configuration of your fuse switch disconnectors, please use our online configurator at www.siemens.com/lowvoltage/3np1-configurator**

| | | Flat terminals | | | |
|---|---|---|---|---|---|
| | | NH00 | NH1 | NH2 | NH3 |
| | |  |  |  |  |
| **Fuse monitoring** | **Number of poles** | **$I_u$ = 160 A** | **$I_u$ = 250 A** | **$I_u$ = 400 A** | **$I_u$ = 630 A** |
| **Floor mounting** | | | | | |
| Without | 1-pole | 3NP1131-1CA10 | 3NP1141-1DA10 | 3NP1151-1DA10 | 3NP1161-1DA10 |
| | 3-pole | 3NP1133-1CA10 | 3NP1143-1DA10 | 3NP1153-1DA10 | 3NP1163-1DA10 |
| | 4-pole | 3NP1134-1CA10 | 3NP1144-1DA10 | 3NP1154-1DA10 | 3NP1164-1DA10 |
| MFM | 3-pole | 3NP1133-1CA11 | 3NP1143-1DA11 | 3NP1153-1DA11 | 3NP1163-1DA11 |
| EFM10 | 3-pole | 3NP1133-1CA12 | 3NP1143-1DA12 | 3NP1153-1DA12 | 3NP1163-1DA12 |
| EFM15 | 1-pole | 3NP1131-1CA14 | 3NP1141-1DA14 | 3NP1151-1DA14 | 3NP1161-1DA14 |
| | 3-pole | 3NP1133-1CA14 | 3NP1143-1DA14 | 3NP1153-1DA14 | 3NP1163-1DA14 |
| EFM20 | 3-pole | 3NP1133-1CA13 | 3NP1143-1DA13 | 3NP1153-1DA13 | 3NP1163-1DA13 |
| **Mounting on 60 mm busbar systems with reach-around protection for Siemens 8US** | | | | | |
| Without FM | 3-pole | 3NP1133-1BC10 | 3NP1143-1BC10 | 3NP1153-1BC10 | 3NP1163-1BC10 |
| | 4-pole | 3NP1134-1BC10 | 3NP1144-1BC10 | 3NP1154-1BC10 | 3NP1164-1BC10 |
| MFM | 3-pole | 3NP1133-1BC11 | 3NP1143-1BC11 | 3NP1153-1BC11 | 3NP1163-1BC11 |
| EFM10 | 3-pole | 3NP1133-1BC12 | 3NP1143-1BC12 | 3NP1153-1BC12 | 3NP1163-1BC12 |
| EFM15 | 3-pole | 3NP1133-1BC14 | 3NP1143-1BC14 | 3NP1153-1BC14 | 3NP1163-1BC14 |
| EFM20 | 3-pole | 3NP1133-1BC13 | 3NP1143-1BC13 | 3NP1153-1BC13 | 3NP1163-1BC13 |
| **Mounting on 60 mm busbar systems with reach-around protection for Rittal** | | | | | |
| Without FM | 3-pole | 3NP1133-1JC10 | 3NP1143-1JC10 | 3NP1153-1JC10 | 3NP1163-1JC10 |
| MFM | 3-pole | 3NP1133-1JC11 | 3NP1143-1JC11 | 3NP1153-1JC11 | 3NP1163-1JC11 |
| EFM10 | 3-pole | 3NP1133-1JC12 | 3NP1143-1JC12 | 3NP1153-1JC12 | 3NP1163-1JC12 |
| EFM20 | 3-pole | 3NP1133-1JC13 | 3NP1143-1JC13 | 3NP1153-1JC13 | 3NP1163-1JC13 |
| **Mounting on 40 mm busbar systems with reach-around protection for Siemens 8US** | | | | | |
| Without FM | 3-pole | 3NP1133-1BB10 | – | – | – |
| MFM | 3-pole | 3NP1133-1BB11 | – | – | – |
| EFM10 | 3-pole | 3NP1133-1BB12 | – | – | – |
| EFM20 | 3-pole | 3NP1133-1BB13 | – | – | – |
| **Mounting on 40 mm busbar systems with reach-around protection for Rittal** | | | | | |
| Without FM | 3-pole | 3NP1133-1JB10 | – | – | – |
| MFM | 3-pole | 3NP1133-1JB11 | – | – | – |
| EFM10 | 3-pole | 3NP1133-1JB12 | – | – | – |
| EFM20 | 3-pole | 3NP1133-1JB13 | – | – | – |

**Notes:**
- On the 3NP1 with fuse monitoring, the permissible operational voltage is limited by the fuse monitoring
- Permissible operational voltage with fuse monitoring:
  - MFM AC max. 690 V (L – L)/max. 440 V (L+ – L–)
  - EFM10 230 ... 690 V AC (L – L)
  - EFM15 3-pole 190 ... 690 V AC (L – L)
  - EFM15 1-pole 24 ... 240 V AC (L – N)/24 ... 250 V DC (L+ – L–)
  - EFM20 230 ... 690 V AC (L – L)
- Additional variants are available as accessories:
  - EFM15 with further operational voltage ranges
  - EFM25 – DC version of the EFM20
- Devices for busbar mounting with reach-around protection
  - For Siemens 8US, mounting is possible on the Wöhner Classic and Rittal RiLine systems without a floor pan
  - For Rittal, mounting is possible on the RiLine60 system with a floor pan

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**Box terminals**

| NH000 narrow | NH000 | NH00 | NH1 | NH2 | NH3 |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
| $I_u$ = 125 A | $I_u$ = 125 A [2] | $I_u$ = 160 A | $I_u$ = 250 A | $I_u$ = 400 A | $I_u$ = 630 A |
| | | | | | |
| – | 3NP1121-1CA20 | 3NP1131-1CA20 | 3NP1141-1DA20 | 3NP1151-1DA20 | 3NP1161-1DA20 |
| 3NP1113-1CA20 | 3NP1123-1CA20 | 3NP1133-1CA20 | 3NP1143-1DA20 | 3NP1153-1DA20 | 3NP1163-1DA20 |
| – | 3NP1124-1CA20 | 3NP1134-1CA20 | 3NP1144-1DA20 | 3NP1154-1DA20 | 3NP1164-1DA20 |
| – | – | 3NP1133-1CA21 | 3NP1143-1DA21 | 3NP1153-1DA21 | 3NP1163-1DA21 |
| – | 3NP1123-1CA22 | 3NP1133-1CA22 | 3NP1143-1DA22 | 3NP1153-1DA22 | 3NP1163-1DA22 |
| – | 3NP1121-1CA24 | 3NP1131-1CA24 | 3NP1141-1DA24 | 3NP1151-1DA24 | 3NP1161-1DA24 |
| – | 3NP1123-1CA24 | 3NP1133-1CA24 | 3NP1143-1DA24 | 3NP1153-1DA24 | 3NP1163-1DA24 |
| – | 3NP1123-1CA23 | 3NP1133-1CA23 | 3NP1143-1DA23 | 3NP1153-1DA23 | 3NP1163-1DA23 |
| | | | | | |
| 3NP1113-1BC20 [1] | 3NP1123-1BC20 | 3NP1133-1BC20 | 3NP1143-1BC20 | 3NP1153-1BC20 | 3NP1163-1BC20 |
| – | 3NP1124-1BC20 | 3NP1134-1BC20 | 3NP1144-1BC20 | 3NP1154-1BC20 | 3NP1164-1BC20 |
| – | – | 3NP1133-1BC21 | 3NP1143-1BC21 | 3NP1153-1BC21 | 3NP1163-1BC21 |
| – | 3NP1123-1BC22 | 3NP1133-1BC22 | 3NP1143-1BC22 | 3NP1153-1BC22 | 3NP1163-1BC22 |
| – | 3NP1123-1BC24 | 3NP1133-1BC24 | 3NP1143-1BC24 | 3NP1153-1BC24 | 3NP1163-1BC24 |
| – | 3NP1123-1BC23 | 3NP1133-1BC23 | 3NP1143-1BC23 | 3NP1153-1BC23 | 3NP1163-1BC23 |
| | | | | | |
| 3NP1113-1BC20 [1] | 3NP1123-1JC20 | 3NP1133-1JC20 | 3NP1143-1JC20 | 3NP1153-1JC20 | 3NP1163-1JC20 |
| – | – | 3NP1133-1JC21 | 3NP1143-1JC21 | 3NP1153-1JC21 | 3NP1163-1JC21 |
| – | 3NP1123-1JC22 | 3NP1133-1JC22 | 3NP1143-1JC22 | 3NP1153-1JC22 | 3NP1163-1JC22 |
| – | 3NP1123-1JC23 | 3NP1133-1JC23 | 3NP1143-1JC23 | 3NP1153-1JC23 | 3NP1163-1JC23 |
| | | | | | |
| – | 3NP1123-1BB20 | 3NP1133-1BB20 | – | – | – |
| – | – | 3NP1133-1BB21 | – | – | – |
| – | 3NP1123-1BB22 | 3NP1133-1BB22 | – | – | – |
| – | 3NP1123-1BB23 | 3NP1133-1BB23 | – | – | – |
| | | | | | |
| – | 3NP1123-1JB20 | 3NP1133-1JB20 | – | – | – |
| – | – | 3NP1133-1JB21 | – | – | – |
| – | 3NP1123-1JB22 | 3NP1133-1JB22 | – | – | – |
| – | 3NP1123-1JB23 | 3NP1133-1JB23 | – | – | – |

[1] The direction of the cable outlet for the load side cannot be changed on size NH000, narrow design
3NP1113-1BC20 → Cable outlet at the bottom
3NP1113-2BC20 → Cable outlet at the top

[2] If optional infeed terminal is used max. 160 A

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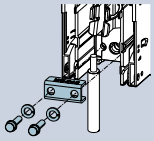
# 3NP1 fuse switch disconnectors

## Accessories

### Connection technology – Terminals

- For adaptation to the respective wiring situation
- Contain enough parts to retrofit one side of a 3NP1 accordingly (three terminals for 3-pole 3NP1, one terminal for 1-pole unit)
- If the incoming cable and cable outlet are retrofitted, two packages must be ordered

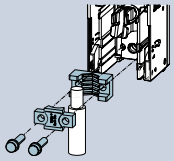
**Saddle terminals**



- Allows connection of stripped circular conductors to 3NP1 with flat terminals

| Connection | Conductor cross-section | 1-pole Article No. | 3-pole Article No. | NH000 narrow | NH000 | NH00 | NH1 | NH2 | NH3 |
|---|---|---|---|---|---|---|---|---|---|
| | 1.5 ... 70 mm² | 3NP1931-1BA00 | 3NP1933-1BA00 | | | ■ | | | |
| | 70 ... 120 mm² | 3NP1941-1BA00 | 3NP1943-1BA00 | | | | ■ | | |
| | 120 ... 240 mm² | 3NP1951-1BA00 | 3NP1953-1BA00 | | | | | ■ | |
| | 150 ... 300 mm² | 3NP1961-1BA00 | 3NP1963-1BA00 | | | | | | ■ |

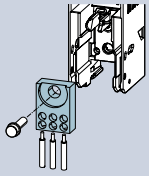
**Prism terminals**



- Allows connection of stripped circular conductors to 3NP1 with flat terminals
- Also approved for connection of aluminum conductors, available for one or two conductors

| Type | Conductor cross-section | 1-pole Article No. | 3-pole Article No. | NH000 narrow | NH000 | NH00 | NH1 | NH2 | NH3 |
|---|---|---|---|---|---|---|---|---|---|
| Single | 35 ... 95 mm² | 3NP1931-1BB10 | 3NP1933-1BB10 | | | ■ | | | |
| | 70 ... 150 mm² | 3NP1941-1BB10 | 3NP1943-1BB10 | | | | ■ | | |
| | 120 ... 240 mm² | 3NP1951-1BB10 | 3NP1953-1BB10 | | | | | ■ | |
| | 150 ... 300 mm² | 3NP1961-1BB10 | 3NP1963-1BB10 | | | | | | ■ |
| Double | 2 × 35 ... 70 mm² | 3NP1941-1BB20 | 3NP1943-1BB20 | | | | ■ | | |
| | 2 × 70 ... 120 mm² | 3NP1951-1BB20 | 3NP1953-1BB20 | | | | | ■ | |
| | 2 × 150 ... 185 mm² | 3NP1961-1BB20 | 3NP1963-1BB20 | | | | | | ■ |

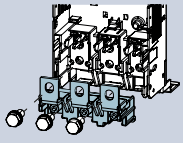
**Three-tier terminals**



- Distributes one outgoing feeder directly to three smaller loads

| Type | Conductor cross-section | 1-pole Article No. | 3-pole Article No. | NH000 narrow | NH000 | NH00 | NH1 | NH2 | NH3 |
|---|---|---|---|---|---|---|---|---|---|
| For 3NP1 with flat terminals | 3 × 1.5 ...16 mm² | 3NP1931-1BE10 | 3NP1933-1BE10 | | | ■ | | | |
| For 3NP1 with box terminals | 3 × 1.5 ...16 mm² | 3NP1921-1BE20 | 3NP1923-1BE20 | | ■ | ■ | | | |

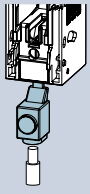
**Connection module**



- Used with a 3NP1 for busbar mounting if a masking frame is to be supported on the 32 mm cover plane (installation of the terminals under the masking frame)
- For 3NP1 with flat terminals

| Type | Conductor cross-section | 1-pole Article No. | 3-pole Article No. | NH000 narrow | NH000 | NH00 | NH1 | NH2 | NH3 |
|---|---|---|---|---|---|---|---|---|---|
| Connection module | 3 × 6 ... 70 mm² | 3NP1931-1BC00 | 3NP1933-1BC00 | | | ■ | | | |

**Infeed terminal**



- Extends the conductor cross-section of a 000 with box terminal to up to 95 mm²

| Version | Conductor cross-section | 1-pole Article No. | 3-pole Article No. | NH000 narrow | NH000 | NH00 | NH1 | NH2 | NH3 |
|---|---|---|---|---|---|---|---|---|---|
| Infeed terminal | 16 ... 95 mm² | 3NP1921-1BD00 | 3NP1923-1BD00 | | ■ | | | | |

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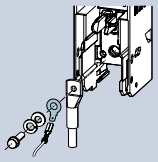
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## Connection technology

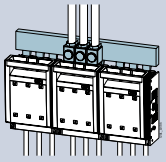
### Auxiliary conductor connections



- For connecting small loads directly to the terminals of the 3NP1
- Connection via commercially available flat tab sleeves 6.3 × 0.8 mm, max. 5 A load
- Scope of supply: 3 units

| 3NP1 connection | Article No. | 3-pole NH000 narrow | 3-pole NH000 | 3-pole NH00 | 3-pole NH1 | 3-pole NH2 | 3-pole NH3 |
|---|---|---|---|---|---|---|---|
| With flat terminals | 3NP1933-1BG10 | | | ■ | | | |
| | 3NP1943-1BG10 | | | | ■ | | |
| | 3NP1943-1BG10 | | | | | ■ | |
| | 3NP1943-1BG10 | | | | | | ■ |
| With box terminals | 3NP1923-1BG40 | ■ | ■ | | | | |
| | 3NP1933-1BG40 | | | ■ | | | |
| | 3NP1943-1BG40 | | | | ■ | | |
| | 3NP1953-1BG40 | | | | | ■ | |
| | 3NP1953-1BG40 | | | | | | ■ |
| With retrofitted prism and saddle terminals | 3NP1933-1BG30 | | | ■ | | | |
| | 3NP1943-1BG30 | | | | ■ | | |
| | 3NP1953-1BG30 | | | | | ■ | |
| | 3NP1953-1BG30 | | | | | | ■ |

### 3-phase busbar system



- For connection of up to 4 3NP1 NH000 for floor mounting on the infeed side
- Infeed is routed through infeed terminals
- With the connection bar, two blocks of bridged 3NP1 can be connected
- Using the cover cap, the connection tags of the busbar are covered on unused feeders to ensure they are safe to touch
- The maximum current-carrying capacity of the interconnected 3NP1 is 225 A in total for the 3-phase busbar system

| Version | Scope of supply | Article No. | 3-pole NH000 |
|---|---|---|---|
| For 2 × 3NP1 | 1 pack = 5 units | 3NP1923-1BF20 | ■ |
| For 3 × 3NP1 | 1 pack = 5 units | 3NP1923-1BF30 | ■ |
| For 4 × 3NP1 | 1 pack = 3 units | 3NP1923-1BF40 | ■ |
| Connection bars | 1 pack = 3 units | 3NP1923-1BF50 | ■ |
| Covering caps | 1 pack = 20 units | 3NP1923-1BF10 | ■ |
| Infeed terminal | 1 pack = 3 units | 3NP1923-1BD00 | ■ |



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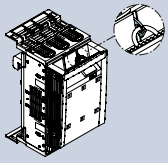


# 3NP1 fuse switch disconnectors

## Accessories

### Assembly kits

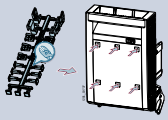
#### Retrofitting of locking function



- For all versions of the 3NP1
- If required for locking with a padlock (not necessary for the 1-pole 3NP1 and NH000, narrow design)

| Scope of supply | Article No. | NH000 narrow | NH000 | NH00 | NH1 | NH2 | NH3 |
|---|---|---|---|---|---|---|---|
| 1 pack = 10 units | 3NP1900-1HA00 | | ■ | ■ | ■ | ■ | ■ |

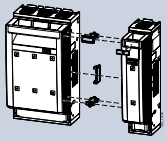
#### Protection against power theft



- Closes the holes on the front of the 3NP1 (holes for voltage testing) and secures the front window such that power theft is not possible without visible damage to the 3NP1 (when the 3NP1 is locked or sealed)

| Scope of supply | Article No. | NH000 narrow | NH000 | NH00 | NH1 | NH2 | NH3 |
|---|---|---|---|---|---|---|---|
| 1 pack is sufficient to equip 5 3NP1 units, 2.5 units for NH000, narrow design | 3NP1900-1EF00 | ■ | ■ | ■ | ■ | ■ | ■ |

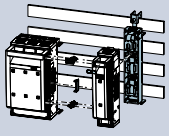
#### Mechanical connection of 1-pole and 3-pole 3NP1 devices



- For 3NP1 with floor mounting
- By combining two 3NP1s for floor mounting, any 2-pole and 4-pole devices can be created

| | Article No. | NH000 narrow | NH000 | NH00 | NH1 | NH2 | NH3 |
|---|---|---|---|---|---|---|---|
| | 3NP1921-1EC00 | | ■ | | | | |
| | 3NP1931-1EC00 | | | ■ | | | |
| | 3NP1941-1EC00 | | | | ■ | ■ | ■ |

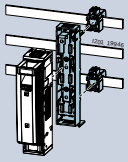
#### 4-pole connection assembly kit for mounting on a 8US 60-mm busbar



- Connects a 3-pole 3NP1 for busbar mounting 60 mm 8US to a 1-pole 3NP1 for floor mounting
- The 1-pole 3NP1 switches the neutral conductor of a 3P+N system in this combination

| 3NP1 connection | Article No. | NH000 narrow | NH000 | NH00 | NH1 | NH2 | NH3 |
|---|---|---|---|---|---|---|---|
| With flat terminals | 3NP1934-1ED20 | | | ■ | | | |
| With box terminals | 3NP1924-1ED10 | | ■ | | | | |
| | 3NP1934-1ED10 | | | ■ | | | |
| With flat terminals or box terminals | 3NP1944-1ED00 | | | | ■ | | |
| | 3NP1954-1ED00 | | | | | ■ | ■ |

#### 1-pole connection assembly kit for mounting on a 8US 60-mm busbar



- Permits adaptation of a 1-pole 3NP1 for floor mounting to a 3-pole busbar system
- The feeding busbar (L1, L2 or L3) can be chosen freely
- If two such 3NP1 are combined by mechanical connection using the assembly kit, 2-pole 3NP1 for busbar mounting can also be assembled

| 3NP1 connection | Article No. | NH000 narrow | NH000 | NH00 | NH1 | NH2 | NH3 |
|---|---|---|---|---|---|---|---|
| With box terminals | 3NP1921-1EE10 | | ■ | | | | |
| | 3NP1931-1EE10 | | | ■ | | | |

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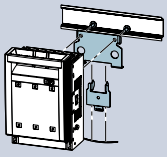


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## Assembly kits



- Must be mounted on the rear of a 3NP1 for floor mounting
- Mounting of the 3NP1 on a DIN rail is achieved for size NH000 by mounting on a DIN rail, and for sizes NH00 and NH1 between two DIN rails that are 125 or 150 mm apart

| | 1/2-pole | 3-pole | 4-pole | NH000 narrow | NH000 | NH00 | NH1 | NH2 | NH3 |
|---|---|---|---|---|---|---|---|---|---|
| **Assembly kits for mounting on DIN rail** | | | | | | | | | |
| | **Article No.** | **Article No.** | **Article No.** | | | | | | |
| | 3NP1921-1EA00 | 3NP1923-1EA00 | 3NP1924-1EA00 | | ■ | | | | |
| | – | 3NP1913-1EB00 | – | ■ | | | | | |
| | 3NP1931-1EB00 | 3NP1933-1EB00 | 3NP1933-1EB00 | | | ■ | | | |
| | 3NP1943-1EB00 | 3NP1943-1EB00 | 3NP1943-1EB00 | | | | ■ | | |

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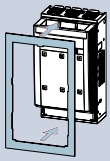
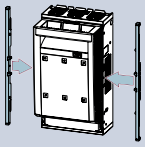
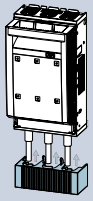
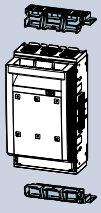
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# 3NP1 fuse switch disconnectors

## Accessories

### Masking frames and covers

| | 1-pole | 3-pole | NH000 narrow | NH000 | NH00 | NH1 | NH2 | NH3 |
|---|---|---|---|---|---|---|---|---|
| **Masking frames** | | | | | | | | |
|  • Used to cover an existing gap for a masking frame mounted on the application side | | | | | | | | |
| **Outer dimensions (H × W)** | **Article No.** | **Article No.** | | | | | | |
| 215 × 130 mm | – | 3NP1923-1DA00 | | ■ | | | | |
| 215 × 130 mm | – | 3NP1933-1DA00 | | | ■ | | | |
| 375 × 220 mm | – | 3NP1943-1DA00 | | | | ■ | | |
| 375 × 245 mm | – | 3NP1953-1DA00 | | | | | ■ | |
| 375 × 290 mm | – | 3NP1963-1DA00 | | | | | | ■ |
| **Masking frame supports** | | | | | | | | |
|  • Are mounted on the side of the 3NP1 and prevent the supported masking frame from sagging (pack of 2 units) | | | | | | | | |
| | **Article No.** | **Article No.** | | | | | | |
| | 3NP1923-1CF00 | 3NP1923-1CF00 | | ■ | | | | |
| | – | 3NP1913-1CF00 [1] | ■ | | | | | |
| | 3NP1933-1CF00 | 3NP1933-1CF00 | | | ■ | | | |
| | 3NP1943-1CF00 | 3NP1943-1CF00 | | | | ■ | ■ | ■ |
| **Cable connection covers** | | | | | | | | |
|  • Extends the terminal covers integrated in the 3NP1<br>• In the version with rear reach-around protection, the underside is also covered | | | | | | | | |
| **Version** | **Article No.** | **Article No.** | | | | | | |
| Without rear reach-around protection | 3NP1921-1CB00 | 3NP1923-1CB00 [1] | | ■ | | | | |
| | – | 3NP1913-1CB00 | ■ | | | | | |
| | 3NP1931-1CB00 | 3NP1933-1CB00 [2] | | | ■ | | | |
| | 3NP1941-1CB00 | 3NP1943-1CB00 | | | | ■ | | |
| | 3NP1951-1CB00 | 3NP1953-1CB00 | | | | | ■ | |
| | 3NP1961-1CB00 | 3NP1963-1CB00 | | | | | | ■ |
| With rear reach-around protection | – | 3NP1933-1CC00 [1] | | | ■ | | | |
| | 3NP1931-1CD00 | 3NP1933-1CD00 [3] | | | ■ | | | |
| | 3NP1941-1CD00 | 3NP1943-1CD00 | | | | ■ | | |
| | 3NP1951-1CD00 | 3NP1953-1CD00 | | | | | ■ | |
| | 3NP1961-1CD00 | 3NP1963-1CD00 | | | | | | ■ |
| **Reach-around protection for busbar (spare part)** | | | | | | | | |
|  • Covers the busbar<br>• For conversion of a 3NP1 to another busbar system | | | | | | | | |
| **For busbar systems** | **Article No.** | **Article No.** | | | | | | |
| Siemens 8US | – | 3NP1923-1CA10 | | ■ | | | | |
| | – | 3NP1913-1CA10 | ■ | | | | | |
| | – | 3NP1933-1CA10 | | | ■ | | | |
| | 3NP1941-1CA10 | – | | | | ■ | ■ | ■ |
| | – | 3NP1943-1CA10 | | | | ■ | | |
| | – | 3NP1953-1CA10 | | | | | ■ | |
| | – | 3NP1963-1CA10 | | | | | | ■ |
| Siemens 8US compact | – | 3NP1923-1CA30 | | ■ | | | | |
| Rittal | – | 3NP1923-1CA20 | | ■ | | | | |
| | – | 3NP1913-1CA10 | | | | | | |
| | – | 3NP1933-1CA20 | | | ■ | | | |
| | – | 3NP1943-1CA20 | | | | ■ | | |
| | – | 3NP1953-1CA20 | | | | | ■ | |
| | – | 3NP1963-1CA20 | | | | | | ■ |

[1] Only for 3NP1 for mounting on busbar systems
[2] Only for 3NP1 with flat terminals
[3] Only for 3NP1 with flat terminals for floor mounting

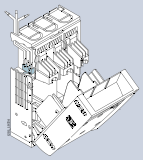
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## Further accessories

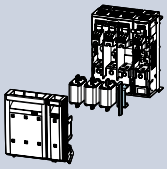
### Auxiliary switches



- Up to 2 auxiliary switches can be mounted
- From size NH00, it is possible to choose whether the auxiliary switch will switch simultaneously with the fuses or leading on switch-on. (only leading possible for size NH000)

| Contacts | Article No. | NH000 narrow | NH000 | NH00 | NH1 | NH2 | NH3 |
|---|---|---|---|---|---|---|---|
| 1 CO | 3NP1920-1FA00 | | ■ | | | | |
| | 3NP1910-1FA00 | ■ | | | | | |
| | 3NP1930-1FA00 | | | ■ | | | |
| | 3NP1940-1FA00 | | | | ■ | ■ | ■ |
| 1 CO, solid-state compatible | 3NP1920-1FB00 | | ■ | | | | |
| | 3NP1930-1FB00 | | | ■ | | | |
| | 3NP1940-1FB00 | | | | ■ | ■ | ■ |

### Isolating blades



- Are used in a 3NP1 if only the isolating function of a 3NP1 is required and not protection with fuses or in the neutral conductor of a 4-pole 3NP1.
- The isolating blade, which is leading switch-on and lagging switch-off, is used in the neutral conductor of a 4-pole 3NP1 if shifting of the neutral point of the 3P+N system has to be avoided during switching.

| Version | Article No. | NH000 narrow | NH000 | NH00 | NH1 | NH2 | NH3 |
|---|---|---|---|---|---|---|---|
| Switching simultaneously with fuses | 3NG1002 | | ■ | ■ | | | |
| | 3NG1202 | | | | ■ | | |
| | 3NG1302 | | | | | ■ | |
| | 3NG1402 | | | | | | ■ |
| Leading switch-on, lagging switch-off | 3NP1924-1MA20 | | ■ | | | | |
| | 3NP1934-1MA20 | | | ■ | | | |
| | 3NP1944-1MA20 | | | | ■ | | |
| | 3NP1954-1MA20 | | | | | ■ | |
| | 3NP1964-1MA20 | | | | | | ■ |



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# 3NP1 fuse switch disconnectors

## Accessories

### Further accessories

| | | 1-pole | 3-pole | NH000 narrow | NH000 | NH00 | NH1 | NH2 | NH3 |
|---|---|---|---|---|---|---|---|---|---|
| **Fuse carriers (spare part)** | | | | | | | | | |
| | • For retrofitting fuse monitoring on an existing 3NP1 | | | | | | | | |
| | **Version** | **Article No.** | **Article No.** | | | | | | |
|  | Standard – without fuse monitoring | 3NP1921-1GA00 | 3NP1923-1GA00 | | ■ | | | | |
| | | – | 3NP1913-1GA00 | ■ | | | | | |
| | | 3NP1931-1GA00 | 3NP1933-1GA00 | | | ■ | | | |
| | | 3NP1941-1GA00 | 3NP1943-1GA00 | | | | ■ | | |
| | | 3NP1951-1GA00 | 3NP1953-1GA00 | | | | | ■ | |
| | | 3NP1961-1GA00 | 3NP1963-1GA00 | | | | | | ■ |
|  | MFM - for operational voltage 24 ... 690 V AC (L-L)/ 24 ... 240 V DC (L+ - L-) | – | 3NP1923-1GB10 | | ■ | | | | |
| | | – | 3NP1933-1GB10 | | | ■ | | | |
| | | – | 3NP1943-1GB10 | | | | ■ | | |
| | | – | 3NP1953-1GB10 | | | | | ■ | |
| | | – | 3NP1963-1GB10 | | | | | | ■ |
|  | EFM10 - for operational voltage 230 ... 690 V AC (L-L) | – | 3NP1923-1GB20 | | ■ | | | | |
| | | – | 3NP1933-1GB20 | | | ■ | | | |
| | | – | 3NP1943-1GB20 | | | | ■ | | |
| | | – | 3NP1953-1GB20 | | | | | ■ | |
| | | – | 3NP1963-1GB20 | | | | | | ■ |
|  | EFM15 - for operational voltage 24 ... 240 V AC (L - N)/ 24 ... 250 V DC (L+ - L-) | 3NP1921-1GB43 | – | | ■ | | | | |
| | | 3NP1931-1GB43 | – | | | ■ | | | |
| | | 3NP1941-1GB43 | – | | | | ■ | | |
| | | 3NP1951-1GB43 | – | | | | | ■ | |
| | | 3NP1961-1GB43 | – | | | | | | ■ |
|  | EFM15 - for operational voltage 110 ... 690 V AC (L - N) | 3NP1921-1GB41 | – | | ■ | | | | |
| | | 3NP1931-1GB41 | – | | | ■ | | | |
| | | 3NP1941-1GB41 | – | | | | ■ | | |
| | | 3NP1951-1GB41 | – | | | | | ■ | |
| | | 3NP1961-1GB41 | – | | | | | | ■ |
|  | EFM15 - for operational voltage 120 ... 440 V DC (L - N) | 3NP1921-1GB44 | – | | ■ | | | | |
| | | 3NP1931-1GB44 | – | | | ■ | | | |
| | | 3NP1941-1GB44 | – | | | | ■ | | |
| | | 3NP1951-1GB44 | – | | | | | ■ | |
| | | 3NP1961-1GB44 | – | | | | | | ■ |
|  | EFM15 - for operational voltage 190 ... 690 V AC (L - L) | – | 3NP1923-1GB42 | | ■ | | | | |
| | | – | 3NP1933-1GB42 | | | ■ | | | |
| | | – | 3NP1943-1GB42 | | | | ■ | | |
| | | – | 3NP1953-1GB42 | | | | | ■ | |
| | | – | 3NP1963-1GB42 | | | | | | ■ |
|  | EFM15 - for operational voltage 220 ... 440 V DC (L+ - L-) | – | 3NP1923-1GB45 | | ■ | | | | |
| | | – | 3NP1933-1GB45 | | | ■ | | | |
| | | – | 3NP1943-1GB45 | | | | ■ | | |
| | | – | 3NP1953-1GB45 | | | | | ■ | |
| | | – | 3NP1963-1GB45 | | | | | | ■ |
|  | EFM20 - for operational voltage 230 ... 690 V AC (L - L) | – | 3NP1923-1GB30 | | ■ | | | | |
| | | – | 3NP1933-1GB30 | | | ■ | | | |
| | | – | 3NP1943-1GB30 | | | | ■ | | |
| | | – | 3NP1953-1GB30 | | | | | ■ | |
| | | – | 3NP1963-1GB30 | | | | | | ■ |
|  | EFM25 - for operational voltage 220 ... 440 V DC (L+ - L-) | – | 3NP1923-1GB50 | | ■ | | | | |
| | | – | 3NP1933-1GB50 | | | ■ | | | |
| | | – | 3NP1943-1GB50 | | | | ■ | | |
| | | – | 3NP1953-1GB50 | | | | | ■ | |
| | | – | 3NP1963-1GB50 | | | | | | ■ |

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# 3NP5 fuse switch disconnectors

## System overview

### Basic units



Floor mounting



For 40 mm busbar system

### Connection parts



Clamp terminals



Busbar adapters for 60 mm systems

### Masking frames and covers



Molded-plastic masking frames



Cable connection covers

### Further accessories



Auxiliary switches



Arc chutes



Assembly kits for flush mounting



Fuse carriers

**Note:**
You will find a detailed range of accessories with the basic units.

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# General information

## 3NA COM LV HRC fuse links



The new 3NA COM LV HRC fuse links with measuring and communication functions make your products communication-capable.

**See Fuse Systems, page 7/50**

## System description

**You will find further information under:**
**sie.ag/2UlrAvy**



3NP50

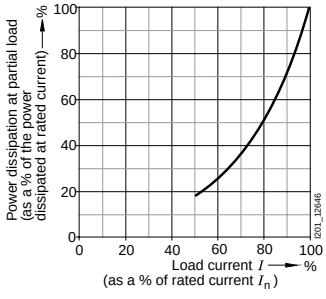


3NP52

The 3NP5 fuse switch disconnector is an extremely robust device for extreme operating conditions.
The fuse carrier has a pretensioned spring that prevents accidental, slow closure.
All 3NP5 are designed for mounting on a mounting plate. Size NH00 is also available in versions for 40 mm busbar systems.
All sizes can also be mounted using adapters on 60 mm busbar systems.

## Suitable fuses

**You will find further information under:**
**sie.ag/2UlrAvy**




The 3NP5 fuse switch disconnector is suitable for all fuses with LV HRC design in sizes 000 to 3 that comply with IEC 60269-2, including fuses for cable and line protection and motor protection.
Fuses for semiconductor protection (Siemens trademark SITOR) can also be used. However, some of these fuses have substantially higher power losses than fuses according to IEC 60269-2. This means that the load current has to be reduced until the value that is permissible in the fuse switch disconnector is not exceeded.
For use of Siemens SITOR semiconductor fuses, ready-made derating tables are available in the linked document.

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# 3NP5 fuse switch disconnectors

| | | Flat terminals | | | |
|---|---|---|---|---|---|
| | | NH00 | NH1 | NH2 | NH3 |
| | |  |  |  |  |
| **Type of mounting** | **Auxiliary switches** | **$I_u$ = 160 A** | **$I_u$ = 250 A** | **$I_u$ = 400 A** | **$I_u$ = 630 A** |
| **Without fuse monitoring** | | | | | |
| Floor mounting | Without | 3NP5060-0CA00 | 3NP5260-0CA00 | 3NP5360-0CA00 | 3NP5460-0CA00 |
| | 1 NO + 1 NC | 3NP5060-0CA10 | 3NP5260-0CA10 | 3NP5360-0CA10 | 3NP5460-0CA10 |
| Mounting on 40 mm busbar systems | Without | 3NP5065-1CF00 | – | – | – |
| | 1 NO + 1 NC | 3NP5065-1CF10 | – | – | – |
| **Electromechanical fuse monitoring with 1 NO + 1 NC as a signaling contact** | | | | | |
| Floor mounting | 1 NO + 1 NC | 3NP5060-0EA86 | 3NP5260-0EA86 | 3NP5360-0EA86 | 3NP5460-0EA86 |
| Mounting on 40 mm busbar systems | 1 NO + 1 NC | 3NP5065-1EF86 | – | – | – |
| **Electromechanical fuse monitoring with 2 NO as a signaling contact** | | | | | |
| Floor mounting | 1 NO + 1 NC | 3NP5060-0EA26 | 3NP5260-0EA26 | 3NP5360-0EA26 | 3NP5460-0EA26 |
| Mounting on 40 mm busbar systems | 1 NO + 1 NC | 3NP5065-1EF26 | – | – | – |

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## Accessories

**Clamp terminals**



| Version | Scope of supply | Article No. | NH00 | NH1 | NH 2 | NH3 |
|---|---|---|---|---|---|---|
| For retrofitting to 3NP5 with flat terminals | 3 units | 3NY1903 | ■ | | | |
| | | 3NY1907 | | ■ | | |

**Busbar adapters**



- For 60 mm busbar system

| Version | Article No. | NH00 | NH1 | NH 2 | NH3 |
|---|---|---|---|---|---|
| For adaptation of a 3NP5, for floor mounting on a 60-mm busbar system | 8US1291-4SB00 | ■ | | | |
| | 8US1210-4AG00 | | ■ | ■ | ■ |

**Covers for cable lug connections**



| Version | Scope of supply | Article No. | NH00 | NH1 | NH 2 | NH3 |
|---|---|---|---|---|---|---|
| Can be screwed onto the free end of the screw | 6 units | 3NY1241 | | ■ | | |
| | | 3NY1245 | | | ■ | ■ |

**Covers for 3NP5, with auxiliary switch mounted**



- With punched cutouts for auxiliary switches

| Color | Version | Dimensions | Article No. | NH00 | NH1 | NH 2 | NH3 |
|---|---|---|---|---|---|---|---|
| Gray | Flat | 215 × 135 mm | 3NY1115 | ■ | | | |
| Black | Flat, with additional bending edges | 290 × 135 mm | 3NY1116 | ■ | | | |

**Covers for 3NP5, without auxiliary switches mounted**



- With prepunched cutouts for retrofitting an auxiliary switch

| Color | Version | Dimensions | Article No. | NH00 | NH1 | NH 2 | NH3 |
|---|---|---|---|---|---|---|---|
| Gray | Flat | 215 × 135 mm | 3NY1105 | ■ | | | |
| Black | Flat | 290 × 135 mm | 3NY1106 | ■ | | | |
| | Angled | 265 × 135 mm | 3NY1107 | ■ | | | |
| | Flat, with additional bending edges | 290 × 135 mm | 3NY1108 | ■ | | | |

**Auxiliary switches**



| Version | Article No. | NH00 | NH1 | NH 2 | NH3 |
|---|---|---|---|---|---|
| 1 NO + 1 NC, including mounting kit | 3NY3033 | ■ | | | |
| | 3NY3034 | | ■ | ■ | ■ |

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## Accessories



**Arc chutes**

- Spare part for arc chutes installed in the factory, one unit per switch is required for NH00, three units for NH1 to NH3

| Article No. | NH00 | NH1 | NH 2 | NH3 |
|---|---|---|---|---|
| 3NY4031 | ■ | | | |
| 3NY4011 | | ■ | | |
| 3NY4012 | | | ■ | ■ |



**Assembly kits for flush mounting in front panel**

| Version | Article No. | NH00 | NH1 | NH 2 | NH3 |
|---|---|---|---|---|---|
| Assembly kit with cover and mounting accessories | 3NY1208 | ■ | | | |
| | 3NY1210 | | ■ | | |
| | 3NY1211 | | | ■ | |
| | 3NY1212 | | | | ■ |
| Covers (spare part for assembly kit) | 3NY1102 | | ■ | | |
| | 3NY1103 | | | ■ | |



**Fuse carriers**

| Version | Article No. | NH00 | NH1 | NH 2 | NH3 |
|---|---|---|---|---|---|
| Without fuse monitoring | 3NY1074 | ■ | | | |
| | 3NY1371 | | ■ | | |
| | 3NY1372 | | | ■ | |
| | 3NY1373 | | | | ■ |
| With electromechanical fuse monitoring by circuit breakers, signaling contact 1 NO + 1 NC, without connecting cable | 3NY1420 | ■ | | | |
| | 3NY1421 | | ■ | | |
| | 3NY1422 | | | ■ | |
| | 3NY1423 | | | | ■ |



**Connectors and connecting cables**

| Version | Length | Article No. | NH00 | NH1 | NH 2 | NH3 |
|---|---|---|---|---|---|---|
| For electromechanical fuse monitoring | 1 m | 3NY1910 | ■ | ■ | ■ | ■ |
| | 3 m | 3NY1911 | ■ | ■ | ■ | ■ |

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# 3NJ4 fuse switch disconnectors

## System overview

### 1-pole switchable



NH00/NH000 ... NH3 (690 V)



NH4a (690 V)



NH1 ... NH3 (690 V) for integratable current transformers

### 3-pole switchable



NH00/NH000 ... NH3 (690 V)



NH00/NH000 ... NH3 (690 V) for integra-table current transformers



NH00/NH000 ... NH3 (690 V) with electronic fuse monitoring EFM



NH00/NH000 ... NH3 (690 V) for integratable current transformers with electronic fuse monitoring EFM



NH3 (400 V) for secondary-side fusing of transformers and incoming block



NH00/NH000, NH1 and NH3 (800 V)

### Accessories



Covers



Adapters on busbar systems



Mounting and assembly elements



Busbar connection assembly kits



Fuses



Current transfor-mers

**Note:**
You will find a detailed range of accessories with the basic units.

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# General information

## 3NA COM LV HRC fuse links

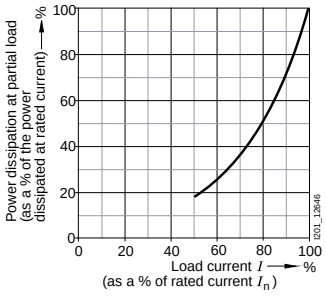


The new the 3NA COM LV HRC fuse links with measuring and communication functions make your products communication-capable.

**See Fuse Systems, page 7/50**

## Suitable fuses

**You will find further information under:**
**sie.ag/2UlrAvy**

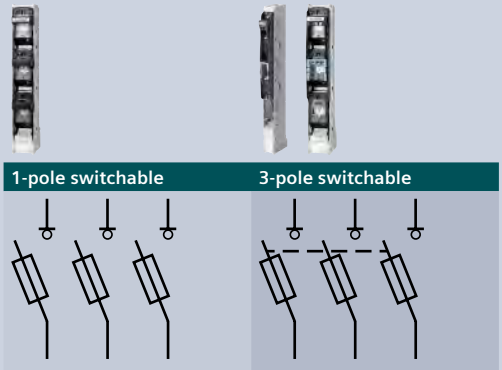



The 3NJ4 fuse switch disconnector is suitable for all fuses with LV HRC design in sizes 000 to 3 that comply with IEC 60269-2, including fuses for cable and line protection.

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# 3NJ4 fuse switch disconnectors




| Rated operational current $I_e$ | Busbar center-to-center spacing | Fuse size | Connection | | |
|---|---|---|---|---|---|
| **NH00/NH000 ... NH3 (690 V)** | | | | | |
| 160 A | 100 mm | NH00/NH000 | M8 flat terminal | – | 3NJ4103-3BF02 |
| | | NH00/NH000 | F70 box terminal | – | 3NJ4103-3BR02 |
| | 185 mm | NH00/NH000 [1] | M8 flat terminal | 3NJ4101-3BF01 | 3NJ4103-3BF01 |
| 250 A | 185 mm | NH1 | M10 flat terminal | 3NJ4121-3BF01 | 3NJ4123-3BF01 |
| | | | M12 stud terminal | – | 3NJ4123-3BJ01 |
| | | | V terminal | – | 3NJ4123-3BT01 |
| 400 A | 185 mm | NH2 | M12 flat terminal | 3NJ4131-3BF01 | 3NJ4133-3BF01 |
| | | | M12 stud terminal | – | 3NJ4133-3BJ01 |
| | | | V terminal | – | 3NJ4133-3BT01 |
| 630 A | 185 mm | NH3 | M12 flat terminal | 3NJ4141-3BF01 | 3NJ4143-3BF01 |
| | | | M12 stud terminal | – | 3NJ4143-3BJ01 |
| | | | V terminal | – | 3NJ4143-3BT01 |
| **NH4a (690 V)** | | | | | |
| 1250 A | 185 mm | NH4a | M16 × 60 stud terminal | 3NJ5643-0BB00 | – |
| **NH00/NH000 ... NH3 (690 V) for integratable current transformers** | | | | | |
| 160 A | 100 mm | NH00/NH000 | M8 flat terminal | – | 3NJ4103-3BF12 |
| 250 A | 185 mm | NH1 | M10 flat terminal | 3NJ4121-3BF11 | 3NJ4123-3BF11 |
| 400 A | 185 mm | NH2 | M12 flat terminal | 3NJ4131-3BF11 | 3NJ4133-3BF11 |
| 630 A | 185 mm | NH3 | M12 flat terminal | 3NJ4141-3BF11 | 3NJ4143-3BF11 |
| **NH00/NH000 ... NH3 (690 V) with electronic fuse monitoring EFM** | | | | | |
| 160 A | 100 mm | NH00/NH000 | M8 flat terminal | – | 3NJ4103-3CF02 |
| 250 A | 185 mm | NH1 | M10 flat terminal | – | 3NJ4123-3CF01 |
| 400 A | 185 mm | NH2/NH1 | M12 flat terminal | – | 3NJ4133-3CF01 |
| 630 A | 185 mm | NH3/NH2 | M12 flat terminal | – | 3NJ4143-3CF01 |
| **NH00/NH000 ... NH3 (690 V) for integratable current transformers, with electronic fuse monitoring EFM** | | | | | |
| 160 A | 100 mm | NH00/NH000 | M8 flat terminal | – | 3NJ4103-3CF12 |
| 250 A | 185 mm | NH1 | M10 flat terminal | – | 3NJ4123-3CF11 |
| 400 A | 185 mm | NH2/NH1 | M12 flat terminal | – | 3NJ4133-3CF11 |
| 630 A | 185 mm | NH3/NH2 | M12 flat terminal | – | 3NJ4143-3CF11 |
| **NH3 (400 V) for secondary-side fusing of transformers and incoming block** | | | | | |
| 1000 A | 185 mm | NH3 | 2 × M12 flat terminal | – | 3NJ4153-3BF01 |
| 1250 A | 185 mm | NH3 | 2 × M12 flat terminal | – | 3NJ4183-3BF01 |
| 1600 A | 185 mm | NH3 | 3 × M12 flat terminal | – | 3NJ4163-3BF01 |
| 2000 A | 185 mm | NH3 | 4 × M12 flat terminal | – | 3NJ4173-3BF01 |
| **NH00/NH000, NH1 and NH3 (800 V)** | | | | | |
| 63 A | 100 mm | NH00/NH000 [1] | M8 flat terminal | – | 3NJ4103-3DF02 |
| | 185 mm | NH00/NH000 | M8 flat terminal | – | 3NJ4103-3DF01 |
| 160 A | 185 mm | NH1 | M10 flat terminal | – | 3NJ4123-3DF01 |
| 315 A | 185 mm | NH3 | M12 flat terminal | – | 3NJ4143-3DF01 |

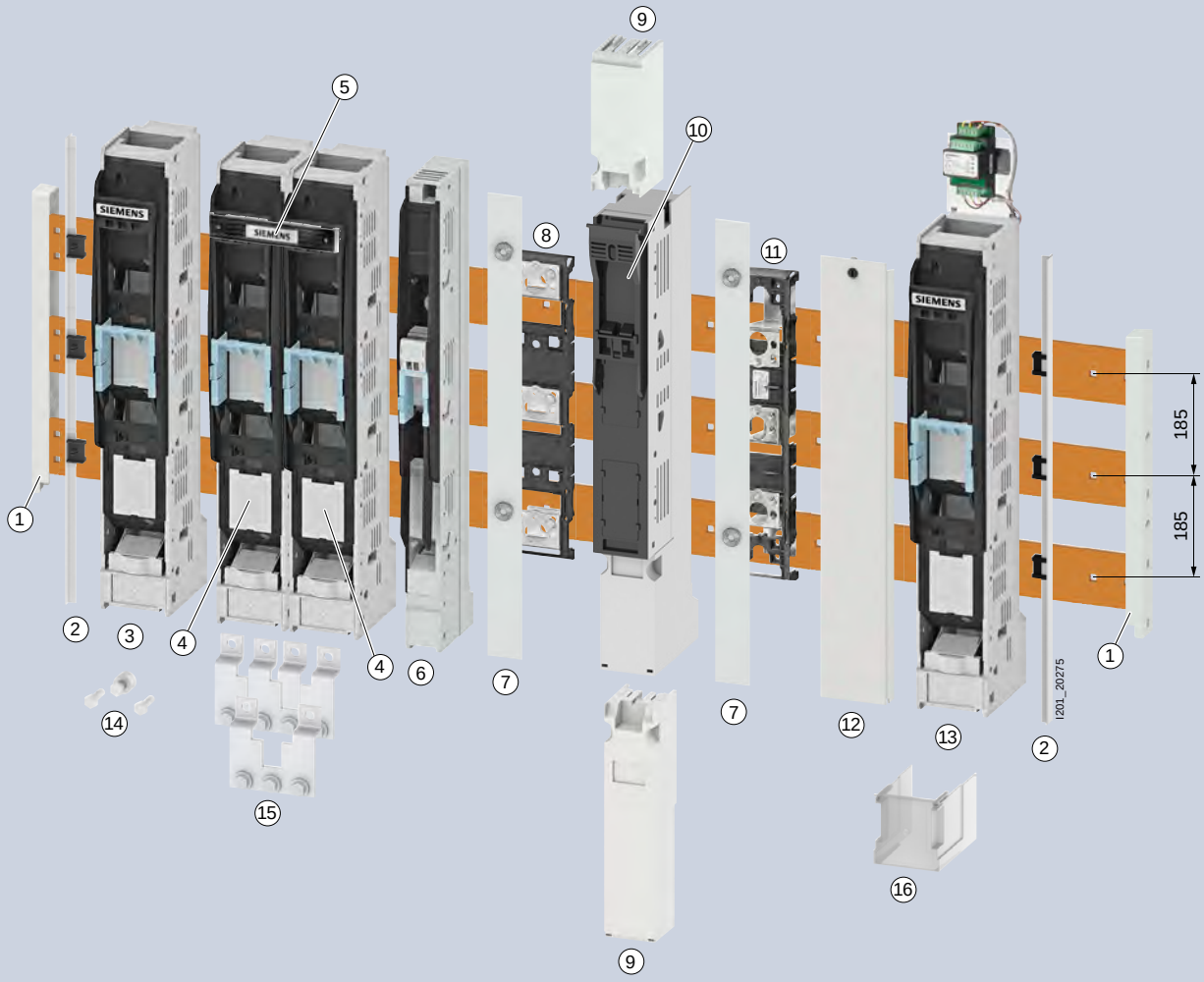
[1] If mounted together with device sizes NH1 to NH3, a 3NJ5930-3BB adapter is required as an accessory to compensate for differences in height.

**Note:**
- Fixing screws for mounting on busbars must be ordered separately.

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1 Busbar support
2 Lateral masking frame support
3 Switch disconnector, NH1
4 Switch disconnector, NH2
5 Coupling of operating handle
6 Switch disconnector, NH00, 185 mm
7 Unequipped section cover, 50 mm
8 Adapter, 185 mm to 185 mm
9 Cover, spacer
10 Switch disconnector, NH00, 100 mm
11 Adapter, 100 mm to 185 mm
12 Blanking cover, 633 x 100 mm
13 Switch disconnector, NH3, with EFM
14 Assembly kit, 2 x 240 mm²
15 Busbar connection assembly kit, 4 x 185 mm²
16 Cover, NH1-3

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# 3NJ4 fuse switch disconnectors

## Accessories

### ⑨ Covers



- Additional touch protection when using cable lugs and as spacer

| Size | Busbar center-to-center spacing | Version | Article No. |
|---|---|---|---|
| NH00 | 100 mm | Top and bottom | 3NJ4912-1DA02 |
| | 185 mm | 100 mm for bottom | 3NJ4912-1FA01 |
| | | 132 mm for top | 3NJ4912-1FA00 |
| ⑯ NH1 ... NH3 | Connection for top and bottom | | 3NJ4912-1AA01 |
| NH3 | For double in-line disconnectors | | 3NJ4912-1EA00 |

### ⑫ Blanking covers



| Version | Length | Width | Busbar center-to-center spacing | Article No. |
|---|---|---|---|---|
| For switchboard cutout | 299 mm | 50 mm | 100 mm only | 3NJ4912-2CA00 |
| | 633 mm | 50 mm | | 3NJ4912-2AA00 |
| | 633 mm | 100 mm | | 3NJ4912-2BA00 |

### ❷ Lateral masking frame supports



- 3 clips with T profile

| Size | Article No. |
|---|---|
| NH00 ... NH3 | 3NJ4912-2DA00 |

### Fixing clips



| Scope of supply | Article No. |
|---|---|
| 1 set = 4 units, including fixing accessories | 3NJ4918-0AA00 |

### ❼ Unequipped section covers



| Busbar center-to-center spacing | Width | Article No. |
|---|---|---|
| 185 mm | 50 mm | 3NJ4912-3AA00 |
| | 100 mm | 3NJ4912-3BA01 |
| 100 mm | 50 mm | 3NJ4912-3CA00 |

### Adapters for screw fixing on busbar systems



- Adapters for screw fixing on busbar systems with 185 mm busbar center-to-center spacing
- For mounting 2 fuse switch disconnectors

| Version | Fuse switch disconnectors | Article No. |
|---|---|---|
| Adaptation to sizes 1 ... 3 | ⑪ From 100 mm to 185 mm | 3NJ4918-0DA02 |
| | ⑧ From 185 mm to 185 mm | 3NJ5930-3BB |
| Adaptation to sizes 1 ... 3, with busbar terminal | From 100 mm to 185 mm | 3NJ4918-0DB02 |

### Adapters for screw fixing on busbar systems



- For fitting one fuse switch disconnector (= 3 separate brackets)

| Version | Article No. |
|---|---|
| Adaptation of 100 mm to busbar system with 60 mm busbar center-to-center spacing | 3NJ4918-0EA00 |

### Fixing screws

- For fitting 3NJ4103 switch disconnectors with integratable current transformers onto adapters

| Scope of supply | Article No. |
|---|---|
| 1 set = 3 units | 3NJ4918-0DC02 |

[1] Touch protection only suitable for 3NJ4103-3BF02
[2] Touch protection only suitable for 3NJ4101-3BF01 and 3NJ4103-3BF01

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| 3NJ4101 | 3NJ4103 | 3NJ412 | 3NJ413 | 3NJ414 | 3NJ415 | 3NJ416 | 3NJ417 | 3NJ418 |
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# 3NJ4 fuse switch disconnectors

## Accessories

### ❶ Busbar supports



- For screwing on the busbars

| Version | Article No. |
|---|---|
| For 100 and 185 mm busbar center-to-center spacing | 3NJ5974-0AB |

### Grounding kits



| Version | Article No. |
|---|---|
| With connecting cable 25 mm² | 3NJ4910-1AA00 |

### Busbar terminals



- Not for devices with transformer installation

| Version | Article No. |
|---|---|
| For each fuse switch disconnector, 3 units are required | 3NJ4911-3AA00 |
| For more rapid mounting of the switch disconnectors onto the busbars (1 set = 3 units) | 3NJ4911-3BA01 |

### Saddle terminals



- 1 set = 3 units

| Connection | Article No. |
|---|---|
| Cu 1.5 ... 70 mm² | 3NJ4911-4AA00 |

### Prism terminal assembly kits



- 1 set = 3 units

| Connection | Article No. |
|---|---|
| Al/Cu 10 ... 70 mm² | 3NJ4911-1AA00 |

### Box terminal assembly kits



- For connection to version with flat terminal
- 1 set = 3 units

| Connection | Article No. |
|---|---|
| Al/Cu 95 ... 240 mm² | 3NJ4911-2BQ00 |

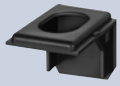
### Auxiliary switch mounting kits



- For 3-pole switchable switch disconnectors only

| Version | Contacts | Article No. |
|---|---|---|
| For NH00 ... NH3 with connecting cables | 1 CO | 3NJ4913-1AA01 |

### Mounting hook



- 1 per in-line disconnector required

| Article No. |
|---|
| 3NJ4918-1AA00 |

### Distance compensation



| Version | Article No. |
|---|---|
| For NH00 | 3NJ4915-1BA00 |
| For fuse switch disconnectors, with integratable current transformers if no current transformer is built in | 3NJ4915-2BA00 |

### Terminal strips



| Article No. |
|---|
| 3NJ4915-1CA00 |

[1] Not for fuse switch disconnectors with fuse monitoring

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| 3NJ4101 | 3NJ4103 | 3NJ412 | 3NJ413 | 3NJ414 | 3NJ415 | 3NJ416 | 3NJ417 | 3NJ418 |
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# 3NJ4 fuse switch disconnectors

## Accessories

### Busbar connection assembly kits for NH2 and NH3



- With flat terminals

| Screws | Conductor cross-section | Article No. |
|---|---|---|
| M12 | 2 × 240 mm² | 3NJ4911-5AA00 |
| | 2 × 300 mm²/3 × 120 mm² | 3NJ4911-5BA00 |
| M16 | 1 × 400 mm² | 3NJ4911-5CA00 |

### Busbar connection assembly kits for NH3



| Version | Conductor cross-section | Article No. |
|---|---|---|
| For NH3 as double in-line disconnectors | 3 × 300 mm²/⑮ 4 × 185 mm² | 3NJ4911-6AA00 |
| | 4 × 240 mm² | 3NJ4911-6BA00 |



| | | |
|---|---|---|
| ⑤ Mechanical coupling of operating handles | | 3NJ4911-6CA00 |

### Fuses NH3



- Minimum order quantity 3 units

| Version | Article No. |
|---|---|
| For protection of transformers, 630 kVA, 909 A | 3NJ4914-8AA00 |

### Isolating blades NH3

| Rated operational current $I_e$ | Article No. |
|---|---|
| 1250 A | 3NJ4914-8BA00 |

### Current transformers .../1 A





| Rated primary current $I_{pr}$ | Accuracy class | Rated power $P_n$ | Article No. |
|---|---|---|---|
| 100/1 A | 0.5 | 1.5 VA | 3NJ4915-1EA10 |
| | 1 | 2.0 VA | 3NJ4915-1EA20 |
| 150/1 A | 0.5 | 2.5 VA | 3NJ4915-1FA10 |
| | 0.5 calibrated | 2.5 VA | 3NJ4915-1FA11 |
| | 1 | 3.0 VA | 3NJ4915-1FA20 |
| 75/1 A | 1 | 1.5 VA | 3NJ4915-2DA20 |
| 100/1 A | 0.5 | 1.5 VA | 3NJ4915-2EA10 |
| | 1 | 2.0 VA | 3NJ4915-2EA20 |
| 150/1 A | 1 | 2.5 VA | 3NJ4915-2FA20 |
| 250/1 A | 0.5 | 2.5 VA | 3NJ4915-2GA10 |
| | 0.5 calibrated | 2.5 VA | 3NJ4915-2GA11 |
| | 1 | 5.0 VA | 3NJ4915-2GA20 |
| 400/1 A | 0.5 | 2.5 VA | 3NJ4915-2HA10 |
| | 0.5 calibrated | 2.5 VA | 3NJ4915-2HA11 |
| | 1 | 5.0 VA | 3NJ4915-2HA20 |
| 500/1 A | 0.5 | 2.5 VA | 3NJ4915-2JA10 |
| | 1 | 5.0 VA | 3NJ4915-2JA20 |
| 600/1 A | 0.5 | 2.5 VA | 3NJ4915-2KA10 |
| | 0.5 calibrated | 2.5 VA | 3NJ4915-2KA11 |
| | 1 | 5.0 VA | 3NJ4915-2KA20 |





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| 3NJ4101 | 3NJ4103 | 3NJ412 | 3NJ413 | 3NJ414 | 3NJ415 | 3NJ416 | 3NJ417 | 3NJ418 |
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# 3NJ4 fuse switch disconnectors

## Accessories

**Current transformers .../5 A**



| Rated primary current $I_{pr}$ | Accuracy class | Rated power $P_n$ | Article No. |
|---|---|---|---|
| 100/5 A | 0.5 | 1.0 VA | 3NJ4915-1EB10 |
| | 1 | 1.5 VA | 3NJ4915-1EB20 |
| 150/5 A | 0.5 | 1.5 VA | 3NJ4915-1FB10 |
| | 0.5 calibrated | 1.5 VA | 3NJ4915-1FB11 |
| | 1 | 2.5 VA | 3NJ4915-1FB20 |
| 75/5 A | 1 | 1.5 VA | 3NJ4915-2DB20 |
| 100/5 A | 0.5 | 1.0 VA | 3NJ4915-2EB10 |
| | 1 | 2.0 VA | 3NJ4915-2EB20 |
| 150/5 A | 0.5 | 1.5 VA | 3NJ4915-2FB10 |
| | 1 | 2.5 VA | 3NJ4915-2FB20 |
| 250/5 A | 0.5 | 2.5 VA | 3NJ4915-2GB10 |
| | 0.5 calibrated | 2.5 VA | 3NJ4915-2GB11 |
| | 1 | 3.75 VA | 3NJ4915-2GB20 |
| 400/5 A | 0.5 | 2.5 VA | 3NJ4915-2HB10 |
| | 0.5 calibrated | 2.5 VA | 3NJ4915-2HB11 |
| | 1 | 3.75 VA | 3NJ4915-2HB20 |
| 500/5 A | 0.5 | 2.5 VA | 3NJ4915-2JB10 |
| | 1 | 5.0 VA | 3NJ4915-2JB20 |
| 600/5 A | 0.5 | 2.5 VA | 3NJ4915-2KB10 |
| | 0.5 calibrated | 2.5 VA | 3NJ4915-2KB11 |
| | 1 | 5.0 VA | 3NJ4915-2KB20 |





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| | 3NJ4101 | 3NJ4103 | 3NJ412 | 3NJ413 | 3NJ414 | 3NJ415 | 3NJ416 | 3NJ417 | 3NJ418 |
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# 5SG76 fuse switch disconnectors

## System overview

### MINIZED fuse switch disconnectors


1P


1P+N


2P

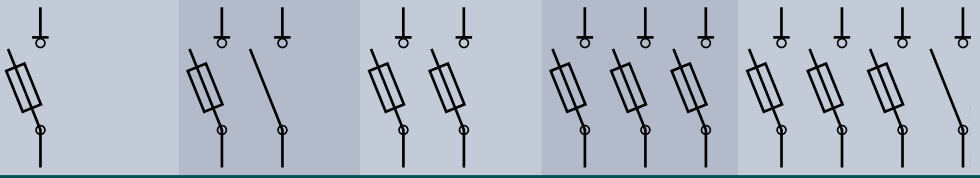

3P


3P+N

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| Number of poles | 1P | 1P+N | 2P | 3P | 3P+N |
|---|---|---|---|---|---|
| |  | | | | |
| **Fuse size** | **Rated current $I_n$** | **Mounting width 1 MW** | **Mounting width 2 MW** | **Mounting width 2 MW** | **Mounting width 3 MW** | **Mounting width 4 MW** |
| **MINIZED fuse switch disconnectors** | | | | | | |
| D01 | 6 A [1] | 5SG7611-0KK06 | – | – | 5SG7631-0KK06 | – |
| | 10 A | 5SG7611-0KK10 | – | – | 5SG7631-0KK10 | – |
| | 16 A | 5SG7611-0KK16 | 5SG7651-0KK16 | 5SG7621-0KK16 | 5SG7631-0KK16 | 5SG7661-0KK16 |

[1] For 2 A, 4 A, 6 A fuses

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**Note:**
No NEOZED adapter sleeves are required for this type series

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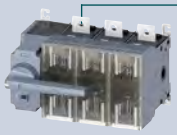


# Switch disconnectors with fuses

## Quick selection guide



### 3KF LV HRC



| Size | | | 1 | 1 | 1 | 2 | 2 | 3 | 4 | 5 | 5 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **General technical specifications acc. to IEC 60947-3** | | | | | | | | | | | |
| **Basic data** | | | | | | | | | | | |
| Rated uninterrupted current $I_u$ | | A | 32 | 63 | 80 | 125 | 160 | 250 | 400 | 630 | 800 |
| For fuse links acc. to IEC 60269-2 | | | 000 and 00 | | | | | 0 and 1 | 1 and 2 | 2 and 3 | |
| Rated operational voltage $U_e$ | At 50/60 Hz AC | V AC | 690 | | | | | | | | |
| | At DC – 2 conducting paths in series | V DC | 220 | | | | | | | | |
| | At DC – 3 conducting paths in series | V DC | 440 | | | | | | | | |
| | At DC | V DC | – | | | | | | | | |
| **Operating and short-circuit behavior** | | | | | | | | | | | |
| Rated operational current $I_e$ [1] | At AC-21A \| AC-21B at 400 V | A | 32 | 63 | 80 | 125 | 160 | 250 | 400 | 630 | 800 |
| | At AC-21A \| AC-21B at 500 V | A | – | – | – | – | – | – | – | – | – |
| | At AC-21A \| AC-21B at 690 V | A | 32 | 63 | 80 | 125 | 160 | 250 | 400 | 630 | 800 |
| | At AC-22A \| AC-22B at 400 V | A | 32 | 63 | 80 | 125 | 160 | 250 | 400 | 630 | 800 |
| | At AC-22A \| AC-22B at 500 V | A | – | – | – | – | – | – | – | – | – |
| | At AC-22A \| AC-22B at 690 V | A | 32 | 63 | 80 | 125 | 160 | 250 | 400 | 630 | 800 |
| | At AC-23A \| AC-23B at 400 V | A | 32 | 63 | 80 | 125 | 160 | 250 | 400 | 630 | 800 |
| | At AC-23A \| AC-23B at 500 V | A | – | – | – | – | – | – | – | – | – |
| | At AC-23A \| AC-23B at 690 V | A | 32 | 63 | 80 | 125 | 160 | 250 | 400 | 630 | 800 |
| | At DC-21A \| DC-21B at 48 V | A | – | – | – | – | – | – | – | – | – |
| | At DC-21A \| DC-21B at 65 V | A | – | – | – | – | – | – | – | – | – |
| | At DC-21A \| DC-21B at 110 V | A | – | – | – | – | – | – | – | – | – |
| | At DC-21A \| DC-21B at 130 V | A | – | – | – | – | – | – | – | – | – |
| | At DC-21A \| DC-21B at 220 V | A | 32 | 63 | 80 | 125 | 160 | 250 | 400 | 630 | 800 |
| | At DC-21A \| DC-21B at 400 V | A | – | – | – | – | – | – | – | – | – |
| | At DC-21A \| DC-21B at 440 V | A | 32 | 63 | 80 | 125 | 160 | 250 | 400 | 630 | 800 |
| | At DC-22A \| DC-22B at 48 V | A | – | – | – | – | – | – | – | – | – |
| | At DC-22A \| DC-22B at 65 V | A | – | – | – | – | – | – | – | – | – |
| | At DC-22A \| DC-22B at 110 V | A | – | – | – | – | – | – | – | – | – |
| | At DC-22A \| DC-22B at 130 V | A | – | – | – | – | – | – | – | – | – |
| | At DC-22A \| DC-22B at 220 V | A | 32 | 63 | 80 | 125 | 160 | 250 | 400 | 630 | 800 |
| | At DC-22A \| DC-22B at 400 V | A | – | – | – | – | – | – | – | – | – |
| | At DC-22A \| DC-22B at 440 V | A | 32 | 63 | 80 | 125 | 160 | 250 | 400 | 630 | 800 |
| | At DC-23A \| DC-23B at 48 V | A | – | – | – | – | – | – | – | – | – |
| | At DC-23A \| DC-23B at 110 V | A | – | – | – | – | – | – | – | – | – |
| | At DC-23A \| DC-23B at 220 V | A | 32 | 63 | 80 | 125 | 160 | 250 | 400 | 630 | 800 |
| | At DC-23A \| DC-23B at 400 V | A | – | – | – | – | – | – | – | – | – |
| | At DC-23A \| DC-23B at 440 V | A | 32 | 63 | 80 | 125 | 160 | 250 | 400 | 630 | 800 |
| Motor switching capacity [2] | At AC-23A at 400 V | kW | 15 | 30 | 37 | 55 | 90 | 132 | 220 | 355 | 400 |
| | At AC-23A at 500 V | kW | 18.5 | 37 | 55 | 75 | 110 | 160 | 280 | 400 | 560 |
| | At AC-23A at 690 V | kW | 30 | 55 | 75 | 110 | 132 | 250 | 400 | 630 | 800 |
| Rated conditional short-circuit current with upstream fuse [3] | At 400/500 V AC | kA | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| | At 690 V AC | kA | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 80 | 80 |
| Let-through current $I_c$ of usable fuses, max. [3] | At 400/500 V AC | kA | 11.8 | 11.8 | 11.8 | 18 | 18 | 33.7 | 37.1 | 77.4 | 77.4 |
| | At 690 V AC | kA | 11.5 | 11.5 | 11.5 | 25.5 | 25.5 | 37.7 | 47 | 65 | 65 |
| Let-through current $I^2t$ value of usable fuses, max. [3] | At 400/500 V AC | $kA^2s$ | 34 | 34 | 34 | 223 | 223 | 1500 | 2150 | 10400 | 10400 |
| | At 690 V AC | $kA^2s$ | 55 | 55 | 55 | 360 | 360 | 940 | 2600 | 7000 | 7000 |
| Maximum power loss of the usable fuses (per fuse) | | W | 6.5 | 7.5 | 8.5 | 11 | 12 | 25.5 | 34 | 48 | 60 |
| **Degree of protection** | | | | | | | | | | | |
| Maximum IP degree of protection (with a rotary operating mechanism) | | | IP65 | | | | | | | | |
| Maximum IP degree of protection | | | – | | | | | | | | |

[1] Values valid even at +10% line voltage tolerance in case of AC
[2] Values are provided as a guide only and may vary depending on the make of motor
[3] Valid for combination of 3KF and fuse type 3NA/3ND, characteristic gG/aM

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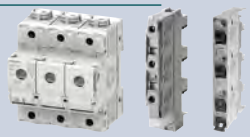
## 3KF SITOR



## 3NJ63



## 5SG7



| 1 | 1 | 1 | 2 | 2 | 3 | 4 | 5 | 5 | 00 | 00 | 00 | 00 | 1 | 2 | 3 | 3 | 5SG71. | 5SG7230 | 5SG7234. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | |
| 32 | 63 | 80 | 125 | 160 | 250 | 400 | 630 | 800 | – | – | – | – | – | – | – | – | 63 | 63 | 63 |
| 000 and 00 | | | | | 0 and 1 | 1 and 2 | 2 and 3 | | 000 and 00 | | | | 1 | 1 and 2 | 2 and 3 | | D02 | D02 | D02 |
| 690 | | | | | | | | | 500 ... 690 | | | | 690 | | 230 ... 690 | | 400, 415 | 400 | 400 |
| 220 | | | | | | | | | 230 ... 440 | | | | 230 ... 440 | | – | | 130 | 110 | – |
| 440 | | | | | | | | | – | | | | – | – | – | | – | – | – |
| – | | | | | | | | | – | | | | – | – | – | | 65 | – | – |
| | | | | | | | | | | | | | | | | | | | |
| 32 | 63 | 80 | 125 | 160 | 250 | 400 | 630 | 800 | – | – | – | – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 32 | 63 | 80 | 125 | 160 | 250 | 400 | 630 | 800 | – | – | – | – | – | – | – | – | – | – | – |
| 32 | 63 | 80 | 125 | 160 | 250 | 400 | 630 | 800 | – | – | – | – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – | – | – | – | – | 160 | – | – | – | 630 | – | – | – |
| 32 | 63 | 80 | 125 | 160 | 250 | 400 | 630 | 800 | – | – | 125 | – | 250 | 400 | 500 | – | – \| 35 | – | – \| 63 |
| 32 | 63 | 80 | 125 | 160 | 250 | 400 | 630 | 800 | – | – | – | – | – | – | – | – | – | 63 \| – | – |
| – | – | – | – | – | – | – | – | – | – | – | – | 160 | – | – | – | 630 | – | – | – |
| 32 | 63 | 80 | 125 | 160 | 250 | 400 | 630 | 800 | 63 | 100 | 125 | – | 250 | 400 | 500 | – | – | – | – |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – \| 63 | – |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | 63 | – | – |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | 63 | – | – |
| 32 | 63 | 80 | 125 | 160 | 250 | 400 | 630 | 800 | – | – | – | – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 32 | 63 | 80 | 125 | 160 | 250 | 400 | 630 | 800 | – | – | – | – | 250 | 400 | – | 630 | – | – \| 63 | – |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – \| 63 | – | – |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – \| 63 | – | – |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – \| 63 | – | – |
| 32 | 63 | 80 | 125 | 160 | 250 | 400 | 630 | 800 | – | – | – | – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 32 | 63 | 80 | 125 | 160 | 250 | 400 | 630 | 800 | – | – | – | – | – | – | – | – | – \| 63 | – | – |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 32 | 63 | 80 | 125 | 160 | 250 | 400 | 630 | 800 | – | – | – | 160 | 250 | 400 | – | 630 | – | – | – |
| – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 32 | 63 | 80 | 125 | 160 | 250 | 400 | 630 | 800 | – | – | – | – | – | – | – | – | – | – | – |
| 15 | 30 | 37 | 55 | 90 | 132 | 220 | 355 | 400 | – | – | – | – | – | – | – | – | – | – | – |
| 18.5 | 37 | 55 | 75 | 110 | 160 | 280 | 400 | 560 | – | – | – | – | – | – | – | – | – | – | – |
| 30 | 55 | 75 | 110 | 132 | 250 | 400 | 630 | 800 | – | – | – | – | – | – | – | – | – | – | – |
| 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | – | | | | | | | | 50 \| – | 50 \| – | 50 \| – |
| 100 | 100 | 100 | 100 | 100 | 100 | 100 | 80 | 80 | 60 ... 100 $kA_{rms}$ | | | | | | | | – | – | – |
| 11.8 | 11.8 | 11.8 | 18 | 18 | 33.7 | 37.1 | 77.4 | 77.4 | – | | | | | | | | – | – | – |
| 11.5 | 11.5 | 11.5 | 25.5 | 25.5 | 37.7 | 47 | 65 | 65 | – | | | | | | | | – | – | – |
| 34 | 34 | 34 | 223 | 223 | 1500 | 2150 | 10400 | 10400 | – | | | | | | | | – | – | – |
| 55 | 55 | 55 | 360 | 360 | 940 | 2600 | 7000 | 7000 | – | | | | | | | | – | – | – |
| 7 | 8 | 12 | 20 | 26 | 36 | 55 | 68 | 85 | – | | | | | | | | 5.5 | 5.5 | 5.5 |
| | | | | | | | | | | | | | | | | | | | |
| IP65 | | | | | | | | | IP41 | | | | | | | | – | – | – |
| – | | | | | | | | | – | | | | | | | | IP20 | – | – |

8

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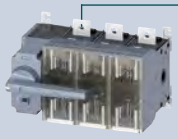


# Switch disconnectors with fuses

## Quick selection guide (continued)



### 3KF LV HRC

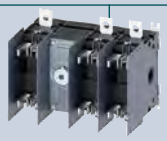
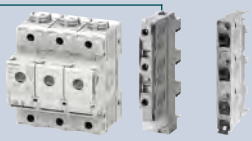


| Size | | | 1 | 1 | 1 | 2 | 2 | 3 | 4 | 5 | 5 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **General technical specifications acc. to UL** | | | | | | | | | | | |
| **Basic data** | | | | | | | | | | | |
| Certification according to UL standard | | | – | – | – | – | – | – | – | – | – |
| $I_n$ acc. to UL 508 | | A | – | – | – | – | – | – | – | – | – |
| $U_e$ acc. to UL 508 | | | – | – | – | – | – | – | – | – | – |
| **Operating and short-circuit behavior** | | | | | | | | | | | |
| Operational power, 3-phase | At 240 V | kA | – | – | – | – | – | – | – | – | – |
| | At 480 V | kA | – | – | – | – | – | – | – | – | – |
| | At 600 V | kA | – | – | – | – | – | – | – | – | – |
| Short circuit current rating (SCCR) | | | – | – | – | – | – | – | – | – | – |
| Fuse type | | | – | – | – | – | – | – | – | – | – |
| **Further information** | | | | | | | | | | | |
| | | | See page 8/122 | | | | | | | | |
| Technical specifications | | | Configuration in SIMARIS | | | | | | | | |

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| 3KF SITOR | | | | | | | | | 3NJ63 | | | | | | | | 5SG7 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | | | | | | | | |  | | | | | | | |  | | |
| 1 | 1 | 1 | 2 | 2 | 3 | 4 | 5 | 5 | 00 | 00 | 00 | 00 | 1 | 2 | 3 | 3 | 5SG71. | 5SG7230 | 5SG7234. |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| UL 508 | | | | | | | | | – | – | – | – | – | – | – | – | – | – | – |
| 32 | 56 | 56 | 125 | 125 | 500 | 320 | 530 | 530 | – | – | – | – | – | – | – | – | – | – | – |
| 600 | | | | | | | | | – | – | – | – | – | – | – | – | – | – | – |
| | | | | | | | | | | | | | | | | | | | |
| 10 | 15 | 15 | 25 | 30 | 60 | 100 | 125 | 150 | – | – | – | – | – | – | – | – | – | – | – |
| 25 | 30 | 40 | 60 | 75 | 150 | 250 | 300 | 300 | – | – | – | – | – | – | – | – | – | – | – |
| 30 | 40 | 40 | 50 | 50 | 1255 | 250 | 300 | 350 | – | – | – | – | – | – | – | – | – | – | – |
| 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | – | – | – | – | – | – | – | – | – | – | – |
| K-1, RK1, CC, J, T | K-1, RK1, CC, J, T | K-1, RK1, CC, J, T | K-1, RK1, J, T | K-1, RK1, J, T | K-1, RK1, J, T | K-1, RK1, CC, J, T | K-1, RK1, J, T | K-1, RK1, J, T | – | – | – | – | – | – | – | – | – | – | – |
| | | | | | | | | | | | | | | | | | | | |
| See page 8/124 | | | | | | | | | See page 8/130 | | | | | | | | See page 8/138 | | |
| Configuration in SIMARIS | | | | | | | | | Configuration in SIMARIS | | | | | | | | Configuration in SIMARIS | | |

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# 3KF switch disconnectors with fuses

## System overview

### Complete units with direct operating mechanisms



Front operating mechanisms, 3-pole



Front operating mechanisms, 4-pole

### Basic units



Front operating mechanisms, 3-pole



Front operating mechanisms, 4-pole



Lateral operating mechanisms, 3-pole



Lateral operating mechanisms, 4-pole



3KF SITOR



### Additional poles



4th contact elements



N terminals



N/PE terminals



Auxiliary switch modules

### Operating mechanisms



Direct operating mechanisms



Door-coupling rotary operating mechanisms



Handles for door-coupling rotary operating mechanisms



Further accessories for door-coupling rotary operating mechanisms

### Further accessories and spare parts



Auxiliary switches



Fuse monitoring



Terminal covers



Mounting elements



Fuse covers

**Note:**
You will find a detailed range of accessories with the basic units.

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# General information

## 3NA COM LV HRC fuse links

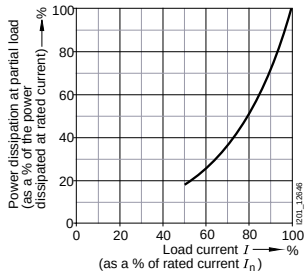


The new the 3NA COM LV HRC fuse links with measuring and communication functions make your products communication-capable.

**See Fuse Systems, page 7/30**

## Suitable fuses

**You will find further information under: sie.ag/2UIrAvy**

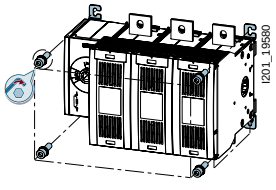



The 3KF switch disconnector with fuses is suitable for all fuses with LV HRC design in sizes 000 to 3 that comply with IEC 60269-2. These include fuses for cable and line protection and motor protection.
Fuses for semiconductor protection (Siemens trademark SITOR) can also be used. However, some of these fuses have substantially higher power losses than fuses according to IEC 60269-2. This means that the load current has to be reduced until the value that is permissible in the switch disconnector with fuses is not exceeded.
For use of Siemens semiconductor fuses (SITOR), ready-made derating tables are available in the linked document.

## Types of mounting

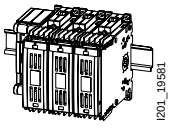
**You will find further information under: sie.ag/2UIrAvy**

### Floor mounting




All 3KF switch disconnectors with fuses are designed for floor mounting.

### DIN rail




Size 1 can be snapped onto a DIN rail (TH35 according to EN 60715) as an alternative mounting method.

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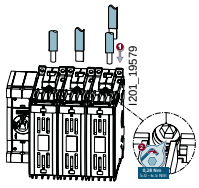
# 3KF switch disconnectors with fuses

## General information

### Electrical connection

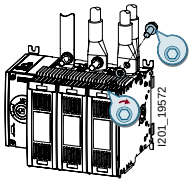
You will find further information under: sie.ag/2UlrAvy

#### Box terminals



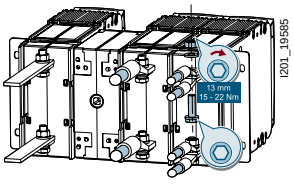

The box terminals for size 1 (32 A ... 80 A) are designed to allow the rapid connection of stripped conductors.

#### Flat terminals




Sizes 2 ... 5 are available with flat terminals, for the connection of cable lugs or busbar systems.

#### Flat terminals at rear



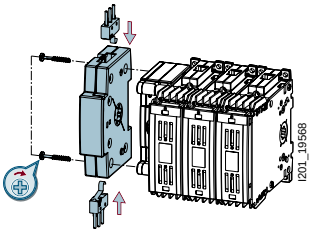

Sizes 1 and 2 (32 A, 63 A and 125 A) are available with rear flat terminals, for the connection of cable lugs or busbar systems.



### Auxiliary switch modules and auxiliary switches

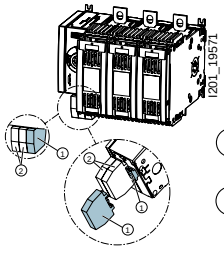
You will find further information under: sie.ag/2UlrAvy

#### Size 1




The auxiliary switches used for size 1 are microswitches (changeover contacts), which can be snapped into an auxiliary switch module. This auxiliary switch module is mounted on the side of the switch disconnector with fuses in the same way as an additional pole. A maximum of two microswitches can be installed in each auxiliary switch module.

#### Sizes 2 ... 5




1 Auxiliary switch, leading

2 Auxiliary switch, simultaneous

For sizes 2 ... 5, the auxiliary switches are directly attached to the operating mechanism module. The auxiliary switch with the leading switching function is always installed in the right-hand mounting location. The other locations are provided for simultaneously switching with the main contacts. Auxiliary switches with spring-type terminals from the 3SU1 program can also be used.

System overview, page 8/114

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## Differentiation 3KF SITOR and derating tables for SITOR fuses

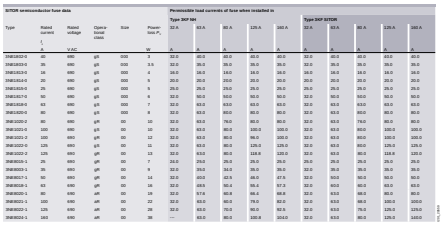
**You will find further information under: sie.ag/2UlrAvy**

### Size 1



3KF SITOR is a variation of the proven switch disconnector with 3KF LV HRC fuses and provides optimized heat dissipation and permits the use of fuses with substantially higher power losses. All 3KF SITOR types are approved according to UL 508.

### Sizes 2 ... 5



| SITOR semiconductor fuse data | | | | | | Permissible load currents of fuse when installed in | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Type 3KF SH | | | | | | Type 3KF SITOR | | | | |
| Type | Rated current $I_n$ | Rated voltage | Operating class | Size | Power-loss $P_v$ | 32 A | 63 A | 80 A | 125 A | 160 A | 32 A | 63 A | 80 A | 125 A | 160 A |
| | A | V AC | | | W | A | A | A | A | A | A | A | A | A | A |
| 3NE1802-0 | 40 | 690 | gR | 000 | 3 | 32.0 | 40.0 | 40.0 | 40.0 | 40.0 | 32.0 | 40.0 | 40.0 | 40.0 | 40.0 |
| 3NE1803-0 | 35 | 690 | gR | 000 | 3.5 | 32.0 | 35.0 | 35.0 | 35.0 | 35.0 | 32.0 | 35.0 | 35.0 | 35.0 | 35.0 |
| 3NE1814-0 | 16 | 690 | gR | 000 | 4 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 |
| 3NE1814-0 | 20 | 690 | gR | 000 | 5 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 |
| 3NE1815-0 | 25 | 690 | gR | 000 | 5 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 |
| 3NE1817-0 | 50 | 690 | gR | 000 | 6 | 32.0 | 50.0 | 50.0 | 50.0 | 50.0 | 32.0 | 50.0 | 50.0 | 50.0 | 50.0 |
| 3NE1818-0 | 63 | 690 | gR | 000 | 7 | 32.0 | 63.0 | 63.0 | 63.0 | 63.0 | 32.0 | 63.0 | 63.0 | 63.0 | 63.0 |
| 3NE1820-0 | 80 | 690 | gR | 000 | 8 | 32.0 | 63.0 | 80.0 | 80.0 | 80.0 | 32.0 | 63.0 | 80.0 | 80.0 | 80.0 |
| 3NE1020-2 | 80 | 690 | gR | 00 | 10 | 32.0 | 63.0 | 76.0 | 80.0 | 80.0 | 32.0 | 63.0 | 76.0 | 80.0 | 80.0 |
| 3NE1020-0 | 100 | 690 | gR | 00 | 10 | 32.0 | 63.0 | 80.0 | 100.0 | 100.0 | 32.0 | 63.0 | 80.0 | 100.0 | 100.0 |
| 3NE1021-2 | 100 | 690 | gR | 00 | 12 | 32.0 | 63.0 | 80.0 | 96.0 | 100.0 | 32.0 | 63.0 | 80.0 | 100.0 | 100.0 |
| 3NE1022-0 | 125 | 690 | gR | 00 | 11 | 32.0 | 63.0 | 80.0 | 125.0 | 125.0 | 32.0 | 63.0 | 80.0 | 125.0 | 125.0 |
| 3NE1022-2 | 125 | 690 | gR | 00 | 13 | 32.0 | 63.0 | 80.0 | 118.8 | 120.0 | 32.0 | 63.0 | 80.0 | 118.8 | 120.0 |
| 3NE8016-1 | 25 | 690 | gR | 00 | 7 | 24.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 |
| 3NE8003-1 | 35 | 690 | gR | 00 | 9 | 32.0 | 35.0 | 34.0 | 35.0 | 35.0 | 32.0 | 35.0 | 35.0 | 35.0 | 35.0 |
| 3NE8017-1 | 50 | 690 | gR | 00 | 14 | 32.0 | 49.0 | 42.9 | 46.0 | 47.5 | 32.0 | 50.0 | 50.0 | 50.0 | 50.0 |
| 3NE8018-1 | 63 | 690 | gR | 00 | 16 | 32.0 | 49.5 | 50.4 | 56.4 | 57.3 | 32.0 | 63.0 | 63.0 | 63.0 | 63.0 |
| 3NE8020-1 | 80 | 690 | aR | 00 | 19 | 32.0 | 57.6 | 60.8 | 66.4 | 68.8 | 32.0 | 63.0 | 66.0 | 80.0 | 80.0 |
| 3NE8021-1 | 100 | 690 | aR | 00 | 22 | 32.0 | 63.0 | 66.0 | 79.0 | 82.0 | 32.0 | 63.0 | 66.0 | 100.0 | 100.0 |
| 3NE8022-1 | 125 | 690 | aR | 00 | 28 | 32.0 | 63.0 | 70.0 | 90.0 | 92.0 | 32.0 | 63.0 | 75.0 | 125.0 | 125.0 |
| 3NE8024-1 | 160 | 690 | aR | 00 | 38 | --- | 63.0 | 80.0 | 100.8 | 104.0 | 32.0 | 63.0 | 80.0 | 125.0 | 140.0 |

Siemens provides you with pretested load currents of the SITOR semiconductor fuses for installation in the 3KF SITOR. The derating tables are provided both for IEC constraints and for UL constraints and are intended to help you with selection. The permissible load faults for the 3KF LV HRC were calculated from the test results of the 3KF SITOR.

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System overview, page 8/114

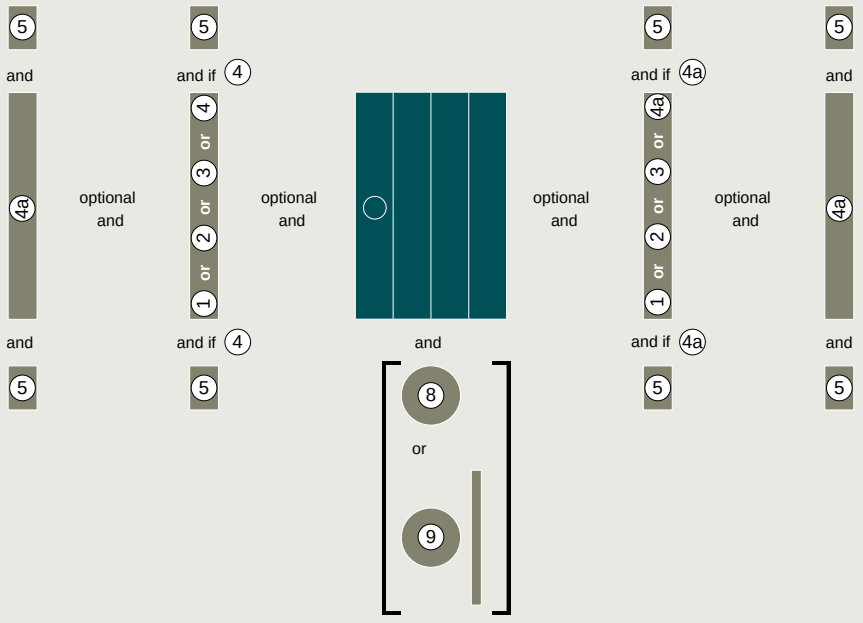
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# 3KF switch disconnectors with fuses

## Mounting concept and accessories 3KF

### Front operating mechanism left, size 1, 3/4-pole



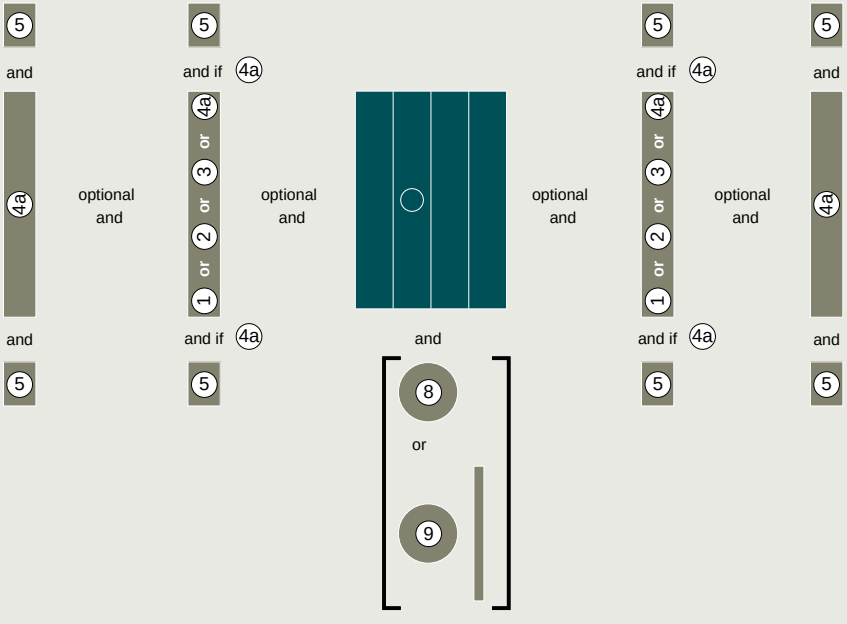

**Legend**

(1) Neutral conductor terminal
(2) N/PE terminal
(3) 4th contact element [1]
(4) Auxiliary switch module, leading, with test function [2]
(4a) Auxiliary switch module for auxiliary switches [2]
(5) Auxiliary switch
(8) Direct operating mechanism
(9) Door-coupling rotary operating mechanism

[1] Only for 3-pole 3K, max. 1×
[2] Max. 1×

I201_20494

### Front operating mechanism center, size 1, 3/4-pole




**Legend**

(1) Neutral conductor terminal
(2) N/PE terminal
(3) 4th contact element [1]
(4a) Auxiliary switch module for auxiliary switches [2]
(5) Auxiliary switch
(8) Direct operating mechanism
(9) Door-coupling rotary operating mechanism

[1] Only for 3-pole 3K, max. 1x
[2] Max. 1x

I201_20495

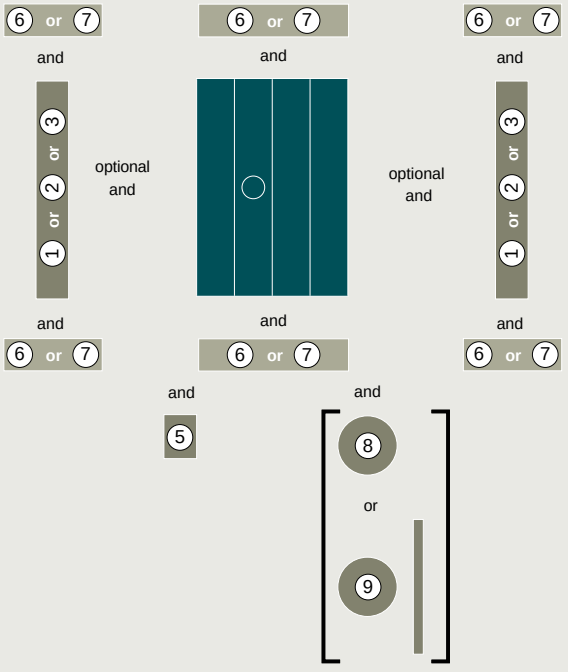


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## Front operating mechanism center or left, sizes 2 to 5, 3/4-pole




**Legend**

1. Neutral conductor terminal
2. N/PE terminal
3. 4th contact element [1]
5. Auxiliary switch [2]
6. Phase barrier
7. Terminal cover
8. Direct operating mechanism
9. Door-coupling rotary operating mechanism

[1] Only for 3-pole 3K, max. 1x
[2] Max. 4x

I201_20496

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System overview, page 8/114

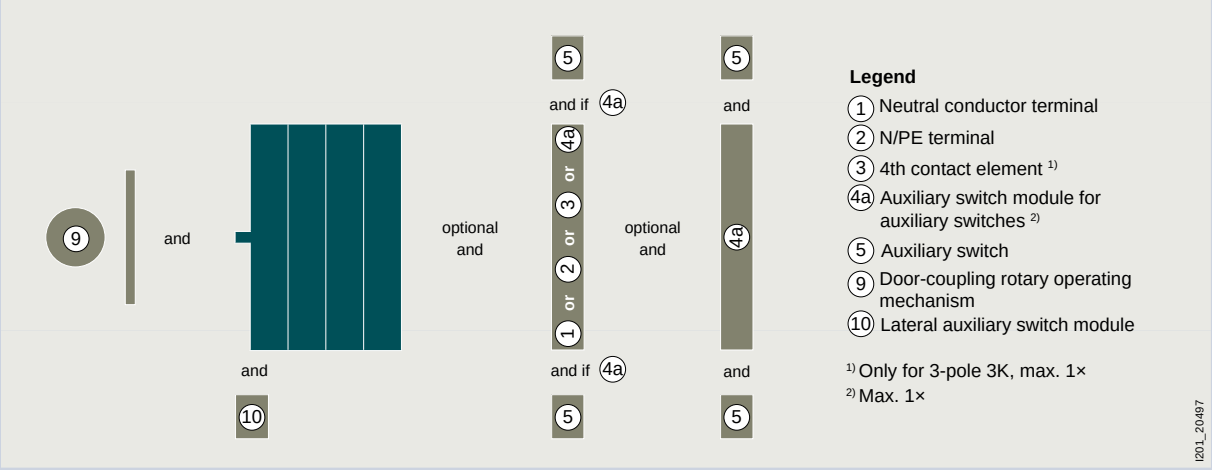
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# 3KF switch disconnectors with fuses

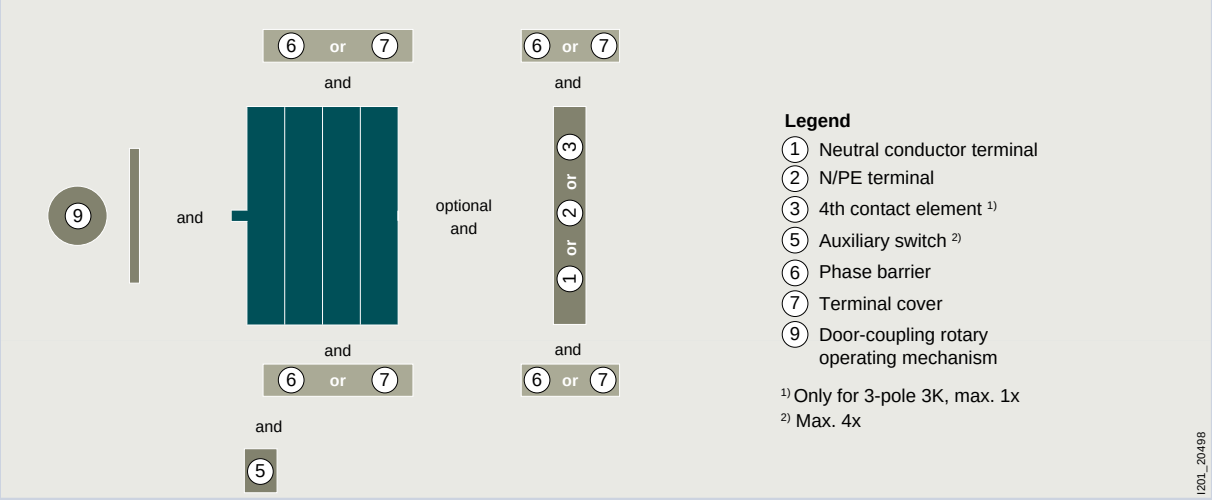
## Mounting concept and accessories 3KF

### Lateral operating mechanism left, size 1, 3/4-pole




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### Lateral operating mechanism left, sizes 2 to 5, 3/4-pole



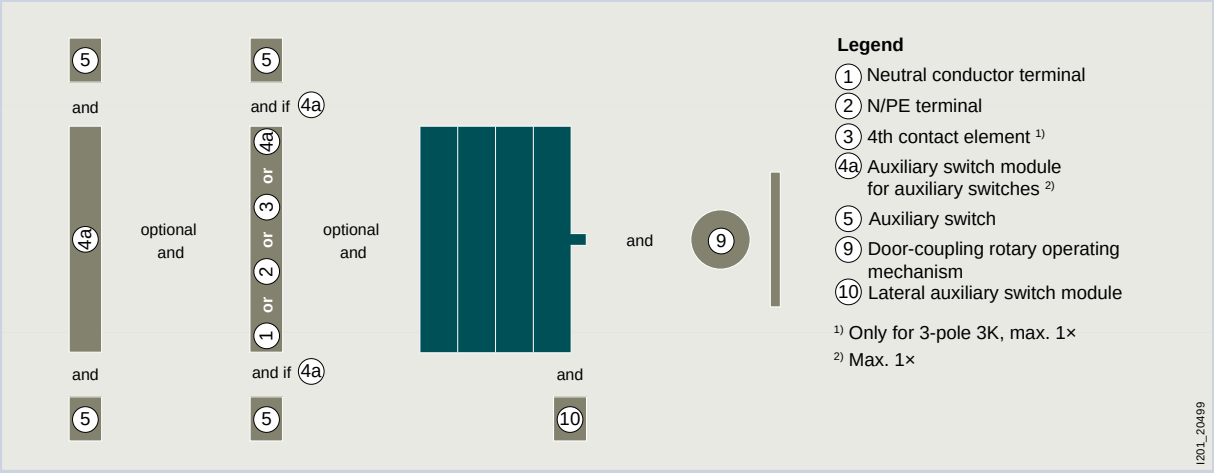



System overview, page 8/114

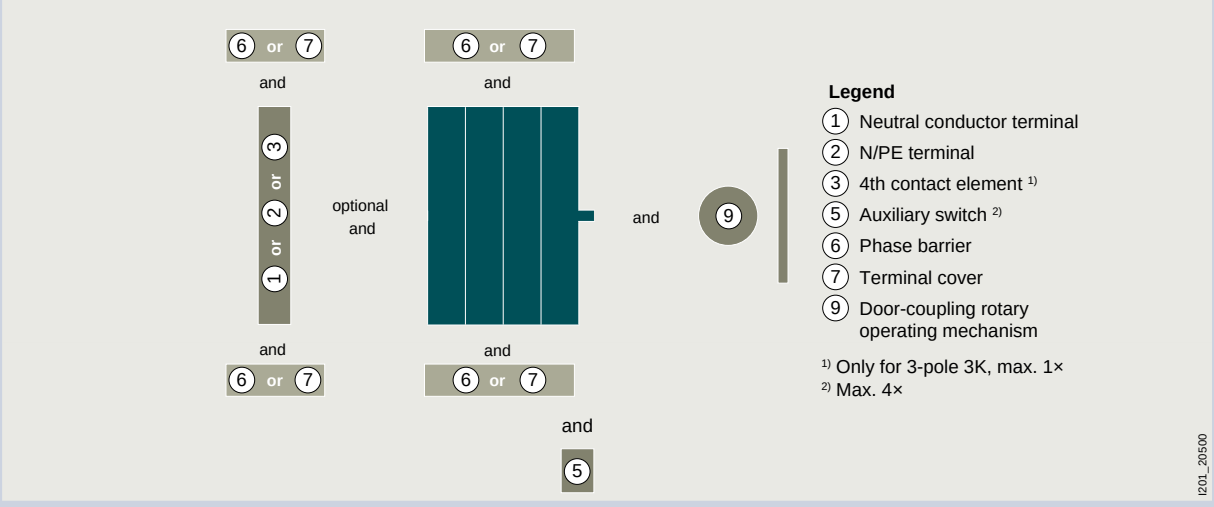
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## Lateral operating mechanism right, size 1, 3/4-pole




## Lateral operating mechanism right, sizes 2 to 5, 3/4-pole




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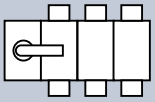
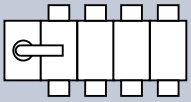
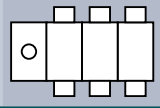
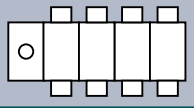
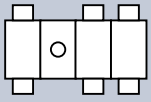
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# 3KF switch disconnectors with fuses

## 3KF LV HRC switch disconnectors



| | Complete units with direct operating mechanisms Front operating mechanisms, left | | Basic units without handle Front operating mechanisms, left | | Front operating mechanism, center |
|---|---|---|---|---|---|
| Number of poles | 3P | 4P | 3P | 4P | 3P |
| |  |  |  |  |  |

| Size | Uninterrupted current $I_u$ | | | | | |
|---|---|---|---|---|---|---|
| **Box terminals** | | | | | | |
| 1 | 32 A | 3KF1303-2LB11 | 3KF1403-2LB11 | 3KF1303-0LB11 | 3KF1403-0LB11 | 3KF1303-0MB11 |
| | 63 A | 3KF1306-2LB11 | 3KF1406-2LB11 | 3KF1306-0LB11 | 3KF1406-0LB11 | 3KF1306-0MB11 |
| | 80 A | 3KF1308-2LB11 | 3KF1408-2LB11 | 3KF1308-0LB11 | 3KF1408-0LB11 | 3KF1308-0MB11 |
| **Flat terminals at rear** | | | | | | |
| 1 | 32 A | – | – | – | – | 3KF1303-0MR11 |
| | 63 A | – | – | – | – | 3KF1306-0MR11 |
| 2 | 125 A | – | – | – | – | 3KF2312-0MR11 |
| **Flat terminals** | | | | | | |
| 2 | 125 A | 3KF2312-2LF11 | 3KF2412-2LF11 | 3KF2312-0LF11 | 3KF2412-0LF11 | 3KF2312-0MF11 |
| | 160 A | 3KF2316-2LF11 | 3KF2416-2LF11 | 3KF2316-0LF11 | 3KF2416-0LF11 | 3KF2316-0MF11 |
| 3 | 250 A | 3KF3325-2LF11 | 3KF3425-2LF11 | 3KF3325-0LF11 | 3KF3425-0LF11 | 3KF3325-0MF11 |
| 4 | 400 A | 3KF4340-2LF11 | 3KF4440-2LF11 | 3KF4340-0LF11 | 3KF4440-0LF11 | 3KF4340-0MF11 |
| 5 | 630 A | 3KF5363-2LF11 | 3KF5463-2LF11 | 3KF5363-0LF11 | 3KF5463-0LF11 | 3KF5363-0MF11 |
| | 800 A | 3KF5380-2LF11 | 3KF5480-2LF11 | 3KF5380-0LF11 | 3KF5480-0LF11 | 3KF5380-0MF11 |

**Note:**
- NH00 and NH000: For 3KF sizes 1 and 2
- NH1 and NH0: For 3KF size 3
- NH2 and NH1: For 3KF size 4
- NH3 and NH2: For 3KF size 5
- For 3KF with lateral operating mechanism (left or right), only door-coupling rotary operating mechanisms without "Test" can be used.
- The complete units with a direct operating mechanism are not suitable for conversion to door-coupling rotary operating mechanisms; the basic units are to be used for this purpose.

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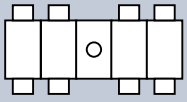
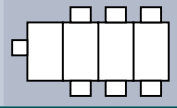
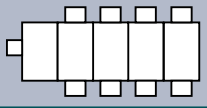
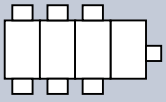
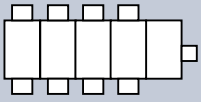
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| | Lateral operating mechanism, left | | Lateral operating mechanism, right | |
|---|---|---|---|---|
| 4P | 3P | 4P | 3P | 4P |
|  |  |  |  |  |
| | | | | |
| | | | | |
| 3KF1403-0MB11 | 3KF1303-4LB11 | 3KF1403-4LB11 | 3KF1303-4RB11 | 3KF1403-4RB11 |
| 3KF1406-0MB11 | 3KF1306-4LB11 | 3KF1406-4LB11 | 3KF1306-4RB11 | 3KF1406-4RB11 |
| 3KF1408-0MB11 | 3KF1308-4LB11 | 3KF1408-4LB11 | 3KF1308-4RB11 | 3KF1408-4RB11 |
| | | | | |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| | | | | |
| 3KF2412-0MF11 | 3KF2312-4LF11 | 3KF2412-4LF11 | 3KF2312-4RF11 | 3KF2412-4RF11 |
| 3KF2416-0MF11 | 3KF2316-4LF11 | 3KF2416-4LF11 | 3KF2316-4RF11 | 3KF2416-4RF11 |
| 3KF3425-0MF11 | 3KF3325-4LF11 | 3KF3425-4LF11 | 3KF3325-4RF11 | 3KF3425-4RF11 |
| 3KF4440-0MF11 | 3KF4340-4LF11 | 3KF4440-4LF11 | 3KF4340-4RF11 | 3KF4440-4RF11 |
| 3KF5463-0MF11 | 3KF5363-4LF11 | 3KF5463-4LF11 | 3KF5363-4RF11 | 3KF5463-4RF11 |
| 3KF5480-0MF11 | 3KF5380-4LF11 | 3KF5480-4LF11 | 3KF5380-4RF11 | 3KF5480-4RF11 |



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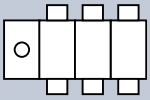
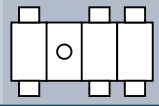


# 3KF switch disconnectors with fuses

## 3KF SITOR switch disconnectors





| | | Basic units without handle | |
|---|---|---|---|
| | | Front operating mechanism Left | Front operating mechanism Center |
| Number of poles | | 3P | 3P |
| | |  |  |
| **Size** | **Uninterrupted current $I_u$** | | |
| **Box terminals** | | | |
| 1 | 32 A | 3KF1303-0LB51 | – |
| | 63 A | 3KF1306-0LB51 | – |
| | 80 A | 3KF1308-0LB51 | – |
| **Flat terminals** | | | |
| 2 | 125 A | – | 3KF2312-0MF51 |
| | 160 A | – | 3KF2316-0MF51 |
| 3 | 250 A | – | 3KF3325-0MF51 |
| 4 | 400 A | – | 3KF4340-0MF51 |
| 5 | 630 A | – | 3KF5363-0MF51 |
| | 800 A | – | 3KF5380-0MF51 |

**Note:**
- Use of standard LV HRC fuses gG, gL, aM in 3KF SITOR is possible without restriction





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# Accessories for 3KF LV HRC and 3KF SITOR switch disconnectors

## Additional poles

**Note:**

- Additional poles (4th contact element, N or N/PE terminal) must always be mounted directly adjacent to the switch disconnector on the left or right. Accordingly, an auxiliary switch module must not be mounted between the basic unit and an additional pole on size 1.
- For installation, it is important to note that only a 3-pole 3KF switch disconnector may be retrofitted with an additional switching pole with contact system (4th contact element).

**4th contact element (switching pole) for 3KF LV HRC**



| Connection | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|
| Box terminals | 3KF9105-2AA00 | ■ | | | | |
| Flat terminals at rear | 3KF9105-1AA00 | ■ | | | | |
| | 3KF9205-1AA00 | | ■ | | | |
| Flat terminals | 3KF9205-0AA00 | | ■ | | | |
| | 3KF9305-0AA00 | | | ■ | | |
| | 3KF9405-0AA00 | | | | ■ | |
| | 3KF9505-0AA00 | | | | | ■ |

**4th contact element (switching pole) for 3KF SITOR**



| Connection | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|
| Box terminals | 3KF9105-2BA00 | ■ | | | | |
| Flat terminals | 3KF9205-0BA00 | | ■ | | | |
| | 3KF9305-0BA00 | | | ■ | | |
| | 3KF9405-0BA00 | | | | ■ | |
| | 3KF9505-0BA00 | | | | | ■ |

**Neutral conductor terminals with removable jumper, for 3KF LV HRC and 3KF SITOR**



| Connection | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|
| Box terminals | 3KF9106-2AA00 | ■ | | | | |
| Flat terminals at rear | 3KF9106-1AA00 | ■ | | | | |
| | 3KF9206-1AA00 | | ■ | | | |
| Flat terminals | 3KF9206-0AA00 | | ■ | | | |
| | 3KF9306-0AA00 | | | ■ | | |
| | 3KF9406-0AA00 | | | | ■ | |
| | 3KF9506-0AA00 | | | | | ■ |

**N/PE terminals with permanent jumper, for 3KF LV HRC and 3KF SITOR**



| Connection | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|
| Box terminals | 3KF9106-8AA00 | ■ | | | | |
| Flat terminals at rear | 3KF9106-6AA00 | ■ | | | | |
| | 3KF9206-6AA00 | | ■ | | | |
| Flat terminals | 3KF9206-7AA00 | | ■ | | | |
| | 3KF9306-7AA00 | | | ■ | | |
| | 3KF9406-7AA00 | | | | ■ | |
| | 3KF9506-7AA00 | | | | | ■ |

## Operating mechanisms

**Direct operating mechanisms, for 3KF LV HRC**



| Version | Color | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|
| Can be locked with up to 3 padlocks | Gray | 3KF9101-1AA00 | ■ | | | | |
| | | 3KF9201-1AA00 | | ■ | | | |
| | | 3KF9301-1AA00 | | | ■ | | |
| | | 3KF9401-1AA00 | | | | ■ | |
| | | 3KF9501-1AA00 | | | | | ■ |
| | Red/yellow | 3KF9101-2AA00 | ■ | | | | |
| | | 3KF9201-2AA00 | | ■ | | | |
| | | 3KF9301-2AA00 | | | ■ | | |
| | | 3KF9401-2AA00 | | | | ■ | |
| | | 3KF9501-2AA00 | | | | | ■ |

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# 3KF switch disconnectors with fuses

## Accessories for 3KF LV HRC and 3KF SITOR switch disconnectors

### Operating mechanisms



**Door-coupling rotary operating mechanisms, for 3KF LV HRC and 3KF SITOR**

- **Scope of supply**:
  - Handle with masking plate
  - Coupling driver with tolerance compensation
  - Shaft 300 mm
- Can be locked with up to max. 3 padlocks

| Inscription | Color | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|
| Test – O – I | Gray | 8UD1171-2AF21 | ■ | | | | |
| | | 8UD1141-2AF21 | | ■ | | | |
| | | 8UD1141-3AF21 | | | ■ | | |
| | | 8UD1151-3AF21 | | | | ■ | |
| | | 8UD1161-4AF21 | | | | | ■ |
| | Red/yellow | 8UD1171-2AF25 | ■ | | | | |
| | | 8UD1141-2AF25 | | ■ | | | |
| | | 8UD1141-3AF25 | | | ■ | | |
| | | 8UD1151-3AF25 | | | | ■ | |
| | | 8UD1161-4AF25 | | | | | ■ |

**Handles, for 3KF LV HRC and 3KF SITOR**

- With masking plate
- Can be locked with up to max. 3 padlocks









| Inscription | Lighting | Color | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|---|
| O – I | Without | Gray | 8UD1771-2AD01 | ■ | | | | |
| | | | 8UD1841-2AD01 | | ■ | ■ | | |
| | | | 8UD1851-3AD01 | | | | ■ | |
| | | | 8UD1861-4AD01 | | | | | ■ |
| | | Red/yellow | 8UD1771-2AD05 | ■ | | | | |
| | | | 8UD1841-2AD05 | | ■ | ■ | | |
| | | | 8UD1851-3AD05 | | | | ■ | |
| | | | 8UD1861-4AD05 | | | | | ■ |
| | With | Gray | 8UD1771-2CD01 | ■ | | | | |
| | | | 8UD1841-2CD01 | | ■ | ■ | | |
| | | | 8UD1851-3CD01 | | | | ■ | |
| | | | 8UD1861-4CD01 | | | | | ■ |
| | | Red/yellow | 8UD1771-2CD05 | ■ | | | | |
| | | | 8UD1841-2CD05 | | ■ | ■ | | |
| | | | 8UD1851-3CD05 | | | | ■ | |
| | | | 8UD1861-4CD05 | | | | | ■ |
| Test – O – I | Without | Gray | 8UD1771-2AF01 | ■ | | | | |
| | | | 8UD1841-2AF01 | | ■ | ■ | | |
| | | | 8UD1851-3AF01 | | | | ■ | |
| | | | 8UD1861-4AF01 | | | | | ■ |
| | | Red/yellow | 8UD1771-2AF05 | ■ | | | | |
| | | | 8UD1841-2AF05 | | ■ | ■ | | |
| | | | 8UD1851-3AF05 | | | | ■ | |
| | | | 8UD1861-4AF05 | | | | | ■ |
| | With | Gray | 8UD1771-2CF01 | ■ | | | | |
| | | | 8UD1841-2CF01 | | ■ | ■ | | |
| | | | 8UD1851-3CF01 | | | | ■ | |
| | | | 8UD1861-4CF01 | | | | | ■ |
| | | Red/yellow | 8UD1771-2CF05 | ■ | | | | |
| | | | 8UD1841-2CF05 | | ■ | ■ | | |
| | | | 8UD1851-3CF05 | | | | ■ | |
| | | | 8UD1861-4CF05 | | | | | ■ |

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## Operating mechanisms

| | | | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|
| **Extension shaft, for 3KF LV HRC and 3KF SITOR** | | | | | | | |
|  | • A shaft jack is required for the 8UD1 handle when the 600 mm long shaft is used and for sizes 1 and 2 | | | | | | |
| | **Length** | **Article No.** | | | | | |
| | 300 mm | 8UC6032 | ■ | ■ | | | |
| | | 8UC6033 | | | ■ | ■ | |
| | | 8UC6034 | | | | | ■ |
| | 600 mm | 8UC6082 | ■ | ■ | | | |
| | | 8UC6083 | | | ■ | ■ | |
| | | 8UC6084 | | | | | ■ |
| **Shaft jack for 8UD1 handle, for 3KF LV HRC and 3KF SITOR** | | | | | | | |
|  | **Version** | **Article No.** | | | | | |
| | For shaft 600 mm | 8UD1900-0FA00 | ■ | ■ | | | |
| **Coupling drivers, for 3KF LV HRC and 3KF SITOR** | | | | | | | |
| | **Version** | **Article No.** | | | | | |
|  | With tolerance compensation | 8UD1900-2GA00 | ■ | | | | |
| | | 8UD1900-6GA00 | | ■ | | | |
| | | 8UD1900-3GA00 | | | ■ | ■ | |
| | | 8UD1900-4GA00 | | | | | ■ |
|  | Without tolerance compensation | 8UD1900-2HA00 | ■ | | | | |
| | | 8UD1900-6HA00 | | ■ | | | |
| | | 8UD1900-3HA00 | | | ■ | ■ | |
| | | 8UD1900-4HA00 | | | | | ■ |
| **Adapters for shafts, for 3KF LV HRC and 3KF SITOR** | | | | | | | |
|  | **Shaft size** | **Article No.** | | | | | |
| | 8 × 8 mm | 8UC6022 | ■ | ■ | | | |
| | 10 × 10 mm | 8UC6023 | | | ■ | ■ | |
| | 12 × 12 mm | 8UC6024 | | | | | ■ |

## Further accessories and spare parts

| | | | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|
| **Auxiliary switch modules, for 3KF LV HRC and 3KF SITOR** | | | | | | | |
| | • Auxiliary switch modules are supplied without auxiliary switches<br>• The 3KF9112-0AB00 mounting bracket is additionally required for mounting the auxiliary switch modules with the rear terminal<br>• The 3KD9103-6 and 3KD9103-7 auxiliary switch modules and those with a leading NO contact can only be used with 3KF if they have the operating mechanism on the front or on the left | | | | | | |
|  | **Type** | **Article No.** | | | | | |
| | Standard version | 3KD9103-5 | ■ | | | | |
| | With test function | 3KD9103-6 | ■ | | | | |
| | With leading NO and test function | 3KD9103-7 | ■ | | | | |
| **Mounting brackets for auxiliary switch modules, for 3KF size 1 with rear terminals** | | | | | | | |
|  | • For mounting auxiliary switch modules on 3KF switch disconnectors with rear terminal | | | | | | |
| | | **Article No.** | | | | | |
| | | 3KF9112-0AB00 | ■ | | | | |

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# 3KF switch disconnectors with fuses

## Accessories for 3KF LV HRC and 3KF SITOR switch disconnectors

### Further accessories and spare parts

**Auxiliary switches, for 3KF LV HRC and 3KF SITOR**

- Auxiliary switches for sizes 2 to 5 have a screw terminal and are mounted on the 3KF operating mechanism module. Auxiliary switches with spring-type terminals from the 3SU1 program can also be used.
- All auxiliary switches for sizes 2 to 5 can be used as leading auxiliary switches, depending on the mounting position of the auxiliary switch (see operating instructions).



| Type | Contacts | Contact surface | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|---|
| With connecting cables | 1 CO | Standard | 3KD9103-1 | ■ | | | | |
| | | Solid-state compatible | 3KD9103-3 | ■ | | | | |
| Without connecting cables | 1 CO | Standard | 3KD9103-2 | ■ | | | | |
| | | Solid-state compatible | 3KD9103-4 | ■ | | | | |
| | 1 NO | Standard | 3SU1400-1AA10-1BA0 | | ■ | ■ | ■ | ■ |
| | | Gold-plated | 3SU1400-1AA10-1LA0 | | ■ | ■ | ■ | ■ |
| | 1 NC | Standard | 3SU1400-1AA10-1CA0 | | ■ | ■ | ■ | ■ |
| | | Gold-plated | 3SU1400-1AA10-1MA0 | | ■ | ■ | ■ | ■ |
| | 1 NO + 1 NC | Standard | 3SU1400-1AA10-1FA0 | | ■ | ■ | ■ | ■ |
| | | Gold-plated | 3SU1400-1AA10-1QA0 | | ■ | ■ | ■ | ■ |
| | 2 NO | Standard | 3SU1400-1AA10-1DA0 | | ■ | ■ | ■ | ■ |
| | | Gold-plated | 3SU1400-1AA10-1NA0 | | ■ | ■ | ■ | ■ |
| | 2 NC | Standard | 3SU1400-1AA10-1EA0 | | ■ | ■ | ■ | ■ |
| | | Gold-plated | 3SU1400-1AA10-1PA0 | | ■ | ■ | ■ | ■ |

**Electronic fuse monitoring, for 3KF LV HRC and 3KF SITOR**



| Version | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|
| For remote display of tripped fuses | 3KF9010-1AA00 | ■ | ■ | ■ | ■ | ■ |

**Phase barriers, for 3KF LV HRC and 3KF SITOR**



| Version | Scope of supply | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|
| For 3-pole devices | 6 units | 3KD9308-6 | | ■ | | | |
| | | 3KD9408-6 | | | ■ | ■ | |
| | | 3KD9508-6 | | | | | ■ |
| For 4-pole devices | 8 units | 3KD9308-8 | | ■ | | | |
| | | 3KD9408-8 | | | ■ | ■ | |
| | | 3KD9508-8 | | | | | ■ |

**Terminal covers, for 3KF LV HRC**



| Version | Scope of supply | Type | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|---|
| For 3-pole devices | 6 units | Standard version | 3KF9204-6 | | ■ | | | |
| | | | 3KF9304-6 | | | ■ | | |
| | | | 3KF9404-6 | | | | ■ | |
| | | | 3KD9504-6 | | | | | ■ |
| | | Short version | 3KF9204-7 | | ■ | | | |
| | | | 3KF9304-7 | | | ■ | | |
| | | | 3KF9404-7 | | | | ■ | |
| For 4-pole devices | 8 units | Standard version | 3KF9204-8 | | ■ | | | |
| | | | 3KF9304-8 | | | ■ | | |
| | | | 3KF9404-8 | | | | ■ | |
| | | | 3KD9504-8 | | | | | ■ |
| | | Short version | 3KF9204-5 | | ■ | | | |
| | | | 3KF9304-5 | | | ■ | | |
| | | | 3KF9404-5 | | | | ■ | |

**Spare part for terminal covers (4th contact element), for 3KF LV HRC**



| Scope of supply | Type | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|
| 1 unit | Standard version | 3KD9504-1 | | | | | ■ |
| | Short version | 3KF9204-1 | | ■ | | | |
| | | 3KF9304-1 | | | ■ | | |
| | | 3KF9404-1 | | | | ■ | |
| 6 units | Standard version | 3KF9204-6 | | ■ | | | |
| | | 3KF9304-6 | | | ■ | | |
| | | 3KF9404-6 | | | | ■ | |

**Spare part for terminal covers (N and N/PE terminal), for 3KF LV HRC**



| Scope of supply | Type | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|
| 1 unit | Standard version | 3KD9504-1 | | | | | ■ |
| | Short version | 3KD9304-1 | | ■ | | | |
| | | 3KD9404-1 | | | ■ | ■ | |
| 6 units | Standard version | 3KD9304-6 | | ■ | | | |
| | | 3KD9404-6 | | | ■ | ■ | |

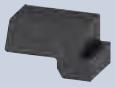
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## Further accessories and spare parts

### Blocking pin test function, for 3KF LV HRC and 3KF SITOR



- Enables permanent deactivation of the test function for auxiliary switches
- It is installed in the operating mechanism module of the 3KF switch disconnector

| Scope of supply | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|
| 10 units | 3KF9112-1AA00 | ■ | | | | |
| | 3KF9412-1AA00 | | ■ | | ■ | |
| | 3KF9512-1AA00 | | | | | ■ |

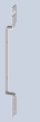
### Mounting brackets, for 3KF LV HRC



- The 3KF9112-0AB00 mounting bracket is needed if an auxiliary switch module is mounted on a 3KF1 with rear terminals

| Connection | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|
| Box terminals, flat terminals | 3KF9112-0AA00 | ■ | | | | |
| | 3KF9212-0AA00 | | ■ | | | |
| Flat terminals at rear | 3KF9212-0AB00 | ■ | ■ | | | |

### Mounting brackets, for 3KF SITOR



| Connection | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|
| Box terminals, flat terminals | 3KF9112-0AA10 | ■ | | | | |
| | 3KF9212-0AA10 | | ■ | | | |

### Mounting brackets, for 3KF LV HRC and 3KF SITOR



| Connection | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|
| Flat terminals | 3KF9412-0AA00 | | | ■ | ■ | |
| | 3KF9512-0AA00 | | | | | ■ |

### Slides, for 3KF LV HRC and 3KF SITOR



| Version | Scope of supply | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|
| For mounting on DIN rail | 5 units | 3KF9112-0BA00 | ■ | | | | |

### Fuse covers, for 3KF LV HRC



| Connection | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|
| Box terminals, flat terminals | 3KF9112-0CA00 | ■ | | | | |
| | 3KF9212-0CA00 | | ■ | | | |
| | 3KF9312-0CA00 | | | ■ | | |
| | 3KF9412-0CA00 | | | | ■ | |
| | 3KF9512-0CA00 | | | | | ■ |
| Flat terminals at rear | 3KF9212-0CB00 | | ■ | | | |

### LV HRC isolating blades, for 3KF LV HRC and 3KF SITOR



| Version | Article No. | NH 000 | NH 00 | NH 1 | NH 2 | NH 3 |
|---|---|---|---|---|---|---|
| With insulated grip lugs | 3NG1002 | ■ | ■ | | | |
| | 3NG1202 | | | ■ | | |
| | 3NG1302 | | | | ■ | |
| | 3NG1402 | | | | | ■ |

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# 3NJ63 switch disconnectors with fuses

## System overview

### Fuse links



For LV HRC fuses

### Accessories



Connection terminals and covers



Auxiliary switches




Current transformers



Ammeters



Guide rails

**Note:**
You will find a detailed range of accessories with the basic units.

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# General information

## 3NA COM LV HRC fuse links

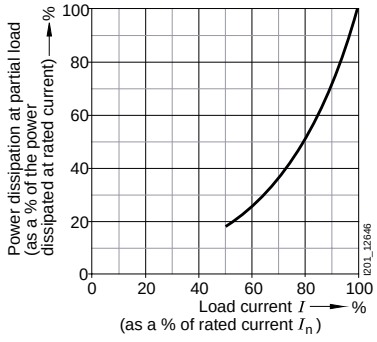


The new the 3NA COM LV HRC fuse links with measuring and communication function make your products communication-capable.

**See Fuse Systems, page 7/50**

## Suitable fuses

**You will find further information under: sie.ag/2UlrAvy**




The 3NJ63 switch disconnector with fuses is suitable for all fuses with LV HRC design in sizes 000 to 3 that comply with IEC 60269-2, including fuses for cable and line protection.



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# 3NJ63 switch disconnectors with fuses

## Configuration

**For a complete and valid configuration of your switch disconnectors with fuses, please use our online configurator at www.siemens.com/lowvoltage/3nj63-configurator**

| | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **3NJ63** | | | – | A | | 0 | | – | | | |

| | | | | |
|---|---|---|---|---|
| Size and type of fuse | LV HRC fuse | 00 | 160 A | 0 |
| | | 1 | 250 A | 1 |
| | | 2 | 400 A | 2 |
| | | 3 | 630 A | 3 |
| Number of poles | 2-pole (DC-23B) [1] | | | 2 |
| | 3-pole (AC-23A) [2] | | | 3 |
| | 4-pole (AC-22B) | | | 4 |
| Switch operation | Manually operated | | | 1 |
| | Motorized operating mechanism | | | 2 |
| | Manually operated | | | 3 |
| | Motorized operating mechanism | | | 4 |
| Electronic fuse monitoring | Without | | | A |
| | ≤ 690 V AC | Operate voltage < 20 V | EFM10 | B |
| | ≤ 690 V AC with line monitoring | Operate voltage < 13 V | EFM20 | C |
| | ≤ 440 V DC | Operate voltage < 20 V | EFM25 | E |
| Auxiliary switches | Without | | | 0 |
| | 1 NC | | | 1 |
| | 1 NO | | | 2 |
| | 1 NO + 1 NC | | | 3 |

[1] 2-pole 500 V DC-21B
[2] 3-pole 800 V NH1 AC-22B

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| 3NJ63 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | – | | | | | – | | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Type of ammeter | Without | | | | | | | 0 | | | | |
| | Moving iron | | | | | | | 1 | | | | |
| | Bi-metal | | | | | | | 2 | | | | |
| Wiring version of the current transformer | Without | | | | | | | | A | | | |
| | 1 current transformer to multi-function plug | | | | | | | | B | | | |
| | 3 current transformers to multi-function plug | | | | | | | | C | | | |
| | 1 current transformer to 1 ammeter | | | | | | | | D | | | |
| | 1 current transformer to 1 ammeter and multi-function plug | | | | | | | | E | | | |
| | 3 current transformers to 1 ammeter and multi-function plug | | | | | | | | F | | | |
| Current transformer primary current | Without | | | | | | | | | A | | |
| | 50 A | | | | | | | | | B | | |
| | 100 A | | | | | | | | | D | | |
| | 150 A | | | | | | | | | E | | |
| | 200 A | | | | | | | | | F | | |
| | 250 A | | | | | | | | | G | | |
| | 300 A | | | | | | | | | H | | |
| | 400 A | | | | | | | | | J | | |
| | 500 A | | | | | | | | | K | | |
| | 600 A | | | | | | | | | L | | |
| Current transformer secondary current | Without | Without accuracy class | | | | | | | | | | 0 |
| | 1 A | Accuracy class 1 | | | | | | | | | | 1 |
| | 1 A | Accuracy class 0.5 | | | | | | | | | | 2 |
| | 1 A | Accuracy class 0.5 calibrated | | | | | | | | | | 3 |
| | 5 A | Accuracy class 1 | | | | | | | | | | 4 |
| | 5 A | Accuracy class 0.5 | | | | | | | | | | 5 |
| | 5 A | Accuracy class 0.5 calibrated | | | | | | | | | | 6 |

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# 3NJ63 switch disconnectors with fuses

## Accessories

| | | | NH00 | NH1 | NH2 | NH3 |
|---|---|---|---|---|---|---|
| **Terminals** | | | | | | |
|  | **Type** | **Article No.** | | | | |
| | For 2/3-pole devices | 3NJ6923-1BA00 | ■ | | | |
| | | 3NJ6933-1BA00 | | ■ | | |
| | | 3NJ6943-1CA00 | | | ■ | ■ |
| | For 4-pole devices | 3NJ6924-1BA00 | ■ | | | |
| | | 3NJ6934-1BA00 | | ■ | | |
| | | 3NJ6944-1CA00 | | | ■ | ■ |
| **Terminal covers** | | | | | | |
|  | **Type** | **Version** / **Article No.** | | | | |
| | For 2/3-pole devices | – 3NJ6923-1DA00 | ■ | | | |
| | | – 3NJ6933-1DA01 | | ■ | | |
| | | – 3NJ6943-1DA00 | | | ■ | ■ |
| | | As an internal terminal cover 3NJ6933-1DB00 | | ■ | | |
| | For 4-pole devices | 3NJ6904-1DA00 | ■ | ■ | ■ | ■ |
| **Contact extensions** | | | | | | |
|  | **Number of poles** | **Article No.** | | | | |
| | 3-pole | 3NJ6923-1EB00 | ■ | | | |
| | | 3NJ6933-1EB00 | | ■ | | |
| | | 3NJ6943-1EB00 | | | ■ | ■ |
| | 4-pole | 3NJ6924-1EB00 | ■ | | | |
| | | 3NJ6934-1EB00 | | ■ | | |
| | | 3NJ6944-1EB00 | | | ■ | ■ |
| **Electronic fuse monitoring and line monitoring devices** | | | | | | |
|  | **Type** | **Version** / **Article No.** | | | | |
| | EFM 10 | With line monitoring for AC networks 3NJ6920-3FB00 | ■ | | | |
| | | With line monitoring for AC networks 3NJ6930-3FB00 | | ■ | | |
| | | With line monitoring for AC networks 3NJ6940-3FB00 | | | ■ | ■ |
| | EFM 20 | With line monitoring for AC networks 3NJ6920-3FC00 | ■ | | | |
| | | With line monitoring for AC networks 3NJ6930-3FC00 | | ■ | | |
| | | With line monitoring for AC networks 3NJ6940-3FC00 | | | ■ | ■ |
| | EFM 25 | With line monitoring for DC networks 3NJ6920-3FE00 | ■ | | | |
| | | With line monitoring for DC networks 3NJ6930-3FE00 | | ■ | | |
| | | With line monitoring for DC networks 3NJ6940-3FE00 | | | ■ | ■ |
| **Auxiliary switches** | | | | | | |
|  | **Contacts** | **Version** / **Article No.** | | | | |
| | 1 NO | With cover 3NJ6920-2BB00 | ■ | | | |
| | | With cover 3NJ6930-2BB00 | | ■ | | |
| | | With cover 3NJ6940-2BB00 | | | ■ | ■ |
| | | Without cover 3NJ6900-2BC00 | ■ | ■ | ■ | ■ |
| | 1 NC | With cover 3NJ6920-2CB00 | ■ | | | |
| | | With cover 3NJ6930-2CB00 | | ■ | | |
| | | With cover 3NJ6940-2CB00 | | | ■ | ■ |
| | | Without cover 3NJ6900-2CC00 | ■ | ■ | ■ | ■ |





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## Current transformers for main devices and contact extensions



| Rated current $I_{pr}$ | Class | Apparent power consumption | Feed-through opening diameter | Article No. | NH00 | NH1 | NH2 | NH3 |
|---|---|---|---|---|---|---|---|---|
| 50 A/1 A | 1 | 1 VA | ⌀ 21 mm | 3NJ6920-3BB11 | ■ | ■ | | |
| 50 A/5 A | 1 | 1 VA | ⌀ 21 mm | 3NJ6920-3BB21 | ■ | ■ | | |
| 100 A/1 A | 1 | 2.5 VA | ⌀ 21 mm | 3NJ6920-3BD11 | ■ | ■ | | |
| | 0.5 | 1.5 VA | ⌀ 21 mm | 3NJ6920-3BD12 | ■ | ■ | | |
| | 0.5 calibrated | 1.5 VA | ⌀ 14 mm | 3NJ6920-3BD13 | ■ | | | |
| | | | ⌀ 15.2 mm | 3NJ6930-3BD13 | | ■ | | |
| 100 A/5 A | 1 | 2.5 VA | ⌀ 21 mm | 3NJ6920-3BD21 | ■ | ■ | | |
| | 0.5 | 1.5 VA | ⌀ 21 mm | 3NJ6920-3BD22 | ■ | ■ | | |
| | 0.5 calibrated | 1.5 VA | ⌀ 14 mm | 3NJ6920-3BD23 | ■ | | | |
| | | | ⌀ 15.2 mm | 3NJ6930-3BD23 | | ■ | | |
| 150 A/1 A | 1 | 2.5 VA | ⌀ 21 mm | 3NJ6920-3BE11 | ■ | ■ | | |
| | 0.5 | 1.5 VA | ⌀ 21 mm | 3NJ6920-3BE12 | ■ | ■ | | |
| | 0.5 calibrated | 1.5 VA | ⌀ 14 mm | 3NJ6920-3BE13 | ■ | | | |
| | | 2.5 VA | ⌀ 15.2 mm | 3NJ6930-3BE13 | | ■ | | |
| 150 A/5 A | 1 | 2.5 VA | ⌀ 21 mm | 3NJ6920-3BE21 | ■ | ■ | | |
| | 0.5 | 1.5 VA | ⌀ 21 mm | 3NJ6920-3BE22 | ■ | ■ | | |
| | 0.5 calibrated | 1.5 VA | ⌀ 14 mm | 3NJ6920-3BE23 | ■ | | | |
| | | 2.5 VA | ⌀ 15.2 mm | 3NJ6930-3BE23 | | ■ | | |
| 200 A/1 A | 1 | 2.5 VA | ⌀ 21 mm | 3NJ6930-3BF11 | | ■ | | |
| | 0.5 | 3.75 VA | ⌀ 21 mm | 3NJ6930-3BF12 | | ■ | | |
| | 0.5 calibrated | 2.5 VA | ⌀ 14 mm | 3NJ6930-3BF13 | | ■ | | |
| 200 A/5 A | 1 | 2.5 VA | ⌀ 21 mm | 3NJ6930-3BF21 | | ■ | | |
| | 0.5 | 5 VA | ⌀ 21 mm | 3NJ6930-3BF22 | | ■ | | |
| | 0.5 calibrated | 2.5 VA | ⌀ 14 mm | 3NJ6930-3BF23 | | ■ | | |
| 250 A/1 A | 1 | 5 VA | ⌀ 21 mm | 3NJ6930-3BG11 | | ■ | | |
| | 0.5 | 5 VA | ⌀ 21 mm | 3NJ6930-3BG12 | | ■ | | |
| | 0.5 calibrated | 2.5 VA | ⌀ 14 mm | 3NJ6930-3BG13 | | ■ | | |
| 250 A/5 A | 1 | 2.5 VA | ⌀ 21 mm | 3NJ6930-3BG21 | | ■ | | |
| | 0.5 | 2.5 VA | ⌀ 21 mm | 3NJ6930-3BG22 | | ■ | | |
| | 0.5 calibrated | 2.5 VA | ⌀ 14 mm | 3NJ6930-3BG23 | | ■ | | |
| 300 A/1 A | 1 | 5 VA | – | 3NJ6940-3BH11 | | | ■ | ■ |
| | 0.5 | 5 VA | – | 3NJ6940-3BH12 | | | ■ | ■ |
| | 0.5 calibrated | 5 VA | – | 3NJ6940-3BH13 | | | ■ | ■ |
| 300 A/5 A | 1 | 5 VA | – | 3NJ6940-3BH21 | | | ■ | ■ |
| | 0.5 | 5 VA | – | 3NJ6940-3BH22 | | | ■ | ■ |
| | 0.5 calibrated | 5 VA | – | 3NJ6940-3BH23 | | | ■ | ■ |
| 400 A/1 A | 1 | 5 VA | – | 3NJ6940-3BJ11 | | | ■ | ■ |
| | 0.5 | 5 VA | – | 3NJ6940-3BJ12 | | | ■ | ■ |
| | 0.5 calibrated | 5 VA | – | 3NJ6940-3BJ13 | | | ■ | ■ |
| 400 A/5 A | 1 | 5 VA | – | 3NJ6940-3BJ21 | | | ■ | ■ |
| | 0.5 | 5 VA | – | 3NJ6940-3BJ22 | | | ■ | ■ |
| | 0.5 calibrated | 5 VA | – | 3NJ6940-3BJ23 | | | ■ | ■ |
| 500 A/1 A | 1 | 5 VA | – | 3NJ6940-3BK11 | | | ■ | ■ |
| | 0.5 | 5 VA | – | 3NJ6940-3BK12 | | | ■ | ■ |
| | 0.5 calibrated | 5 VA | – | 3NJ6940-3BK13 | | | ■ | ■ |
| 500 A/5 A | 1 | 5 VA | – | 3NJ6940-3BK21 | | | ■ | ■ |
| | 0.5 | 5 VA | – | 3NJ6940-3BK22 | | | ■ | ■ |
| | 0.5 calibrated | 5 VA | – | 3NJ6940-3BK23 | | | ■ | ■ |
| 600 A/1 A | 1 | 5 VA | – | 3NJ6940-3BL11 | | | ■ | ■ |
| | 0.5 | 5 VA | – | 3NJ6940-3BL12 | | | ■ | ■ |
| | 0.5 calibrated | 5 VA | – | 3NJ6940-3BL13 | | | ■ | ■ |
| 600 A/5 A | 1 | 5 VA | – | 3NJ6940-3BL21 | | | ■ | ■ |
| | 0.5 | 5 VA | – | 3NJ6940-3BL22 | | | ■ | ■ |
| | 0.5 calibrated | 5 VA | – | 3NJ6940-3BL23 | | | ■ | ■ |



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# 3NJ63 switch disconnectors with fuses

## Accessories



| Type | Version | Article No. | NH00 | NH1 | NH2 | NH3 |
|---|---|---|---|---|---|---|
| **Current transformer busbars** | | | | | | |
| For current transformers with feed-through opening diameter 21 mm | For 1 current transformer | 3NJ6920-3DB00 | ■ | | | |
| | | 3NJ6930-3DB00 | | ■ | | |
| | For 3 current transformers | 3NJ6920-3DC00 | ■ | | | |
| | | 3NJ6930-3DC00 | | ■ | | |
| | For 4 current transformers | 3NJ6920-3DD00 | ■ | | | |
| | | 3NJ6930-3DD00 | | ■ | | |
| For current transformers with feed-through opening diameter 14 mm | For 1 current transformer | 3NJ6920-3DE00 | ■ | | | |
| | | 3NJ6930-3DE00 | | ■ | | |
| | For 3 current transformers | 3NJ6920-3DF00 | ■ | | | |
| | | 3NJ6930-3DF00 | | ■ | | |
| | For 4 current transformers | 3NJ6920-3DG00 | ■ | | | |
| **Holders** | | | | | | |
| Version | | Article No. | | | | |
| For ammeters | | 3NJ6900-4GA00 | ■ | ■ | ■ | ■ |



**Amperemeter**



| Type | Version | Rated current $I_e$ | Article No. | NH00 | NH1 | NH2 | NH3 |
|---|---|---|---|---|---|---|---|
| Moving-iron measuring instruments | For measurements on transformer x/1 A with double overload | 50 A/1 A | 3NJ6900-4HB11 | ■ | ■ | | |
| | | 100 A/1 A | 3NJ6900-4HD11 | ■ | ■ | | |
| | | 150 A/1 A | 3NJ6900-4HE11 | ■ | ■ | | |
| | | 200 A/1 A | 3NJ6900-4HF11 | | ■ | | |
| | | 250 A/1 A | 3NJ6900-4HG11 | | ■ | | |
| | | 300 A/1 A | 3NJ6900-4HH11 | | | ■ | ■ |
| | | 400 A/1 A | 3NJ6900-4HJ11 | | | ■ | ■ |
| | | 500 A/1 A | 3NJ6900-4HK11 | | | ■ | ■ |
| | | 600 A/1 A | 3NJ6900-4HL11 | | | ■ | ■ |
| | For measurements on transformer x/5 A with double overload | 50 A/5 A | 3NJ6900-4HB21 | ■ | ■ | | |
| | | 100 A/5 A | 3NJ6900-4HD21 | ■ | ■ | | |
| | | 150 A/5 A | 3NJ6900-4HE21 | ■ | ■ | | |
| | | 200 A/5 A | 3NJ6900-4HF21 | | ■ | | |
| | | 250 A/5 A | 3NJ6900-4HG21 | | ■ | | |
| | | 300 A/5 A | 3NJ6900-4HH21 | | | ■ | ■ |
| | | 400 A/5 A | 3NJ6900-4HJ21 | | | ■ | ■ |
| | | 500 A/5 A | 3NJ6900-4HK21 | | | ■ | ■ |
| | | 600 A/5 A | 3NJ6900-4HL21 | | | ■ | ■ |



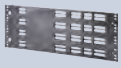
| Type | Version | Rated current $I_e$ | Article No. | NH00 | NH1 | NH2 | NH3 |
|---|---|---|---|---|---|---|---|
| Bi-metal measuring instruments | For measurements on transformer x/1 A with 1.2-times overload | 50 A/1 A | 3NJ6900-4HB12 | ■ | ■ | | |
| | | 100 A/1 A | 3NJ6900-4HD12 | ■ | ■ | | |
| | | 150 A/1 A | 3NJ6900-4HE12 | ■ | ■ | | |
| | | 200 A/1 A | 3NJ6900-4HF12 | | | | |
| | | 250 A/1 A | 3NJ6900-4HG12 | | | | |
| | | 300 A/1 A | 3NJ6900-4HH12 | | | ■ | ■ |
| | | 400 A/1 A | 3NJ6900-4HJ12 | | | ■ | ■ |
| | | 500 A/1 A | 3NJ6900-4HK12 | | | ■ | ■ |
| | | 600 A/1 A | 3NJ6900-4HL12 | | | ■ | ■ |
| | For measurements on transformer x/5 A with 1.2-times overload | 50 A/5 A | 3NJ6900-4HB22 | ■ | ■ | | |
| | | 100 A/5 A | 3NJ6900-4HD22 | ■ | ■ | | |
| | | 150 A/5 A | 3NJ6900-4HE22 | ■ | ■ | | |
| | | 200 A/5 A | 3NJ6900-4HF22 | | ■ | | |
| | | 250 A/5 A | 3NJ6900-4HG22 | | ■ | | |
| | | 300 A/5 A | 3NJ6900-4HH22 | | | ■ | ■ |
| | | 400 A/5 A | 3NJ6900-4HJ22 | | | ■ | ■ |
| | | 500 A/5 A | 3NJ6900-4HK22 | | | ■ | ■ |
| | | 600 A/5 A | 3NJ6900-4HL22 | | | ■ | ■ |



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| | | | | NH00 | NH1 | NH2 | NH3 |
|---|---|---|---|---|---|---|---|
| **Multi-function plugs** | | | | | | | |
|  | **Version** | **Dimensions** | **Article No.** | | | | |
| | With fixing screws | 6 × 2.5 mm² | 3NJ6920-3EB01 | ■ | ■ | | |
| | | 8 × 2.5 mm² | 3NJ6920-3ED01 | ■ | ■ | | |
| | | | 3NJ6940-3EC00 | | | ■ | ■ |
| | Without fixing screws | 8 × 2.5 mm² | 3NJ6940-3ED00 | | | ■ | ■ |
| | | 10 × 1.5 mm² and 8 × 2.5 mm² | 3NJ6920-3EE01 | ■ | ■ | | |
| | | 12 × 1.5 mm² and 8 × 2.5 mm² | 3NJ6940-3EF00 | | | ■ | ■ |
| **Front panels** | | | | | | | |
|  | **Use** | **Version** | **Article No.** | | | | |
| | 3NJ6303-..... | With LV HRC fuse | 3NJ6923-4BB00 | ■ | | | |
| | 3NJ6313-..... | With LV HRC fuse | 3NJ6933-4BB00 | | ■ | | |
| | 3NJ6323-..... | With LV HRC fuse | 3NJ6943-4BB00 | | | ■ | ■ |
| | 3NJ6333-..... | With LV HRC fuse | 3NJ6953-4BB00 | | | ■ | ■ |
| **Busbar covers** | | | | | | | |
|  | | | **Article No.** | | | | |
| | | | 3NJ6916-4EA00 | ■ | ■ | ■ | ■ |
| **Blanking covers** | | | | | | | |
|  | | | **Article No.** | | | | |
| | | | 3NJ6900-4CB00 | ■ | ■ | ■ | ■ |
| **Connection modules** | | | | | | | |
|  | | | **Article No.** | | | | |
| | | | 3NJ6915-3BA00 | ■ | ■ | ■ | ■ |
| **Guide rails** | | | | | | | |
|  | **Overall depth** | | **Article No.** | | | | |
| | 200 mm | | 3NJ6900-4FB00 | ■ | ■ | ■ | ■ |
| | 400 mm | | 3NJ6900-4FC00 | ■ | ■ | ■ | ■ |
| **LV HRC fuse puller tongs** | | | | | | | |
| | **Version** | | **Article No.** | | | | |
| | For NH00 | | 8PQ9400-1AA50 | ■ | | | |
| | For NH1, NH2, NH3 | | 8PQ9400-1AA51 | | ■ | ■ | ■ |
| **Locking devices for padlocks** | | | | | | | |
|  | | | **Article No.** | | | | |
| | | | 3NJ6900-4LL | ■ | ■ | ■ | ■ |

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System overview, page 8/130

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# 5SG switch disconnectors with fuses

## System overview

### MINIZED switch disconnectors with fuses



1P



3P

### NEOZED bus-mounting switch disconnectors



3P



3P, with terminals

### Accessories



Auxiliary switches





Lateral modules

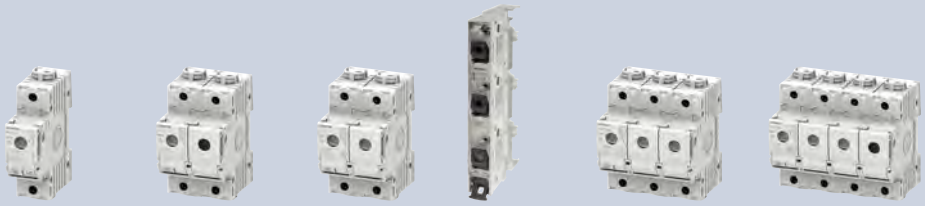


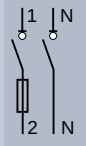
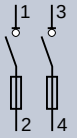
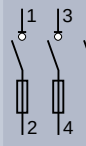
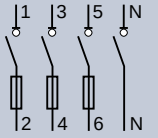
Reducers

**Note:**
You will find a detailed range of accessories with the basic units.

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| Number of poles | 1P | 1P+N | 2P | 3P | | 3P+N |
|---|---|---|---|---|---|---|
| |  |  |  |  | |  |

| Fuse size | Rated current $I_n$ | Mounting width 1.5 MW | Mounting width 3 MW | Mounting width 3 MW | Mounting width 1.5 MW | Mounting width 4.5 MW | Mounting width 6 MW |
|---|---|---|---|---|---|---|---|
| **MINIZED switch disconnectors with fuses** [1] [3] | | | | | | | |
| D02 | 63 A | 5SG7113 | 5SG7153 | 5SG7123 | – | 5SG7133 | 5SG7163 |
| **MINIZED switch disconnectors with fuses – version for Austria only** [2] [3] | | | | | | | |
| D02 | 25 A | – | – | – | – | 5SG7133-8BA25 | – |
| | 35 A | – | – | – | – | 5SG7133-8BA35 | – |
| | 50 A | – | – | – | – | 5SG7133-8BA50 | – |
| **NEOZED bus-mounting switch disconnectors** | | | | | | | |
| D02 | 63 A | – | – | – | 5SG7230 [4] | – | – |
| **NEOZED bus-mounting switch disconnectors, without LED signal detector** | | | | | | | |
| D02 | 63 A | – | – | – | 5SG7234-1 [5] | – | – |
| **NEOZED bus-mounting switch disconnectors, with LED signal detector** | | | | | | | |
| D02 | 63 A | – | – | – | 5SG7234-2 [5] | – | – |

[1] Using withdrawable design with touch protection according to BGV A3, adapter sleeves not included in the scope of delivery
[2] With permanently fitted adapter sleeves, incl. fuse link
[3] Do not use fuse links with nickel-plated contact caps
[4] In the case of permanent load over 35 A, we recommend the use of 5SH5526 lateral modules. Please observe EN 60439-1, Table 1
[5] In the case of permanent load over 35 A, we recommend the use of 5SH5533 lateral modules. Please observe EN 60439-1, Table 1

**Note:**
NEOZED adapter sleeves are required for these devices

## Accessories

**Auxiliary switches**

| | Version | Type | Mounting width | Contacts | Article No. |
|---|---|---|---|---|---|
|  | For MINIZED D02 switch disconnectors | Standard | 0.5 MW | 1 NO + 1 NC | 5ST3010 |
| | | | | 2 NO | 5ST3011 |
| | | | | 2 NC | 5ST3012 |
| | | With test button | 0.5 MW | 1 NO + 1 NC | 5ST3010-2 |
| | | | | 2 NO | 5ST3011-2 |
| | | | | 2 NC | 5ST3012-2 |
|  | For NEOZED bus-mounting switch disconnectors | Standard | 0.5 MW | 1 CO | 5SH5525 |

**Lateral modules**

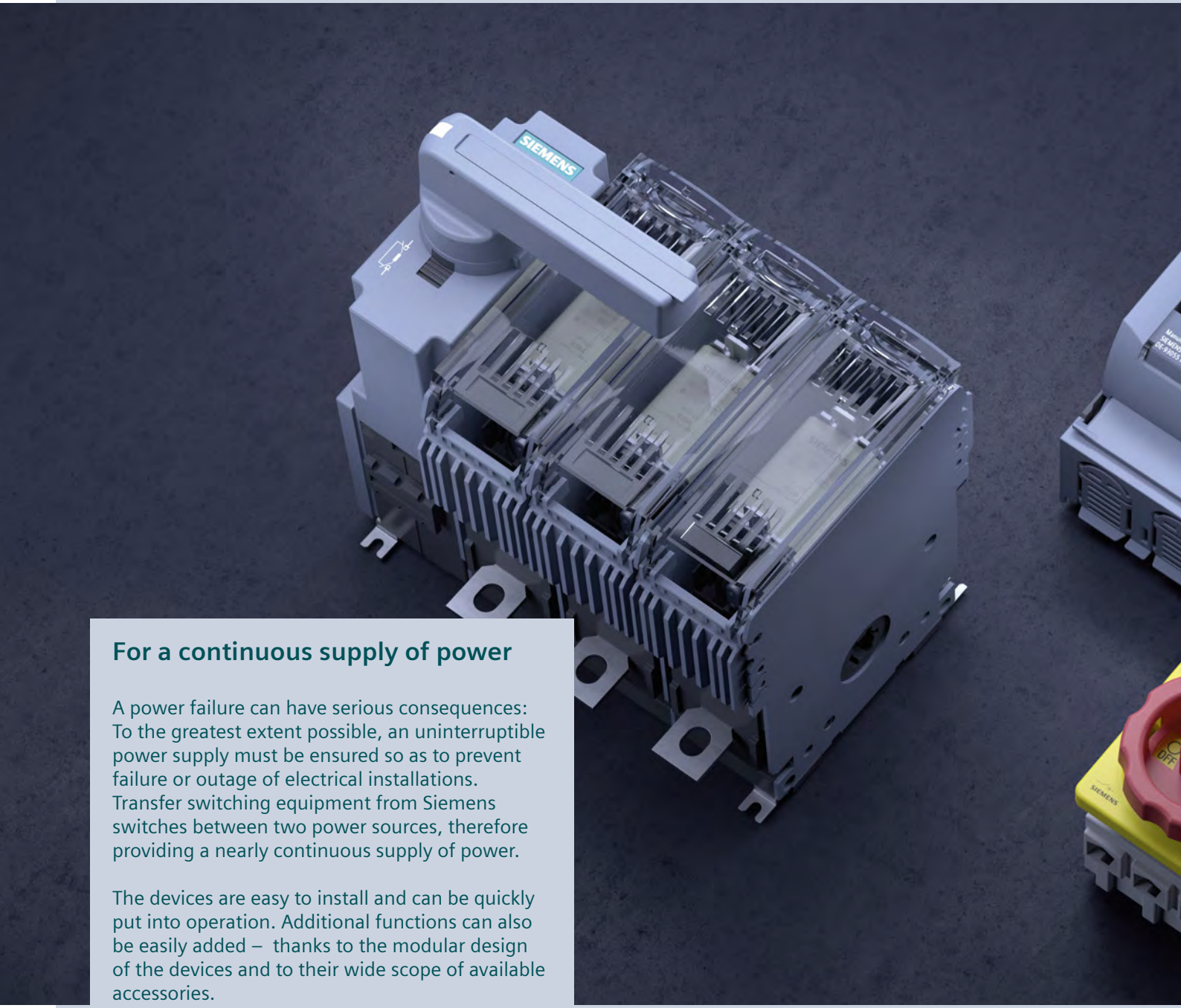
| | Version | Type | Mounting width | Article No. |
|---|---|---|---|---|
|  | For NEOZED bus-mounting switch disconnectors | 5SG7230 | 0.5 MW | 5SH5526 |
| | | 5SG7234-1 and -2 | 0.5 MW | 5SH5533 |

**Reducers**

| | Version | Article No. |
|---|---|---|
|  | For D01 fuse links | 5SH5527 |

Quick selection guide, page 8/110

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## For a continuous supply of power

A power failure can have serious consequences: To the greatest extent possible, an uninterruptible power supply must be ensured so as to prevent failure or outage of electrical installations. Transfer switching equipment from Siemens switches between two power sources, therefore providing a nearly continuous supply of power.

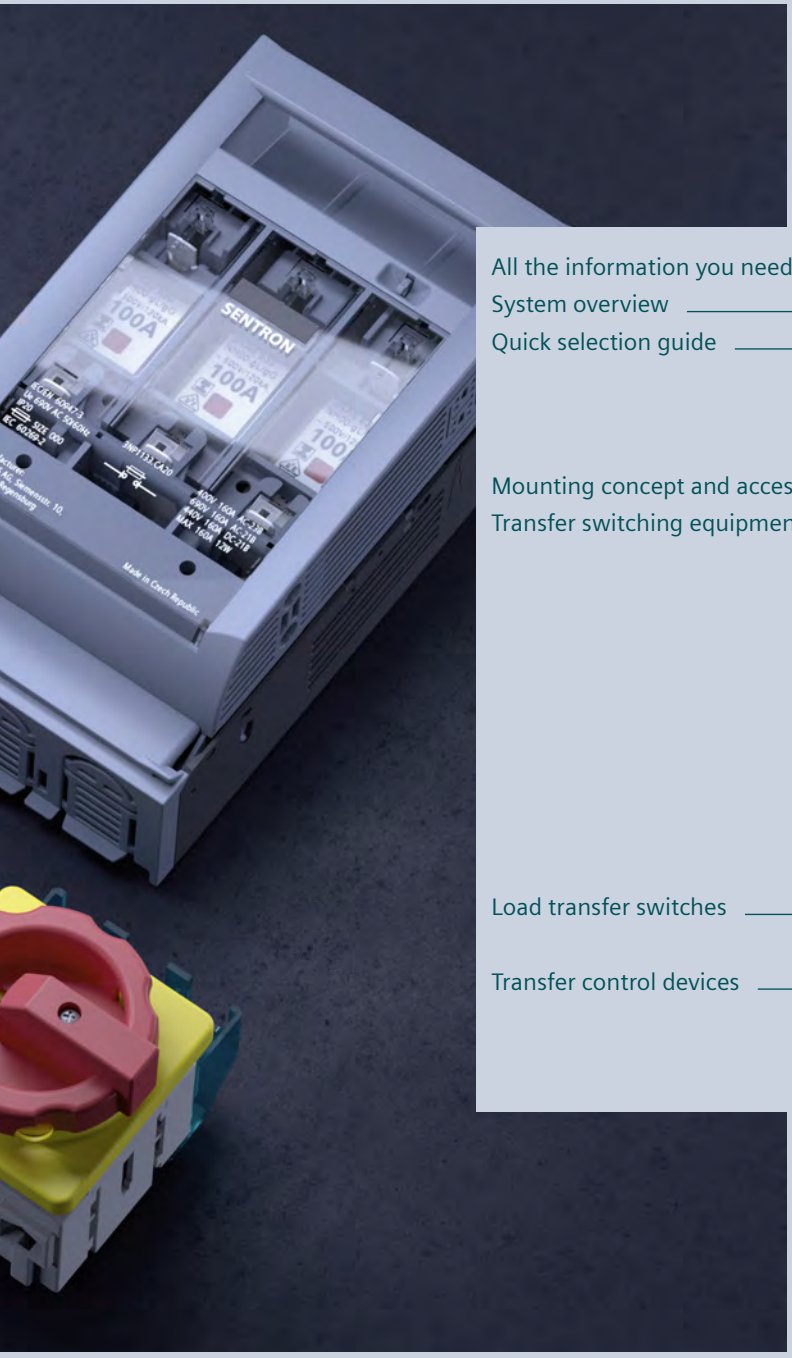
The devices are easy to install and can be quickly put into operation. Additional functions can also be easily added – thanks to the modular design of the devices and to their wide scope of available accessories.

Convenient ordering processes and fast delivery optimize stock-keeping and save you time and money. You can also use our CAx data for automated and streamlined planning and configuration.

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# Transfer Switching Equipment and Load Transfer Switches




All the information you need 9/2
System overview 9/4
Quick selection guide 9/6
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# A multitude of additional information ...

## Information + ordering

### All the important things at a glance

For information about transfer switching equipment and load transfer switches, please visit our website **www.siemens.com/switching-devices**

Our white paper provides you with a good overview of the transfer switching equipment **sie.ag/2XBonIi**

### Your product in detail

The relevant tender specifications can be found at **www.siemens.com/tenderspecifications**

Use our conversion tool for quick and easy conversion to Siemens products **www.siemens.com/conversion-tool**

### Everything you need for your order

Refer to SiePortal to find an overview of your products (product catalog)

- Transfer switching equipment and load transfer switches **sie.ag/2mmMw6g**

Direct forwarding to the individual products in SiePortal by clicking on the article number in the catalog or entering this web address incl. article number **www.siemens.com/product_catalog_SIEP?Article No.**

You will find order support in SiePortal under **www.siemens.com/lowvoltage/product-support**

- Order Support
  - 3KC automatic transfer switching equipment (ATSE) – End-to-end safety for user and systems **(109755620)**
  - 3KC remotely operated transfer switching equipment (RTSE) – End-to-end safety for user and systems **(109755627)**
  - 3KC manual transfer switching equipment (MTSE) – End-to-end safety for user and systems **(109750227)**



### The fast track to the experts

#### Contact persons in your region

We offer a comprehensive portfolio of services.
You can find your local contacts at
**www.siemens.com/lowvoltage/components/contact**

You will find further information on services at
**www.siemens.com/service-offers**

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at
**www.siemens.com/support-request**

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# … can be found in our online services

## Commissioning + operation

### Your product in detail

The SiePortal platform (knowledge base) provides detailed technical information
**www.siemens.com/lowvoltage/product-support**

- Operating instructions
- Certificates

Online Support app available for download from the **App Store** and **Play Store**
You will find further information at
**www.siemens.com/support-app**

Provision of 3D data (step and u3d data formats)

- SiePortal (product catalog)
  **www.siemens.com/lowvoltage/product-catalog**
- Image database
  **www.siemens.com/lowvoltage/picturedb**

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
**www.siemens.com/cax**

### Manuals

Manuals can be found in SiePortal at
**www.siemens.com/lowvoltage/manuals**

- Configuration Manual
  - Transfer switching equipment and load transfer switches **(109769745)**
- Equipment Manual
  - 3KC3 and 3KC6 transfer switching equipment **(109754954)**
  - 3KC0 manual transfer switching equipment **(109763232)**
  - 3KC4 and 3KC8 transfer switching equipment **(109738725)**
  - 3KC ATC3100 transfer control device **(100341671)**
  - 3KC ATC6300 transfer control device **(109755149)**
  - 3KC ATC6500 transfer control device **(109758018)**

### Technical overview – Transfer switching equipment and load transfer switches

#### The fast way to get you to our online services

This page provides you with comprehensive information and links on transfer switching equipment and load transfer switches

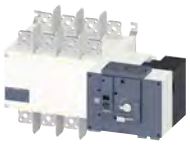
**www.siemens.com/lowvoltage/product-support (109770919)**

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# System overview

## Remote (RTSE) and automatic (ATSE) transfer switching equipment

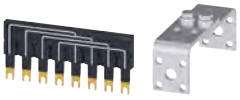

3KC3 (RTSE), 4-pole


3KC4 (RTSE), 3 and 4-pole


3KC6 (ATSE), 4-pole


3KC8 (ATSE), 3 and 4-pole

## Accessories, RTSE and ATSE

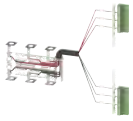

Bridging bars


Auxiliary switches


Terminal covers


Autotransformers


Dual power supply


Power supply and voltage sensing cables

## Manual transfer switching equipment (MTSE)


3KC0 (MTSE), 3 and 4-pole

## Accessories, MTSE


Bridging bars


4th contact element


Auxiliary switches


Direct operating mechanisms


Door-coupling rotary operating mechanisms


Phase barriers


Terminal covers

**Note:**
You will find a detailed range of accessories in the Accessories section.

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## Load transfer switches


Front mounting 3LD2


Floor mounting 3LD2


Molded-plastic enclosures 3LD2

## Accessories


4th contact element


N/PE terminal


Auxiliary switches


Terminal covers

## Transfer control devices


3KC ATC3100


3KC ATC6300


3KC ATC6500

## Accessories


Expansion modules


Front interface

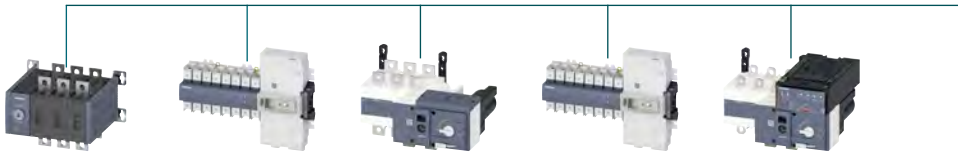

Protective seal

**Note:**
You will find a detailed range of accessories in the Accessories section.

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# Applications

## Switching with switch disconnectors (without protection function)

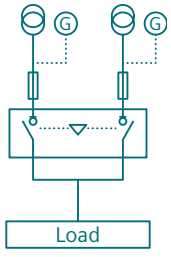


3KC0 3KC3 3KC4 3KC6 3KC8

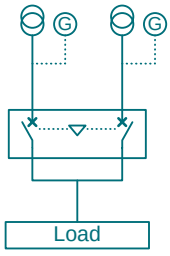
| | | | 3KC0 | 3KC3 | 3KC4 | 3KC6 | 3KC8 |
|---|---|---|---|---|---|---|---|
| **Transfer types** | Load transfer | AC | ■ | ■ | ■ | – | – |
| | | DC | – | – | ■ | – | – |
| | Transfer control | AC | ■ | ■ | ■ | ■ | ■ |
| **Method of operation** | Manual (MTSE) | | ■ | ■ | ■ | ■ | ■ |
| | Remote (RTSE) | | – | ■ | ■ | – | ■ |
| | Automatic (ATSE) | | – | With ATC6300 | With ATC6300 | ■ | ■ |
| **Transfer control** | Network/network | AC | ■ | ■ | ■ | ■ | ■ |
| | Network/generator | AC | ■ | ■ | ■ | – | ■ |
| | Generator/generator | AC | ■ | ■ | ■ | – | – |
| **Rated operating current** | | | 16 ... 1600 A | 40 ... 160 A | 250 ... 3200 A | 40 ... 160 A | 250 ... 3200 A |
| **Number of poles** | | | 3 and 4 | 4 | 3 and 4 | 4 | 3 and 4 |
| **Communication** | | | – | With ATC6300 | With ATC6300 | – | – |
| **Automatic load shedding** | | | – | – | – | – | – |
| **Further information** | | | From page 9/24 onwards | From page 9/16 onwards | From page 9/16 onwards | From page 9/17 onwards | From page 9/17 onwards |

[1] Manual load transfer switch, not an MTSE

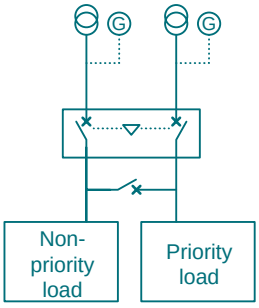
## Transfer control




With switch disconnectors

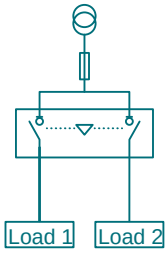



With circuit breakers




With circuit breakers and automatic load shedding

## Load transfer




With switch disconnectors



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## Switching with circuit breakers (with protection function)



3LD2



3KC ATC3100 (+ 3VA/3WA/3WL)



3KC ATC6300 (+ 3VA/3WA/3WL)



3KC ATC6500 (+ 3VA/3WA/3WL)

| | | | |
|---|---|---|---|
| ■ | – | – | – |
| – | – | – | – |
| – | ■ | ■ | ■ |
| ■ [1)] | – | – | – |
| – | ■ | ■ | ■ |
| – | ■ | ■ | ■ |
| – | ■ | ■ | ■ |
| – | ■ | ■ | ■ |
| – | – | ■ | ■ |
| 25 ... 250 A | 3VA: 16 ... 630 A, 3WA/3WL: 630 ... 6300 A | 3VA: 16 ... 630 A, 3WA/3WL: 630 ... 6300 A | 3VA: 16 ... 1600 A, 3WA/3WL: 630 ... 6300 A |
| 3 and 4 | 3 and 4 | 3 and 4 | 3 and 4 |
| – | – | ■ | ■ |
| – | – | – | ■ |
| **From page 9/30 onwards** | **From page 9/32 onwards** | **From page 9/32 onwards** | **From page 9/32 onwards** |



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# Transfer switching equipment and load transfer switches

## Remote transfer switching equipment (RTSE), automatic transfer switching equipment (ATSE)



| | | | 3KC3424<br>3KC6424 | 3KC3426<br>3KC6426 | 3KC3428<br>3KC6428 | 3KC3430<br>3KC6430 | 3KC3432<br>3KC6432 | 3KC3434<br>3KC6434 |
|---|---|---|---|---|---|---|---|---|
| **Rated uninterrupted current $I_u$** | | | **40 A** | **63 A** | **80 A** | **100 A** | **125 A** | **160 A** |
| Connection | | | Box terminal | | | | | |
| Switch positions | | | I – O – II | | | | | |
| Number of poles | | | 4 | | | | | |
| Size | | | – | | | | | |
| **General technical specifications** | | | | | | | | |
| Operational voltage at 50/60 Hz AC acc. to IEC 60947-6-1 | | V | 415 | | | | | |
| Operational voltage at 50/60 Hz AC acc. to IEC 60947-3 (load transfer switch) | | V | 415 | | | | | |
| Impulse withstand voltage ($U_{imp}$) for main circuit | | kV | 6 | | | | | |
| Impulse withstand voltage ($U_{imp}$) for control circuit (RTSE/ATSE) | | kV | 4 (RTSE)/2.5 (ATSE) | | | | | |
| Operational current in acc. to IEC 60947-6-1 | AC-31 A/B, at 415 V | A | 40 | 63 | 80 | 100 | 100/125 | 100/160 |
| | AC-32 A/B, at 415 V | A | 40 | 63 | 80 | 100 | 100/125 | 100/160 |
| | AC-33 B, at 415 V | A | 40 | 63 | 80 | 100 | 125 | 125 |
| Operational current in acc. to IEC 60947-3 (load transfer switch) | AC-21 A/B, at 415 V | A | 40 | 63 | 80 | 100 | 125 | 125/160 |
| | AC-21 A/B, at 690 V | A | 40 | 63 | 80 | 100 | 125 | 125 |
| | AC-22 A/B, at 415 V | A | 40 | 63 | 80 | 100 | 125 | 125/160 |
| | AC-22 A/B, at 690 V | A | 40 | 63 | 80 | 80 | 100/125 | 100/125 |
| | AC-23 A/B, at 415 V | A | 40 | 63 | 80 | 100 | 125 | 125/160 |
| | AC-23 A/B, at 690 V | A | 40 | 63 | 63 | 80 | 80 | 80 |
| Operational power in acc. to IEC 60947-3 (load transfer switch) | AC-23 A/B, at 415 V [1] | kW | 22 | 37 | 45 | 55 | 60 | 75 |
| | AC-23 A/B, at 690 V [2] | kW | 37 | 55 | 55 | 75 | 75 | 75 |
| | AC-3 motor load switch at 380 ... 440 V | kW | – | | | | | |
| | AC-3 motor load switch at 660 ... 690 V | kW | – | | | | | |
| **Short-circuit behavior** | | | | | | | | |
| Short-circuit current ratings in acc. to IEC 60947-6-1 | Conditional short-circuit current with gG fuse (415 V) | kA | 50 | 50 | 50 | 50 | 50 | 40 |
| Short-circuit current ratings in acc. to IEC 60947-3 (load transfer switch) | Conditional short-circuit current with gG fuse (415 V) | kA | 50 | 50 | 50 | 50 | 50 | 40 |
| | Conditional short-circuit current with gG fuse (690 V) | kA | – | | | | | |
| **Transfer switching properties (in acc. to IEC 60947-6-1)** | | | | | | | | |
| Switching time I – O and II – O | | s | 0.045 | | | | | |
| Switch-off time I – O – II and II – O – I | | s | 0.15 | | | | | |
| Transfer time I – O – II and II – O – I without/with line monitoring | | s | 0.18/1.4 | | | | | |
| **Degree of protection** | | | | | | | | |
| IP maximum degree of protection | | | IP20 | | | | | |
| **Standards UL/CSA, in acc. to UL 508** | | | | | | | | |
| Rated operational voltage $U_e$ AC | | V | – | | | | | |
| Rated uninterrupted current $I_u$ | | A | – | | | | | |
| Maximum rated power (AC-3), 3-phase, 40 ... 60 Hz | 480 V | hp | – | | | | | |
| | 600 V | hp | – | | | | | |
| **Further information** | | | | | | | | |
| | | | From page 9/16 onwards | | | | | |

[1] For 3LD2 at 380 ... 440 V [2] For 3LD2 at 660 ... 690 V

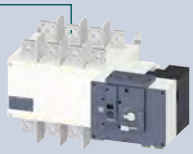
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# Remote transfer switching equipment (RTSE), automatic transfer switching equipment (ATSE)



| 3KC4.38<br>3KC8.38 | 3KC4.42<br>3KC8.42 | 3KC4.46<br>3KC8.46 | 3KC4.48<br>3KC8.48 | 3KC4.50<br>3KC8.50 | 3KC4.52<br>3KC8.52 | 3KC4.54<br>3KC8.54 | 3KC4.56<br>3KC8.56 | 3KC4.58<br>3KC8.58 | 3KC4.60<br>3KC8.60 |
|---|---|---|---|---|---|---|---|---|---|
| **250 A** | **400 A** | **630 A** | **800 A** | **1000 A** | **1250 A** | **1600 A** | **2000 A** | **2500 A** | **3200 A** |
| Flat terminal | | | | | | | | | |
| I – O – II | | | | | | | | | |
| 3 and 4 | | | | | | | | | |
| – | | | | | | | | | |
| | | | | | | | | | |
| 415 | | | | | | | | | |
| 690 | | | | | | | | | |
| 12 | | | | | | | | | |
| 4 | | | | | | | | | |
| –/250 | –/400 | –/630 | –/800 | –/1000 | –/1250 | –/1600 | –/2000 | –/2500 | –/3200 |
| –/200 | –/400 | –/500 | –/800 | –/1000 | –/1250 | –/1250 | –/2000 | –/2000 | –/2000 |
| 200 | 200 | 400 | 800 | 1000 | 1000 | 1000 | 1250 | 1250 | 1250 |
| 250 | 400 | 630 | 800 | 1000 | 1250 | 1600 | –/2000 | –/2500 | –/3200 |
| 200 | 200 | 500 | 800 | 1000 | 1250 | 1600 | –/2000 | –/2000 | –/2000 |
| 250 | 400 | 630 | 800 | 1000 | 1250 | 1600 | –/2000 | –/2500 | –/3200 |
| 160 | 160 | 400 | 630 | 800 | 1000 | 1000 | – | – | – |
| 200 | 400 | 500/630 | 800 | 1000 | 1250 | 1250 | –/1600 | –/1600 | –/1600 |
| 125 | 125 | 400 | 630 | 630 | 800 | 800 | – | – | – |
| 110 | 220 | 335 | 450 | 700 | 800 | 900 | – | – | – |
| 110 | 110 | 400 | 400 | 630 | 800 | 800 | – | – | – |
| – | | | | | | | | | |
| – | | | | | | | | | |
| | | | | | | | | | |
| 50 | 50 | 50 | 50 | 50 | 100 | 100 | – | – | – |
| – | | | | | | | | | |
| 50 | 50 | 50 | 50 | 50 | 100 | 100 | – | – | – |
| | | | | | | | | | |
| 0.5 | 0.5 | 0.6 | 1.4 | 1.4 | 1.4 | 1.4 | 1.6 | 1.6 | 1.6 |
| 0.4 | 0.4 | 0.4 | 1.4 | 1.4 | 1.4 | 1.5 | 1.2 | 1.2 | 1.2 |
| 0.9/1.0 | 0.9/1.0 | 1.0/1.1 | 2.8/3.1 | 2.8/3.1 | 2.8/3.1 | 2.9/3.3 | 2.8/2.8 | 2.8/2.8 | 2.8/2.8 |
| | | | | | | | | | |
| IP20 | | | | | | | | | |
| | | | | | | | | | |
| – | | | | | | | | | |
| – | | | | | | | | | |
| – | | | | | | | | | |
| – | | | | | | | | | |
| | | | | | | | | | |
| From page 9/16 onwards | | | | | | | | | |

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# Transfer switching equipment and load transfer switches

## Manual transfer switching equipment (MTSE)





| | | | 3KC0.16 | 3KC0.22 | 3KC0.26 | 3KC0.28 | 3KC0.30 | 3KC0.32 | 3KC0.34 |
|---|---|---|---|---|---|---|---|---|---|
| **Rated uninterrupted current $I_u$** | | | **16 A** | **32 A** | **63 A** | **80 A** | **100 A** | **125 A** | **160 A** |
| Connection | | | Box terminal | | | Box terminal | | | |
| Switch positions | | | I – O – II | | | I – O – II | | | |
| Number of poles | | | 3 and 4 | | | 3 and 4 | | | |
| Size | | | 1 | | | 2 | | | |
| **General technical specifications** | | | | | | | | | |
| Operational voltage at 50/60 Hz AC acc. to IEC 60947-6-1 | | V | 415 | | | 415 | | | |
| Operational voltage at 50/60 Hz AC acc. to IEC 60947-3 (load transfer switch) | | V | 690 | | | 690 | | | |
| Impulse withstand voltage ($U_{imp}$) for main circuit | | kV | 8 | | | 8 | | | |
| Impulse withstand voltage ($U_{imp}$) for control circuit (RTSE/ATSE) | | kV | – | | | – | | | |
| Operational current in acc. to IEC 60947-6-1 | AC-31 A/B, at 415 V | A | –/16 | –/32 | –/63 | –/80 | –/100 | –/125 | –/160 |
| | AC-32 A/B, at 415 V | A | –/16 | –/32 | –/63 | –/80 | –/100 | –/125 | –/160 |
| | AC-33 B, at 415 V | A | 16 | 32 | 63 | 80 | 100 | 125 | 160 |
| Operational current in acc. to IEC 60947-3 (load transfer switch) | AC-21 A/B, at 415 V | A | 16/16 | 32/32 | 63/63 | 80/80 | 100/100 | 125/125 | 160/160 |
| | AC-21 A/B, at 690 V | A | 16/16 | 32/32 | 63/63 | 80/80 | 100/100 | 125/125 | 160/160 |
| | AC-22 A/B, at 415 V | A | 16/16 | 32/32 | 63/63 | 80/80 | 100/100 | 125/125 | 160/160 |
| | AC-22 A/B, at 690 V | A | 16/16 | 32/32 | 63/63 | 80/80 | 100/100 | 125/125 | 160/160 |
| | AC-23 A/B, at 415 V | A | 16/16 | 32/32 | 63/63 | 80/80 | 100/100 | 125/125 | 160/160 |
| | AC-23 A/B, at 690 V | A | 16/16 | 32/32 | 63/63 | 80/80 | 100/100 | 125/125 | 160/160 |
| Operational power in acc. to IEC 60947-3 (load transfer switch) | AC-23 A/B, at 415 V [1] | kW | 7.5/7.5 | 15/15 | 30/30 | 37/37 | 55/55 | 55/55 | 90/90 |
| | AC-23 A/B, at 690 V [2] | kW | 11/11 | 30/30 | 55/55 | 75/75 | 90/90 | 110/110 | 110/110 |
| | AC-3 motor load switch at 380 ... 440 V | kW | – | | | – | | | |
| | AC-3 motor load switch at 660 ... 690 V | kW | – | | | – | | | |
| **Short-circuit behavior** | | | | | | | | | |
| Short-circuit current ratings in acc. to IEC 60947-6-1 | Conditional short-circuit current with gG fuse (415 V) | kA | 100 | | | 100 | | | |
| Short-circuit current ratings in acc. to IEC 60947-3 (load transfer switch) | Conditional short-circuit current with gG fuse (415 V) | kA | 100 | | | 100 | | | |
| | Conditional short-circuit current with gG fuse (690 V) | kA | 100 | | | 65 | | | |
| **Transfer switching properties (in acc. to IEC 60947-6-1)** | | | | | | | | | |
| Switching time I – O and II – O | | s | – | | | – | | | |
| Switch-off time I – O – II and II – O – I | | s | – | | | – | | | |
| Transfer time I – O – II and II – O – I without/with line monitoring | | s | – | | | – | | | |
| **Degree of protection** | | | | | | | | | |
| IP maximum degree of protection | | | IP20 | | | IP20 | | | |
| **Standards UL/CSA, in acc. to UL 508** | | | | | | | | | |
| Rated operational voltage $U_e$ AC | | V | – | | | – | | | |
| Rated uninterrupted current $I_u$ | | A | – | | | – | | | |
| Maximum rated power (AC-3), 3-phase, 40 ... 60 Hz | 480 V | hp | – | | | – | | | |
| | 600 V | hp | – | | | – | | | |
| **Further information** | | | | | | | | | |
| | | | From page 9/24 onwards | | | From page 9/24 onwards | | | |

[1] For 3LD2 at 380 ... 440 V [2] For 3LD2 at 660 ... 690 V



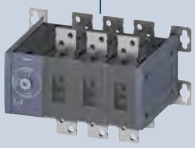
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## Manual transfer switching equipment (MTSE)

## Load transfer switches








| 3KC0.36 | 3KC0.38 | 3KC0.40 | 3KC0.42 | 3KC0.44 | 3KC0.46 | 3KC0.48 | 3KC0.50 | 3KC0.52 | 3KC0.54 | 3LD21 | 3LD22 | 3LD25 | 3LD27 | 3LD23 | 3LD24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 200 A | 250 A | 315 A | 400 A | 500 A | 630 A | 800 A | 1000 A | 1250 A | 1600 A | 25 A | 32 A | 63 A | 100 A | 160 A | 250 A |
| Flat terminal | | | | Flat terminal | | | Flat terminal | | | Box terminal | | | | Box terminal | |
| I – O – II | | | | I – O – II | | | I – O – II | | | I – O – II | | | | I – O – II | |
| 3 and 4 | | | | 3 and 4 | | | 3 and 4 | | | 3 | | | | 3 and 4 | |
| 3 | | | | 4 | | | 5 | | | – | | | | – | |
| | | | | | | | | | | | | | | | |
| 415 | | | | 415 | | | 415 | | | – | | | | – | |
| 690 | | | | 690 | | | 690 | | | 690 | | | | 690 | |
| 12 | | | | 12 | | | 12 | | | 6 | | | | 6 | |
| – | | | | – | | | – | | | – | | | | – | |
| –/200 | –/250 | –/315 | –/400 | –/500 | –/630 | –/800 | –/1000 | –/1250 | –/1600 | – | | | | – | |
| –/200 | –/250 | –/315 | –/350 | –/500 | –/630 | –/800 | –/1000 | –/1250 | –/1250 | – | | | | – | |
| 200 | 250 | 315 | 315 | 500 | 500 | 500 | 800 | 800 | 800 | – | | | | – | |
| 200/200 | 250/250 | 315/315 | 400/400 | 500/500 | 630/630 | 800/800 | 1000/1000 | 1250/1250 | 1600/1600 | 25 | 32 | 63 | 100 | 160 | 250 |
| 200/200 | 250/250 | 315/315 | 400/400 | 500/500 | 630/630 | 800/800 | 1000/1000 | 1250/1250 | 1600/1600 | 25 | 32 | 63 | 100 | 160 | 250 |
| 200/200 | 250/250 | 315/315 | 400/400 | 500/500 | 630/630 | 800/800 | 1000/1000 | 1250/1250 | 1600/1600 | 25 | 32 | 63 | 100 | 140 | 230 |
| 200/200 | 250/250 | 315/315 | 400/400 | 500/500 | 630/630 | 800/800 | 1000/1000 | 1250/1250 | 1600/1600 | 25 | 32 | 63 | 100 | 140 | 230 |
| 200/200 | 250/250 | 315/315 | 400/400 | 500/500 | 630/630 | 670/670 | 800/800 | 800/800 | 800/800 | 20 | 22 | 43 | 70 | 132 | 224 |
| 200/200 | 250/250 | 315/315 | 315/315 | 500/500 | 500/500 | 500/500 | 800/800 | 800/800 | 800/800 | 11.5 | 13.5 | 22 | 34 | 47 | 58 |
| 110/110 | 132/132 | 160/160 | 220/220 | 280/280 | 355/355 | 355/355 | 400/400 | 400/400 | 400/400 | 9.5 | 11.5 | 22 | 37 | 75 | 132 |
| 185/185 | 220/220 | 280/280 | 355/355 | 500/500 | 500/500 | 500/500 | 800/800 | 800/800 | 800/800 | 9.5 | 11.5 | 18.5 | 30 | 45 | 55 |
| – | | | | – | | | – | | | 7.5 | 9.5 | 18.5 | 30 | 50 | 110 |
| – | | | | – | | | – | | | 7.5 | 9.5 | 15 | 22 | 37 | 45 |
| | | | | | | | | | | | | | | | |
| 100 | 100 | 65 | 65 | 100 | 100 | 65 | 100 | 80 | 80 | – | | | | – | |
| 100 | 100 | 65 | 65 | 100 | 100 | 65 | 100 | 80 | 80 | 50 | 50 | 50 | 50 | 50 | 50 |
| 65 | 65 | 35 | 35 | 65 | 65 | 50 | – | | | 50 | 50 | 50 | 50 | 50 | 50 |
| | | | | | | | | | | | | | | | |
| – | | | | – | | | – | | | – | | | | – | |
| – | | | | – | | | – | | | – | | | | – | |
| – | | | | – | | | – | | | – | | | | – | |
| | | | | | | | | | | | | | | | |
| IP20 | | | | IP20 | | | IP20 | | | IP65 | | | | | |
| | | | | | | | | | | | | | | | |
| – | | | | – | | | – | | | 600 | 600 | 600 | 600 | 600 | 600 |
| – | | | | – | | | – | | | 20 | 30 | 60 | 100 | 160 | 250 |
| – | | | | – | | | – | | | 10 | 20 (15) [3] | 40 | 60 | 75 | 100 |
| – | | | | – | | | – | | | 15 | 30 (20) [3] | 50 | 75 | 75 | 75 |
| | | | | | | | | | | | | | | | |
| From page 9/24 onwards | | | | From page 9/24 onwards | | | From page 9/24 onwards | | | From page 9/30 onwards | | | | | |

[3] Values in brackets apply to devices in molded-plastic enclosure.

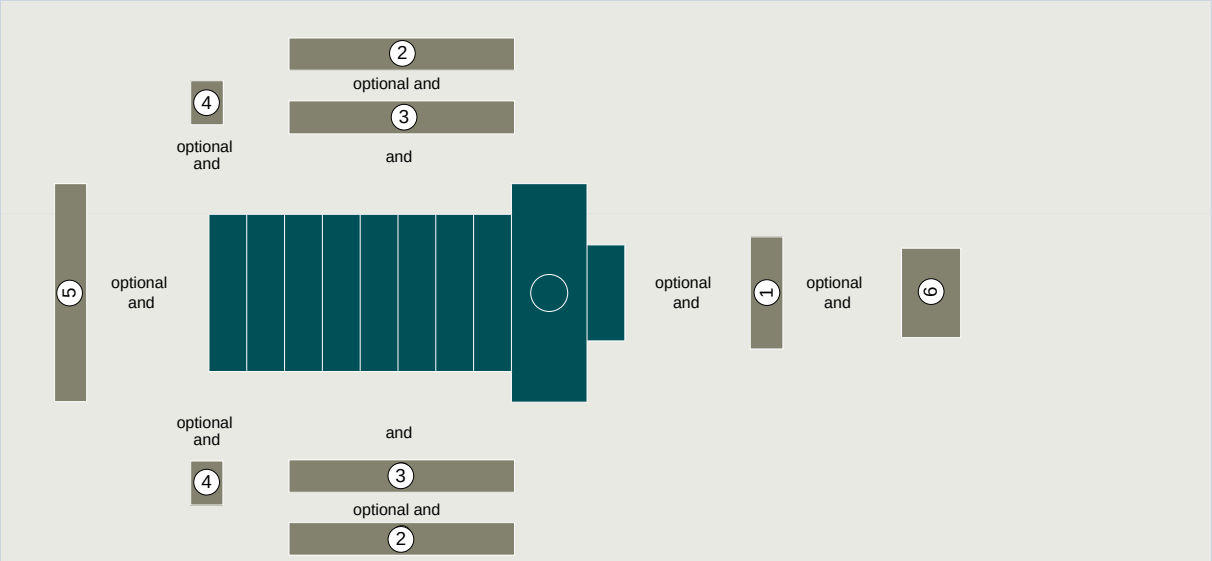
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# Mounting concept and accessories

## 3KC3 (RTSE) 4-pole



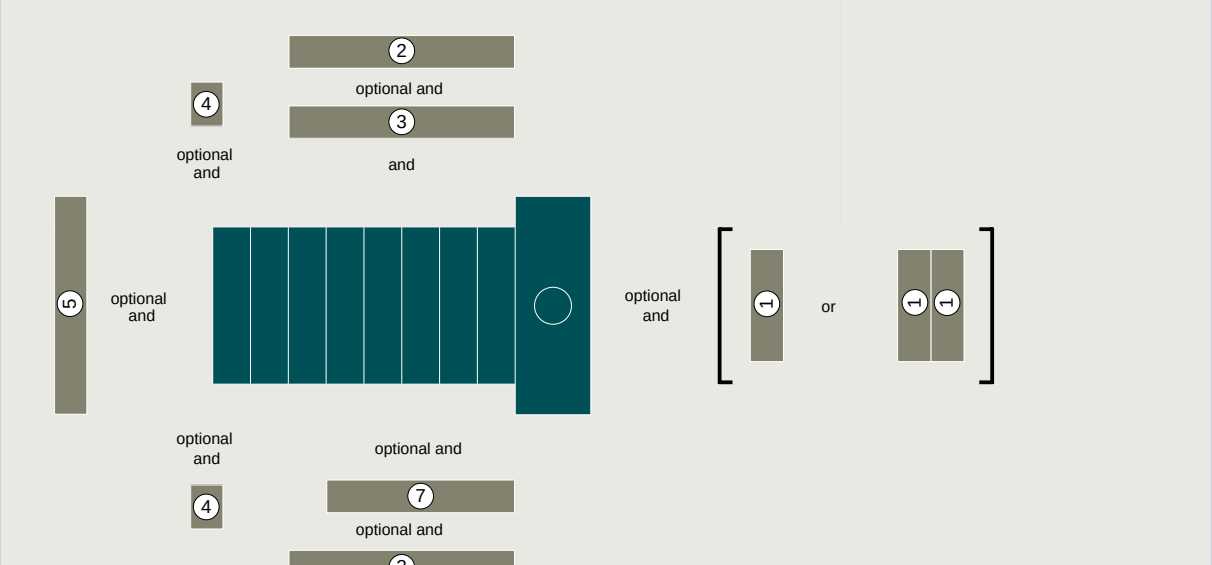

**Legend**

1 Auxiliary switch
2 Terminal cover
3 Bridging bar [1)]
4 Control wire tap
5 Autotransformer
6 Dual power supply

[1)] 1× per change-over switch

I201_20552

## 3KC6 (ATSE) 4-pole




**Legend**

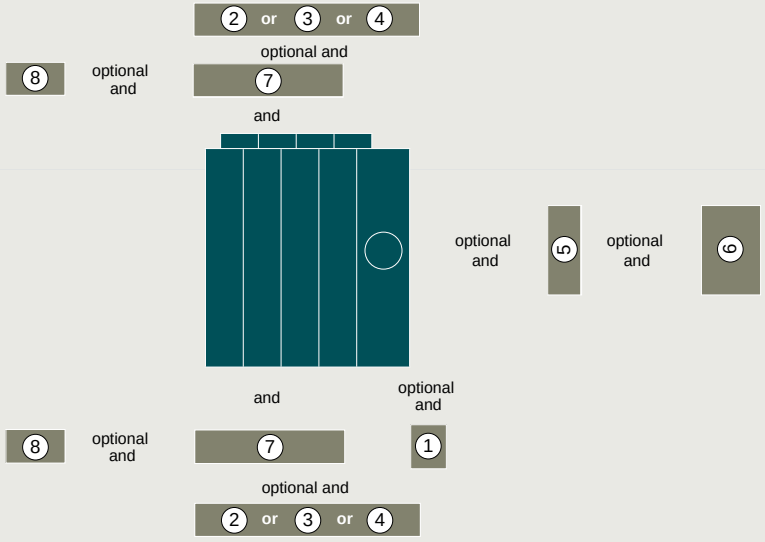
1 Auxiliary switch
2 Terminal cover
3 Bridging bar
4 Aux. conductor terminal
5 Autotransformer
6 Dual power supply
7 Sealable cover

I201_20553

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## 3KC4 (RTSE) 3-pole or 4-pole



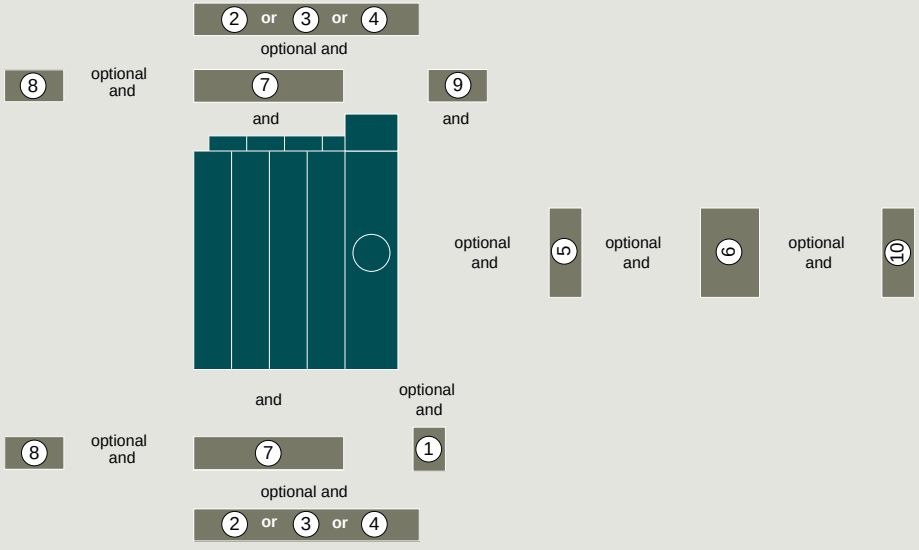

**Legend**

(1) Auxiliary switch
(2) Phase barrier
(3) Terminal cover
(4) Terminal plate
(5) Autotransformer
(6) Dual power supply
(7) Bridging bar
(8) Copper bar connection kit [1)]

[1)] 3× with 3-pole change-over switch, 4× with 4-pole change-over switch

I201_20554

## 3KC8 (ATSE) 3-pole or 4-pole




**Legend**

(1) Auxiliary switch
(2) Phase barrier
(3) Terminal cover
(4) Terminal plate
(5) Autotransformer
(6) Dual power supply
(7) Bridging bar
(8) Copper bar connection kit [1)]
(9) Power supply cable
(10) External display

[1)] 3× with 3-pole change-over switch, 4× with 4-pole change-over switch

I201_20555

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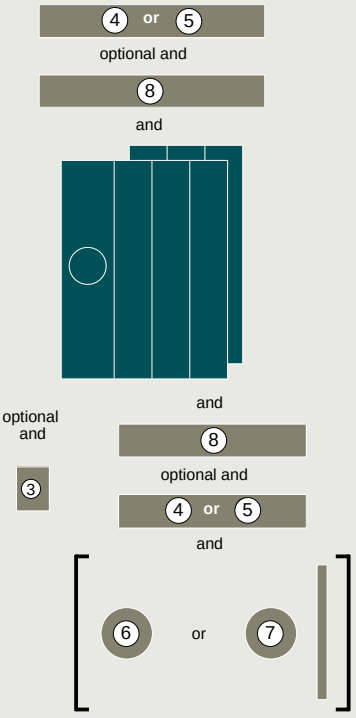
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# Mounting concept and accessories

## 3KC0 (MTSE) front operating mechanism on left, 3-pole or 4-pole, sizes 3 to 5

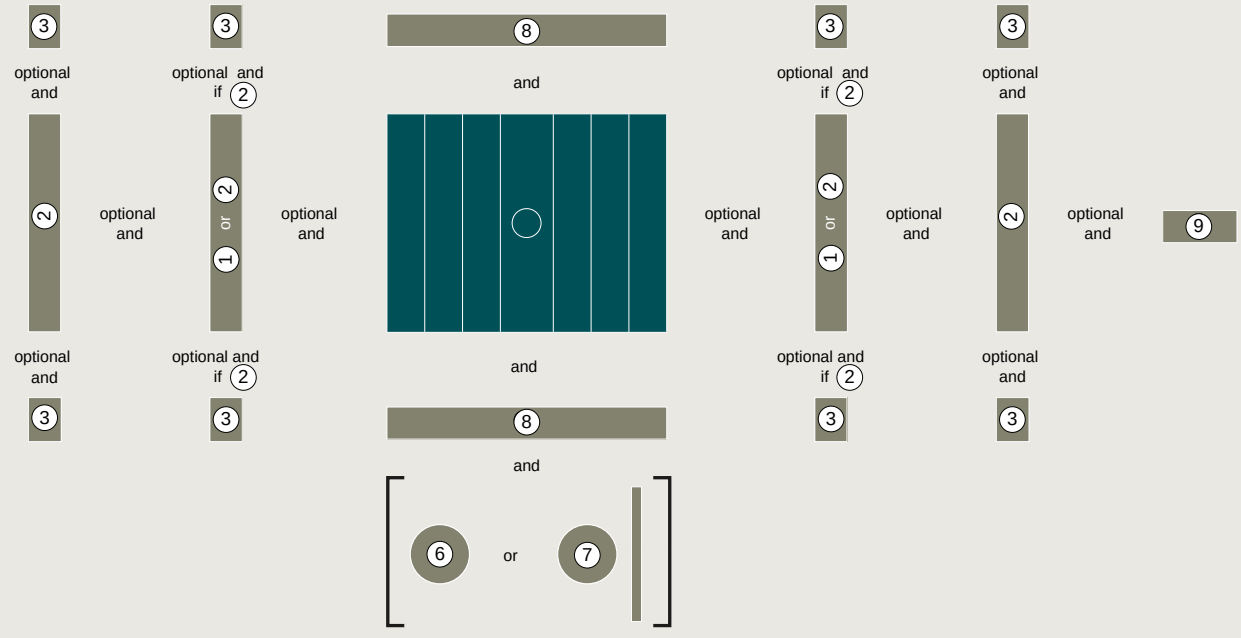



**Legend**

3 Auxiliary switch [1)]
4 Phase barrier
5 Side plate cover and terminal cover [2)]
6 Direct operating mechanism
7 Door-coupling rotary operating mechanism
8 Bridging bar [3)]

[1)] Up to 4 auxiliary switches
[2)] Side plate cover must be ordered separately from the terminal cover
[3)] 3× with 3-pole change-over switch, 4× with 4-pole change-over switch

I201_20556




**Legend**

1 4th contact element [1)]
2 Auxiliary switch module, standard version [2)]
3 Auxiliary switch
6 Direct operating mechanism
7 Door-coupling rotary operating mechanism
8 Bridging bar [3)]
9 Assembly kit for floor mounting

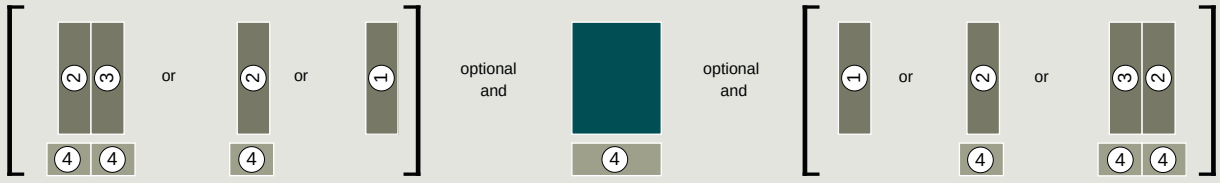
[1)] Only for 3-pole 3K, max. 1×
[2)] Max. 1× for each side of the switch, requires at least 1× auxiliary switch 3
[3)] Only 1× per change-over switch

I201_20557

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## 3LD2 load transfer switch mounting concept




**Legend**

(1) Auxiliary switch
(2) N/PE terminal
(3) N switching contact [1)]
(4) Terminal cover

[1)] N switching (3) contact must first be installed on the basic unit

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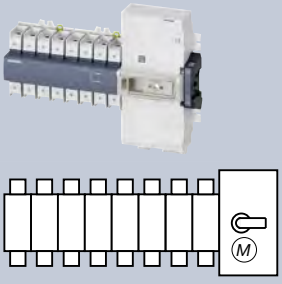
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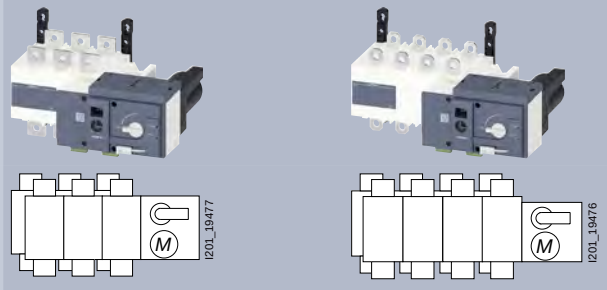
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# 3KC3 and 3KC4 remote transfer switching equipment (RTSE)

## 40 to 3200 A

| | Box terminal<br>3KC3 (RTSE) | Flat terminal<br>3KC4 (RTSE) |
|---|---|---|
| **Version** | With motorized operating mechanism and additional handle | With motorized operating mechanism and additional handle |
| **Operating mechanism** | Operating mechanism on right | Operating mechanism on right |
| **Mounting** | Floor and DIN-rail mounting | Floor mounting |
| **Bridging bars** | Additionally required for connection side | Additionally required for connection side |
| **Scope of supply** | Including 3KC9603 auxiliary switches | |






| Rated uninterrupted current $I_u$ | 4-pole | 3-pole | 4-pole |
|---|---|---|---|
| **Box terminal** | | | |
| 40 A | 3KC3424-2AA22-0AA3 | – | – |
| 63 A | 3KC3426-2AA22-0AA3 | – | – |
| 80 A | 3KC3428-2AA22-0AA3 | – | – |
| 100 A | 3KC3430-2AA22-0AA3 | – | – |
| 125 A | 3KC3432-2AA22-0AA3 | – | – |
| 160 A | 3KC3434-2AA22-0AA3 | – | – |
| **Flat terminal** | | | |
| 250 A | – | 3KC4338-0CA21-0AA3 | 3KC4438-0CA21-0AA3 |
| 400 A | – | 3KC4342-0DA21-0AA3 | 3KC4442-0DA21-0AA3 |
| 630 A | – | 3KC4346-0EA21-0AA3 | 3KC4446-0EA21-0AA3 |
| 800 A | – | 3KC4348-0FA21-0AA3 | 3KC4448-0FA21-0AA3 |
| 1000 A | – | 3KC4350-0FA21-0AA3 | 3KC4450-0FA21-0AA3 |
| 1250 A | – | 3KC4352-0GA21-0AA3 | 3KC4452-0GA21-0AA3 |
| 1600 A | – | 3KC4354-0HA21-0AA3 | 3KC4454-0HA21-0AA3 |
| 2000 A | – | 3KC4356-0JA21-0AA3 | 3KC4456-0JA21-0AA3 |
| 2500 A | – | 3KC4358-0JA21-0AA3 | 3KC4458-0JA21-0AA3 |
| 3200 A | – | 3KC4360-0JA21-0AA3 | 3KC4460-0JA21-0AA3 |



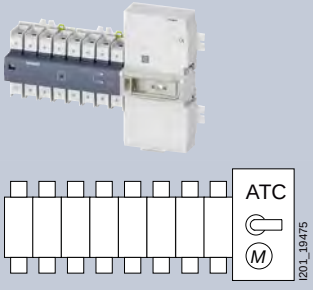
Quick selection guide, page 9/8

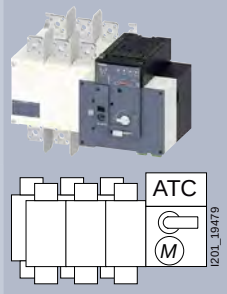
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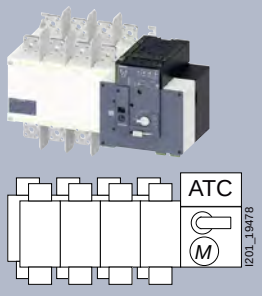

# 3KC6 and 3KC8 automatic transfer switching equipment (ATSE)

## 40 to 3200 A

| | Box terminal<br>3KC6 (ATSE) | Flat terminal<br>3KC8 (ATSE) |
|---|---|---|
| **Version** | With motorized operating mechanism, integrated controller and additional handle | With motorized operating mechanism, integrated controller and additional handle |
| **Operating mechanism** | Operating mechanism on right | Operating mechanism on right |
| **Mounting** | Floor and DIN-rail mounting | Floor mounting |
| **Bridging bars** | Additionally required for connection side | Additionally required for connection side |
| **Scope of supply** | Wired ready for operation (including power supply) | Without power supply and voltage sensing cables |




| Rated uninterrupted current $I_u$ | 4-pole | 3-pole | 4-pole |
|---|---|---|---|
| **Box terminal** | | | |
| 40 A | 3KC6424-2TA20-0TA3 | – | – |
| 63 A | 3KC6426-2TA20-0TA3 | – | – |
| 80 A | 3KC6428-2TA20-0TA3 | – | – |
| 100 A | 3KC6430-2TA20-0TA3 | – | – |
| 125 A | 3KC6432-2TA20-0TA3 | – | – |
| 160 A | 3KC6434-2TA20-0TA3 | – | – |
| **Flat terminal** | | | |
| 250 A | – | 3KC8338-0CA22-0GA3 | 3KC8438-0CA22-0GA3 |
| 400 A | – | 3KC8342-0DA22-0GA3 | 3KC8442-0DA22-0GA3 |
| 630 A | – | 3KC8346-0EA22-0GA3 | 3KC8446-0EA22-0GA3 |
| 800 A | – | 3KC8348-0FA22-0GA3 | 3KC8448-0FA22-0GA3 |
| 1000 A | – | 3KC8350-0FA22-0GA3 | 3KC8450-0FA22-0GA3 |
| 1250 A | – | 3KC8352-0GA22-0GA3 | 3KC8452-0GA22-0GA3 |
| 1600 A | – | 3KC8354-0HA22-0GA3 | 3KC8454-0HA22-0GA3 |
| 2000 A | – | 3KC8356-0JA22-0GA3 | 3KC8456-0JA22-0GA3 |
| 2500 A | – | 3KC8358-0JA22-0GA3 | 3KC8458-0JA22-0GA3 |
| 3200 A | – | 3KC8360-0JA22-0GA3 | 3KC8460-0JA22-0GA3 |



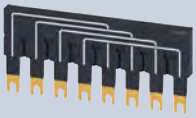
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# Accessories

## For remote transfer switching equipment (RTSE) and automatic transfer switching equipment (ATSE)

### Bridging bar



- For load-side connection
- For 3KC4/3KC8 3-pole transfer switches 3 units, for 3KC4/3KC8 4-pole transfer switches 4 units are required

| Version | Number of poles | Scope of supply | Article No. | RTSE | ATSE |
|---|---|---|---|---|---|
| For 40 ... 125 A | 4-pole | 1 unit | 3KC9618-2 | ■ | ■ |
| For 160 A | 4-pole | 1 unit | 3KC9618-3 | ■ | ■ |



| | | | | | |
|---|---|---|---|---|---|
| For 250 A | 1-pole | 1 unit | 3KC9818-2 | ■ | ■ |
| For 400 A | 1-pole | 1 unit | 3KC9818-3 | ■ | ■ |
| For 630 A | 1-pole | 1 unit | 3KC9818-4 | ■ | ■ |
| For 800 ... 1000 A | 1-pole | 1 unit | 3KC9818-5 | ■ | ■ |
| For 1250 A | 1-pole | 1 unit | 3KC9818-6 | ■ | ■ |
| For 1600 A | 1-pole | 1 unit | 3KC9818-7 | ■ | ■ |
| For 2000 ... 3200 A | 1-pole | 1 unit | 3KC9818-8 | ■ | ■ |

### Control wire tap



| Version | Scope of supply | Article No. | RTSE | ATSE |
|---|---|---|---|---|
| For 40 ... 160 A | 2 units | 3KC9622-2 | ■ | ■ |

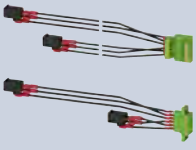
### Auxiliary switches for 40 ... 160 A



- For 250 V AC/5 A or for 24 V DC/2 A
- 1 change-over contact for each position O, I, II
- Max. 2 auxiliary switches can be installed per transfer switching equipment unit

| Version | Contact configuration | Article No. | RTSE | ATSE |
|---|---|---|---|---|
| For 40 ... 160 A | With separate contacts | 3KC9603-1 | ■ | ■ |
| | With linked common contacts | 3KC9603-2 | ■ | ■ |

### Auxiliary switches for 250 ... 1600 A



- One auxiliary switch contains 2 leading changeover contacts, one changeover contact for position I and one changeover contact for position II (incl. bolt set)
- Max. two auxiliary switches can be installed per transfer switching equipment unit
- For 2000 ... 3200 A transfer switching equipment the auxiliary switch is included in the basic unit
- 250 V AC/12 A (AC-13), 24 V DC/14 A (DC-13)

| Version | Article No. | RTSE | ATSE |
|---|---|---|---|
| For 250 ... 630 A | 3KC9803-1 | ■ | ■ |
| For 800 ... 1600 A | 3KC9803-2 | ■ | ■ |
| For 2000 ... 2500 A (included in the basic unit) | – | ■ | ■ |

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## Terminal covers

| Version | Number of poles | Scope of supply | Article No. | RTSE | ATSE |
|---|---|---|---|---|---|
|  For 40 ... 160 A | 4-pole | 2 units (1 unit covers 4 poles) | 3KC9604-2 | ■ | ■ |
|  For 250 ... 400 A | 3-pole | 3 units (1 unit covers 1 pole) | 3KC9804-1 | ■ | ■ |
| | 4-pole | 4 units (1 unit covers 1 pole) | 3KC9804-2 | ■ | ■ |
|  For 630 A | 3-pole | 3 units (1 unit covers 1 pole) | 3KC9804-3 | ■ | ■ |
| | 4-pole | 4 units (1 unit covers 1 pole) | 3KC9804-4 | ■ | ■ |

## Sealable cover

| Version | Scope of supply | Article No. | RTSE | ATSE |
|---|---|---|---|---|
|  For 3KC6 (ATSE) 40 ... 160 A | Incl. bolt set and sealing ribbons | 3KC9721-1 | – | ■ |
|  For 3KC8 (ATSE) 250 ... 3200 A | Incl. bolt set and sealing ribbons | 3KC9821-0 | – | ■ |

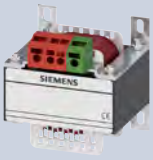
## Sealing ribbon



- Also as spare part for sealable cover

| Version | Scope of supply | Article No. | RTSE | ATSE |
|---|---|---|---|---|
| For 40 ... 3200 A | 10 units | 3KC9621-2 | – | ■ |

## Autotransformers

| Version | Technical specifications | Article No. | RTSE | ATSE |
|---|---|---|---|---|
|  For 40 ... 160 A | 400 V/230 V AC; 400 VA | 3KC9624-1 | ■ | ■ |
|  For 250 ... 3200 A, 3-pole | 400 V/230 V AC; 200 VA | 3KC9824-1 | ■ | ■ |

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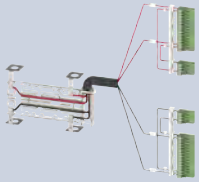
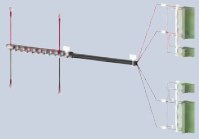
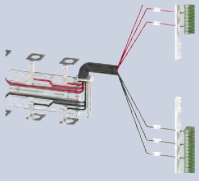
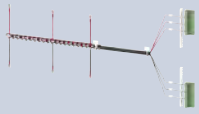
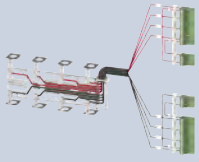
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# Accessories

## For remote transfer switching equipment (RTSE) and automatic transfer switching equipment (ATSE)

**Power supply and voltage sensing cables for ATSE**

| | Application | Infeed | Switches | Version | Article No. | RTSE | ATSE |
|---|---|---|---|---|---|---|---|
|  For 250 ... 630 A | 2-pole | From below, with power supply | 3-pole | For 250 A | 3KC9833-1 | – | ■ |
| | | | | For 400 A | 3KC9833-2 | – | ■ |
| | | | | For 630 A | 3KC9833-3 | – | ■ |
| | | | | For 800 ... 1000 A | 3KC9833-4 | – | ■ |
| | | | | For 1250 A | 3KC9833-5 | – | ■ |
| | | | | For 1600 A | 3KC9833-6 | – | ■ |
| | | | | For 2000 ... 3200 A | 3KC9833-7 | – | ■ |
|  For 800 ... 3200 A | | From above, with power supply | 3-pole | For 250 A | 3KC9834-1 | – | ■ |
| | | | | For 400 A | 3KC9834-2 | – | ■ |
| | | | | For 630 A | 3KC9834-3 | – | ■ |
| | | | | For 800 ... 1000 A | 3KC9834-4 | – | ■ |
| | | | | For 1250 A | 3KC9834-5 | – | ■ |
| | | | | For 1600 A | 3KC9834-6 | – | ■ |
| | | | | For 2000 ... 3200 A | 3KC9834-7 | – | ■ |
|  For 250 ... 630 A | 3-pole | From below, without power supply | 3-pole | For 250 A | 3KC9822-1 | – | ■ |
| | | | | For 400 A | 3KC9822-2 | – | ■ |
| | | | | For 630 A | 3KC9822-3 | – | ■ |
| | | | | For 800 ... 1000 A | 3KC9822-4 | – | ■ |
| | | | | For 1250 A | 3KC9822-5 | – | ■ |
| | | | | For 1600 A | 3KC9822-6 | – | ■ |
| | | | | For 2000 ... 3200 A | 3KC9822-7 | – | ■ |
|  For 800 ... 3200 A | | From above, without power supply | 3-pole | For 250 A | 3KC9832-1 | – | ■ |
| | | | | For 400 A | 3KC9832-2 | – | ■ |
| | | | | For 630 A | 3KC9832-3 | – | ■ |
| | | | | For 800 ... 1000 A | 3KC9832-4 | – | ■ |
| | | | | For 1250 A | 3KC9832-5 | – | ■ |
| | | | | For 1600 A | 3KC9832-6 | – | ■ |
| | | | | For 2000 ... 3200 A | 3KC9832-7 | – | ■ |
|  For 250 ... 630 A | 4-pole | From below, with power supply | 4-pole | For 250 A | 3KC9830-1 | – | ■ |
| | | | | For 400 A | 3KC9830-2 | – | ■ |
| | | | | For 630 A | 3KC9830-3 | – | ■ |
| | | | | For 800 ... 1000 A | 3KC9830-4 | – | ■ |
| | | | | For 1250 A | 3KC9830-5 | – | ■ |
| | | | | For 1600 A | 3KC9830-6 | – | ■ |
| | | | | For 2000 ... 3200 A | 3KC9830-7 | – | ■ |
|  For 800 ... 3200 A | | From above, with power supply | 4-pole | For 250 A | 3KC9831-1 | – | ■ |
| | | | | For 400 A | 3KC9831-2 | – | ■ |
| | | | | For 630 A | 3KC9831-3 | – | ■ |
| | | | | For 800 ... 1000 A | 3KC9831-4 | – | ■ |
| | | | | For 1250 A | 3KC9831-5 | – | ■ |
| | | | | For 1600 A | 3KC9831-6 | – | ■ |
| | | | | For 2000 ... 3200 A | 3KC9831-7 | – | ■ |

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## Dual power supply



| Version | Technical specifications | Article No. | RTSE | ATSE |
|---|---|---|---|---|
| For 3KC3 and 3KC4 (RTSE) 40 ... 3200 A | 240 V AC, 3 A | 3KC9625-1 | ■ | – |

## External display



- For installing in the control cabinet door

| Version | Article No. | RTSE | ATSE |
|---|---|---|---|
| For 3KC8 (ATSE) 250 ... 3200 A | 3KC9823-0 | – | ■ |

## Connection cable



- 3 m RJ45 cable for external display

| Version | Article No. | RTSE | ATSE |
|---|---|---|---|
| For 250 ... 3200 A | 3KC9823-2 | – | ■ |

## Phase barrier



- For 800 ... 3200 A transfer switching equipment included in the scope of supply of the basic unit

| Version | Number of poles | Scope of supply | Article No. | RTSE | ATSE |
|---|---|---|---|---|---|
| For 250 ... 400 A | 3-pole | 2 units | 3KC9808-1 | ■ | ■ |
| | 4-pole | 3 units | 3KC9808-6 | ■ | ■ |
| For 630 A | 3-pole | 2 units | 3KC9808-2 | ■ | ■ |
| | 4-pole | 3 units | 3KC9808-7 | ■ | ■ |

## Cover frame for ATSE



- For a clean and safe door cut-out
- To enable access to the front of the 3KC8 transfer switching equipment (electronic module and operation of the motorized operating mechanism)

| Version | Article No. | RTSE | ATSE |
|---|---|---|---|
| 250 ... 630 A | 3KC9820-4 | – | ■ |
| 800 ... 3200 A | 3KC9820-5 | – | ■ |

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# Accessories

## For remote transfer switching equipment (RTSE) and automatic transfer switching equipment (ATSE)

### Copper bar connection kit

| Version | Designation | Scope of supply | Article No. | RTSE | ATSE |
|---|---|---|---|---|---|
| For 2000 ... 2500 A | C-bracket, part A | 1 unit | 3KC9811-0 | ■ | ■ |
| For 2000 ... 3200 A | Bolt set, part B | 1 unit | 3KC9811-1 | ■ | ■ |
| | | | 3KC9811-2 | ■ | ■ |
| | T-bracket, part C | 1 unit | 3KC9811-3 | ■ | ■ |
| | L-bracket, part D | 2 units | 3KC9811-4 | ■ | ■ |
| | Bridging bars, part E | 1 unit | 3KC9818-8 | ■ | ■ |

### Terminal plates

- For protecting the front side at the upper and lower connecting terminals

| Version | Number of poles | Article No. | RTSE | ATSE |
|---|---|---|---|---|
| For 250 ... 400 A | 3-pole | 3KC9827-1 | ■ | ■ |
| | 4-pole | 3KC9828-1 | ■ | ■ |
| For 630 A | 3-pole | 3KC9827-2 | ■ | ■ |
| | 4-pole | 3KC9828-2 | ■ | ■ |
| For 800 ... 1250 A | 3-pole | 3KC9827-3 | ■ | ■ |
| | 4-pole | 3KC9828-3 | ■ | ■ |
| For 1600 A | 3-pole | 3KC9827-4 | ■ | ■ |
| | 4-pole | 3KC9828-4 | ■ | ■ |
| For 2000 ... 3200 A | 3-pole | 3KC9827-5 | ■ | ■ |
| | 4-pole | 3KC9828-5 | ■ | ■ |

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| | | | RTSE | ATSE |
|---|---|---|---|---|
| **Motorized operating mechanism as spare part** | | | | |
| | **Version** | **Article No.** | | |
|  | For 250 ... 400 A | 3KC9826-1 | ■ | ■ |
|  | For 630 A | 3KC9826-2 | ■ | ■ |
|  | For 800 ... 1250 A | 3KC9826-3 | ■ | ■ |
|  | For 1600 A | 3KC9826-4 | ■ | ■ |
|  | For 2000 ... 3200 A | 3KC9826-5 | ■ | ■ |
| **Controller (electronic module) as spare part** | | | | |
| | **Version** | **Article No.** | | |
|  | For 250 ... 3200 A | 3KC9826-0 | – | ■ |
| **Mounting kit as spare part** | | | | |
| | • Comprising two device holders, each with two plastic covers | | | |
| | **Version** | **Article No.** | | |
|  | For 250 ... 630 A | 3KC9820-6 | ■ | ■ |

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## Copper bar connection kit

You will find further information at: sie.ag/36U7MCb



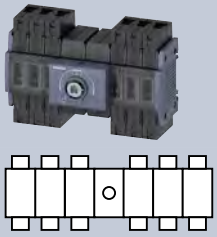
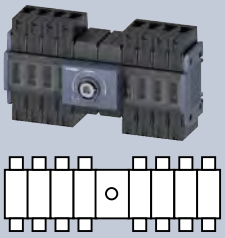
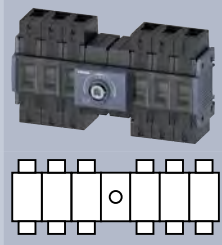
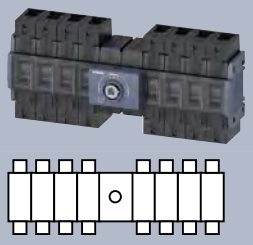

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# 3KC0 manual transfer switching equipment (MTSE)

## 16 to 1600 A

| | Box terminal | | | |
|---|---|---|---|---|
| | Size 1 | | Size 2 | |
| **Version** | Basic unit without handle | | Basic unit without handle | |
| **Operating mechanism** | Front operating mechanism | | Front operating mechanism | |
| **Mounting** | DIN-rail and floor mounting [1] | | DIN-rail and floor mounting [1] | |
| **Bridging bars** | Additionally required for connection side | | Additionally required for connection side | |
| |  |  |  |  |

| Rated uninterrupted current $I_u$ | 3-pole | 4-pole | 3-pole | 4-pole |
|---|---|---|---|---|
| **Box terminal** | | | | |
| 16 A | 3KC0316-2ME00-0AA0 | 3KC0416-2ME00-0AA0 | – | – |
| 32 A | 3KC0322-2ME00-0AA0 | 3KC0422-2ME00-0AA0 | – | – |
| 63 A | 3KC0326-2ME00-0AA0 | 3KC0426-2ME00-0AA0 | – | – |
| 80 A | – | – | 3KC0328-2NE00-0AA0 | 3KC0428-2NE00-0AA0 |
| 100 A | – | – | 3KC0330-2NE00-0AA0 | 3KC0430-2NE00-0AA0 |
| 125 A | – | – | 3KC0332-2NE00-0AA0 | 3KC0432-2NE00-0AA0 |
| 160 A | – | – | 3KC0334-2NE00-0AA0 | 3KC0434-2NE00-0AA0 |
| **Flat terminal** | | | | |
| 200 A | – | – | – | – |
| 250 A | – | – | – | – |
| 315 A | – | – | – | – |
| 400 A | – | – | – | – |
| 500 A | – | – | – | – |
| 630 A | – | – | – | – |
| 800 A | – | – | – | – |
| 1000 A | – | – | – | – |
| 1250 A | – | – | – | – |
| 1600 A | – | – | – | – |

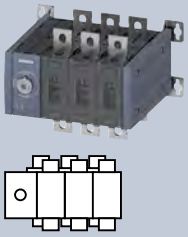
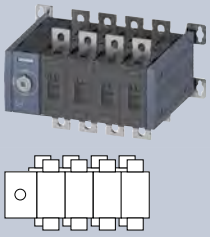
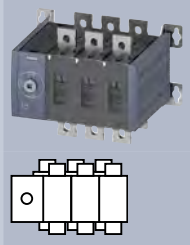
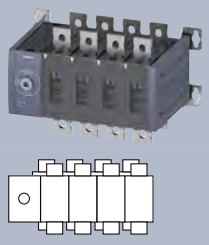
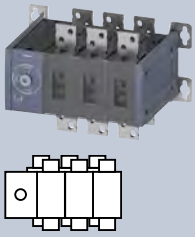
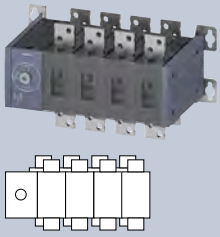
[1] An assembly kit is required for floor mounting

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| Flat terminal | | | | | |
|---|---|---|---|---|---|
| **Size 3** | | **Size 4** | | **Size 5** | |
| Basic unit without handle | | Basic unit without handle | | Basic unit without handle | |
| Front operating mechanism | | Front operating mechanism | | Front operating mechanism | |
| Floor mounting | | Floor mounting | | Floor mounting | |
| Additionally required for connection side | | Additionally required for connection side | | Additionally required for connection side | |
|  |  |  |  |  |  |
| **3-pole** | **4-pole** | **3-pole** | **4-pole** | **3-pole** | **4-pole** |
| | | | | | |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| | | | | | |
| 3KC0336-0PE00-0AA0 | 3KC0436-0PE00-0AA0 | – | – | – | – |
| 3KC0338-0PE00-0AA0 | 3KC0438-0PE00-0AA0 | – | – | – | – |
| 3KC0340-0PE00-0AA0 | 3KC0440-0PE00-0AA0 | – | – | – | – |
| 3KC0342-0PE00-0AA0 | 3KC0442-0PE00-0AA0 | – | – | – | – |
| – | – | 3KC0344-0QE00-0AA0 | 3KC0444-0QE00-0AA0 | – | – |
| – | – | 3KC0346-0QE00-0AA0 | 3KC0446-0QE00-0AA0 | – | – |
| – | – | 3KC0348-0QE00-0AA0 | 3KC0448-0QE00-0AA0 | – | – |
| – | – | – | – | 3KC0350-0RE00-0AA0 | 3KC0450-0RE00-0AA0 |
| – | – | – | – | 3KC0352-0RE00-0AA0 | 3KC0452-0RE00-0AA0 |
| – | – | – | – | 3KC0354-0RE00-0AA0 | 3KC0454-0RE00-0AA0 |



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# Accessories

## For manual transfer switching equipment (MTSE)



### Box terminal (4th contact element, switching pole)






| Connection | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|
| | 3KD9105-2 | ■ | | | | |
| | 3KD9205-2 | | ■ | | | |

### Auxiliary switch module



- **Delivery:** Does not include auxiliary switch
- A maximum of 2 auxiliary switches can be installed per auxiliary switch module.
- The auxiliary switches indicate the switch position of the respective switching equipment (I or II) to which the auxiliary switch module is connected.

| Type | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|
| Standard version | 3KD9103-5 | ■ | ■ | | | |

### Auxiliary switches

- Auxiliary switches for sizes 3 to 5 have a screw terminal and are mounted on the 3K operating mechanism module. Auxiliary switches with spring-loaded terminals from the 3SU1 program can also be used.
- All auxiliary switches for sizes 3 to 5 can be used as leading auxiliary switches, depending on the mounting position of the auxiliary switch (see operating instructions).







| Type | Contacts | Contact surface | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|---|
| With connecting cables | 1 CO | Standard | 3KD9103-1 | ■ | ■ | | | |
| | | Solid-state compatible | 3KD9103-3 | ■ | ■ | | | |
| Without connecting cables | 1 CO | Standard | 3KD9103-2 | ■ | ■ | | | |
| | | Solid-state compatible | 3KD9103-4 | ■ | ■ | | | |
| | 1 NO | Standard | 3SU1400-1AA10-1BA0 | | | ■ | ■ | ■ |
| | | Gold-plated | 3SU1400-1AA10-1LA0 | | | ■ | ■ | ■ |
| | 1 NC | Standard | 3SU1400-1AA10-1CA0 | | | ■ | ■ | ■ |
| | | Gold-plated | 3SU1400-1AA10-1MA0 | | | ■ | ■ | ■ |
| | 1 NO + 1 NC | Standard | 3SU1400-1AA10-1FA0 | | | ■ | ■ | ■ |
| | | Gold-plated | 3SU1400-1AA10-1QA0 | | | ■ | ■ | ■ |
| | 2 NO | Standard | 3SU1400-1AA10-1DA0 | | | ■ | ■ | ■ |
| | | Gold-plated | 3SU1400-1AA10-1NA0 | | | ■ | ■ | ■ |
| | 2 NC | Standard | 3SU1400-1AA10-1EA0 | | | ■ | ■ | ■ |
| | | Gold-plated | 3SU1400-1AA10-1PA0 | | | ■ | ■ | ■ |

### Bridging bars

- For load-side connection
- For 3-pole transfer switches (sizes 3 to 5) 3 units, for 4-pole transfer switches (sizes 3 to 5) 4 units are required



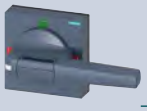




| Number of poles | | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|
| 1-pole | 1 unit | 3KC9318-0 | | | ■ | | |
| | | 3KC9418-0 | | | | ■ | |
| | | 3KC9518-0 | | | | | ■ |
| 3-pole | 1 unit | 3KC9118-1 | ■ | | | | |
| | | 3KC9218-1 | | ■ | | | |
| 4-pole | 1 unit | 3KC9118-2 | ■ | | | | |
| | | 3KC9218-2 | | ■ | | | |

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| | | | | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|---|
| **Direct operating mechanism standard version** | | | | | | | | |
|    | • Can be locked with up to max. 3 padlocks<br>• Requires additional mounting depth in locked state | | | | | | | |
| | **Color** | | **Article No.** | | | | | |
| | Gray | | 3KC9201-3 | ■ | ■ | | | |
| | | | 3KC9301-1 | | | ■ | | |
| | | | 3KC9401-1 | | | | ■ | |
| | | | 3KC9501-1 | | | | | ■ |
| | Red/yellow | | 3KC9301-2 | | | ■ | | |
| | | | 3KC9401-2 | | | | ■ | |
| | | | 3KC9501-2 | | | | | ■ |
| **Flat direct operating mechanism for distribution boards** | | | | | | | | |
|  | • Can be locked with one padlock<br>• No additional mounting depth in locked state | | | | | | | |
| | **Color** | | **Article No.** | | | | | |
| | Gray | | 3KC9101-4 | ■ | | | | |
| **Door-coupling rotary operating mechanism, 8UD1 series** | | | | | | | | |
|   | • Handle with masking plate<br>• Coupling driver with tolerance compensation<br>• Shaft 300 mm<br>• Can be locked with up to max. 3 padlocks<br>• Labeling I – O – II | | | | | | | |
| | **Color** | **Handle length** | **Shaft** | **Article No.** | | | | |
| | Gray | 55 mm | 8 × 8 mm | 8UD1131-2AE21 | ■ | ■ | | |
| | | 100 mm | 8 × 8 mm | 8UD1141-2AE21 | | | ■ | |
| | | 140 mm | 10 × 10 mm | 8UD1151-3AE21 | | | | ■ |
| | | 200 mm | 12 × 12 mm | 8UD1161-4AE21 | | | | ■ |
| **Handles for door-coupling rotary operating mechanisms, 8UD1 series** | | | | | | | | |
|     | • Without extension shaft and coupling driver<br>• With masking plate<br>• Can be locked with up to max. 3 padlocks<br>• Labeling I – O – II | | | | | | | |
| | **Color** | **Handle length** | **Shaft** | **Article No.** | | | | |
| | Gray | 55 mm | 8 × 8 mm | 8UD1731-2AE01 | ■ | ■ | | |
| | | 100 mm | 8 × 8 mm | 8UD1841-2AE01 | | | ■ | |
| | | 140 mm | 10 × 10 mm | 8UD1851-3AE01 | | | | ■ |
| | | 200 mm | 12 × 12 mm | 8UD1861-4AE01 | | | | ■ |
| | Red/yellow | 55 mm | 8 × 8 mm | 8UD1731-2AE05 | ■ | ■ | | |
| | | 100 mm | 8 × 8 mm | 8UD1841-2AE05 | | | ■ | |
| | | 140 mm | 10 × 10 mm | 8UD1851-3AE05 | | | | ■ |
| | | 200 mm | 12 × 12 mm | 8UD1861-4AE05 | | | | ■ |

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# Accessories

## For manual transfer switching equipment (MTSE)

| | | | | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|---|
| **Extension shaft for door-coupling rotary operating mechanism, 8UD1 series** | | | | | | | | |
|  | • A shaft jack is required for the 8UD1 handle when the 600 mm long shaft is used and for sizes 1/2. | | | | | | | |
| | **Length** | **Cross-section** | **Article No.** | | | | | |
| | 300 mm | 8 × 8 mm | 8UC6032 | ■ | ■ | ■ | | |
| | | 10 × 10 mm | 8UC6033 | | | | ■ | |
| | | 12 × 12 mm | 8UC6034 | | | | | ■ |
| | 600 mm | 8 × 8 mm | 8UC6082 | ■ | ■ | ■ | | |
| | | 10 × 10 mm | 8UC6083 | | | | ■ | |
| | | 12 × 12 mm | 8UC6084 | | | | | ■ |
| **Shaft jack for 8UD1 handle for shaft, 600 mm** | | | | | | | | |
|  | **Shaft** | | **Article No.** | | | | | |
| | 8 × 8 mm | | 8UD1900-0FA00 | ■ | ■ | | | |
| **Coupling drivers** | | | | | | | | |
| | **Type** | **Shaft** | **Article No.** | | | | | |
|  | With tolerance compensation | 8 × 8 mm | 8UD1900-2GA00 | ■ | ■ | | | |
|  | | 8 × 8 mm | 8UD1900-6GA00 | | | ■ | | |
| | | 10 × 10 mm | 8UD1900-3GA00 | | | | ■ | |
| | | 12 × 12 mm | 8UD1900-4GA00 | | | | | ■ |
|  | Without tolerance compensation | 8 × 8 mm | 8UD1900-2HA00 | ■ | ■ | | | |
|  | | 8 × 8 mm | 8UD1900-6HA00 | | | ■ | | |
| | | 10 × 10 mm | 8UD1900-3HA00 | | | | ■ | |
| | | 12 × 12 mm | 8UD1900-4HA00 | | | | | ■ |
| **Adapters for shafts** | | | | | | | | |
|  | • Non-interchangeability features (rivet and lug) | | | | | | | |
| | **Shaft** | | **Article No.** | | | | | |
| | 8 × 8 mm | | 8UC6022 | ■ | ■ | | | |
| | 8 × 8 mm | | 8UC6022 | | | ■ | | |
| | 10 × 10 mm | | 8UC6023 | | | | ■ | |
| | 12 × 12 mm | | 8UC6024 | | | | | ■ |
| **Phase barriers** | | | | | | | | |
|  | • For manual transfer switching equipment (MTSE) with flat terminals<br>• One pack (6 or 8 units) is required for the infeed side and the load side | | | | | | | |
| | **Number of poles, switch** | **Scope of supply** | **Article No.** | | | | | |
| | 3-pole | 6 units | 3KD9308-6 | | | ■ | | |
| | | 6 units | 3KD9408-6 | | | | ■ | |
| | | 6 units | 3KD9508-6 | | | | | ■ |
| | 4-pole | 8 units | 3KD9308-8 | | | ■ | | |
| | | 8 units | 3KD9408-8 | | | | ■ | |
| | | 8 units | 3KD9508-8 | | | | | ■ |

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## Terminal covers

- For manual transfer switching equipment (MTSE) with flat terminals
- One pack (6 or 8 units) is required for the infeed side and the load side
- Additional side plate covers are required for terminal covers on the terminal side, where bridging bars are used (normally the load side)





| Length | Number of poles, switch | Scope of supply | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|---|
| Standard length | 3-pole | 6 units | 3KD9304-6 | | | ■ | | |
| | | | 3KD9404-6 | | | | ■ | |
| | | | 3KD9504-6 | | | | | ■ |
| | 4-pole | 8 units | 3KD9304-8 | | | ■ | | |
| | | | 3KD9404-8 | | | | ■ | |
| | | | 3KD9504-8 | | | | | ■ |
| Short version | 3-pole | 6 units | 3KD9304-7 | | | ■ | | |
| | | | 3KD9404-7 | | | | ■ | |
| | 4-pole | 8 units | 3KD9304-5 | | | ■ | | |
| | | | 3KD9404-5 | | | | ■ | |

## Terminal covers as spare parts





| Length | Scope of supply | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|
| Standard length | 1 unit | 3KD9504-1 | | | | | ■ |
| Short version | 1 unit | 3KD9304-1 | | | ■ | | |
| | | 3KD9404-1 | | | | ■ | |

## Side plate covers



- For lateral touch protection on the terminal side, where bridging bars are used (normally the load side)
- Suitable for terminal covers in standard length

| Length | Scope of supply | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|---|
| Standard length | 2 units | 3KC9304-0 | | | ■ | | |
| | | 3KC9404-0 | | | | ■ | |
| | | 3KC9504-0 | | | | | ■ |

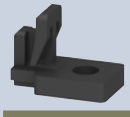
## Assembly kit for floor mounting



- For floor mounting of sizes 1 and 2
- Contains 4 mounting brackets and 2 mounting plates for 3-pole and 4-pole devices

| Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|
| 3KC9120-1 | ■ | ■ | | | |

## Mounting bracket as spare part



- Spare part for mounting brackets included in the assembly kit for 3-pole and 4-pole devices

| Scope of supply | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|
| 4 units | 3KD9120-1 | ■ | ■ | | | |

## Slide for mounting on DIN rail as spare part



- Spare part included in the scope of supply for the 3KC0 slide for DIN-rail mounting

| Scope of supply | Article No. | Size 1 | Size 2 | Size 3 | Size 4 | Size 5 |
|---|---|---|---|---|---|---|
| 5 units | 3KF9112-0BA00 | ■ | ■ | | | |

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# 3LD2 load transfer switches

## Up to 250 A

| | Front mounting<br>Direct operating mechanism (knob-operated mechanism) |
|---|---|
| **Actuator color** | Black |
| **Locking device** | 3LD23 and 3LD24 lockable<br>with up to 3 padlocks with a hasp thickness of 4 to 6 mm<br>(all other versions non-lockable) |
| **Mounting** | Four-hole mounting |
| **Bridging bars** | Pre-assembled |



| Rated uninterrupted current $I_u$ (AC-21A, 380 ... 440 V) | Rated operational power (50/60 Hz, 380 ... 440 V) | | 3P | 3P+N |
|---|---|---|---|---|
| | At AC-23A | At AC-3 | | |
| 25 A | 9.5 kW | 7.5 kW | 3LD2123-7UK01 | – |
| 32 A | 11.5 kW | 9.5 kW | 3LD2223-7UK01 | – |
| 63 A | 22.0 kW | 18.5 kW | 3LD2524-7UK01 | – |
| 100 A | 37.0 kW | 30.0 kW | 3LD2724-7UK01 | – |
| 160 A | 75 kW | 50 kW | 3LD2305-7UK01 | 3LD2305-7UL01 |
| 250 A | 132 kW | 110 kW | 3LD2405-7UK01 | 3LD2405-7UL01 |

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## Accessories



**4th contact (N conductor)**

- Leading switch-on, lagging switch-off
- Bridging bars for the switchable N pole are not included in the scope of supply

| Load transfer switch design | Article No. | 3LD21 (25 A) | 3LD22 (32 A) | 3LD25 (63 A) | 3LD27 (100 A) | 3LD23 (160 A) | 3LD24 (250 A) |
|---|---|---|---|---|---|---|---|
| Front mounting | 3LD9220-0B | ■ | ■ | | | | |
| | 3LD9250-0BA | | | ■ | | | |
| | 3LD9280-0B | | | | ■ | | |
| | 3LD9240-0B | | | | | ■ | ■ |
| Floor mounting | 3LD9240-0C | | | | | ■ | ■ |
| Molded-plastic enclosures | 3LD9220-0C | ■ | ■ | | | | |
| | 3LD9250-0CA [1] | | | ■ | | | |
| | 3LD9280-0C [1] | | | | ■ | | |



**N or PE terminals**

- Through-type

| Load transfer switch design | Article No. | 3LD21 (25 A) | 3LD22 (32 A) | 3LD25 (63 A) | 3LD27 (100 A) | 3LD23 (160 A) | 3LD24 (250 A) |
|---|---|---|---|---|---|---|---|
| Front mounting | 3LD9220-2B | ■ | ■ | | | | |
| | 3LD9250-2BA | | | ■ | | | |
| | 3LD9280-2B | | | | ■ | | |
| | 3LD9240-2B | | | | | ■ | ■ |
| Floor mounting | 3LD9240-2C | | | | | ■ | ■ |

[1] Can only be used as a spare part, as no additional poles can be installed in the enclosure.

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| Floor mounting<br>Door-coupling rotary operating mechanism (knob-operated mechanism) | | Molded-plastic enclosures<br>Direct operating mechanism (knob-operated mechanism) |
|---|---|---|
| Black | | Black |
| Lockable in O position<br>with up to 3 padlocks with a hasp thickness of 4 to 6 mm | | 3LD21 and 3LD22 lockable in O position<br>with up to 3 padlocks with a hasp thickness of 4 to 6 mm<br>(all other versions non-lockable) |
| Four-hole mounting | | Metric screw connection |
| Pre-assembled | | Pre-assembled |
|  | |  |
| **3P** | **3P+N** | **3P+N and PE base terminal** |
| – | – | 3LD2165-7UB01 |
| – | – | 3LD2265-7UB01 |
| – | – | 3LD2566-7UB01 |
| – | – | 3LD2766-7UB01 |
| 3LD2318-7UK01 | 3LD2318-7UL01 | – |
| 3LD2418-7UK01 | 3LD2418-7UL01 | – |

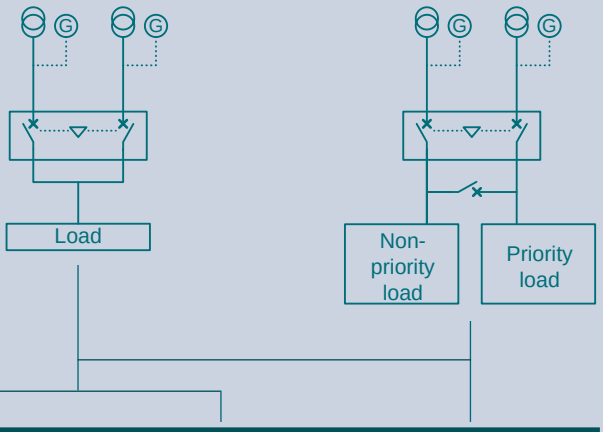
9

| | | | | 3LD21 (25 A) | 3LD22 (32 A) | 3LD25 (63 A) | 3LD27 (100 A) | 3LD23 (160 A) | 3LD24 (250 A) |
|---|---|---|---|---|---|---|---|---|---|
| **Auxiliary switches** | | | | | | | | | |
|  | • For mounting on the left and/or right<br>• NO contact: lagging on closing, leading on opening the 3LD switch disconnector<br>• NC contact: leading on closing, lagging on opening the 3LD switch disconnector<br>• Indicate the switch position of the respective switch disconnector (I or II) to which the auxiliary switch module is connected<br>• For 3-pole load transfer switches only | | | | | | | | |
| | **Load transfer switch design** | **Contacts** | **Type of contact** | **Article No.** | | | | | |
| | Front mounting | 1 NO + 1 NC | Standard | 3LD9200-5B | ■ | ■ | ■ | ■ | ■ | ■ |
| | | | Gold-plated | 3LD9200-5BF | ■ | ■ | ■ | ■ | ■ | ■ |
| | Floor mounting and molded-plastic enclosure | 1 NO + 1 NC | Standard | 3LD9200-5C | ■ | ■ | ■ | ■ | ■ | ■ |
| | | | Gold-plated | 3LD9200-5CF | ■ | ■ | ■ | ■ | ■ | ■ |
| | | 2 NO | Standard | 3LD9200-6C | ■ | ■ | ■ | ■ | ■ | ■ |
| **Terminal covers as additional touch protection** | | | | | | | | | |
| | • For mounting on load side only | | | | | | | | |
| | **Number of poles** | | **Scope of supply** | **Article No.** | | | | | |
|  | 1-pole | | 4 units | 3LD9221-2A | ■ | ■ | | | | |
| | | | | 3LD9251-2A | | | ■ | | | |
| | | | | 3LD9281-2A | | | | ■ | | |
| | | | | 3LD9241-2A | | | | | ■ | ■ |
|  | 3-pole | | 4 units | 3LD9221-0A | ■ | ■ | | | | |
| | | | | 3LD9251-0A | | | ■ | | | |
| **Shaft coupling** | | | | | | | | | |
|  | • No ON-lock | | | | | | | | |
| | **Load transfer switch design** | | | **Article No.** | | | | | |
| | Floor mounting | | | 3LD9242-4F | | | | ■ | ■ |

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# 3KC ATC transfer control devices




| Version | Controllable switching devices | Interfaces | ATC3100 | ATC6300 | ATC6500 |
|---|---|---|---|---|---|
| For fast parameterization without software | 2 | – | 3KC9000-8EL10 | – | – |
| For programming with user-friendly software, with programmable inputs and outputs | 2 | Optional communications interface and LCD display | – | 3KC9000-8TL40 | – |
| | 3 | Integrated RS485 interface and LCD display | – | – | 3KC9000-8TL50 |

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## Further technical specifications

| | | ATC3100 | ATC6300 | ATC6500 |
|---|---|---|---|---|
| **Application** | | | | |
| Transfer between | | Network/network, network/generator | Network/network, network/generator, generator/generator | |
| Controllable switching devices | | 2 | | 3 |
| In-phase transition | | – | | Yes |
| Implementation of transfer with | | 3VA, 3VL, 3VT, 3WA/3WL, 3WT | 3WA/3WL FSI-III, 3WT, 3KC3, 3KC4, 3VA, 3VL | 3WA/3WL FSI-III, 3WL10, 3WT, 3VA |
| **Measuring inputs** | | | | |
| Max. rated operational voltage $U_e$ | Phase-phase | 400 V AC | 480 V AC | 600 V AC |
| | Phase-neutral conductor | 230 V AC | 277 V AC | 346 V AC |
| Measuring range | Phase-phase | – | 50 ... 576 V AC | 50 ... 720 V AC |
| | Phase-neutral conductor | 161 ... 264 V AC | 50 ... 333 V AC | 30 ... 415 V AC |
| Frequency range | | 50/60 Hz | 45 ... 65 Hz | |
| Relative error of measurement method | | ±5% | ±0.25% | |
| **Communication** | | | | |
| Integrated RS485 interface (Modbus RTU) | | – | | Yes |
| Optional RS485 interface (Modbus RTU) | | – | Yes | Ready-integrated |
| Optional Ethernet interface (Modbus TCP) | | – | Yes | |
| **Power supply** | | | | |
| Auxiliary power supply | Rated operational voltage $U_e$ AC | 220 ... 240 V | 100 ... 240 V | |
| | Rated operational voltage $U_e$ DC | – | 110 ... 250 V | |
| | Frequency range | 50/60 Hz | 45 ... 65 Hz | |
| Battery power supply | Rated operational voltage $U_e$ DC | 12/24 V | | 12/24/48 V |
| **Digital inputs** | | | | |
| Number of inputs | | 5 | 6 | 8 |
| Freely programmable | | – | All | |
| **Relay outputs** | | | | |
| Number of outputs | | 7 | 7 | |
| Freely programmable | | – | All | |
| Contact configuration | | – | 6 × 1 NO, 8 A, 250 V AC (AC-1)<br>1 × 1 CO, 8 A, 250 V AC (AC-1) | 2 × 1 NO, 12 A, 250 V AC (AC-1)<br>2 × 1 NO, 8 A, 250 V AC (AC-1)<br>3 × 1 CO, 8 A, 250 V AC (AC-1) |
| **Real time clock and event log** | | | | |
| ATC component | | No | Yes | |
| Operating time without voltage | | – | 300 s | 14 days |
| Max. number of events that can be stored | | – | 100 | 250 |
| **Connections** | | | | |
| Terminal type | | Removable/plug-in | | |
| Cable cross-section | IEC | 0.5 ... 2.5 mm² | 0.2 ... 2.5 mm² | |
| **Enclosures** | | | | |
| Version | | Door installation, DIN-rail mounting, floor mounting | Door installation | |
| Degree of protection | | IP41 on the front, IP20 on the rear side | IP40 on the front, IP20 on the rear side | |



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# Accessories for transfer control devices

## For 3KC ATC3100 transfer switching equipment

### Connecting cable for 3KC ATC3100

- Measurement and control cable for connection of 3KC ATC3100 to 3VL or 3WA/3WL

| Cable length | Article No. |
|---|---|
| 1.8 m | 3KC9000-8EL62 |

## For 3KC ATC6300 and 3KC ATC6500 transfer switching equipment

### Expansion modules with digital inputs and outputs



| ATC6 expansion module | Features | Article No. |
|---|---|---|
| 4DI | • 4 digital inputs<br>• Including insulated 24 V DC/1 W power supply for digital inputs and sensors | 3KC9000-8TL60 |
| 4DO, SSR | • 4 solid-state-compatible digital outputs<br>• 4 NO at the solid-state-compatible output max. 55 mA at 30 V AC or 40 V DC | 3KC9000-8TL61 |
| 2DI/2DO, SSR | • 2 digital inputs and 2 solid-state compatible digital outputs<br>• Including insulated 24 V DC/1 W power supply for digital inputs and sensors<br>• 2 NO at the solid-state-compatible output max. 55 mA at 30 V AC or 40 V DC | 3KC9000-8TL62 |
| 2DO, relay | • 2 relay outputs<br>• 2 CO at relay output, 5 A, 250 V AC (AC-1) | 3KC9000-8TL63 |
| 2DI/2DO, relay | • 2 digital inputs and 2 relay outputs<br>• 2 NO at relay output, 5 A, 250 V AC (AC-1) | 3KC9000-8TL64 |

### Expansion modules with communications interfaces



- **Note:** The 3KC ATC6500 transfer switching equipment comes with an integrated RS485 interface

| ATC6 expansion module | Features | Article No. |
|---|---|---|
| RS485 | • RS485 interface, Modbus RTU | 3KC9000-8TL74 |
| Ethernet | • Ethernet interface, Modbus TCP | 3KC9000-8TL75 |

### Front interface



- For parameterization on the front using software

| ATC6 front interface | Features | Article No. |
|---|---|---|
| USB | • Mini-USB cable, 1.8 m | 3KC9000-8TL73 |

### Protective seal



- For front IP65 protection

| Suitable for | Version | Article No. |
|---|---|---|
| 3KC ATC6300 | 144 × 144 mm | 3KC9000-8TL67 |
| 3KC ATC6500 | 240 × 180 mm | 3KC9000-8TL68 |





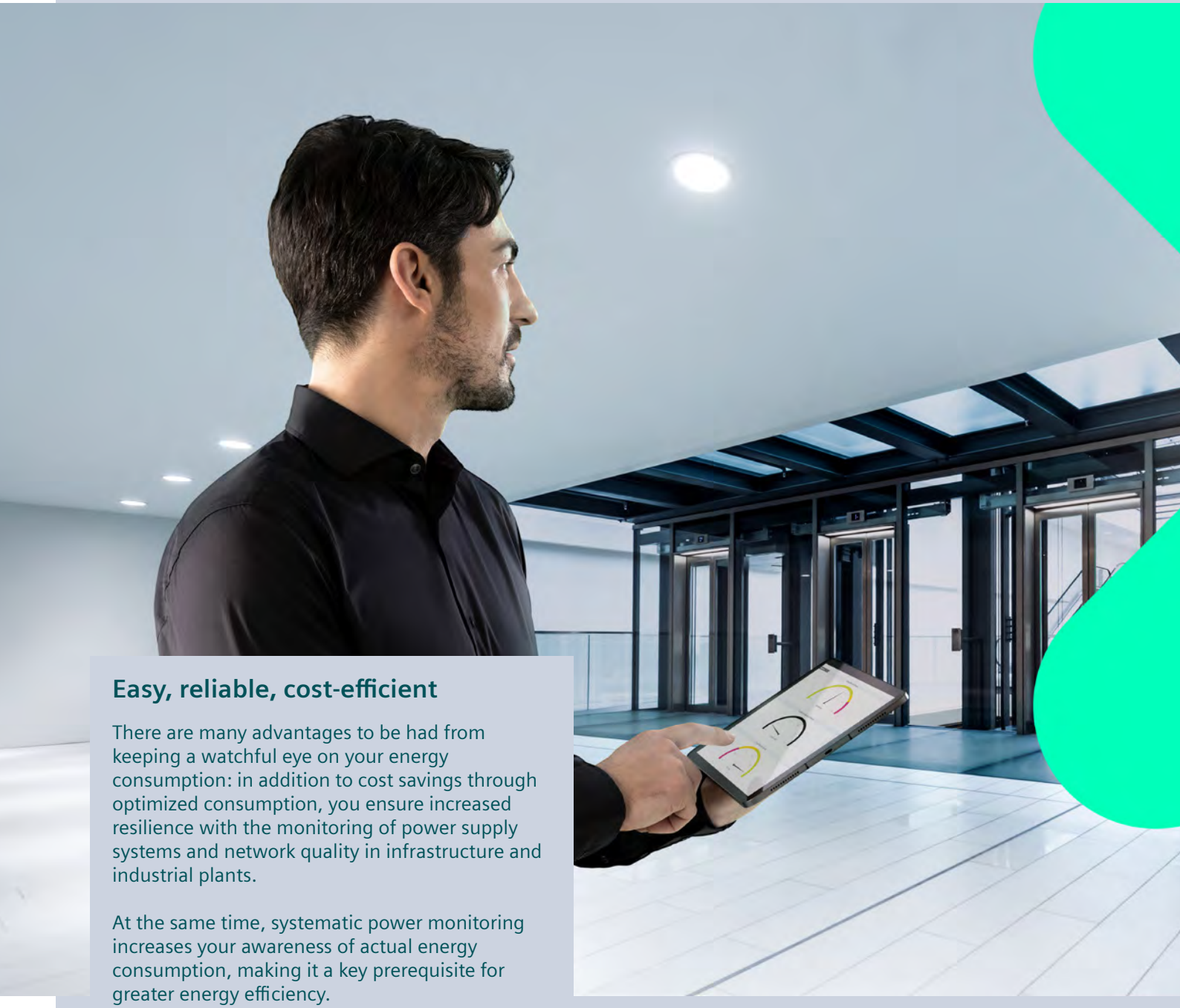
System overview, page 9/4

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## Easy, reliable, cost-efficient

There are many advantages to be had from keeping a watchful eye on your energy consumption: in addition to cost savings through optimized consumption, you ensure increased resilience with the monitoring of power supply systems and network quality in infrastructure and industrial plants.

At the same time, systematic power monitoring increases your awareness of actual energy consumption, making it a key prerequisite for greater energy efficiency.

Integration into open IoT operating systems such as Insights Hub results in even greater optimization potential.

What is more, with a power monitoring system you lay the foundation for regular energy audits and a corporate energy management system according to ISO 50001 and ISO 50003.

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# Measuring Devices, Power Monitoring and Digitalization Solutions




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Current transformers 10/44
Bushing-type current transformers for measurement purposes 10/44

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# A multitude of additional information ...

## Information + ordering

### All the important things at a glance

For information about measuring devices, power monitoring and digitalization solutions, please visit our websites
**www.siemens.com/sentron-measuring-devices**
**www.siemens.com/sentron-digital**

### Your product in detail

The SiePortal platform (knowledge base) provides comprehensive information
**www.siemens.com/lowvoltage/product-support**

- Quick Selection Guide
  - SENTRON portfolio for power monitoring **(109744725)**
- Brochure
  - SENTRON Powermanager – update and benefit **(109805178)**

The relevant tender specifications can be found at
**www.siemens.com/tenderspecifications**

### Siemens YouTube channel

- Power monitoring (general) **sie.ag/7N6g4g**

### Everything you need for your order

Refer to SiePortal to find an overview of your products (product catalog)

- Measuring devices and power monitoring **sie.ag/2kTH9Lz**
- Digitalization solutions **sie.ag/2olIiNi**
- Configuring and visualizing for SIMATIC **sie.ag/2kpbwcs**
- Software and apps **sie.ag/2kTJjuF**

Direct forwarding to the individual products in SiePortal by clicking on the article number in the catalog or entering this web address incl. article number
**www.siemens.com/product_catalog_SIEP?Article No.**

### Configurators

The configurator reduces the time and effort required in the planning and ordering process, and allows for individual adaptations.
Configure your 7KM PAC and 7KT PAC measuring device at **www.siemens.com/lowvoltage/pac-configurator**

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### The fast track to the experts

## Contact persons in your region

We offer a comprehensive portfolio of services.
You can find your local contacts at
**www.siemens.com/lowvoltage/components/contact**

You will find further information on services at
**www.siemens.com/service-offers**

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at
**www.siemens.com/support-request**

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# … can be found in our online services

## Commissioning + operation

### Your product in detail

The SiePortal platform (knowledge base) provides detailed technical information
**www.siemens.com/lowvoltage/product-support**

- Operating instructions
- Certificates

Online Support app available for download from the **App Store** and **Play Store**
You will find further information at
**www.siemens.com/support-app**

Provision of 3D data (step and u3d data formats)

- SiePortal (product catalog)
  **www.siemens.com/lowvoltage/product-catalog**
- Image database
  **www.siemens.com/lowvoltage/picturedb**

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
**www.siemens.com/cax**

### Face-to-face or online training

Our training courses can be found at
**www.siemens.com/sitrain-lowvoltage**

- Digitalization in power distribution boards (WT-LVDIGI)
- SENTRON circuit protection devices with measuring and communication function (WT-LVBCOM)
- Power Monitoring with SENTRON (WT-LVAEM)
- Energy Management with SENTRON Powermanager – User training (LV-PM)

### SENTRON Powerconfig

The combined commissioning and service tool SENTRON Powerconfig for communication-capable measuring devices, circuit protection devices and circuit breakers.

Free download SENTRON Powerconfig
**www.siemens.com/powerconfig**

Free download SENTRON Powerconfig mobile via
**App Store** and **Play Store**

### Manuals

Manuals can be found in SiePortal at
**www.siemens.com/lowvoltage/manuals**

- Configuration Manual
  - Measuring devices and power monitoring **(45315973)**
- Equipment Manual
  - 7KT PAC1600 energy meter **(109759827)**
  - 7KT PAC1600 multimeter **(109760293)**
  - 7KM PAC2200 power monitoring device **(109746835)**
  - 7KM PAC2200CLP power monitoring device **(109783220)**
  - 7KM PAC3200T power monitoring device **(109746833)**
  - SENTRON PAC5100/5200 7KM5212/5412 **(109477872)**
  - 7KM PAC3120 and 7KM PAC3220 **(109767307)**
  - SENTRON Powercenter 3000 **(109763838)**
- System Manual
  - 7KT multichannel current measuring system **(109483442)**
  - SENTRON power monitoring device PAC4200 **(34261595)** // PAC4220 **(109823026)**
  - SENTRON circuit protection devices with communication and measuring function **(109791806)**
- Communication Manual
  - SENTRON PAC5100/5200 7KM5212/5412 **(109477870)**
  - 3VA molded case circuit breakers with IEC and UL certification **(98746267)**
- SEM3™
  - Embedded Micro Metering Module™ **(109748928)**
- Quick Installation Guide
  - SENTRON POWERCENTER 3000 **(109766001)**
- Installation Manual
  - Circuit protection devices with communication and measuring function **(109791805)**

### Technical overview – Measuring devices, power monitoring and digitalization solutions

#### The fast way to get you to our online services

This page provides you with comprehensive information and links on measuring devices, power monitoring and digitalization solutions

**www.siemens.com/lowvoltage/product-support (109764480)**

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# Power monitoring

## Software

### Local monitoring systems

| Web | Mobile App |
|---|---|
| Web interface integrated | SENTRON Powerconfig |

### Functions for power monitoring

| | Web | Mobile App |
|---|---|---|
| Commissioning of measuring devices and circuit breakers | – | ■ |
| Displaying current data | ■ | ■ |
| Displaying/evaluating current/historical values | ■ | ■ |
| Prepared analyses/reports | – | – |
| Customized reporting | – | – |
| Data analysis in the cloud | – | – |
| **Additionally for energy management** | | |
| Switching loads on and off | – | – |
| **Operating environment** | | |
| Use | Free of charge | Free of charge |
| System requirements | Browser | Android, iOS |
| Suitable according to ISO 50001 | – | – |
| Connection of non-Siemens devices | – | – |
| Integrated cloud interface | – | – |
| Further information | | from page 10/14 |



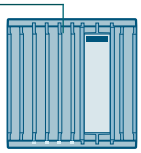
## Measuring devices, circuit breakers and circuit protection devices

| | | | |
|---|---|---|---|
| **Measuring devices for industrial applications**  | 7KM PAC1020 | – | – |
| | 7KM PAC2200, PAC2200CLP | ■ | ■ 1) 2) |
| | 7KM PAC3200T | ■ | ■ 1) |
| | 7KM PAC3120 | – | ■ 2) |
| | 7KM PAC3220 | ■ | ■ |
| | 7KM PAC4200 | ■ | ■ |
| | 7KM PAC4220 | ■ | ■ |
| | 7KM PAC5200 | ■ | – |
| **Measuring devices for buildings and infrastructure**  | 7KT PAC1200 | ■ | – |
| | 7KT PAC1600 | – | – |
| | SEM3, SEM3T | ■ | – |
| **Circuit breakers**  | 3WA | – | ■ |
| | 3WL | – | ■ |
| | 3WL10, 3VA27 | – | – |
| | 3VA ETU5/8 | – | ■ |
| **Communication-capable circuit protection devices**  | SENTRON Powercenter 1000/1100<br>5ST3 COM AS+FC, 5ST3 COM RCA,<br>5SL6 COM MCB, 5SL6 COM RCM MCB,<br>5SV6 COM AFDD/ MCB, 5TY1 COM ECPD,<br>3NA COM LV HRC, 3RV2 COM | – | ■ |
| **Other Modbus devices** | | – | – |

■ Function available – Function not available

1) Via WiFi 2) Via gateway (PAC4200) 3) Incl. module for Desigo CC building management 4) Via XML/JSON 5) Via SPP2000 6) Via Modbus TCP

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| | PC-based | | | Cloud | World of SIMATIC | |
|---|---|---|---|---|---|---|
| | | | | | TIA Portal | |
| |  |  |  |  |  |  |
| | **SENTRON Powerconfig** | **SENTRON Powermanager** [3] | **SENTRON Powercenter 3000** | **SENTRON Powermind (Insights Hub)** | **SIMATIC TIA Portal integrated** | **SIMATIC TIA Portal capable** |
| | ■ | – | – | – | ■ | – |
| | ■ | ■ | ■ | ■ | ■ | ■ |
| | ■ | ■ | ■ | ■ | ■ | ■ |
| | – | ■ | – | ■ | ■ | – |
| | – | ■ | – | – | – | – |
| | – | – | – | ■ | – | – |
| | – | ■ | – | – | ■ | ■ |
| | Free of charge | License and trial license | – | Subscription | – | – |
| | Windows X64 | Windows X64 | – | Browser | – | – |
| | – | ■ (TÜV) | ■ | ■ | – | – |
| | – | ■ | ■ | ■ | – | – |
| | – | ■ | ■ | ■ | – | – |
| | **from page 10/14** | **from page 10/16** | **from page 10/22** | **from page 10/28** | | |
| | ■ | ■ [4] | ■ | ■ | – | – |
| | ■ | ■ | ■ | ■ | – | ■ [5] |
| | ■ | ■ | ■ | ■ | – | ■ [5] |
| | ■ | ■ | ■ | ■ | – | – |
| | ■ | ■ | ■ | ■ | ■ | ■ |
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| | ■ | ■ | – | – | – | – |
| | ■ | ■ | ■ | – | – | – |
| | – | ■ \| ■ [4] | – | – | – | – |
| | ■ | ■ | ■ | ■ | – | ■ |
| | ■ | ■ | ■ | ■ | ■ | ■ |
| | ■ | ■ | – | – | – | ■ |
| | ■ | ■ | ■ | ■ | ■ | ■ |
| | ■ | ■ | ■ | ■ | – | ■ [6] |
| | ■ | ■ | ■ | ■ | – | – |

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# Hardware components

## Industry







| | 7KM PAC1020 | 7KM PAC2200 | 7KM PAC2200CLP | 7KM PAC3200T | 7KM PAC3120 Standard \| MID | |
|---|---|---|---|---|---|---|
| **Type of mounting** | | | | | | |
| Front mounting \| DIN rail \| Screw mounting | ■ \| – \| – | – \| ■ \| – | – \| ■ \| – | – \| ■ \| – | ■ \| – \| – | |
| Withdrawable \| Fixed-mounted | – \| – | – \| – | – \| – | – \| – | – \| – | |
| **Measuring connection** | | | | | | |
| Direct measurement | – | ■ | ■ | – | – | |
| Transformer measurement | ■ | ■ | ■ | ■ | ■ | |
| Multichannel measuring system | – | – | – | – | – | |
| **Suitable transformers** | | | | | | |
| Window-type current transformers | ■ | ■ | ■ | ■ | ■ | |
| Folding transformer | ■ | ■ | ■ | ■ | ■ | |
| Integrated transformer | – | – | – | – | – | |
| **Commissioning** | | | | | | |
| MID version \| PTB-A50.7 \| PTB firmware update | – \| – \| – | ■ \| – \| – | ■ \| ■ \| – | – \| – \| – | – \| – \| – | ■ \| ■ \| ■ |
| Max. input voltage L-L/L-N | 400 V/ 230 V | 400 V/ 230 V | 400 V/ 230 V | 400 V/ 230 V | 690 V/ 400 V | 400 V/ 230 V |
| Transformer connection version | x/1 A or x/5 A | x/1 A or x/5 A | x/1 A or x/5 A | x/1 A or x/5 A | x/1 A or x/5 A | |
| Direct connection version | – | 65 A | 65 A | – | – | |
| DC power supply unit with extra-low voltage version | – | – | – | – | 24 ... 60 V DC ±20% | – |
| 1-phase counter version | – | ■ | ■ | – | – | |
| Electrically isolated voltage inputs | – | – | – | – | – | |
| Version without display (for web interface) | – | – | – | ■ | – | |
| **Evaluation** | | | | | | |
| **Measured quantities** | | | | | | |
| Average value of measured values | – | ■ | ■ | ■ | ■ | |
| Voltage, current, frequency | ■ | ■ | ■ | ■ | ■ | |
| Power, power factor | ■ | ■ | ■ | ■ | ■ | |
| **Energy measurement** | | | | | | |
| Daily energy storage | – | > 221 days | > 10 years | > 221 days | > 221 days | |
| Monthly energy storage | – | > 25 months | > 10 years | > 25 months | > 25 months | |
| Yearly energy storage | – | > 7 years | > 10 years | > 7 years | > 7 years | |
| Apparent \| Active \| Reactive energy \| p.f. \| power factor | ■ \| ■ \| ■ \| – \| ■ | ■ \| ■ \| ■ \| – \| ■ | ■ \| ■ \| ■ \| – \| ■ | ■ \| ■ \| ■ \| – \| ■ | ■ \| ■ \| ■ \| ■ \| ■ | |
| Distortion factor THD (voltage, current) | – | – | – | ■ | ■ | |
| Harmonics (voltage, current) | – | – | – | – | – | |
| Phase angle/phase chart | – | – | – | – | – | |
| Load profile recording | – | – | ■ | – | – | |
| Flicker acc. to IEC 61000-4-15 | – | – | – | – | – | |
| **Monitoring functions** | | | | | | |
| Operating hours counter | – | – | – | ■ | ■ | |
| Limit monitoring | – | – | – | ■ | ■ | |
| Logic functions | – | – | – | ■ | ■ | |
| Event log | – | – | – | – | – | |
| Gateway function | – | – | – | – | – | |
| Reporting acc. to EN 50160 | – | – | – | – | – | |
| Integrated fault recorder | – | – | – | – | – | |
| **Integrated communications interfaces** | | | | | | |
| Digital inputs/digital outputs | 1/1 | 1/1 | 1/1 | 1/1 | 2/2 | |
| S0 interface | ■ | ■ | ■ | ■ | ■ | |
| M-Bus | – | ■ | – | – | – | |
| RS485 (Modbus RTU) | ■ | ■ | – | – | ■ | |
| Ethernet with Modbus TCP | – | ■ | ■ | ■ | – | |
| BACnet | – | – | – | – | – | |
| **Further information** | | | | | | |
| | See page 10/32 | See page 10/32 | See page 10/32 | See page 10/32 | See page 10/32 | |

[1] From 01/2025 universal power supply unit

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## Industry








| | 7KM PAC3220 Standard \| MID | | 7KM PAC4200 | 7KM PAC4220 | 7KM PAC5200 | SICAM Q100 new | SICAM Q200 new |
|---|---|---|---|---|---|---|---|
| | ■ \| – \| – | | ■ \| – \| – | ■ \| – \| – | ■ \| ■ \| – | ■ \| – \| – | ■ \| – \| – |
| | – \| – | | – \| – | – \| – | – \| – | – \| – | – \| – |
| | – | | – | – | – | – | – |
| | ■ | | ■ | ■ | ■ | ■ | ■ |
| | – | | – | – | – | – | – |
| | ■ | | ■ | ■ | ■ | ■ | ■ |
| | ■ | | ■ | ■ | ■ | ■ | ■ |
| | – | | – | – | – | – | – |
| | – \| – \| – | ■ \| ■ \| ■ | – \| – \| – | – \| – \| – | – \| – \| – | – \| – \| – | – \| – \| – |
| | 690 V/ 400 V | 400 V/ 230 V | 690 V/ 400 V | 690 V/ 400 V | 690 V/ 400 V | 690 V/ 400 V | 690 V/ 400 V |
| | x/1 A or x/5 A | | x/1 A or x/5 A | x/1 A or x/5 A | x/1 A or x/5 A | x/1 A or x/5 A | x/1 A or x/5 A |
| | – | | – | – | – | – | – |
| | 24 ... 60 V DC ±20% | – | 22 ... 65 V DC | 24 ... 48 V DC ±25% | 24 ... 250 V DC | 24 ... 250 V DC | 110 ... 250 V D [1] |
| | – | | – | – | – | – | – |
| | – | | – | – | ■ | ■ | ■ |
| | – | | – | – | ■ | ■ | – |
| | | | | | | | |
| | ■ | | ■ | ■ | – | ■ | ■ |
| | ■ | | ■ | ■ | ■ | ■ | ■ |
| | ■ | | ■ | ■ | ■ | ■ | ■ |
| | | | | | | | |
| | > 221 days | | > 365 days | > 10 years | – | ■ | ■ |
| | > 25 months | | > 24 months | > 10 years | – | ■ | ■ |
| | > 7 years | | – | > 10 years | – | ■ | ■ |
| | ■ \| ■ \| ■ \| ■ \| ■ | | ■ \| ■ \| ■ \| ■ \| ■ | ■ \| ■ \| ■ \| ■ \| ■ | ■ \| ■ \| ■ \| ■ \| ■ | ■ \| ■ \| ■ \| ■ \| ■ | ■ \| ■ \| ■ \| ■ \| ■ |
| | ■ | | ■ | ■ | ■ | ■ | ■ |
| | – | | 2nd to 64th | 2. bis 64. | 2nd to 40th | ■ | ■ |
| | – | | ■ | ■ | ■ | ■ | ■ |
| | – | | ■ | ■ | – | ■ | ■ |
| | – | | – | – | ■ | ■ | ■ |
| | | | | | | | |
| | ■ | | ■ | ■ | – | – | – |
| | ■ | | ■ | ■ | ■ | ■ | ■ |
| | ■ | | ■ | ■ | ■ | ■ | ■ |
| | – | | > 4000 events | > 4000 events | ■ | ■ | ■ |
| | – | | ■ | ■ | – | ■ | ■ |
| | – | | – | – | ■ | ■ | ■ |
| | – | | – | – | ■ | ■ | ■ |
| | | | | | | | |
| | 2/2 | | 2/2 | 2/2 | 0/2 | 2/2 | 6/6 |
| | ■ | | ■ | ■ | – | – | – |
| | – | | – | – | – | – | – |
| | – | | – | – | – | ■ | ■ |
| | ■ | | ■ | ■ | ■ | ■ | ■ |
| | – | | – | – | – | – | – |
| | | | | | | | |
| | See page 10/32 | | See page 10/32 | See page 10/32 | See page 10/32 | See page 10/32 | See page 10/32 |

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# Hardware components

## Buildings and infrastructure





| | 7KT PAC1200 new | 7KT PAC1600 | SEM3 |
|---|---|---|---|
| **Type of mounting** | | | |
| Front mounting \| DIN rail \| Screw mounting | – \|■\| – | – \|■\| – | – \| – \|■ |
| Withdrawable \| Fixed-mounted | – \| – | – \| – | – \| – |
| **Measuring connection** | | | |
| Direct measurement | ■ | ■ | – |
| Transformer measurement | ■ | ■ | – |
| Multichannel measuring system | ■ | – | ■ |
| **Suitable transformers** | | | |
| Window-type current transformers | ■ | ■ | ■ |
| Folding transformer | ■ | ■ | ■ |
| Integrated transformer | ■ | – | ■ |
| **Commissioning** | | | |
| MID version \| PTB-A50.7 \| PTB firmware update | – \| – \| – | ■\| – \| – | – \| – \| – |
| Max. input voltage L-L/L-N | 400 V/230 V | 400 V/230 V | 480 V/277 V |
| Transformer connection version | x/5 A | x/5 A | 50 ... 1200 A/0.1 A |
| Direct connection version | 40/63 A | 63/80 A | – |
| DC power supply unit with extra-low voltage version | – | – | – |
| 1-phase counter version | ■ | ■ | ■ |
| Electrically isolated voltage inputs | – | – | – |
| Version without display (for web interface) | ■ | – | ■ |
| **Evaluation** | | | |
| **Measured quantities** | | | |
| Average value of measured values | – | – | – |
| Voltage, current, frequency | ■ | ■ | ■ |
| Power, power factor | ■ | ■ | ■ |
| **Energy measurement** | | | |
| Daily energy storage | – | – | – |
| Monthly energy storage | – | – | – |
| Yearly energy storage | – | – | – |
| Apparent \| Active \| Reactive energy \| p.f. \| power factor | – \|■\|■\| – \| – | ■\|■\|■\| – \| – | ■\|■\|■\|■\|■ |
| Distortion factor THD (voltage, current) | – | – | – |
| Harmonics (voltage, current) | – | – | – |
| Phase angle/phase chart | – | – | – |
| Load profile recording | – | – | ■ |
| Flicker acc. to IEC 61000-4-15 | – | – | – |
| **Monitoring functions** | | | |
| Operating hours counter | – | ■ | – |
| Limit monitoring | – | ■ | – |
| Logic functions | – | – | ■ |
| Event log | – | – | ■ |
| Gateway function | – | – | – |
| Reporting acc. to EN 50160 | – | – | – |
| Integrated fault recorder | – | – | – |
| **Integrated communications interfaces** | | | |
| Digital inputs/digital outputs | – | 1/1 | 2/1 |
| S0 interface | – | ■ | – |
| M-Bus | – | ■ | – |
| RS485 (Modbus RTU) | – | ■ | ■ |
| Ethernet with Modbus TCP | ■ | – | ■ |
| BACnet | – | – | ■ |
| **Further information** | | | |
| | See page 10/37 | See page 10/36 | See page 10/38 |

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# Circuit breakers






| 3WA | 3WL | 3WL10/3VA27 | 3VAETU8 |
|---|---|---|---|
| | | | |
| – \| – \| – | – \| – \| – | – \| – \| – | – \| – \| – |
| ■\|■ | ■\|■ | ■\|■ | – \|■ |
| | | | |
| – | – | – | – |
| ■ | ■ | ■ | ■ |
| – | – | – | – |
| | | | |
| – | – | – | – |
| – | – | – | – |
| ■ | ■ | ■ | ■ |
| | | | |
| – \| – \| – | – \| – \| – | – \| – \| – | – \| – \| – |
| 1000 V/577 V | 690 V/400 V | 690 V/400 V | 690 V/400 V |
| integrated | integrated | integrated | integrated |
| – | – | – | – |
| 24 V DC | 24 V DC | 24 V DC | 24 V DC |
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |
| | | | |
| | | | |
| ■ | ■ | – | – |
| ■ | ■ | ■ | ■ |
| ■ | ■ | ■ | ■ |
| | | | |
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |
| ■\|■\|■\|■\|■ | ■\|■\|■\|■\|■ | ■\|■\|■\|■\| – | ■\|■\|■\|■\|■ |
| ■ | ■ | – | ■ |
| 2nd to 31st | 2nd to 29th | – | – |
| – | – | – | – |
| ■ | ■ | ■ | ■ |
| – | – | – | – |
| | | | |
| ■ | ■ | – | ■ |
| – | ■ | ■ | ■ |
| – | – | – | – |
| – | ■ | ■ | ■ |
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |
| | | | |
| ■ | ■ | ■ | ■ |
| ■ | – | ■ | ■ |
| – | – | – | – |
| – | ■ | ■ | ■ |
| ■ | ■ | ■ | ■ |
| – | – | – | – |
| | | | |
| See page 1/4 | See page 1/76 | See page 1/76, page 2/13 | See page 2/14 |

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# Hardware components

## Circuit protection devices





| | SENTRON Powercenter 1100 new | 5ST3 COM auxiliary switches and fault signal contacts | 5SV6 COM AFDD/MCB |
|---|---|---|---|
| **Communications interfaces** | | | |
| Radio link | ■ | ■ | ■ |
| Modbus TCP | ■ | – | – |
| Bluetooth | ■ | – | – |
| Gateway function | ■ | – | – |
| Secure protocol (https) | ■ | – | – |
| Login (role-based) | ■ | – | – |
| Web server | – | – | – |
| Cloud (MQTT) | – | – | – |
| Compatible with SENTRON Powercenter 1000 | – | ■ | ■ |
| **Type of mounting** | | | |
| DIN rail | ■ | ■ | ■ |
| Busbar | – | – | – |
| **Evaluation** | | | |
| Switching state | – | ■ | ■ |
| Temperature | ■ | ■ | ■ |
| Current | – | – | ■ |
| Residual current (in various frequency ranges) | – | – | – |
| Voltage | – | – | ■ |
| Frequency | – | – | ■ |
| Apparent, reactive and active power, power factor | – | – | ■ |
| Reactive and active energy | – | – | ■ |
| **Monitoring functions** | | | |
| Operating hours counter | ■ | ■ | ■ |
| Operating hours counter with load current | – | – | ■ |
| Operating cycles counter | – | ■ | ■ |
| Trip counter | – | ■ | ■ |
| Short-circuit trip counter | – | – | ■ |
| Alarms for limit monitoring | ■ | ■ | ■ |
| Detection of overload and short circuit | – | – | ■ |
| Detection of arcing faults | – | – | ■ |
| **Switching function** | | | |
| Remote switching | – | – | – |
| RCCB test function | – | – | |
| Digital input | – | – | – |
| Time delay | – | – | – |
| Timing function | – | – | – |
| Configuration of protective function | – | – | – |
| **Further information** | | | |
| | See page 10/26 | See page 3/54 and 4/66 | See page 4/58 |

[1] Protection function provided, but tripping is not communicated

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## Circuit protection devices







| 5SL6 COM miniature circuit breakers EM \| RCM/EM | 3NA COM fuses | Remote control auxiliaries 5ST3 COM new | SIRIUS 3RV2 COM new | ECPD 5TY1 COM new |
|---|---|---|---|---|
| ■ | ■ | ■ | ■ | ■ |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| | – | – | – | – |
| ■ | ■ | ■ | ■ | – |
| ■ | – | ■ | ■ | ■ |
| – | ■ | – | – | – |
| ■ | – | ■ | ■ | ■ |
| ■ | ■ | ■ | ■ | ■ |
| ■ | ■ | – | – | ■ |
| – \| ■ | – | – | – | ■ |
| ■ | – | – | – | ■ |
| ■ | – | – | – | ■ |
| ■ | – | – | – | ■ |
| ■ | – | – | – | ■ |
| ■ | ■ | ■ | ■ | ■ |
| ■ | ■ | – | – | ■ |
| ■ | – | ■ | ■ | ■ |
| ■ | – | ■ | ■ | ■ |
| ■ | – | – | ■ | ■ |
| ■ | ■ | ■ | ■ | ■ |
| ■ | – [1] | – | ■ | ■ |
| – | – | – | – | ■ |
| | – | ■ | – | ■ |
| – | – | ■ | – | ■ |
| – | – | – | – | ■ |
| – | – | – | – | ■ |
| – | – | ■ | – | ■ |
| – | – | – | – | ■ |
| See page 3/40 | See page 7/50 | See page 3/59 | See catalog IC 10 | See page 4/54 |

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# Accessories

## Communication modules






| | | 7KM Switched Ethernet PROFINET/Modbus TCP | 7KM PROFIBUS DP | 7KM RS485 Modbus RTU | SENTRON PROFINET Proxy SPP2000 |
|---|---|---|---|---|---|
| **Industry** | | | | | |
|  | 7KM PAC1020 | – | – | – | – |
|  | 7KM PAC2200 | – | – | – | ■ |
|  | 7KM PAC2200CLP | – | – | – | ■ |
|  | 7KM PAC3200T | – | – | – | ■ |
|  | 7KM PAC3120/ 7KM PAC3120 MID | – | – | – | – |
|  | 7KM PAC3220/ 7KM PAC3220 MID | ■ | ■ | ■ | – |
|  | 7KM PAC42x0 | ■ | ■ | ■ | – |
|  | 7KM PAC5200 | – | – | – | – |
| **Buildings and infrastructure** | | | | | |
|  | 7KT PAC1200 | – | – | – | – |
|  | 7KT PAC1600 | – | – | – | – |
|  | SEM3 | – | – | – | – |
| **Circuit breakers** | | | | | |
|  | 3WA/3WL | – | – | – | – |
|  | 3WL10/3VA27 | – | – | – | – |
|  | 3VA ETU5/8 | ■ | ■ | ■ | – |

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| Expansion modules | | Current transformers | | |
|---|---|---|---|---|
|  |  |  |  |  |
| **7KM PAC 4DI/2DO** | **7KM PAC I(N), I(Diff), analog** | **4NC** | **7KT** | **3NJ calibrated** |
| – | – | ■ | ■ | ■ |
| – | – | ■ | ■ | ■ |
| – | – | – | – | ■ |
| – | – | ■ | ■ | ■ |
| – | – | ■ | ■ | ■ |
| ■ | ■ | ■ | ■ | ■ |
| ■ | ■ | ■ | ■ | ■ |
| – | – | ■ | ■ | ■ |
| – | – | – | – | – |
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| – | – | – | – | – |
| – | – | – | – | – |

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# SENTRON Powerconfig

## Configuration software for commissioning and maintenance

SENTRON Powerconfig is available free of charge at
**www.siemens.com/powerconfig**

You will find further information on the internet at
**www.siemens.com/sentron**

Free download SENTRON Powerconfig mobile via:

App Store

Play Store

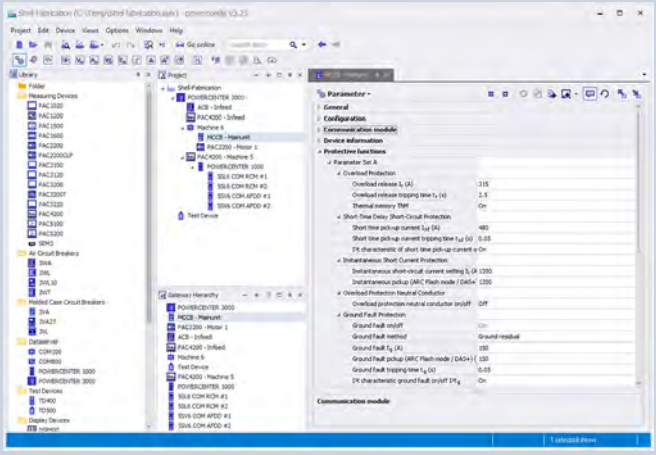
- Software tool for the efficient commissioning and diagnostics of communication-capable SENTRON components
- Supports all electronic SENTRON devices, e.g. 3WA, 3WL, 3VA, SENTRON Powercenter 3000 and SENTRON Powercenter 1000, with 5ST3 AS+FC COM, 5ST3 RCA COM, 5SL6 MCB COM, 5SV6 AFDD COM and 3NA Fuse COM
- General range of functions:
  - User-friendly parameter assignment even for complex devices such as the 3WA
  - Fast, optical detection of communication and measuring-capable circuit protection devices, such as SENTRON Powercenter 1000
  - Saving and printing of device settings
  - Testing the 3WA and archiving the test results
  - Monitoring, saving and printing of instantaneous measured quantities
  - Execution of specific device functions, such as resetting of devices and setting of energy meters
- Service functions:
  - Detection of devices and acquisition of measured quantities and status information via different networks, e.g. via Ethernet
  - Device and status acquisition via local interfaces, such as Bluetooth and USB
  - Acquisition and archiving of historic records, such as load profiles and events
  - Firmware updates
  - Switching of language packs for 7KM PAC measuring devices
- Cooperative interaction between SENTRON Powerconfig mobile and SENTRON Powerconfig on the PC:
  - SENTRON Powerconfig mobile offers a high degree of mobile versatility, e.g. to scan codes on the circuit protection devices
  - SENTRON Powerconfig on the PC can be used for subsequent editing and archiving of the system configuration



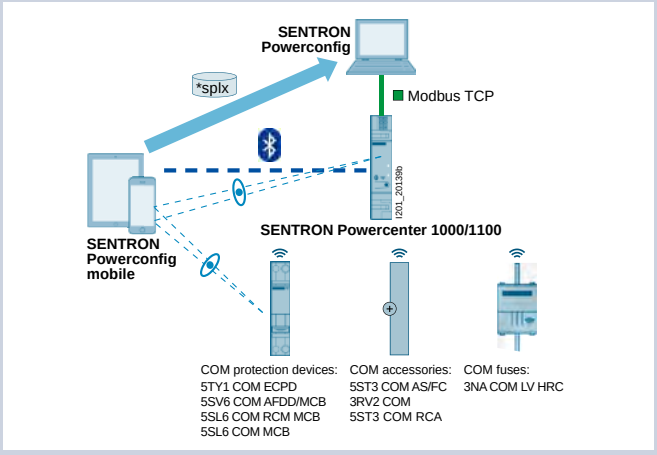


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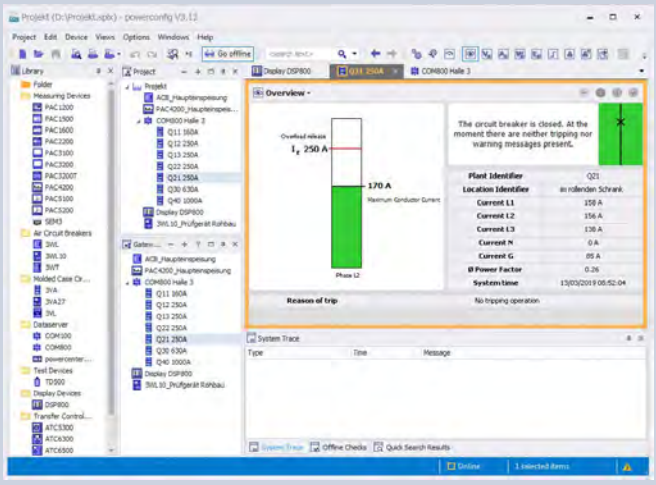
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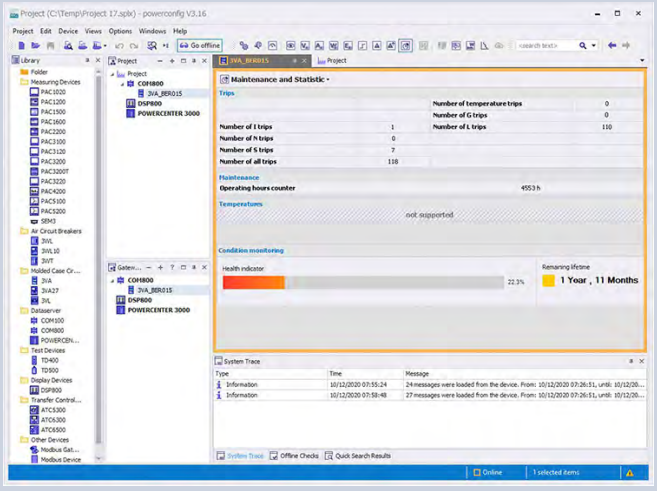
Setting of parameter values




Scanning of circuit protection devices



Display of the circuit breaker status



Display of the state of health of the 3VA

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# SENTRON Powermanager

## PC-based power monitoring software



### SENTRON Powermanager

SENTRON Powermanager is based on the modern Desigo CC platform with advanced graphical capabilities and a standard SQL database. The workflows for setting up the system, creating devices, graphically displaying the device data and processing it in reports have been fundamentally revised.

You can find the latest download and change information at **www.siemens.com/lowvoltage/product-support (109771760)**

Updates and upgrades of version 4.x or higher are based on the SUS/SUR principles.
You will find further information in the brochure – SENTRON Powermanager – update and benefit **www.siemens.com/lowvoltage/product-support (109805178)**

If you wish to migrate from classic Powermanager (3.6) to the current version, please get in touch with your local Siemens contact.

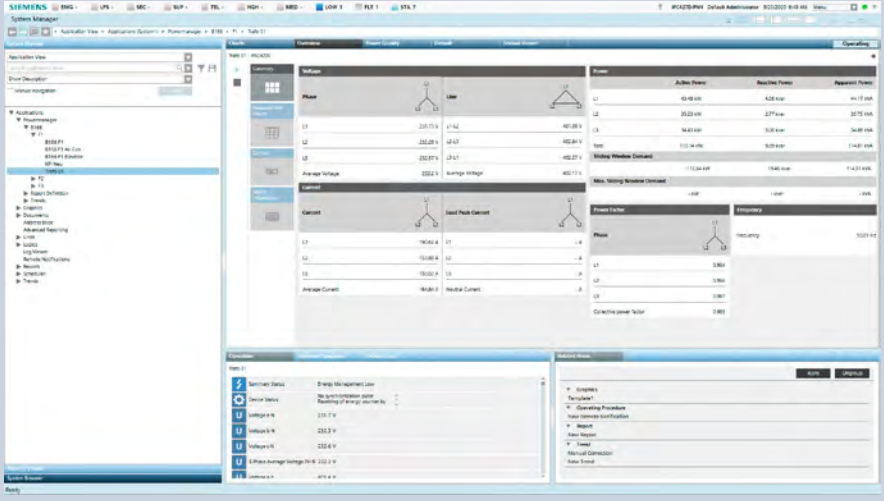
The "Trial" license gives customers the opportunity to gain initial experience with SENTRON Powermanager during a 60-day test phase. The application can still be used by purchasing a regular license.

You will find further information on the internet at **www.siemens.com/powermanager**

You will find training courses on the internet at **www.siemens.com/sitrain-lowvoltage**




SENTRON Powermanager – Measuring device diagram

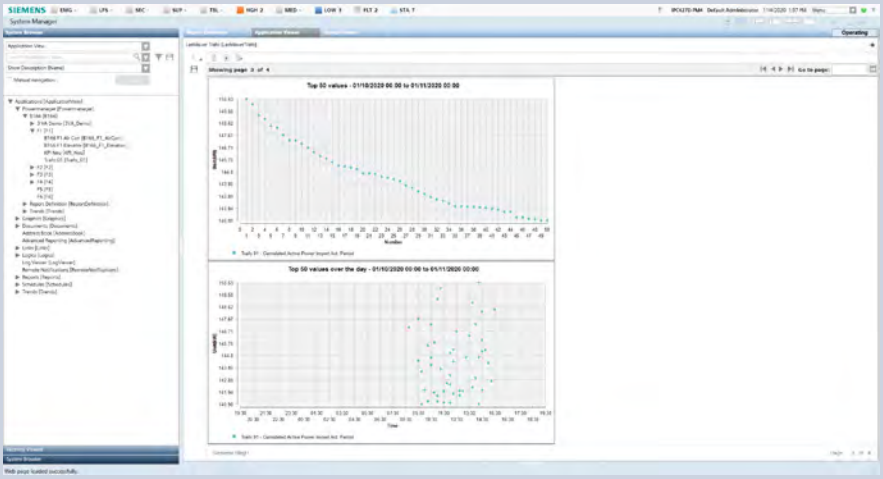


SENTRON Powermanager – Overview of measuring devices

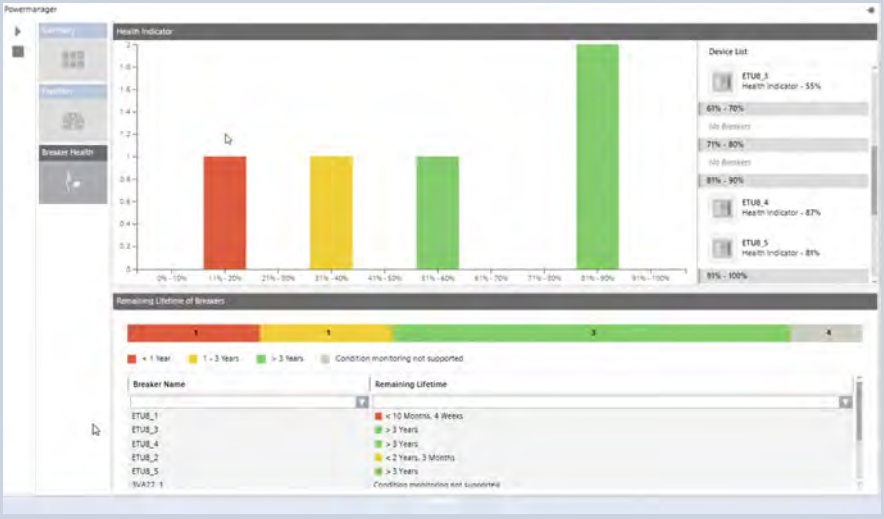


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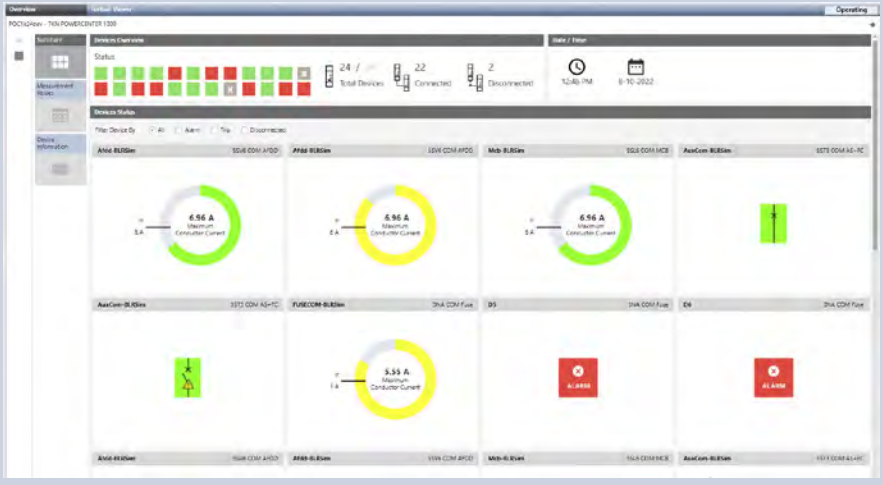
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SENTRON Powermanager – Load duration report




Health Dashboard



SENTRON Powercenter 1000 Dashboard



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# SENTRON Powermanager

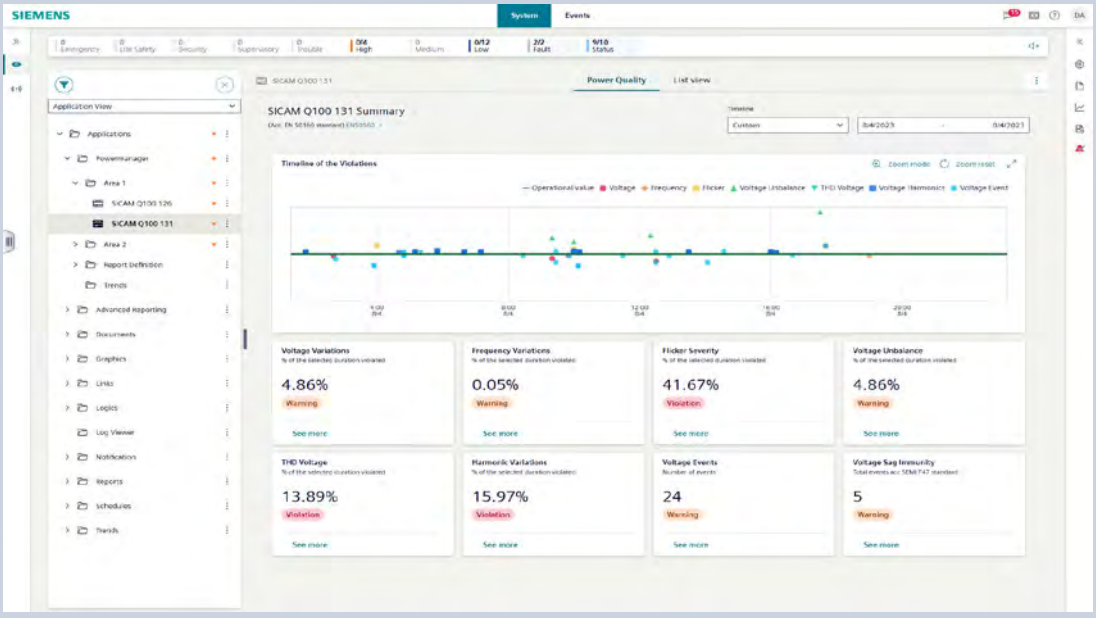
## PC-based power monitoring software



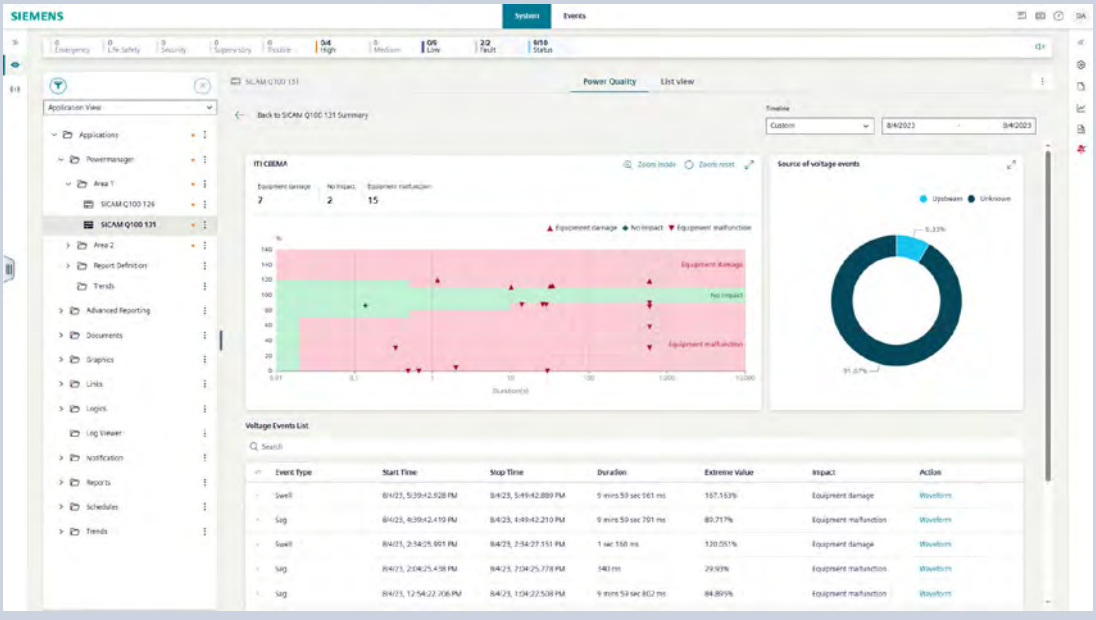
### SENTRON Powermanager PQ Advisor new

The Power Quality Advisor in the SENTRON Powermanager enables the automatic evaluation and archiving of power quality information from the SICAM Q100 and Q200 devices in the SENTRON Powermanager. Dashboards and reports in accordance with EN 50160 as well as higher-level area and system dashboards make it easier to localize power quality events.

The integrated and dedicated assessment of the waveform enables a detailed evaluation of the cause of the power quality event.




PQ overview – all events at a glance according to EN 50160




Interpretation of the voltage events and their effects using the ITIC diagram



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Voltage events – detailed voltage curve for detailed evaluation



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# SENTRON Powermanager

## PC-based power monitoring software



| Version | Description | Article No. |
|---|---|---|
| **SENTRON Powermanager** | | |
| Extended Package | Full product license for up to 10 devices, installation for client/server, web access via Windows App Client | 7KN2710-2CE40-0YC0 |
| Trial license | Full product license limited to 60 days for up to 10 devices, incl. all functions; software download via SIOS Portal www.siemens.com/lowvoltage/product-support (109771760) A free license for one-time use (trial license limited to 60 days) must also be requested via www.siemens.com/sentron-powermanager-trialversion | |
| **Device expansions** | | |
| Device Pack (20) | Device expansion license for up to 20 devices | 7KN2711-1CE40-0YC0 |
| Device Pack (50) | Device expansion license for up to 50 devices | 7KN2711-2CE40-0YC0 |
| Device Pack (100) | Device expansion license for up to 100 devices | 7KN2711-3CE40-0YC0 |
| Device Pack (200) | Device expansion license for up to 200 devices | 7KN2711-4CE40-0YC0 |
| Device Pack (500) | Device expansion license for up to 500 devices | 7KN2711-5CE40-0YC0 |
| Device Pack (1000) | Device expansion license for up to 1000 devices | 7KN2711-6CE40-0YC0 |
| **Option packs** | | |
| "Graphics Editor 60 Days" option pack | Option for creating any number of freely configured graphics, validity period limited to 60 days | 7KN2712-0CE40-0YC0 |
| "Graphics Editor Unlimited" option pack | Option for creating custom-made SENTRON Powermanager applications, e.g. graphics; especially suitable for partners such as Solution Providers, control cabinet builders, etc. | 7KN2712-0CE40-0YC1 |
| "Client (2)" option pack | Expansion for up to 2 clients | 7KN2712-1CE40-0YC0 |
| "Client (5)" option pack | Expansion for up to 5 clients | 7KN2712-2CE40-0YC0 |
| "SENTRON Powermanager OPC UA/DA Client (100)" option pack | 100 data points for OPC client configuration | 7KN2712-3CE40-0YC0 |
| "SENTRON Powermanager OPC UA Server" option pack | OPC server configuration | 7KN2712-3CE40-0YC2 |
| "SENTRON Powermanager Server" option pack | Additionally, SENTRON Powermanager server license for distributed systems without devices, web, etc. | 7KN2712-4CE40-0YC0 |
| "SENTRON logics" option pack | Extended logic function | 7KN2712-6CE40-0YC0 |
| SENTRON Powermanager SUR-Unit | Update – Extend subscription period by 12 months | 7KN2713-7CE40-0YC0 |
| SENTRON Powermanager SUS-Unit | Update – Start new 12-month subscription period | 7KN2713-8CE40-0YC0 |
| "SENTRON Powermanager BACnet protocoll" option pack | Creating, evaluating and managing individual devices with BACnet communication in Powermanager | 7KN2712-3CE40-1YC0 |
| "SENTRON Powermanager IEC 61850 protocol" option pack | Creating, evaluating and managing devices with IEC 61850 communication in SENTRON Powermanager | 7KN2712-3CE40-1YC1 |
| "SENTRON Powermanager PQ Advisor" option pack | Power Quality Advisor extension requires IEC 61850 protocol. Evaluation and archiving of power quality information from SICAM Q100/Q200 in EN 50160 dashboards and reports. | 7KN2712-5CE40-0YC0 |
| **System packages** | | |
| System 1 | Package comprising<br>1 × SENTRON Powermanager Extended<br>1 × PAC4200<br>1 × PAC3120<br>1 × RS485 modules | 7KN2715-1CE40-0YC0 |
| System 3 | Package comprising<br>1 × SENTRON Powermanager Extended<br>3 × PAC3220 | 7KN2715-3CE40-0YC0 |
| System 4 | Package comprising<br>1 × SENTRON Powermanager Extended<br>1 × PAC4200<br>4 × PAC1600<br>1 × RS485 module | 7KN2715-4CE40-0YC0 |
| System 5 | Package comprising<br>1 × SENTRON Powermanager Extended<br>5 × PAC2200 transformer measurement Modbus TCP | 7KN2715-5CE40-0YC0 |



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Quick selection guide, page 10/4

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# SENTRON Powercenter

## Edge/IoT-based data acquisition and visualization for low-voltage power distribution

### SENTRON Powercenter 3000

Areas of use and applications
- Basis for certified energy management according to ISO 50001 to improve energy efficiency and optimize maintenance management
- Transparency and fault localization in single and distributed locations
- Future-proof foundation for expanding data analysis from on-site analysis to cloud-based analysis

Features
- Simple and fast commissioning via
  - Reuse of the configuration data from SENTRON Powerconfig or
  - An integrated network scan with automatic device recognition and dashboard selection in accordance with the device type
- Data acquisition, storage and provision
  - All key data of lower-level devices and energy/demand values, breaker status, signals etc.
  - The 15min energy values as a basis for energy reporting as part of ISO 50001 certification
  - Export in form of CSV file (once, periodically, send e.g. by email
- Visualization/data analysis
  - Analysis of the data in graphical form, e.g. lines, bars, diagrams, and also in tabular form
  - In the web interface of the SENTRON Powercenter 3000 via the predefined device dashboards and the customer-specific dashboards
  - Can also be output as a report
- Interfaces for the digitalization of low-voltage
  - Integrated and easy-to-configure communication with SENTRON Powermind (see separate section)
  - To other cloud applications, e.g. based on AWS, Azure, AliCloud, etc.
  - Via Modbus TCP for other applications, e.g. SENTRON Powermanager
- General:
  - Energy and status data from infeed to the final circuit of up to 32 SENTRON protection, switching, measuring and monitoring devices (expandable to up to 212 devices with license-based extensions – subject to fee)
  - Non-Siemens devices are created via SENTRON Power Device Engineer and treated like any other device
  - Compact design, Web interface in 10 languages
  - Flexible IT security features for protection against unauthorized access

More information:
**www.siemens.com/sentron-powercenter3000**

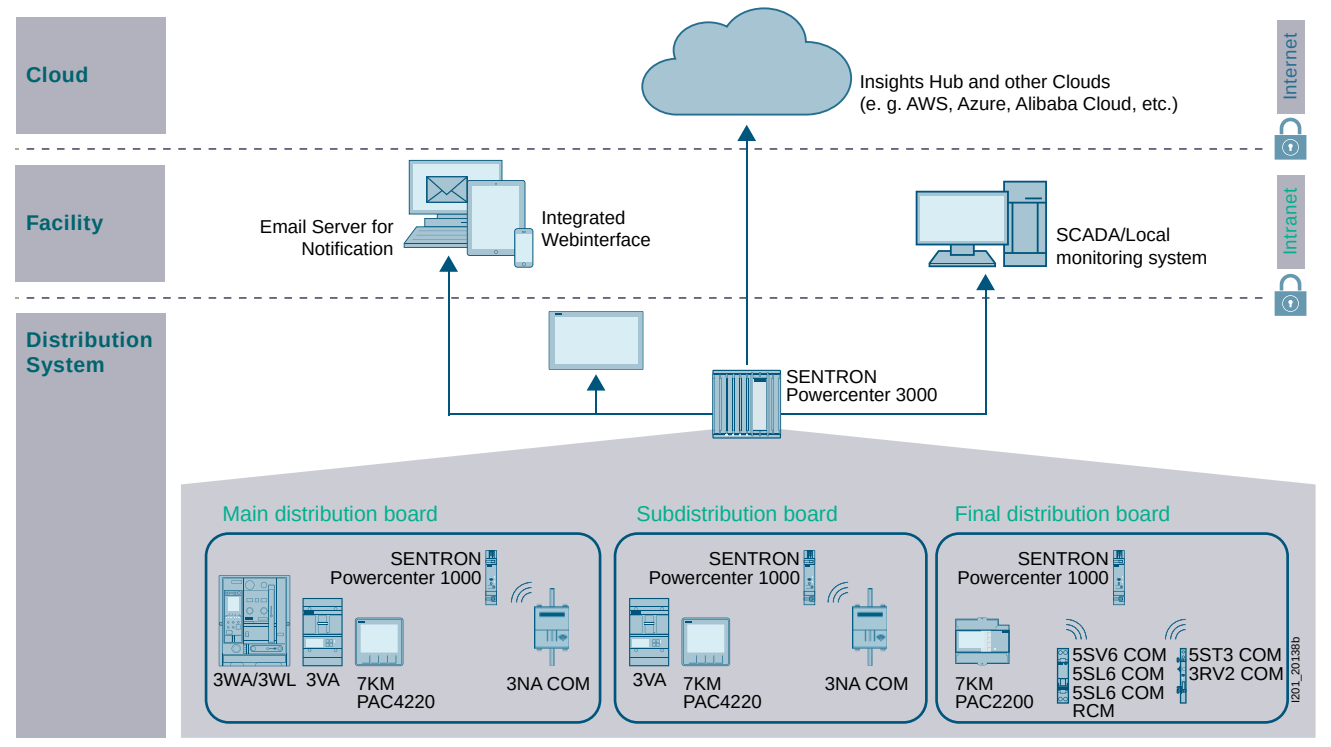


| Version | Description | Article No. |
|---|---|---|
| SENTRON Powercenter 3000 | Basic – The SENTRON Powercenter 3000 product, incl. handling of up to 32 devices | 7KN1310-0MC00-0AA8 |
| SENTRON Powercenter 3000 device expansion (10) | License for an additional 10 devices [1)] | 7KN1300-1AA00-0YA0 |
| SENTRON Powercenter 3000 device expansion (20) | License for an additional 20 devices [1)] | 7KN1300-2AA00-0YA0 |
| SENTRON Powercenter 3000 device expansion (50) | License for an additional 50 devices [1)] | 7KN1300-3AA00-0YA0 |
| SENTRON Powercenter 3000 device expansion (100) | License for an additional 100 devices [1)] | 7KN1300-4AA00-0YA0 |

[1)] Please note that each "device expansion" license can only be executed once on a SENTRON Powercenter 3000. You can add each "device expansion" license type once to your SENTRON Powercenter 3000, which increases the number of devices to a total number of 212 (32 Basic plus 180 via additional licenses).


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Areas of use and applications for SENTRON Powercenter 3000

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# SENTRON Powercenter

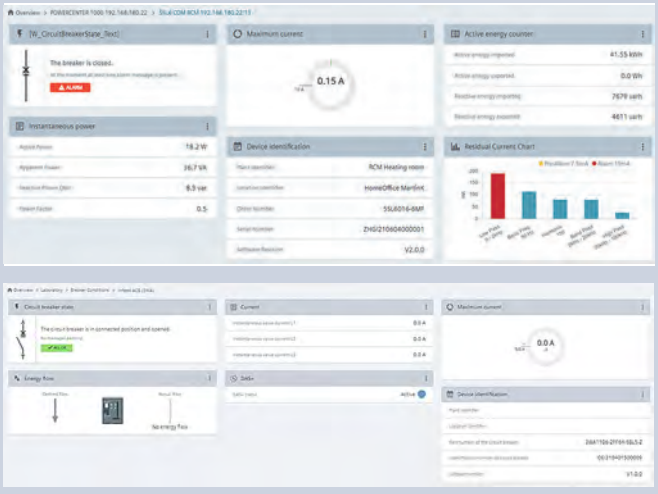
## Edge/IoT-based data acquisition and visualization for low-voltage power distribution

The following examples give an impression of the diverse functions of the SENTRON Powercenter 3000. These are aimed at different customer groups, such as energy managers and maintenance personnel, but also electricians. All information is available via a web browser on a standard PC, but also on mobile devices, such as tablets and smartphones. The information is therefore also available remotely within the company network.

**Predefined dashboards**
These are automatically selected according to the configuration of the SENTRON Powercenter 3000 and show the most important data of SENTRON protection, switching and measuring devices.



**Data visualization based on the example of a measuring device**
- Key data points such as active energy or active power are displayed in the form of a curve (time range can be altered by scrolling).
- Further instantaneous values or device information are available in tabular form.





**Information on the status of protection and switching devices**
- Representation of the device status, e.g. open, closed, tripped and relevant measured quantities, such as maximum phase current, total power ...
- Condition monitoring information is used to assess the state of health and predict the remaining service life

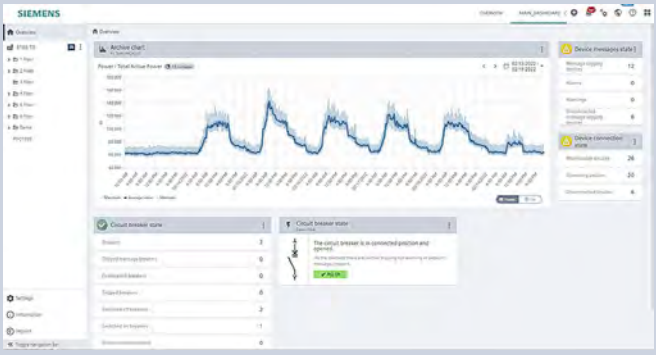




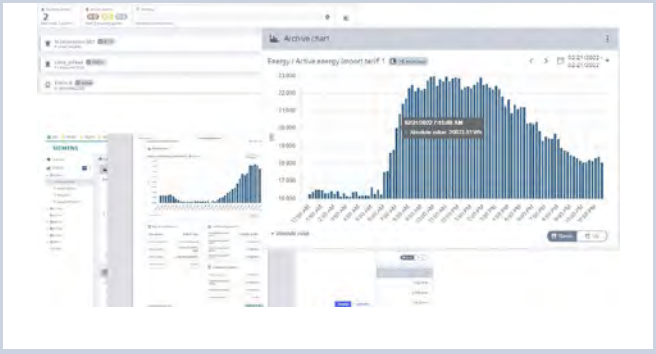
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**Creation of customer-specific dashboards**
Users can create their own dashboards (in addition to the standard "Overview" dashboard) by using widgets from the library to compile their own views of the most important information.



Example of a customer-specific dashboard



Several examples of the UI elements

**Easy-to-operate user interface**
Further UI elements provide additional operating convenience and more in-depth views of the collected data.
- The alarm widget serves as a convenient tool to obtain an overview of the active limit monitoring and any alarms that may be triggered.
  - In the archive graph widget, the 15min energy values (kWh) are displayed as a bar chart
  - The detailed display on "mouse over" shows the individual values in the bar chart with the corresponding date/time stamp
- Dashboards and their contents, e.g. results of data analysis can be printed using the web browser print function



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# SENTRON Powercenter

## Wireless data acquisition and visualization in the final circuit

### SENTRON Powercenter 1100

The SENTRON Powercenter 1100 data transceiver is designed to enable comprehensive data acquisition of communication and measuring-capable SENTRON COM circuit protection devices. This increases transparency in the final circuit, through which optimization measures can be derived to increase system availability.

Up to 24 (or 64) devices can communicate wirelessly with SENTRON Powercenter 1100 via radio link. This means that no increased installation effort is required for communication. Selected measured values of the circuit protection devices are stored in the data transceiver for up to 30 days. These can be visualized to ensure extensive data availability.

The compact design of the SENTRON Powercenter 1100, in a single modular width, results in an extremely small footprint in the distribution board so as to enable wireless, comprehensive data acquisition.

This is complemented by easy mounting on a 35 mm DIN rail and plug-in terminals for a 24 V DC power supply, which can be immediately looped through (daisy chain) to supply other devices. The device also features two Ethernet ports that provide a switch function.

The integrated Bluetooth interface enables simple on-site communication and commissioning via the SENTRON Powerconfig mobile app. With the REST API via https, which is integrated by default, and the access authorization of various roles via login and password, the power center is well protected in terms of cybersecurity. Moreover, communication via the Modbus TCP interface can still be activated so that a further option for connection to various configuration or energy monitoring systems, even customer-specific systems, can be ensured.

| Version | Power supply | Other interfaces | Subordinate devices (radio) | Article No. |
|---|---|---|---|---|
| SENTRON Powercenter 1000 | 24 V DC SELV | 1 × Ethernet (Modbus TCP)<br>Bluetooth | 24 (up to firmware V4.0) | 7KN1110-0MC00 |
| SENTRON Powercenter 1100 new | 24 V DC SELV | 2 × Ethernet (Modbus TCP/https)<br>Bluetooth | 24 | 7KN1111-0MC00 |
| | | | 64 | 7KN1111-0MC01 |

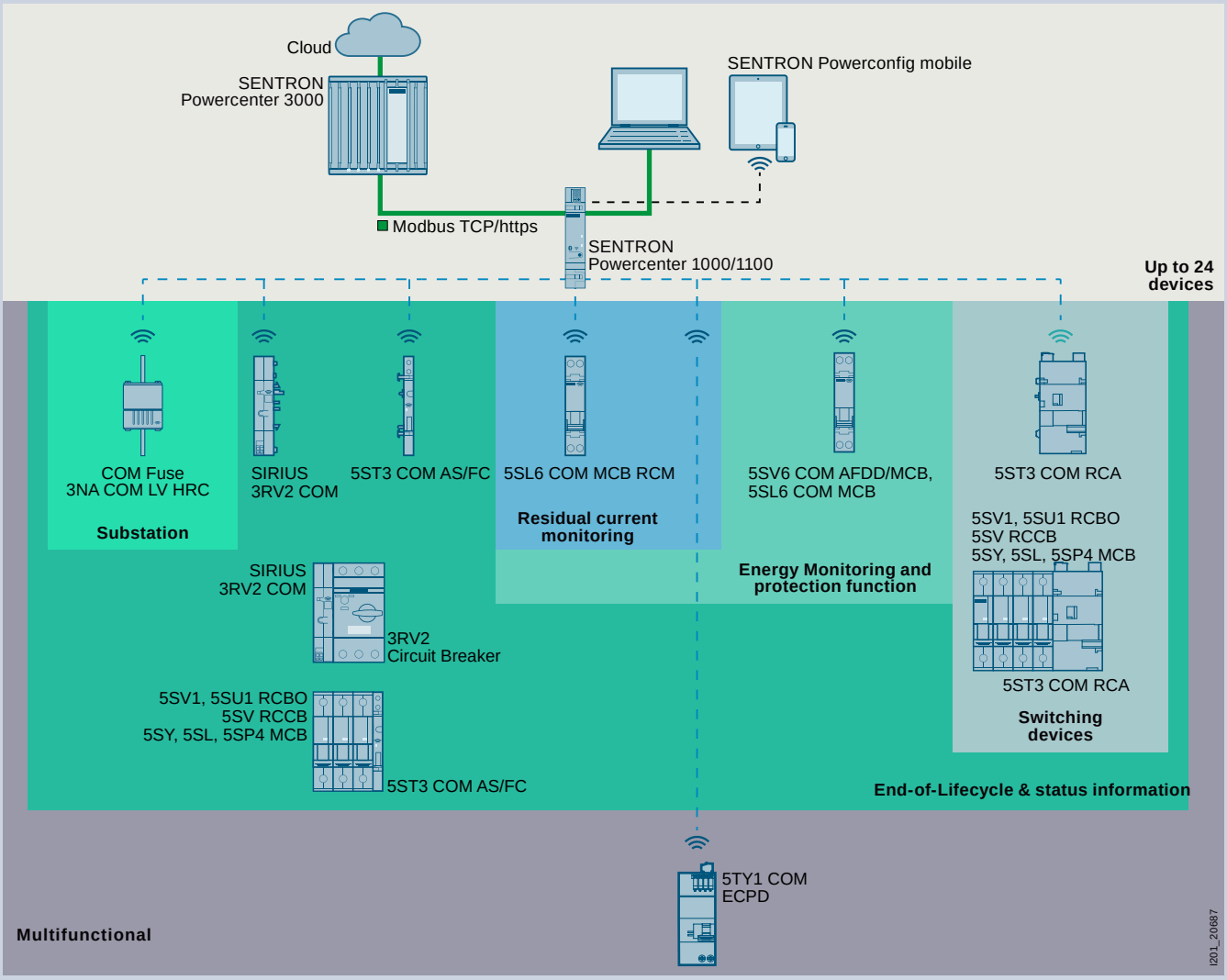
**Note:**
Please note the country-specific radio licenses of the products at
www.siemens.com/lowvoltage/certificates (109801197)

| Bundles | Scope of supply | Article No. |
|---|---|---|
| Bundle 1 | | |
|  | 2 × MCB 5SL6 COM B16<br>1 × RCBO 5SV1 B16<br>1 × AS/FC 5ST3 COM<br>1 × SENTRON Powercenter 1000 | 7KN1110-0XC01 |
| Bundle 2 | | |
|  | 2 × MCB 5SL6 COM C16<br>1 × RCBO 5SV1 B16<br>1 × AS/FC 5ST3 COM<br>1 × SENTRON Powercenter 1000 | 7KN1110-0XC02 |
| Bundle 3 | | |
|  | 3 × 3NA COM LV HRC fuse links 250 A gG<br>1 × SENTRON Powercenter 1000<br>1 × 3NP1 fuse switch disconnectors | 7KN1110-0XC03 |
| Bundle 4 | | |
|  | 9 × 3NA COM LV HRC fuse links 250 A gG<br>1 × SENTRON Powercenter 1000<br>1 × SENTRON Powercenter 3000 | 7KN1110-0XC04 |
| Bundle 5 | | |
|  | 9 × 3NA COM LV HRC fuse links 250 A gG<br>1 × SENTRON Powercenter 1000 | 7KN1110-0XC05 |
| Bundle 6 | | |
|  | 1 × MCB 5SL6 COM B10<br>1 × MCB 5SL6 COM B13<br>1 × RCBO 5SV1 B13, short-time delayed G<br>1 × AS/FC 5ST3 COM<br>1 × SENTRON Powercenter 1000 | 7KN1110-0XC06 |

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Application areas and system topology with SENTRON Powercenter 1000/1100

## SENTRON Powercenter 1000/1100 data transceiver

- Acquisition and storage of data and measured values from up to 24 communication-capable circuit protection devices via radio link
- Parameterization, visualization and further processing of the data in higher-level applications via Bluetooth and Modbus TCP

You will find further information under:
**www.siemens.com/lowvoltage/manuals**

Installation Manual – Circuit protection devices with communication and measuring function **(109791805)**

System Manual – Circuit protection devices with communication and measuring function **(109791806)**



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# SENTRON Powermind

## Cloud-based solution for data visualization and analysis in power distribution systems



SENTRON Powermind is aimed equally at energy managers, facility managers and/or operators. For energy managers, predefined, automated representations and analyses of energy data are available, such as:

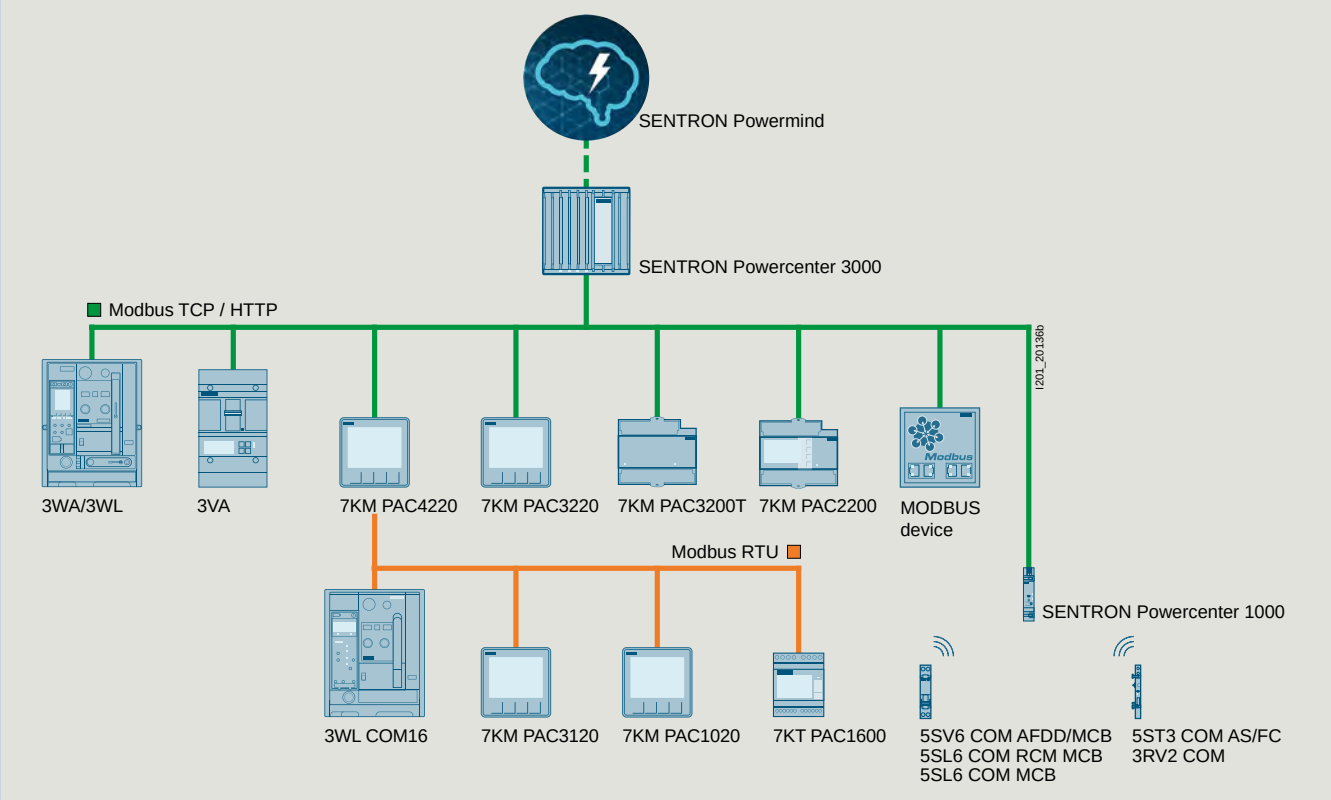
- Analysis of data in graphical form, e.g. lines, bars, heatmap, Sankey diagram, pie diagram and diagram of top 10 loads (can also be output in the form of a report)
- Comparison of energy consumption on weekdays versus weekends with percentage day-by-day representation of the distribution of energy consumption to identify unnecessary energy consumption
- Comparison of energy consumption and power import during a selected period as compared with a reference period to assess the effectiveness of energy efficiency measures
- Day-by-day representation of the 15 min power demand, incl. min and max values to assess power peaks

SENTRON Powermind offers operators and facility managers the following information and analyses:

- Status of the switching and protection devices, such as 3VA, 3WA and 3WL
- Display of the maximum current value of an individual phase in relation to $I_n$
- Condition monitoring information about the condition of the contact system of each circuit breaker and also as an overview of all circuit breakers
- The following devices are supported:
  PAC1020, PAC2200/PAC2200CLP, PAC3100/PAC3120, PAC3200/PAC3200T/PAC3220, PAC4200 measuring devices,
  3VA, 3WA and 3WL circuit breakers

You will find further information on the Insights Hub Store at
**www.dex.siemens.com/industrial-iot/step-4-book-apps-and-extras/sentron-powermind**





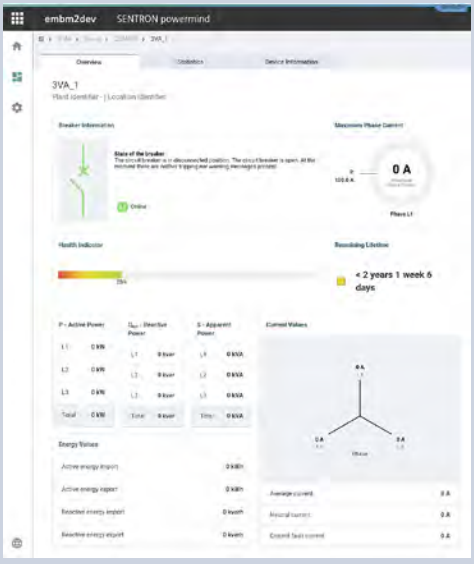

A large number of devices transmit data via SENTRON Powercenter 3000 or SENTRON Powermanager to SENTRON Powermind

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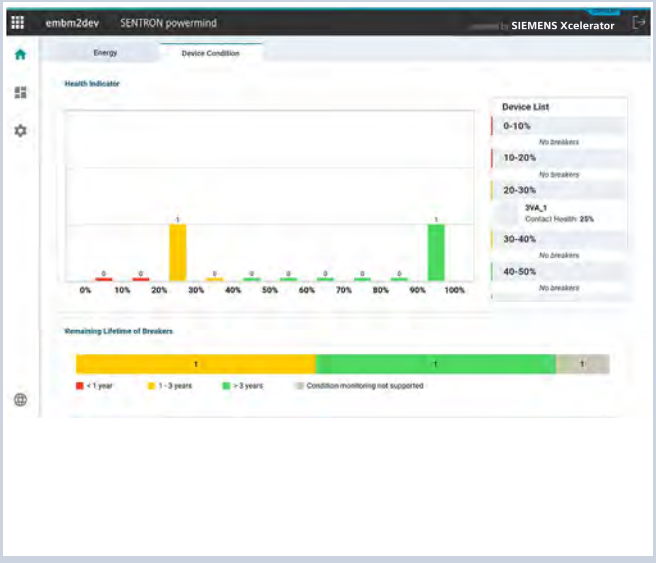
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SENTRON Powermind processes data from SENTRON Powercenter 3000. No complex configuration or parameterization is required, as the necessary information is exchanged using files. This also prevents possible incorrect entries or write errors. An error-free connection can thus be easily established in just a few minutes.

The examples show some of the functions of SENTRON Powermind, which are aimed at different customer groups, such as energy managers and maintenance personnel, but also electricians. All information is available via a web browser on a standard PC, but also on mobile devices, such as tablets and smartphones. The information is therefore available both on-site (locally) and off-site (remotely).




**Creating transparency**
- Representation of the device status, e.g. open, closed, tripped and relevant measured quantities, such as maximum phase current, total power ...
- Information about the state of health of the device to take action proactively




**Overview of the circuit breaker status**
- Overview of the state of the health of all circuit breakers in the switchboard
- Assignment to a maintenance cycle (< 1 year; between 1 and 3 years; > 3 years)
- Display of circuit breakers in list form as well as link to the respective circuit breaker dashboard





**Energy management**
- Comparison of the energy consumption of two periods, for example, to assess the effectiveness of energy saving measures
- Representation of the active power as mean and min/max values in a line diagram or heatmap

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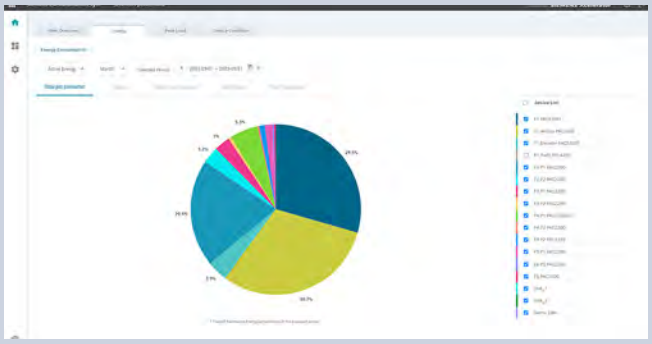
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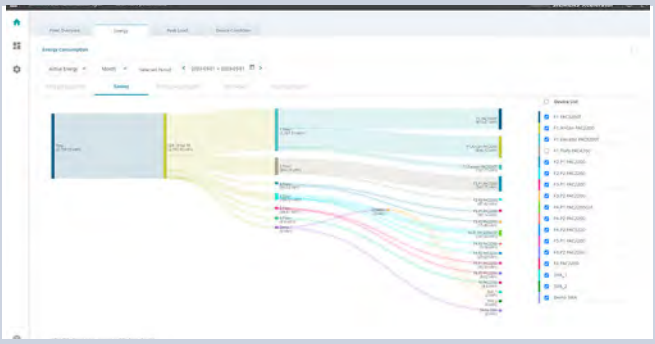
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# SENTRON Powermind

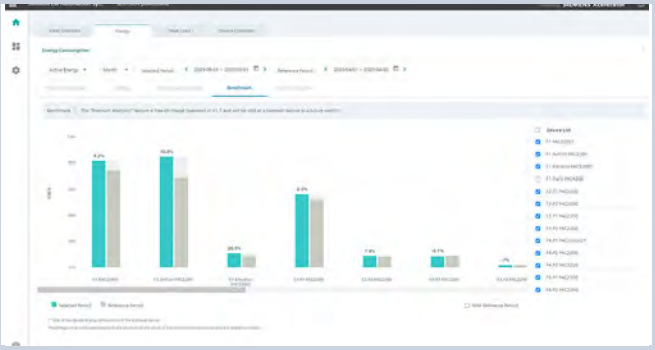
## Cloud-based solution for data visualization and analysis in power distribution systems

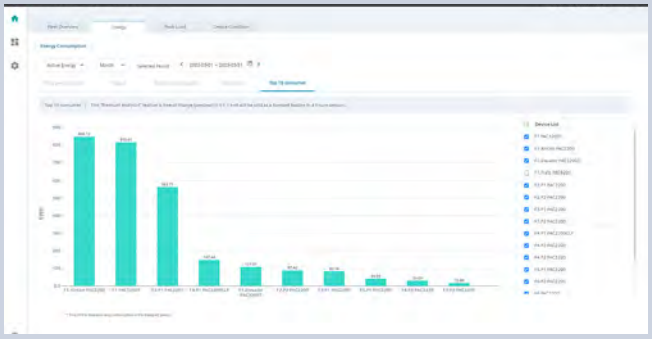












Creating transparency and analyzing energy data

- Representation of the power flow/power import in various parts of the power distribution system
- Analysis of energy consumption in a freely selectable period (Total, Details, Sankey, Top 10) or in comparison to another period (benchmark), including percentage and absolute deviation; applicable to the overall system, system components and individual loads



# SIMATIC Modbus/TCP SENTRON PAC

## For 7KM PAC3200/4200 measuring devices

| Use and version | Valid for | Type | Article No. |
|---|---|---|---|
| Communication via the integrated PN interface for reading values out of PAC3200 and PAC4200 devices, single license | 1 CPU and up to 20 SENTRON PACs | Modbus/TCP 20 SENTRON PAC | 6AV6676-6MA30-0AX0 |
| | 1 CPU and up to 100 SENTRON PACs | Modbus/TCP 100 SENTRON PAC | 6AV6676-6MA30-1AX0 |
| | 1 CPU and up to 512 SENTRON PACs | Modbus/TCP 512 SENTRON PAC | 6AV6676-6MA30-2AX0 |



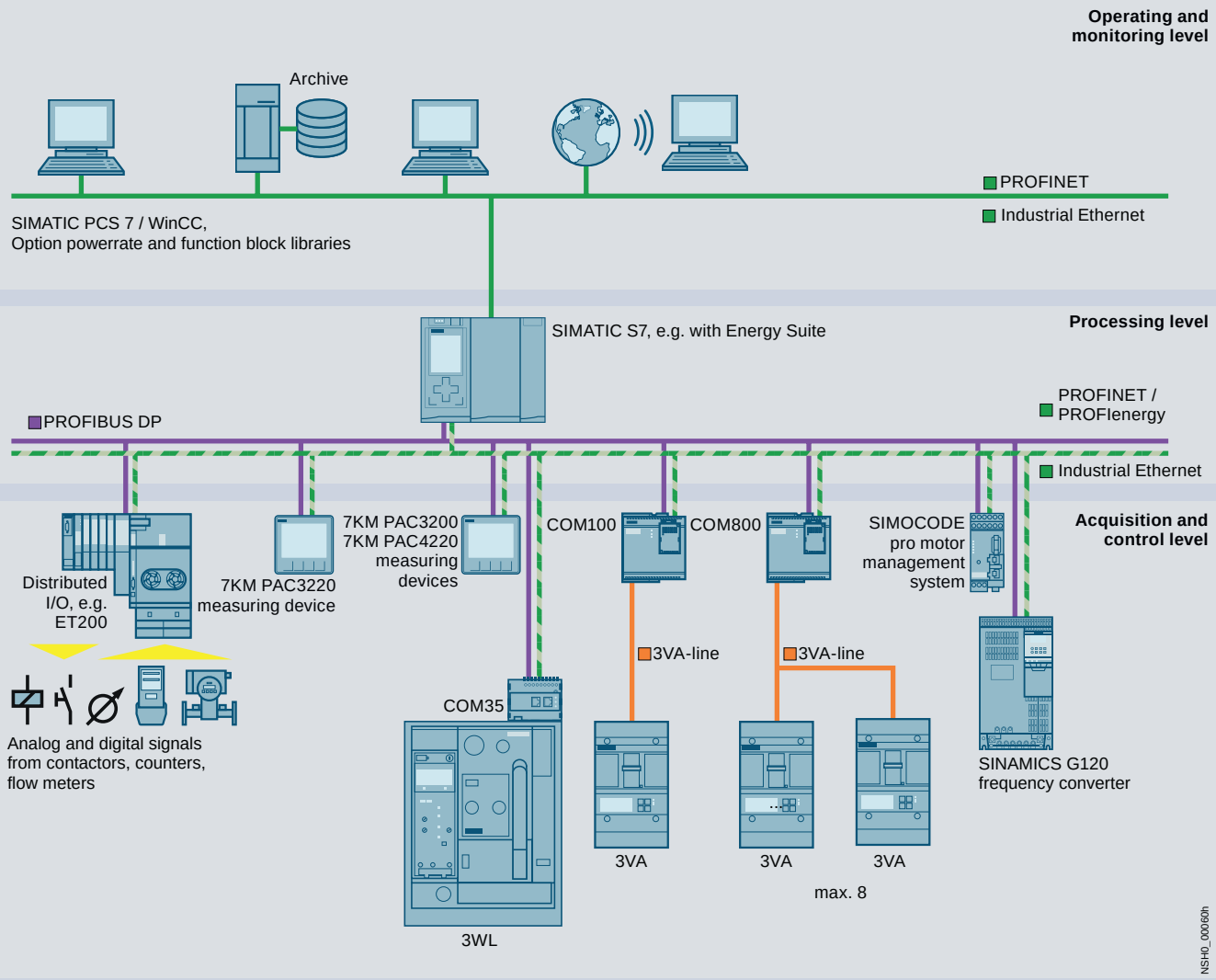
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# PAC/3WL/3VA SIMATIC PCS 7 library

## For 7KM PAC3200/3220/4200 measuring devices and 3WL/3VA/3VL circuit breakers

| Use | Version | Type of delivery | Article No. |
|---|---|---|---|
| **PAC/3WL/3VA SIMATIC PCS 7 library** | | | |
| • AS blocks and faceplates for integrating the 3WL/3VA/3VL circuit breakers into SIMATIC PCS 7, V8.x, V9.0 SP2 or V9.1<br>• For each SIMATIC PCS 7 Operator Station of the single station/server version, a license containing the following is required:<br>– Engineering license for one SIMATIC PCS 7 Operator Station of the single station/server version<br>– Runtime license for one automation system (1 required per automation system, further AS runtime licenses can be ordered separately) | Engineering and runtime software, software class A, 2-language (English, German), single license for one installation | Software and electronic documentation as a software download, engineering and runtime license as Certificate of License | 7KN2780-0CE24-0YA0 |
| **AS runtime license for PAC/3WL/3VA library for SIMATIC PCS 7** | | | |
| License for one automation system in each case | Runtime software, software class A, 2-language (English, German), single license for one installation | Runtime license as Certificate of License without software and documentation | 7KN2780-0CE00-0YC0 |




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# 7KM PAC measuring devices

## Basic units




| Connections | Power supply | Display | Interface | MID | PTB | 7KM PAC1020 | 7KM PAC2200/ PAC2200CLP | 7KM PAC3200T | 7KM PAC3120 |
|---|---|---|---|---|---|---|---|---|---|
| **Transformer measurement** | | | | | | | | | |
| Screw terminals | Self-powered | With | M-Bus | With | Without | – | 7KM2200-2EA30-1GA1 | – | – |
| | | | | Without | Without | – | 7KM2200-2EA30-1CA1 | – | – |
| | | | Modbus RTU | With | Without | – | 7KM2200-2EA30-1HA1 | – | – |
| | | | | Without | Without | – | 7KM2200-2EA30-1DA1 | – | – |
| | | | | With | With | – | – | – | 7KM3120-2BA01-1HA0 [1] new |
| | | | Modbus TCP | With | With | – | 7KM2200-2EA00-1JB1 | – | – |
| | | | | | Without | – | 7KM2200-2EA30-1JA1 | – | – |
| | | | | Without | Without | – | 7KM2200-2EA30-1EA1 | – | – |
| | AC/DC wide-range power supply unit | With | Modbus RTU | Without | Without | 7KM1020-0BA01-1DA0 | – | – | 7KM3120-0BA01-1DA0 |
| | | | Modbus TCP | Without | Without | – | – | – | – |
| | | | Modbus TCP/RTU | Without | Without | – | – | – | – |
| | | Without | Modbus TCP | Without | Without | – | – | 7KM3200-0CA01-1AA0 | – |
| | DC power supply unit with extra-low voltage | With | Modbus TCP | Without | Without | – | – | – | – |
| | | | Modbus RTU | Without | Without | – | – | – | 7KM3120-1BA01-1EA0 |
| Ring cable lug connection | AC/DC wide-range power supply unit | With | Modbus TCP | Without | Without | – | – | – | – |
| **Direct measurement** | | | | | | | | | |
| Screw terminals | Self-powered | With | M-Bus | With | Without | – | 7KM2200-2EA40-1GA1 | – | – |
| | | | | Without | Without | – | 7KM2200-2EA40-1CA1 | – | – |
| | | | Modbus RTU | With | Without | – | 7KM2200-2EA40-1HA1 | – | – |
| | | | | Without | Without | – | 7KM2200-2EA40-1DA1 | – | – |
| | | | Modbus TCP | With | With | – | 7KM2200-2EA40-1JB1 | – | – |
| | | | | | Without | – | 7KM2200-2EA40-1JA1 | – | – |
| | | | | Without | Without | – | 7KM2200-2EA40-1EA1 | – | – |

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## Further technical specifications

| | | 7KM1020-.. | 7KM2200-.. | 7KM3200-.. | 7KM3120-0.. | 7KM3120-1.. | 7KM3120-2.. |
|---|---|---|---|---|---|---|---|
| **Basic data** | | | | | | | |
| Installation | | Front mounting | DIN rail | | Front mounting | | |
| Mounting width | | – | 6 MV | | – | | |
| Control panel instrument | | 96 × 96 mm | – | | 96 × 96 mm | | |
| External auxiliary voltage | 50/60 Hz AC | 100 ... 250 V | – | 90 ... 276 V | 100 ... 250 V ±10% | – | 100 ... 250 V ±10% |
| | DC | 110 ... 250 V ±10% | – | 110 ... 275 V | 110 ... 250 V ±10% | 24 ... 60 V ±20% | – |
| **Measuring inputs** | | | | | | | |
| Transformer connection | Secondary input current $I_e$ | x/1 A or x/5 A | | | | | |
| Direct connection | Input voltage $U_e$ 3 50/60 Hz AC | 400/230 V | | | 690/400 V | | 400/230 V |
| | Rated current $I_n$ | – | 65 A | – | | | |

[1] Additional AC/DC wide-range power supply as an auxiliary power supply

[2] From 01/2025 universal power supply unit

[3] Without binary modules

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| 7KM PAC3220 | 7KM PAC4200 | 7KM PAC4220 | 7KM PAC5200 | SICAM Q100 new | SICAM Q200 new |
|---|---|---|---|---|---|
| | | | | | |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| 7KM3220-2BA01-1JA0 [1] new | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| 7KM3220-0BA01-1DA0 | 7KM4212-0BA00-3AA0 | 7KM4220-0BA01-1EA0 | 7KM5412-6BA00-1EA2 | 7KG9501-0AA01-2AA1 | – |
| – | – | – | – | 7KG9501-0AA31-2AA1 | 7KG9711-0AA10-0BB0 [2] [3]<br>7KG9711-0JJ10-0BB0 [2] |
| – | – | – | 7KM5412-6CA00-1EA8 | – | – |
| 7KM3220-1BA01-1EA0 | 7KM4211-1BA00-3AA0 | 7KM4220-1BA01-1EA0 | – | – | – |
| – | – | – | – | – | – |
| – | 7KM4212-0BA00-2AA0 | – | – | – | – |
| | | | | | |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |

| 7KM3220-0.. | 7KM3220-1.. | 7KM3220-2.. | 7KM4212-.. | 7KM4211-.. | 7KM4220-0.. | 7KM4220-1.. | 7KM5412-.. | Q100 | Q200 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| Front mounting | | | | | | | Front mounting/DIN rail | Front mounting/DIN rail (optional) | Front mounting |
| – | | | | | | | | 96 mm | 192 mm |
| 96 × 96 mm | | | | | | | | | 96 × 192 mm |
| 100 … 250 V ±10% | – | 100 … 250 V ±10% | 95 … 240 V ±10% | – | 95 … 250 V ±10% | – | 110 … 230 V ±10% | 24 … 240 V | 100 … 240 V |
| 100 … 250 V ±10% | 24 … 60 V ±20% | – | 110 … 340 V ±10% | 22 … 65 V ±10% | 110… 270 V ±10% | 24 … 48 V ±25% | 24 … 250 V ±10% | 24 … 240 V | 100 … 240 V |
| | | | | | | | | | |
| x/1 A or x/5 A | | | | | | | | | |
| 690/400 V | | 400/230 V | 690/400 V | 500/289 V | 690/400 V | | | | |
| – | | | | | | | | | |

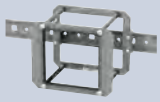
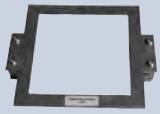
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# 7KM PAC measuring devices

## Accessories

| | | 7KM PAC1020<br>7KM PAC3100<br>7KM PAC3120<br>7KM PAC3200<br>7KM PAC3220<br>7KM PAC4200<br>7KM PAC4220 |
|---|---|---|
| **7KM PAC TMP2 DIN-rail adapter** | | |
|  | • Two-tier adapter for mounting a measuring device on a DIN rail<br>• Front display<br>• For manual intervention | 7KM9900-0XA00-0AA0 |
| **7KM PAC TMP mounting plate** | | |
|  | • Adapter for mounting a measuring device on DIN rail<br>• Display faces backwards towards DIN rail<br>• Readout and evaluation of measurements solely via mains operation | 7KM9900-0YA00-0AA0 |
| **Compact holder** | | |
|  | • Device holder for 7KM PAC1020/3100/3120/3200/3220/4200/4220<br>• 10 holders for 5 PAC devices<br>• For seamless side-by-side mounting of the devices (without spaces) | 7KM9900-0GA00-0AA0 |

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| | | 7KM PAC3100<br>7KM PAC3200<br>7KM PAC4200 | 7KM PAC3120<br>7KM PAC3220<br>7KM PAC4220 |
|---|---|---|---|
| **Spare parts for 7KM PAC** | | | |
|  | • Spare parts comprising:<br>– Device holders for panel mounting (2X)<br>**Note:** can also be used for 7KM PAC3120/3220<br>– Screw terminal for connection of voltage inputs<br>– Screw terminal for connection of current inputs<br>– Terminal block inputs/outputs for 7KM PAC3100/4200<br>– Terminal block inputs/outputs for 7KM PAC3200<br>– RS485 terminal blocks for 7KM PAC3100 | 7KM9900-0SA00-0AA0 | – |
| | • Spare part package comprising:<br>– Device holders for panel mounting | – | 7KM9900-0SA00-0AA0 |

| | | 7KM PAC2200<br>7KM PAC2200CLP<br>7KM PAC2200 MID<br>7KM PAC3200T |
|---|---|---|
| **SENTRON PROFINET Proxy SPP2000** | | |
|  | • Proxy for transition from Modbus TCP-capable measuring devices to PROFINET IO. Connection of up to 8 devices from the PAC2200, PAC2200CLP, PAC2200 MID and PAC3200T product ranges<br>• PROFINET Conformance Class C<br>• Two switched ports<br>• Integration in TIA by means of GSDML file | 7KM9300-0PP20-0AA0 |

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# Expansion and communication modules

| | 7KM PAC3220<br>7KM PAC4200<br>7KM PAC4220 | COM100/800 (3VA) |
|---|---|---|
| **7KM Switched Ethernet PROFINET communication module** | | |
|  <br>• Latest PROFINET switching properties<br>• S2 system redundancy for operation in H systems<br>• CiR Configuration in Run<br>• Firmware update via the modules for PAC4200 and PAC3220 | | |
| | 7KM9300-0AE02-0AA0 | |
| **7KM PROFIBUS DP communication module** | | |
|  | 7KM9300-0AB01-0AA0 | |
| **7KM RS485 communication module** | | |
|  | 7KM9300-0AM00-0AA0 [1] | |
| **7KM PAC 4DI/2DO expansion module** | | |
|  | 7KM9200-0AB00-0AA0 | – |
| **7KM PAC I(N), I(Diff), analog expansion module** | | |
|  <br>• To add the following functions to the measuring inputs:<br>– N conductor measurement<br>– Two analog inputs, also for measuring non-electrical quantities such as temperature, water or air pressure<br>– Residual current measurement via type A or type B summation current transformers | | |
| | 7KM9200-0AD00-0AA0 | – |

[1] Suitable for 7KM PAC4200/4220 (especially for the Modbus TCP/RTU Gateway)

Residual-current transformers for 7KM PAC I(N), I(Diff), analog expansion module, **from page 11/1**



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# 7KT PAC measuring devices

## PAC1600 basic unit



| Connections | Version | Power supply | Display | Interface | MID | 7KT PAC1600 |
|---|---|---|---|---|---|---|
| **Transformer measurement** | | | | | | |
| Screw terminals | 3-phase | Self-powered | With | Modbus RTU | Without | 7KT1661 |
| | | | | | With | 7KT1662 |
| | | | | M-Bus | Without | 7KT1663 |
| | | | | | With | 7KT1664 |
| | | | | S0 interface | Without | 7KT1672 |
| | | | | | With | 7KT1673 |
| | 3-phase, universal | Auxiliary power:<br>100 ... 240 V AC,<br>110 ... 250 V DC 50/60Hz | With | – | Without | 7KT1681 |
| | | | | Modbus RTU | Without | 7KT1682 |
| **Direct measurement** | | | | | | |
| Screw terminals | 1-phase | Self-powered | With | Modbus RTU | Without | 7KT1651 |
| | | | | | With | 7KT1652 |
| | | | | M-Bus | Without | 7KT1653 |
| | | | | | With | 7KT1654 |
| | | | | S0 interface | Without | 7KT1655 |
| | | | | | With | 7KT1656 |
| | 3-phase | Self-powered | With | Modbus RTU | Without | 7KT1665 |
| | | | | | With | 7KT1666 |
| | | | | M-Bus | Without | 7KT1667 |
| | | | | | With | 7KT1668 |
| | | | | S0 interface | Without | 7KT1670 |
| | | | | | With | 7KT1671 |



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# PAC1200 multichannel current measuring system [1] new



| Connections | Version | Power supply | Display | Interface | MID | 7KT PAC1200 |
|---|---|---|---|---|---|---|
| **Direct measurement** | | | | | | |
| Screw terminals | 3-phase | Self-powered | Without | Modbus TCP | Without | 7KT1261 |

## PAC1200

**7KT PAC1200**

**Data manager with 7KT1261, sensor bars**



| Number of connections | Article No. |
|---|---|
| 3 | 7KT1233 |
| 6 | 7KT1236 |
| 9 | 7KT1238 |
| 12 | 7KT1242 |

**Data manager with 7KT1261, sensors**



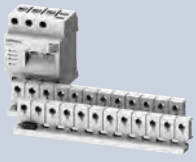
| Current $I_e$ | Article No. |
|---|---|
| 40 A | 7KT1254 |
| 63 A | 7KT1255 |

[1] 7KT1261 available from 01/2025 (successor of 7KT1260)

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# PAC1200 Bundles [1] new





| Data manager | Sensor bars | Sensors | 18 bundle | 24 bundle |
|---|---|---|---|---|
| 1 × data manager 7KT1261 | 2 × 9-sensor bar 7KT1238 | 18 × sensors 40 A 7KT1254 | 7KT1224 | – |
| | 2 × 12-sensor bar 7KT1242 | 24 × sensors 40 A 7KT1254 | – | 7KT1225 |

[1] 7KT1224 and 7KT1225 available from 01/2025 (successor of 7KT1222 and 7KT1223)

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# SEM3 multichannel current measuring system

## Data manager



| Connections | Version | Power supply | Display | Interface | MID | |
|---|---|---|---|---|---|---|
| **Transformer measurement** | | | | | | |
| Screw terminals | 3-phase | Self-powered | Without | Modbus TCP<br>RS485 Modbus RTU | Without | US2:SEM3CONTROLLER |

| Further technical specifications | SEM3 |
|---|---|
| **Basic data** | |
| Installation | Screw mounting |
| **Measuring inputs** | |
| Max. input voltage 50/60 Hz AC | 480 V/277 V |
| Standard current transformers | 50 ... 1200 A/0.1 A |
| Folding transformer | 50 ... 2000 A/0.1 A |

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## Accessories

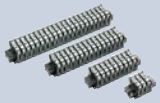
### Metering modules



- For recording measured values
- Accuracy of 0.2% or 1% for the entire measurement including current transformer
- Simple setting of phase configuration by means of slide switch
- Connection of a current transformer for measuring a phase
- Metering module is plugged into meter rack

| Measuring accuracy | Article No. |
|---|---|
| 0.2% | US2:SEM3PHAMETER |
| 1% | US2:SEM3PLAMETER |

### Meter racks



| Version | Article No. |
|---|---|
| For 3 metering modules | US2:SEM3RACK3 |
| For 9 metering modules | US2:SEM3RACK9 |
| For 15 metering modules | US2:SEM3RACK15 |
| For 21 metering modules | US2:SEM3RACK21 |

### Connecting cables



- 600 V insulated special cable for connecting meter racks to the data manager

| Length | Article No. |
|---|---|
| 0.3 m | US2:SEM3CAB12INCH |
| 0.6 m | US2:SEM3CAB24INCH |
| 0.9 m | US2:SEM3CAB36INCH |

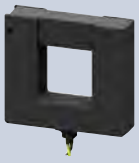
### Standard current transformers



- Standard power cable brown and yellow, 1.82 m long
- Can be extended up to 100 m while still maintaining accuracy
- Transformer configuration is carried out in the data manager

| Output signal | Transformer transmission ratio | Article No. |
|---|---|---|
| 100 mA | 50 : 0.1 | US2:SEM3SCCT50 |
| | 125 : 0.1 | US2:SEM3SCCT125 |
| | 250 : 0.1 | US2:SEM3SCCT250 |
| | 400 : 0.1 | US2:SEM3SCCT400 |
| | 600 : 0.1 | US2:SEM3SCCT600 |
| | 800 : 0.1 | US2:SEM3SCCT800 |
| | 1200 : 0.1 | US2:SEM3SCCT1200 |

### Folding transformers



- Standard power cable brown and yellow, 1.82 m long
- Can be extended up to 100 m while still maintaining accuracy
- Transformer configuration is carried out in the data manager

| Output signal | Transformer transmission ratio | Article No. |
|---|---|---|
| 100 mA | 50 : 0.1 | 7KT1280-5MA00 |
| | 125 : 0.1 | 7KT1280-5MA01 |
| | 250 : 0.1 | 7KT1280-5MA02 |
| | 400 : 0.1 | 7KT1280-5MA03 |
| | 600 : 0.1 | 7KT1280-5MA04 |
| | 800 : 0.1 | 7KT1280-5MA05 |
| | 1200 : 0.1 | 7KT1280-5MA06 |
| | 1600 : 0.1 | 7KT1280-5MA07 |
| | 2000 : 0.1 | 7KT1280-5MA08 |

### DIN-rail adapters



- 5 adapters for snapping onto DIN rail
- 1 adapter each for data manager and for meter racks with 3, 9, 15 and 21 metering modules
- Adapters are screwed onto the data manager or the meter racks

| | Article No. |
|---|---|
| | US2:SEM3DINKIT |

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# SEM3T multichannel temperature measuring system

## Data manager for thermal monitoring in electrical systems



| Connections | Version | Power supply | Display | Interface | |
|---|---|---|---|---|---|
| Plug-in connectors | Temperature measurement | 24 V DC | Without | Modbus TCP | 7KT1281-0AA00 |
| | | | | Modbus TCP/Wi-Fi | 7KT1281-0AA10 |

| Further technical specifications | SEM3T |
|---|---|
| **Basic data** | |
| Installation | DIN-rail mounting |
| **Measuring inputs** | |
| Temperature sensors | 0 to 130 °C |

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## Accessories

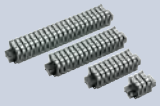
### Metering module



- For recording measured values
- No configuration necessary for modules
- Connection of a temperature sensor
- Metering module is plugged into meter rack

| Article No. |
|---|
| 7KT1281-1AA00 |

### Meter racks



| Version | Article No. |
|---|---|
| For 3 metering modules | US2:SEM3RACK3 |
| For 9 metering modules | US2:SEM3RACK9 |
| For 15 metering modules | US2:SEM3RACK15 |
| For 21 metering modules | US2:SEM3RACK21 |

### Connecting cables



- 600 V insulated special cable for connecting meter racks to the data manager

| Length | Article No. |
|---|---|
| 0.3 m | US2:SEM3CAB12INCH |
| 0.6 m | US2:SEM3CAB24INCH |
| 0.9 m | US2:SEM3CAB36INCH |

### Temperature sensors

- Standard connection cable, brown and yellow, 3 m long
- Can be extended up to 15 m while still maintaining accuracy
- Configuration is carried out in the data manager





| Version | Size | Article No. |
|---|---|---|
| Sensors with ring cable lugs | Sensor 1/4" | 7KT1281-2SA00 |
| | Sensor 5/16" | 7KT1281-2SA01 |
| | Sensor 3/8" | 7KT1281-2SA02 |
| | Sensor 1/2" | 7KT1281-2SA03 |
| Cylindrical sensor | | 7KT1281-2CA00 |



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# Time and pulse counters

## Mechanical counting mechanisms






| Display | Resetting | Rated frequency | Rated control supply voltage $U_c$ | 48 × 48 mm | 72 × 72 mm | – |
|---|---|---|---|---|---|---|
| **Time counter** | | | | | | |
| 00000.00 h | Without | – | 10 ... 80 V DC | 7KT5500 | – | – |
| | | | 10 ... 50 V DC | – | 7KT5600 | – |
| | | | 12 ... 24 V DC | – | – | 7KT5801 |
| | | 50 Hz | 24 V AC | 7KT5505 | – | 7KT5802 |
| | | | 115 V AC | 7KT5501 | 7KT5601 | 7KT5803 |
| | | | 230 V AC | 7KT5502 | 7KT5602 | 7KT5804 |
| | | 60 Hz | 115 V AC | 7KT5503 | 7KT5603 | 7KT5806 |
| | | | 230 V AC | 7KT5504 | 7KT5604 | 7KT5807 |
| **Pulse counter** | | | | | | |
| 0000000 | Without | – | 12 ... 24 V DC | – | – | 7KT5811 |
| | | 50/60 Hz | 24 V AC | – | – | 7KT5812 |
| | | | 230 V AC | – | – | 7KT5814 |

| Further technical specifications | 7KT55.. | 7KT56.. | 7KT58.. |
|---|---|---|---|
| **Basic data** | | | |
| Installation | Front mounting | | DIN-rail mounting |
| Mounting width | – | | 2 MW |
| Front frame | 48 × 48 mm | 72 × 72 mm | – |
| Display | Drum-type register | | |
| Version | – | With narrow frame according to DIN 43700 | – |

| Accessories | | | 7KT55.. | 7KT56.. | 7KT58.. |
|---|---|---|---|---|---|
| **Cover** | | | | | |
| | **Size** | | **Article No.** | **Article No.** | **Article No.** |
| | 55 × 55 mm | | 7KT9020 | – | – |
| **Sealing ring for cover** | | | | | |
| | **Degree of protection** | **Scope of supply** | **Article No.** | **Article No.** | **Article No.** |
| | IP43 (in control panels with smooth surfaces) | 1 set = 5 units | 7KT9000 | – | – |
| **Terminal cover** | | | | | |
| | **Degree of protection** | | **Article No.** | **Article No.** | **Article No.** |
| | IP20 (with connected conductors) | | – | 7KT9021 | – |

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# Electronic counting mechanisms



| Display | Resetting | Rated frequency | Rated control supply voltage $U_c$ | |
|---|---|---|---|---|
| **Time counter** | | | | |
| 000000.0 h | Without | 50/60 Hz | 24 ... 240 V AC, 12 ... 150 V DC | 7KT5821 |
| | Electrical | 50/60 Hz | 24 ... 240 V AC, 12 ... 150 V DC | 7KT5822 |
| | Electrical and mechanical | 50/60 Hz | 24 ... 240 V AC, 12 ... 150 V DC | 7KT5823 |
| **Pulse counter** | | | | |
| 0000000 | Electrical and mechanical | 50/60 Hz | 24 ... 240 V AC, 12 ... 150 V DC | 7KT5833 |

## Further technical specifications

| | 7KT58.. |
|---|---|
| **Basic data** | |
| Installation | DIN-rail mounting |
| Mounting width | 2 MW |
| Display | LCD display |

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# Current transformers

## Bushing-type current transformers for measurement purposes

| | | | | 4NC [1] | | 7KT | 3NJ [1] | |
|---|---|---|---|---|---|---|---|---|
| | | | | 1-phase | | 3-phase | 1-phase | |
| | | | |  |  |  |  |  |
| **Size** | **Internal diameter** | **Rated primary current $I_{pr}$** | **Rated power $P_n$** | **Secondary rated current $I_{sr}$** | | | | |
| | | | | **5 A** | **1 A** | **5 A** | **5 A** | **1 A** |
| **Accuracy class 0.2s** | | | | | | | | |
| 1 | 19 mm | 150 A | 1 VA | 4NC5121-2FA21 | – | – | – | – |
| | | 200 A | 2.5 VA | 4NC5122-2FC21 | – | – | – | – |
| | | 250 A | 2.5 VA | 4NC5123-2FC21 | – | – | – | – |
| | | 300 A | 5 VA | 4NC5124-2FE21 | – | – | – | – |
| | | 400 A | 5 VA | 4NC5125-2FE21 | – | – | – | – |
| | | 500 A | 5 VA | 4NC5126-2FE21 | – | – | – | – |
| 5 | 26 mm | 600 A | 5 VA | 4NC5227-2FE21 | – | – | – | – |
| | | 700 A | 5 VA | 4NC5228-2FE21 | – | – | – | – |
| | | 800 A | 5 VA | 4NC5231-2FE21 | – | – | – | – |
| | | 1000 A | 5 VA | 4NC5232-2FE21 | – | – | – | – |
| **Accuracy class 0.5** | | | | | | | | |
| 1 | 19 mm | 100 A | 1 VA | 4NC5117-2DA21 | 4NC5117-0DA21 | – | – | – |
| | | 150 A | 2.5 VA | 4NC5121-2DC21 | 4NC5121-0DC21 | – | – | – |
| | | 200 A | 5 VA | 4NC5122-2DE21 | 4NC5122-0DE21 | – | – | – |
| | | 250 A | 5 VA | 4NC5123-2DE21 | 4NC5123-0DE21 | – | – | – |
| 2 | 28 mm | 200 A | 5 VA | 4NC5222-2DE21 | 4NC5222-0DE21 | – | – | – |
| | | 250 A | 5 VA | 4NC5223-2DE21 | 4NC5223-0DE21 | – | – | – |
| | | 300 A | 5 VA | 4NC5224-2DE21 | 4NC5224-0DE21 | – | – | – |
| | | 400 A | 5 VA | 4NC5225-2DE21 | 4NC5225-0DE21 | – | – | – |
| 3 | 36 mm | 400 A | 5 VA | 4NC5325-2DE21 | 4NC5325-0DE21 | – | – | – |
| | | 500 A | 5 VA | 4NC5326-2DE21 | 4NC5326-0DE21 | – | – | – |
| | | 600 A | 5 VA | 4NC5327-2DE21 | 4NC5327-0DE21 | – | – | – |
| | | 750 A | 5 VA | 4NC5330-2DE21 | 4NC5330-0DE21 | – | – | – |
| | | 800 A | 5 VA | 4NC5331-2DE21 | – | – | – | – |
| 4 | 41 mm | 800 A | 10 VA | 4NC5431-2DH21 | 4NC5431-0DH21 | – | – | – |
| | | 1000 A | 10 VA | 4NC5432-2DH21 | 4NC5432-0DH21 | – | – | – |
| | | 1200 A | 10 VA | 4NC5433-2DH21 | 4NC5433-0DH21 | – | – | – |
| | | 1500 A | 10 VA | 4NC5435-2DH21 | 4NC5435-0DH21 | – | – | – |
| | | 1600 A | 15 VA | 4NC5436-2DK21 | – | – | – | – |
| | | 2000 A | 20 VA | 4NC5438-2DL21 | – | – | – | – |
| | | 2500 A | 25 VA | 4NC5440-2DM21 | – | – | – | – |
| | | 3000 A | 30 VA | 4NC5441-2DN21 | – | – | – | – |
| **Accuracy class 0.5 calibrated** | | | | | | | | |
| – | 14 mm | 100 A | 1.5 VA | – | – | – | 3NJ6920-3BD23 | 3NJ6920-3BD13 |
| | | 150 A | 2.5 VA | – | – | – | 3NJ6920-3BE23 | 3NJ6920-3BE13 |
| | 15 mm | 200 A | 2.5 VA | – | – | – | – | 3NJ6930-3BF13 |
| | | 200 A | 2.5 VA | – | – | – | 3NJ6930-3BF23 | – |
| | | 250 A | 2.5 VA | – | – | – | – | 3NJ6930-3BG13 |
| | | 250 A | 2.5 VA | – | – | – | 3NJ6930-3BG23 | – |
| | 32 mm | 300 A | 5 VA | – | – | – | 3NJ6940-3BH23 | 3NJ6940-3BH13 |
| | | 400 A | 5 VA | – | – | – | 3NJ6940-3BJ23 | 3NJ6940-3BJ13 |
| | | 500 A | 5 VA | – | – | – | 3NJ6940-3BK23 | 3NJ6940-3BK13 |
| | | 600 A | 5 VA | – | – | – | 3NJ6940-3BL23 | 3NJ6940-3BL13 |

[1] Overcurrent limiting factor FS5

Note:
Maximum voltage for equipment (rms value) $U_m$ = 720 V

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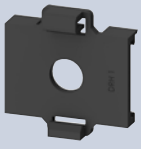

| | | | | 4NC [1] | | 7KT | 3NJ [1] | |
|---|---|---|---|---|---|---|---|---|
| | | | | 1-phase | | 3-phase | 1-phase | |
| | | | |  |  |  |  |  |
| **Size** | **Internal diameter** | **Rated primary current $I_{pr}$** | **Rated power $P_n$** | **Secondary rated current $I_{sr}$** | | | | |
| | | | | **5 A** | **1 A** | **5 A** | **5 A** | **1 A** |
| **Accuracy class 1.0** | | | | | | | | |
| 1 | 19 mm | 50 A | 1.2 VA | 4NC5112-2CB21 | 4NC5112-0CB21 | – | – | – |
| | | 60 A | 1.2 VA | 4NC5113-2CB21 | 4NC5113-0CB21 | – | – | – |
| | 13 mm | 60 A | 1.25 VA | – | – | 7KT1200 | – | – |
| | 19 mm | 75 A | 2.5 VA | 4NC5115-2CC21 | 4NC5115-0CC21 | – | – | – |
| | | 100 A | 2.5 VA | 4NC5117-2CC21 | 4NC5117-0CC21 | – | – | – |
| | 13 mm | 100 A | 2.5 VA | – | – | 7KT1200 | – | – |
| | 19 mm | 150 A | 2.5 VA | 4NC5121-2CC21 | 4NC5121-0CC21 | – | – | – |
| | 13 mm | 150 A | 3.75 VA | – | – | 7KT1202 | – | – |
| | 19 mm | 200 A | 5 VA | 4NC5122-2CE21 | 4NC5122-0CE21 | – | – | – |
| | | 250 A | 5 VA | 4NC5123-2CE21 | 4NC5123-0CE21 | – | – | – |
| 2 | 28 mm | 200 A | 5 VA | 4NC5222-2CE21 | 4NC5222-0CE21 | – | – | – |
| | | 250 A | 5 VA | 4NC5223-2CE21 | 4NC5223-0CE21 | – | – | – |
| | | 300 A | 5 VA | 4NC5224-2CE21 | 4NC5224-0CE21 | – | – | – |
| | | 400 A | 5 VA | 4NC5225-2CE21 | 4NC5225-0CE21 | – | – | – |
| 3 | 36 mm | 400 A | 5 VA | 4NC5325-2CE21 | 4NC5325-0CE21 | – | – | – |
| | | 500 A | 5 VA | 4NC5326-2CE21 | 4NC5326-0CE21 | – | – | – |
| | | 600 A | 5 VA | 4NC5327-2CE21 | 4NC5327-0CE21 | – | – | – |
| | | 750 A | 5 VA | 4NC5330-2CE21 | 4NC5330-0CE21 | – | – | – |
| 4 | 41 mm | 800 A | 10 VA | 4NC5431-2CH21 | 4NC5431-0CH21 | – | – | – |
| | | 1000 A | 10 VA | 4NC5432-2CH21 | 4NC5432-0CH21 | – | – | – |
| | | 1250 A | 10 VA | 4NC5434-2CH21 | 4NC5434-0CH21 | – | – | – |
| | | 1500 A | 10 VA | 4NC5435-2CH21 | 4NC5435-0CH21 | – | – | – |
| | | 2000 A | 12.5 VA | 4NC5438-2CJ21 | 4NC5438-0CJ21 | – | – | – |
| | | 2500 A | 12.5 VA | 4NC5440-2CJ21 | 4NC5440-0CJ21 | – | – | – |
| | | 3000 A | 30 VA | 4NC5441-2CN21 | – | – | – | – |

[1] Overcurrent limiting factor FS5

Note:
Maximum voltage for equipment (rms value) $U_m$ = 720 V

## Accessories

**DIN-rail mounting**



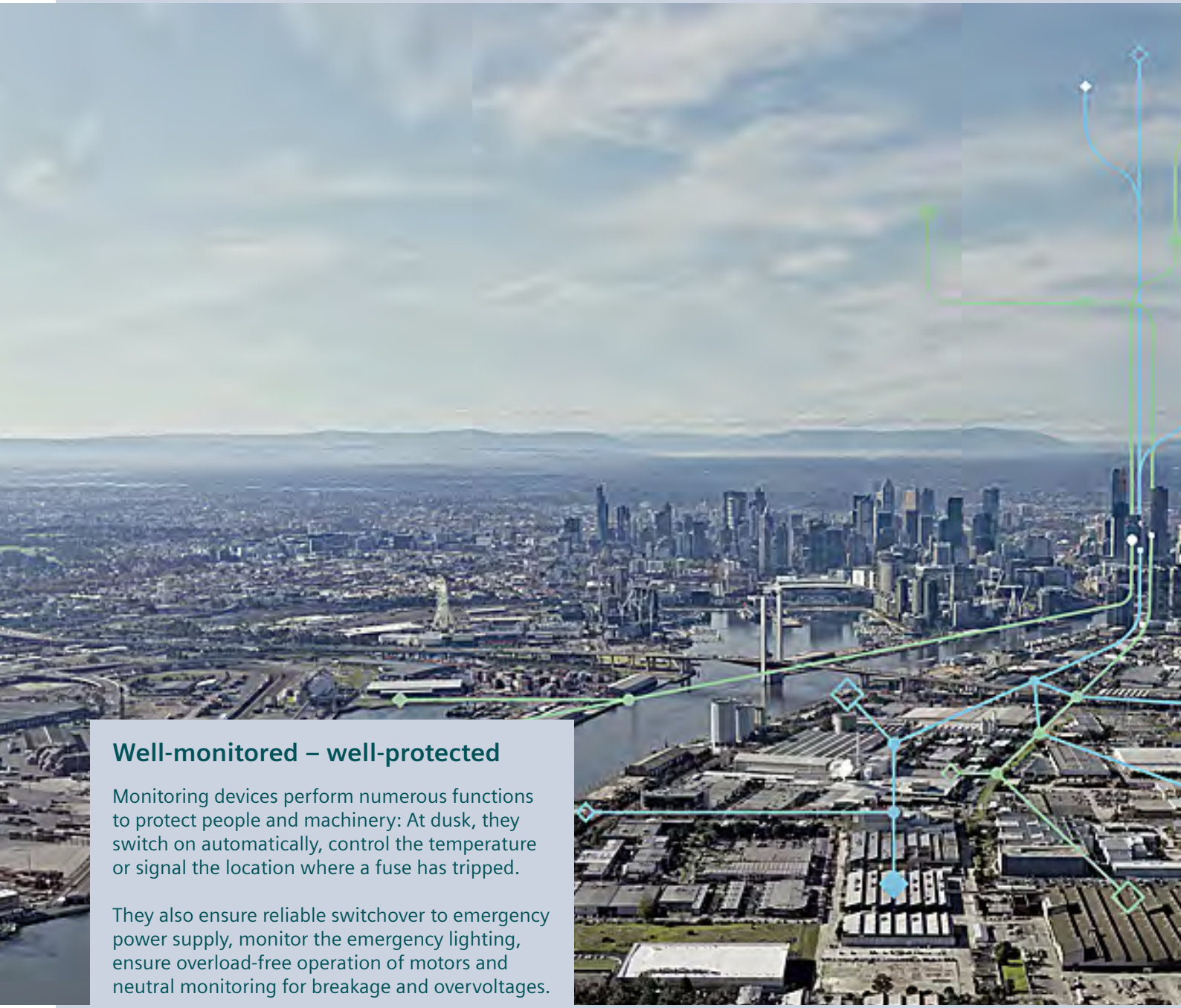
| For transformer size | Article No. | Article No. | Article No. | Article No. | Article No. |
|---|---|---|---|---|---|
| 1 and 5 | 4NC5923-5LT21 | 4NC5923-5LT21 | – | – | – |
| 2 | 4NC5925-5LT21 | 4NC5925-5LT21 | – | – | – |
| 3 | 4NC5930-5LT21 | 4NC5930-5LT21 | – | – | – |
| 4 | 4NC5940-5LT21 | 4NC5940-5LT21 | – | – | – |

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## Well-monitored – well-protected

Monitoring devices perform numerous functions to protect people and machinery: At dusk, they switch on automatically, control the temperature or signal the location where a fuse has tripped.

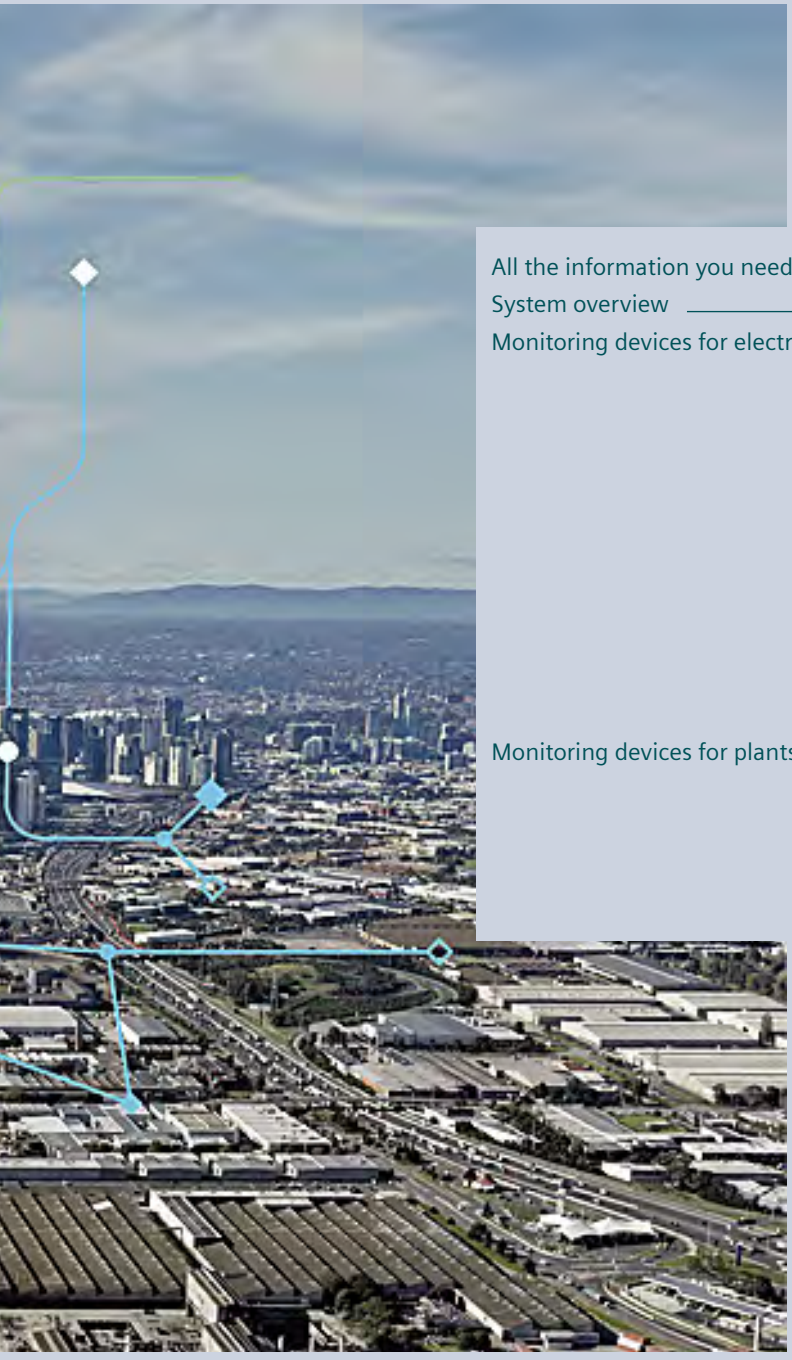
They also ensure reliable switchover to emergency power supply, monitor the emergency lighting, ensure overload-free operation of motors and neutral monitoring for breakage and overvoltages.

Monitoring devices can do even more, e.g., underload monitoring of asynchronous motors in no-load operation.

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# Monitoring Devices




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# A multitude of additional information ...

## Information + ordering

### All the important things at a glance

For information about monitoring devices, please visit our website **www.siemens.com/lowvoltage**

### Your product in detail

The relevant tender specifications can be found at **www.siemens.com/tenderspecifications**

Use our conversion tool for quick and easy conversion to Siemens products **www.siemens.com/conversion-tool**

### Everything you need for your order

Refer to SiePortal to find an overview of your products (product catalog)

- Monitoring devices **sie.ag/2m3no4A**

Direct forwarding to the individual products in SiePortal by clicking on the article number in the catalog or entering this web address incl. article number **www.siemens.com/product_catalog_SIEP?Article No.**



### The fast track to the experts

#### Contact persons in your region

We offer a comprehensive portfolio of services. You can find your local contacts at **www.siemens.com/lowvoltage/components/contact**

You will find further information on services at **www.siemens.com/service-offers**

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# … can be found in our online services

## Commissioning + operation

### Your product in detail

The SiePortal platform (knowledge base) provides detailed technical information
**www.siemens.com/lowvoltage/product-support**

- Operating instructions
- Characteristic curves
- Certificates

Online Support app available for download from the **App Store** and **Play Store**
You will find further information at
**www.siemens.com/support-app**

Provision of 3D data (step and u3d data formats)

- SiePortal (product catalog)
  **www.siemens.com/lowvoltage/product-catalog**
- Image database
  **www.siemens.com/lowvoltage/picturedb**

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
**www.siemens.com/cax**

### Manuals

Manuals can be found in SiePortal at
**www.siemens.com/lowvoltage/manuals**

- Configuration Manual
  – Monitoring devices **(45316099)**

### Technical overview – Monitoring devices

#### The fast way to get you to our online services

This page provides you with comprehensive information and links on monitoring devices
**www.siemens.com/lowvoltage/product-support (109769086)**

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# System overview

## Monitoring devices for electrical values



5SV8 residual current monitor



5SV8 modular residual current device



5TT3 and 5TT6 relay



5TT3 monitors

## Accessories



Summation current transformer



Holders for DIN rails



Magnetic field centering sleeves

## Monitoring devices for plants and equipment



5TT5 EMERGENCY STOP modules



5TT3 relay



7LQ2 twilight switches

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## Accessories



Immersion electrodes

**Note:**
You will find a detailed range of accessories with the basic units.

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# 5SV8 residual current monitors

## Type A and type AC

| | | | | RCM analog | RCM digital | |
|---|---|---|---|---|---|---|
| | | | Mounting width | 2 MW | 3 MW | 3 MW |
| | | | |  |  |  |
| **Rated operational voltage $U_e$** | **Rated residual current $I_{\Delta n}$** | | **Response time $\Delta t$** | | **1 channel** | **4 channels** |
| | **Type A** | **Type AC** | | | | |
| 230 V AC | 0.03 ... 5 A | > 3 A | 0.02 ... 5 s | 5SV8000-6KK | – | – |
| | 0.03 ... 3 A | 5 ... 30 A | 0.02 ... 10 s, INS, SEL [1] | – | 5SV8001-6KK | 5SV8200-6KK |

## Further technical specifications

| | | 5SV8000-6KK | 5SV8001-6KK | 5SV8200-6KK |
|---|---|---|---|---|
| **Standards** | | | | |
| Standards | | EN 62020, IEC 62020 | | |
| Approvals | | – | UL | |
| **Supply** | | | | |
| Rated operational voltage $U_e$ | | 230 V AC | | |
| Frequency | | 50/60 Hz | | |
| Rated residual current $I_{\Delta n}$ | Type A | 0.03 ... 3 A | | |
| | Type AC | > 3 A | 5 ... 30 A | |
| Response time $\Delta t$ | | 0.02 ... 5 s | 0.02 ... 10 s, INS, SEL [1] | |
| **Relay contacts** | | | | |
| Relay contacts | | 1 × alarm | 1 × pre-alarm,<br>1 × alarm | 1 × pre-alarm,<br>4 × alarm |
| Rated voltage | | 230 V AC | | |
| Rated current | | 6 A | | |
| **Summation current transformer** | | | | |
| Diameter | | 20 ... 210 mm | | |
| **Equipment** | | | | |
| Maximum cable length RCM/CT | | 10 m (shielded cable) | | |
| Conductor cross-section | | 1.5 mm² | | |
| Test/reset | | Yes/Yes | | |
| External tripping operation/external reset | | –/Yes | Yes/Yes | |
| **Safety** | | | | |
| Degree of protection | Contacts | IP20 | | |
| | Front | IP41 | | |
| **Ambient conditions** | | | | |
| Operating temperature | | –10 ... +50 °C | | |

[1] INS: Instantaneous,
SEL: Selective





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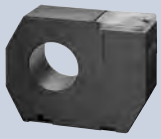
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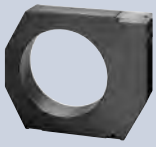


## Accessories

### Summation current transformers







- Including holder for DIN rail or wall mounting
- Standard ®

| Mounting options | Lowest measurable residual current $I_{\Delta n\ min}$ | Rated current $I_n$ | Maximum current [2] $I_{max}$ | Internal diameter | Article No. |
|---|---|---|---|---|---|
| DIN rail | 30 mA | ≤ 40 A | 240 A | 20 mm | 5SV8700-0KK |
| | | ≤ 63 A | 380 A | 30 mm | 5SV8701-0KK |
| Wall mounting, DIN rail[1] | 30 mA | ≤ 80 A | 480 A | 35 mm | 5SV8702-0KK |
| | | ≤ 200 A | 1200 A | 70 mm | 5SV8703-0KK |
| Wall mounting | 100 mA | ≤ 250 A | 1500 A | 105 mm | 5SV8704-0KK |
| | 300 mA | ≤ 500 A | 3000 A | 140 mm | 5SV8705-0KK |
| | | ≤ 600 A | 3600 A | 210 mm | 5SV8706-0KK |

### Holders for DIN rails



- Suitable for summation current transformers with internal diameter of 20 mm, 30 mm, 35 mm, 70 mm
- Cannot be used together with magnetic field centering sleeves

| Article No. |
|---|
| 5SV8900-1KK |

### Magnetic field centering sleeves



| Internal diameter | Article No. |
|---|---|
| 35 mm | 5SV8902-1KK |
| 70 mm | 5SV8903-1KK |
| 105 mm | 5SV8904-1KK |
| 140 mm | 5SV8905-1KK |
| 210 mm | 5SV8906-1KK |

[1] The holder for DIN rails is additionally required for mounting onto the DIN rail.
[2] Short-time starting current, up to 2 s

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# 5SV8 modular residual current device

## Type A

| | MRCD |
|---|---|
| Mounting width | 3 MW |



| Rated operational voltage $U_e$ | Rated residual current $I_{\Delta n}$ Type A | Response time $\Delta t$ | |
|---|---|---|---|
| 230 V AC | 0.03 ... 3 A | 0.02 ... 10 s, INS, SEL [1] | 5SV8101-6KK |

## Further technical specifications

| | | |
|---|---|---|
| **Standards** | | |
| Standards | | EN 60947-2 (Annex M), IEC 60947-2 (Annex M) |
| Approvals | | – |
| **Supply** | | |
| Rated operational voltage $U_e$ | | 230 V AC from a 1-phase auxiliary voltage source (also externally) |
| Frequency | | 50/60 Hz |
| Rated residual current $I_{\Delta n}$ | Type A | 0.03 ... 3 A (default setting: 30 mA) |
| | Type AC | – |
| Response time $\Delta t$ | $I_{\Delta n}$ = 30 mA | INS instantaneous |
| | $I_{\Delta n}$ > 30 mA | INS – SEL – 0.06 ... 10 s [1] (default setting INS) |
| **Relay contacts** | | |
| Relay contacts | | 1 × alarm,<br>1 × tripping operation |
| Rated voltage | | 230 V AC |
| Rated current | | 6 A |
| **Summation current transformer** | | |
| Diameter | | 35 ... 210 mm |
| **Equipment** | | |
| Maximum cable length RCM/CT | | 10 m (shielded cable) |
| Conductor cross-section | | 0.125 ... 2.08 mm² |
| Test/reset | | Yes/Yes |
| External tripping operation/external reset | | Yes/Yes |
| **Safety** | | |
| Degree of protection | Contacts | IP20 |
| | Front | IP41 |
| **Ambient conditions** | | |
| Operating temperature | | –10 ... +50 °C |

[1] INS: Instantaneous,
SEL: Selective





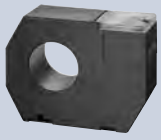
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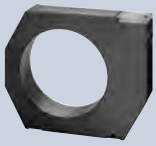
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## Accessories

### Summation current transformers





- Including holder for wall mounting
- Standard ®

| Mounting options | Lowest measurable residual current $I_{\Delta n\ min}$ | Rated current $I_n$ | Maximum current [2] $I_{max}$ | Internal diameter | Article No. |
|---|---|---|---|---|---|
| Wall mounting, DIN rail [1] | 30 mA | ≤ 80 A | 480 A | 35 mm | 5SV8702-0KK |
| | 30 mA | ≤ 200 A | 1200 A | 70 mm | 5SV8703-0KK |
| Wall mounting | 100 mA | ≤ 250 A | 1500 A | 105 mm | 5SV8704-0KK |
| | 300 mA | ≤ 500 A | 3000 A | 140 mm | 5SV8705-0KK |
| | | ≤ 600 A | 3600 A | 210 mm | 5SV8706-0KK |

### Holders for DIN rails



- Suitable for summation current transformers with internal diameter of 20 mm, 30 mm, 35 mm, 70 mm
- Cannot be used together with magnetic field centering sleeves

| Article No. |
|---|
| 5SV8900-1KK |

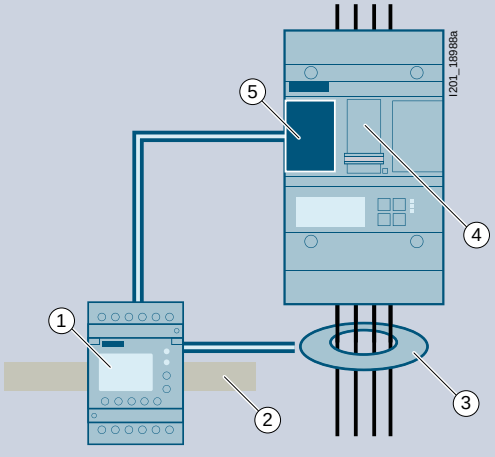
### Magnetic field centering sleeves



| Internal diameter | Article No. |
|---|---|
| 35 mm | 5SV8902-1KK |
| 70 mm | 5SV8903-1KK |
| 105 mm | 5SV8904-1KK |
| 140 mm | 5SV8905-1KK |
| 210 mm | 5SV8906-1KK |

[1] The holder for DIN rails is additionally required for mounting onto the DIN rail.
[2] Short-time starting current, up to 2 s

## Tested combination options




**5SV8101-6KK/- (tested combinations)**

| ❶ Modular residual current device | | |
|---|---|---|
| 5SV8101-6KK | | |
| ❷ DIN rail | | |
| EN 60715 – TH35 – 7.5 35 – 15 | | |
| ❸ Summation current transformers | | Magnetic field centering sleeves |
| Ø 35 mm | 5SV8702-0KK | 5SV8902-1KK |
| Ø 70 mm | 5SV8703-0KK | 5SV8903-1KK |
| Ø 105 mm | 5SV8704-0KK | 5SV8904-1KK |
| Ø 140 mm | 5SV8705-0KK | 5SV8905-1KK |
| Ø 210 mm | 5SV8706-0KK | 5SV8906-1KK |
| ❹ Molded case circuit breakers | | ❺ Trip element |
| 3VL17... | | 3VL9400-1UP00 |
| 3VL27... | | |
| 3VL37... | | |
| 3VL47... | | |
| 3VA10... | | 3VA9908-0BB11 |
| 3VA11... | | 3VA9908-0BB20 |
| 3VA20... | | 3VA9908-0BB24 |
| 3VA21... | | 3VA9908-0BB25 |
| 3VA22... | | |
| 3VA12... | | 3VA9908-0BB11 |
| 3VA23... | | 3VA9908-0BB20 |
| 3VA24... | | 3VA9908-0BB24 |

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# 5SV8 modular residual current device

## Type B

| | MRCD digital |
|---|---|
| Mounting width | 2 MW |



| Rated operational voltage $U_e$ | Rated residual current $I_{\Delta n}$ Type B | Response time $\Delta t$ | |
|---|---|---|---|
| 230 V AC | 0.03 ... 1 A | 0 ... 10 s | 5SV8101-4KK |
| 24 V DC | 0.03 ... 1 A | 0 ... 10 s | 5SV8111-4KK |

## Further technical specifications

| | | 5SV8101-4KK | 5SV8111-4KK |
|---|---|---|---|
| **Standards** | | | |
| Standards | | EN 60947-2 (Annex M), IEC 60947-2 (Annex M) | |
| **Supply** | | | |
| Supply voltage $U_s$ | | 230 V AC (70 ... 300 V AC) | 24 V DC (9.6 ... 94 V DC) |
| Frequency | | 50/60 Hz | – |
| Power consumption | | < 6.5 VA | |
| **Relay contacts** | | | |
| Relay contacts | | 1 × alarm, 1 × tripping operation | |
| Rated voltage | | 250 V AC | |
| Rated current | | 5 A | |
| **External summation current transformer** | | | |
| Internal diameter | | 35 ... 210 mm (5SV8701-2KK, 5SV8701-2KP, 5SV8702-2KK, 5SV8702-2KP, 5SV8703-2KK, 5SV8704-2KK) | |
| Rated voltage | (Summation current transformers) | 690 V | |
| Response characteristic | Acc. to IEC 60947-2 (M) | Type B | |
| Rated frequency | | 0 ... 2 kHz | |
| Response residual current | $I_{\Delta n}1$ (AL1 alarm) | 50 ... 100% of $I_{\Delta n}2$ (factory setting: 50%) | |
| | $I_{\Delta n}2$ (TP2 tripping) | 30 mA ... 1 A (factory setting: 30 mA) | |
| Response delay | $t_{on}1$ (alarm) | 0 ... 10 s (factory setting: 1 s) | |
| | $t_{on}2$ (tripping) | 0 ... 10 s (factory setting: 0 s) | |
| **Equipment** | | | |
| Maximum cable length MRCD/converter | | 10 m (6 × 0.75 mm²) | |
| Password | | Off/0 ... 999 (factory setting: 0) | |
| **Safety** | | | |
| Degree of protection | Components (IEC 60529) | IP30 | |
| | Terminals (IEC 60529) | IP20 | |
| EMC | | IEC 60947-2 (M) | |
| Overvoltage category | | III | |
| Pollution degree | | 3 | |
| **Mechanical data** | | | |
| Width | | 36 mm (2 MW) | |
| Depth | | 64 mm | |
| Height | | 85 mm | |
| Weight | | 150 g | |
| Mounting | | DIN rail | |
| Enclosure material | | Polycarbonate | |
| Electrical connection | | Screw terminals | |
| Conductor cross-section | Rigid | 0.2 ... 4 mm² | |
| | Flexible, with end sleeve | 0.2 ... 2.5 mm² (AWG 24 ... 12) | |
| Stripped length | | 8 ... 9 mm | |
| Tightening torque | | 0.5 ... 0.6 Nm | |
| **Ambient conditions** | | | |
| Operating temperature | | –25 ... +55 °C | |



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## Accessories

**Summation current transformers**



| Lowest measurable residual current $I_{\Delta n\ min}$ | Rated current $I_n$ | Maximum current [1] $I_{max}$ | Internal diameter | Version | Article No. |
|---|---|---|---|---|---|
| 10 mA | ≤ 80 A | 500 A | 35 mm | Standard | 5SV8701-2KK |
| | | | | With shield | 5SV8701-2KP |
| | ≤ 160 A | 1000 A | 60 mm | Standard | 5SV8702-2KK |
| | | | | With shield | 5SV8702-2KP |
| 100 mA | ≤ 330 A | 2000 A | 120 mm | Standard | 5SV8703-2KK |
| 300 mA | ≤ 630 A | 3800 A | 210 mm | Standard | 5SV8704-2KK |

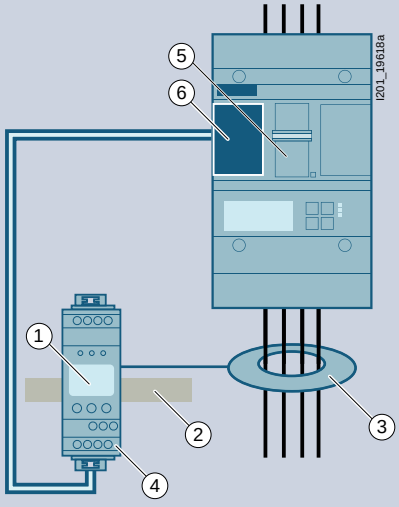
**Holders for DIN rails**



| Suitable for summation current transformers | Article No. |
|---|---|
| 5SV8701-2KK, 5SV8701-2KP | 5SV8900-2KK |
| 5SV8702-2KK, 5SV8702-2KP | 5SV8900-3KK |

[1] Short-time starting current, up to 2 s

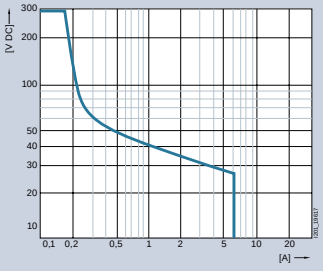
## Tested combination options




**5SV8101-4KK/5SV8111-4KK (tested combinations)**

| ❶ Modular residual current device | |
|---|---|
| 5SV8101-4KK/5SV8111-4KK | |
| **❷ DIN rail** | |
| EN 60715 – TH35 – 7,5 35 – 15 | |
| **❸ Summation current transformers** | |
| Ø 35 mm | 5SV8701-2KK/5SV8701-2KP |
| Ø 60 mm | 5SV8702-2KK/5SV8702-2KP |
| Ø 120 mm | 5SV8703-2KK |
| Ø 210 mm | 5SV8704-2KK |
| **❹ Relay contacts** | |

DC:




AC: max. 230 V, 5A

| ❺ Molded case circuit breakers | ❻ Trip element |
|---|---|
| 3VA1... | 3VA9908-0BB11 |
| 3VA20... | 3VA9908-0BB24 |
| 3VA21... | 3VA9908-0BB25 |
| 3VA22... | |
| 3VA23... | 3VA9908-0BB11 |
| 3VA24... | 3VA9908-0BB25 |

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# 5TT3 undervoltage relays

## Without response delay

| | | | | For the monitoring of | | |
|---|---|---|---|---|---|---|
| | | | | 1, 2 or 3 phases against N | | 3 phases against N |
| | | | Contacts | 1 CO | 2 CO | 2 CO |
| | | | Mounting width | 1 MW | 2 MW | 2 MW |
| | | | |  |  |  |
| **Rated operational voltage $U_e$** | **Rated operational current $I_e$** | **Switching thresholds** | **Hysteresis** | | | |
| **Not adjustable** | | | | | | |
| 230 V AC | 4 A | 0.7 and 0.9 × $U_c$ | – | 5TT3400 | 5TT3402 | 5TT3404 |
| | | 0.85 and 0.95 × $U_c$ | – | 5TT3401 | – | 5TT3405 |
| **Adjustable** | | | | | | |
| 230 V AC | 4 A | 0.7 ... 0.95 × $U_c$ | 5% | – | – | 5TT3406 |
| | | 0.9 ... 0.95 × $U_c$ | – | – | 5TT3403 | – |

## Further technical specifications

| | | 5TT3400<br>5TT3401<br>5TT3402<br>5TT3403 | 5TT3404<br>5TT3405 | 5TT3406 |
|---|---|---|---|---|
| **Standards** | | | | |
| Standards | | IEC 60255, DIN VDE 0435-110, DIN VDE 0435-303 | | |
| **Supply** | | | | |
| Rated control circuit voltage $U_c$ | | 230/400 V AC | | |
| Primary operating range (overload capability) | | 1.1 × $U_c$ | | |
| Rated frequency | | 50/60 Hz | | |
| **Contacts** | | | | |
| µ contact | AC-11 | 4 A | | |
| Response values | ON-switching | 0.9/0.95 × $U_c$ | | 4% hysteresis |
| | OFF-switching | 0.7/0.85 × $U_c$ | | 0.7 ... 0.95 × $U_c$ |
| Minimum contact load | | 10 V/100 mA | | |
| **Safety** | | | | |
| Rated insulation voltage $U_i$ | Between coil/contact | 4 kV | | |
| Electrical isolation, creepage distances and clearances | Actuator/contact | 3 mm | 5.5 mm | |
| Rated impulse withstand voltage $U_{imp}$ | Actuator/contact | > 2.5 kV | > 4 kV | |
| **Functions** | | | | |
| Phase asymmetry | Setting accuracy | – | Approx. 5 ... 10% | |
| | Repeat accuracy | – | 1 | |
| Phase failure detection | At L1 or L2 or L3 | 100 ms | | |
| Functions | Monitoring of 1/2 phases against N | Yes | – | |
| | Monitoring of 3 phases against N | Yes | | |
| | Asymmetry (failure) detection | – | Yes | |
| | Reverse (failure) detection | – | Yes | |
| | Phase failure detection | Yes | | |
| | N-conductor monitoring | – | Yes | |
| **Connection** | | | | |
| Terminals | ± Screw (Pozidriv) | PZ 1 | | |
| Conductor cross-sections | Rigid | Max. 2 × 2.5 mm² | | |
| | Flexible, with end sleeve | Min. 1 × 0.5 mm² | | |
| **Ambient conditions** | | | | |
| Permissible ambient temperature | | –20 ... +60 °C | | |
| Resistance to climate | Acc. to EN 60068-1 | 20/60/4 | | |

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# 5TT3 undervoltage relays

## With response delay

| | | | | For the monitoring of 1, 2 or 3 phases against N | |
|---|---|---|---|---|---|
| | | | | **Contacts** | 1 CO | 2 CO |
| | | | | **Mounting width** | 1 MW | 1 MW |
| | | | | |  |  |
| **Rated operational voltage $U_e$** | **Rated operational current $I_e$** | **Switching thresholds** | **Hysteresis** | **Standard** | **With TEST pushbutton** |
| **Not adjustable** | | | | | |
| 230 V AC | 4 A | 0.85 × $U_c$ | 5% | 5TT3414 | 5TT3415 |

## Further technical specifications

| | | 5TT3414 | 5TT3415 |
|---|---|---|---|
| **Supply** | | | |
| Rated control circuit voltage $U_c$ | | 230/400 V AC | |
| Primary operating range (overload capability) | | 1.15 × $U_c$ | |
| Rated frequency | | 50/60 Hz | |
| **Contacts** | | | |
| Contacts | AC-15 | 1 CO | 2 CO |
| Response values | ON-switching | 5% hysteresis | |
| | OFF-switching | 0.85 × $U_c$ | |
| Response delay | | 0.5 s | |
| Return transfer delay | | 60 s | |
| Minimum contact load | | 10 V/100 mA | |
| Electrical endurance in operating cycles | AC-15 (1 A, 230 V AC) | 1 × $10^5$ | |
| **Safety** | | | |
| Rated insulation voltage $U_i$ | Between coil/contact | – | |
| Rated impulse withstand voltage | Acc. to IEC 60664-1 | 6 kV | |
| Pollution degree | | 2 | |
| **Functions** | | | |
| Phase failure detection | At L1 or L2 or L3 | 500 ms | |
| Functions | Monitoring of 1 or 2 phases against N | Yes | |
| | Monitoring of 3 phases against N | Yes | |
| | Phase failure detection | Yes | |
| **Connection** | | | |
| Terminals | – Screw (slot) | 3.5 mm | |
| Conductor cross-sections | Rigid | 1 × 4 $mm^2$ | |
| | Flexible, with end sleeve | 1 × 2.5 $mm^2$ | |
| **Ambient conditions** | | | |
| Permissible ambient temperature | | –25 ... +60 °C | |
| Resistance to climate | Acc. to EN 60068-1 | 20/060/04 | |



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# 5TT3 short-time voltage relay

## Without response delay

| | For the monitoring of 1, 2 or 3 phases against N |
|---|---|
| Contacts | 2 CO |
| Mounting width | 2 MW |



| Rated operational voltage $U_e$ | Rated operational current $I_e$ | Switching thresholds | |
|---|---|---|---|
| **Not adjustable** | | | |
| 230 V AC | 4 A | 0.8 ... 0.85 × $U_c$ | 5TT3407 |

## Further technical specifications

| | | | |
|---|---|---|---|
| **Standards** | | | |
| Standards | | | IEC 60255, DIN VDE 0435-303 |
| **Supply** | | | |
| Rated control circuit voltage $U_c$ | | | 230/400 V AC |
| Primary operating range (overload capability) | | | 1.1 × $U_c$ |
| Rated frequency | | | 50/60 Hz |
| Rated operational power $P_s$ | AC operation: | 230 V and p.f. = 1 | 2000 VA |
| | | 230 V and p.f. = 0.4 | 1250 VA |
| | DC operation: | $U_e$ = 24 V and $I_e$ = 6 A | Max. 100 W |
| | | $U_e$ = 60 V and $I_e$ = 1 A | Max. 100 W |
| | | $U_e$ = 110 V and $I_e$ = 0.6 A | Max. 100 W |
| | | $U_e$ = 220 V and $I_e$ = 0.5 A | Max. 100 W |
| Back-up fuse | Terminals L1/L2/L3 | | 2 A |
| **Contacts** | | | |
| µ contact | AC-11 | | 3 A |
| Response values | ON-switching | | 0.85 × $U_c$ |
| | OFF-switching | | 0.8 × $U_c$ |
| Automatic reclosing delay (return transfer delay) | | | 0.2 ... 2 s |
| Minimum contact load | | | 10 V/100 mA |
| **Safety** | | | |
| Rated insulation voltage $U_i$ | Between coil/contact | | 4 kV |
| Electrical isolation, creepage distances and clearances | Actuator/contact | | 4 mm |
| Rated impulse withstand voltage $U_{imp}$ | Actuator/contact | | > 4 kV |
| **Functions** | | | |
| Phase failure detection | At L1 or L2 or L3 | | ≥ 20 ms |
| Phase asymmetry | Setting accuracy | | Approx. 5 ... 10% |
| | Repeat accuracy | | 1 |
| Functions | Monitoring of 1 or 2 phases against N | | Yes |
| | Monitoring of 3 phases against N | | Yes |
| | Phase failure detection | | Yes |
| | N-conductor monitoring | | Yes |
| **Connection** | | | |
| Terminals | ± Screw (Pozidriv) | | PZ 1 |
| Conductor cross-sections | Rigid | | Max. 2 × 2.5 mm² |
| | Flexible, with end sleeve | | Min. 1 × 0.5 mm² |
| **Ambient conditions** | | | |
| Permissible ambient temperature | | | –20 ... +60 °C |
| Humidity class | Acc. to IEC 60068-2-30 | | F |



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# 5TT3 undervoltage and overvoltage relays

## With adjustable response delay

| | For the monitoring of 3 phases against N |
|---|---|
| **Contacts** | 2 CO |
| **Mounting width** | 2 MW |



| Rated operational voltage $U_e$ | Rated operational current $I_e$ | Switching thresholds | Hysteresis | |
|---|---|---|---|---|
| **Adjustable** | | | | |
| 230 V AC | 4 A | 0.7 and 1.1 × $U_c$<br>0.9 and 1.3 × $U_c$ | 4%<br>4% | 5TT3408 |

## Further technical specifications

| | | | |
|---|---|---|---|
| **Standards** | | | |
| Standards | | | IEC 60255, DIN VDE 0435-303 |
| **Supply** | | | |
| Rated control circuit voltage $U_c$ | | | 230/400 V AC |
| Primary operating range (overload capability) | | | 1.35 × $U_c$ |
| Rated frequency | | | 50/60 Hz |
| Back-up fuse | Terminals L1/L2/L3 | | 2 A |
| **Contacts** | | | |
| µ contact | AC-11 | | 1 A |
| Response values | Overvoltage: | ON-switching | 4% hysteresis |
| | | OFF-switching | 0.9 ... 1.3 × $U_c$ |
| | Undervoltage: | ON-switching | 4% hysteresis |
| | | OFF-switching | 0.7 ... 1.1 × $U_c$ |
| OFF-delay (response delay) | | | 0.1 ... 20 s |
| Automatic reclosing delay (return transfer delay) | | | – |
| Minimum contact load | | | 10 V/100 mA |
| **Safety** | | | |
| Rated insulation voltage $U_i$ | Between coil/contact | | 4 kV |
| Electrical isolation, creepage distances and clearances | Contact/contact | | 4 mm |
| | Actuator/contact | | 4 mm |
| Rated impulse withstand voltage $U_{imp}$ | Actuator/contact | | > 4 kV |
| **Functions** | | | |
| Phase failure detection | At L1 or L2 or L3 | | 100 ms |
| Phase asymmetry | Setting accuracy | | Approx. 5 ... 10% |
| | Repeat accuracy | | 1 |
| Functions | Monitoring of 1 or 2 phases against N | | – |
| | Monitoring of 3 phases against N | | Yes |
| | Asymmetry detection | | Yes |
| | Reverse voltage detection | | Yes |
| | Phase failure detection | | Yes |
| | N-conductor monitoring | | Yes |
| **Connection** | | | |
| Terminals | ± Screw (Pozidriv) | | PZ 1 |
| Conductor cross-sections | Rigid | | Max. 2 × 2.5 mm² |
| | Flexible, with end sleeve | | Min. 1 × 0.5 mm² |
| **Ambient conditions** | | | |
| Permissible ambient temperature | | | –20 ... +60 °C |
| Humidity class | Acc. to IEC 60068-2-30 | | F |



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# 5TT6 current relays

## For 1-phase loads up to 230 V AC

| | | | | Auxiliary voltage and load voltage | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Not isolated | | Electrically isolated | | |
| | | | Mounting width | 1 MW | 1 MW | 2 MW | 2 MW | 2 MW |
| | | | |  |  |  |  |  |
| Rated operational voltage $U_e$ | Rated operational current $I_e$ | Contacts | Rated control current $I_c$ | Monitoring Undercurrent | Overcurrent | Monitoring Undercurrent | Overcurrent | Overcurrent/ undercurrent |
| 230 V AC | 5 A | 1 CO | 1 ... 10 A | 5TT6111 | 5TT6112 | – | – | – |
| | | 2 CO | 0.1 ... 1 A, 0.5 ... 5 A, 1 ... 10 A, 1.5 ... 15 A | – | – | 5TT6113 | 5TT6114 | 5TT6115 |

## Further technical specifications

| | | 5TT6111 5TT6112 | 5TT6113 5TT6114 5TT6115 |
|---|---|---|---|
| **Standards** | | | |
| Standards | | IEC 60255 | IEC 60255 DIN VDE 0435-303 |
| **Supply** | | | |
| Rated control current $I_c$ | | 1 ... 10 A | 0.1 ... 1 A, 0.5 ... 5 A, 1 ... 10 A, 1.5 ... 15 A |
| Rated control circuit voltage $U_c$ | | 230 V AC | |
| Primary operating range | | 0.9 ... 1.1 × $U_c$ | |
| Overload capability | Continuous | 15 A | 20 A |
| | At 50 °C ambient temperature max. 3 s | 20 A | – |
| | Independent of measuring range, max. 3 s | – | 30 A |
| Rated frequency | | 50/60 Hz | |
| **Contacts** | | | |
| µ contact (AC-15) | NO | 3 A | 5 A |
| | NC | 1 A | |
| Response values | ON-switching | Infinitely variable | |
| | OFF-switching | Permanent, 4% hysteresis | |
| Switching delay $t_v$ | | 0.1 ... 20 s, continuously adjustable | |
| Response time | Non-adjustable | Current corresponds to the rated operational power of the continuous-flow heater | See Siemens Service and Support Portal, search term "Article No.", e.g. "5TT6113" |
| Minimum contact load | | 10 V/100 mA | |
| **Safety** | | | |
| Rated insulation voltage $U_i$ | Between coil/contact | 2.5 kV | |
| Electrical isolation, creepage distances and clearances | Actuator/contact | 3 mm | |
| Rated impulse withstand voltage $U_{imp}$ | Actuator/contact | > 4 kV | |
| **Connection** | | | |
| Terminals | ± Screw (Pozidriv) | PZ 1 | |
| Conductor cross-sections | Rigid | Max. 2 × 2.5 mm² | |
| | Flexible, with end sleeve | Min. 1 × 0.5 mm² | |
| **Ambient conditions** | | | |
| Permissible ambient temperature | | –20 ... +60 °C | |
| Resistance to climate | Acc. to EN 60068-1 | 20/60/4 | |

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# 5TT3 fuse monitors

## For all low-voltage fuse systems

| | |
|---|---|
| **Mounting width** | 2 MW |



| Rated operational voltage $U_e$ | Rated operational current $I_e$ | Rated control circuit voltage $U_c$ | |
|---|---|---|---|
| **Adjustable** | | | |
| 250 V AC | 4 A | 380 ... 415 V AC | 5TT3170 |

## Further technical specifications

| | | |
|---|---|---|
| **Standards** | | |
| Standards | | IEC 60255, DIN VDE 0435-110 |
| **Supply** | | |
| Rated operational voltage $U_e$ | | 250 V AC |
| Rated operational current $I_e$ | AC-1 | 4 A |
| Rated control circuit voltage $U_c$ | 3 AC | 380 ... 415 V |
| Primary operating range | | 0.8 ... 1.1 × $U_c$ |
| Rated frequency | | 50 ... 400 Hz |
| **Contacts** | | |
| Internal resistance of measuring paths | | > 1000 Ω/V |
| Max. permissible rear feed | | 90% |
| Response/release time | | < 50 ms |
| Electrical endurance AC-11 | In switching cycles at 1 A | $1.5 \times 10^5$ |
| **Safety** | | |
| Rated impulse withstand voltage $U_{imp}$ | Input/output | > 4 kV |
| **Application** | | |
| Area of application | | Asymmetric, systems afflicted with harmonics, regenerative motors |
| Message | | Also for disconnected loads |
| **Connection** | | |
| Terminals | ± Screw (Pozidriv) | PZ 1 |
| Conductor cross-sections | Rigid | Max. 2 × 2.5 mm² |
| | Flexible, with end sleeve | Min. 1 × 0.5 mm² |
| **Ambient conditions** | | |
| Permissible ambient temperature | | –20 ... +45 °C |
| Resistance to climate | Acc. to EN 60068-1 | 20/45/4 |



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# 5TT3 phase monitors

## For monitoring of voltages in a three-phase system

| | |
|---|---|
| **Mounting width** | 1 MW |



| Rated operational voltage $U_e$ | Rated operational current $I_e$ | Contacts | Rated control circuit voltage $U_c$ | With 3 green LEDs for 3 phases |
|---|---|---|---|---|
| 250 V AC | 4 A | 1 CO | 230/400 V | 5TT3421 |

## Further technical specifications

| | | |
|---|---|---|
| **Standards** | | |
| Standards | | IEC 60255, DIN VDE 0435 |
| **Supply** | | |
| Rated operational voltage $U_e$ | | 250 V AC |
| Rated operational current $I_e$ | | 4 A |
| Rated control circuit voltage $U_c$ | | 230/400 V AC |
| Primary operating range | | 0.8 ... 1.1 × $U_c$ |
| Rated frequency | | 50/60 Hz |
| Rated power dissipation $P_v$ | Electronics | 9 VA |
| | Contacts | 0.2 VA |
| **Contacts** | | |
| µ contact | AC-11 | 3 A |
| Minimum contact load | | 10 V/100 mA |
| **Safety** | | |
| Rated insulation voltage $U_i$ | Between coil/contact | 4 kV |
| Electrical isolation, creepage distances and clearances | Actuator/contact | 4 mm |
| Rated impulse withstand voltage $U_{imp}$ | Actuator/contact | > 2.5 kV |
| Degree of protection | Acc. to EN 60529 | IP20, with connected conductors |
| Protection class | Acc. to EN 61140/VDE 0140-1 | II |
| **Connection** | | |
| Terminals | ± Screw (Pozidriv) | PZ 1 |
| Conductor cross-sections | Rigid | Max. 2 × 2.5 mm² |
| | Flexible, with end sleeve | – |
| **Ambient conditions** | | |
| Permissible ambient temperature | | –20 ... +60 °C |
| Resistance to climate | Acc. to EN 60068-1 | 20/60/4 |





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# 5TT3 phase sequence monitors

## For monitoring of phase sequence in a three-phase system

| | |
|---|---|
| **Mounting width** | 1 MW |



| Rated operational voltage $U_e$ | Rated operational current $I_e$ | Contacts | Rated control circuit voltage $U_c$ | With one green LED, which lights up for right-rotating field |
|---|---|---|---|---|
| 250 V AC | 4 A | 1 CO | 400 V | 5TT3423 |

## Further technical specifications

| | | |
|---|---|---|
| **Standards** | | |
| Standards | | IEC 60255, DIN VDE 0435 |
| **Supply** | | |
| Rated operational voltage $U_e$ | | 250 V AC |
| Rated operational current $I_e$ | | 4 A |
| Rated control circuit voltage $U_c$ | | 400 V AC |
| Primary operating range | | 0.8 ... 1.1 × $U_c$ |
| Rated frequency | | 50/60 Hz |
| Rated power dissipation $P_v$ | Electronics | 9 VA |
| | Contacts | 0.2 VA |
| **Contacts** | | |
| µ contact | AC-11 | 3 A |
| Minimum contact load | | 10 V/100 mA |
| **Safety** | | |
| Rated insulation voltage $U_i$ | Between coil/contact | 4 kV |
| Electrical isolation, creepage distances and clearances | Actuator/contact | 4 mm |
| Rated impulse withstand voltage $U_{imp}$ | Actuator/contact | > 2.5 kV |
| Degree of protection | Acc. to EN 60529 | IP20, with connected conductors |
| Protection class | Acc. to EN 61140/VDE 0140-1 | II |
| **Connection** | | |
| Terminals | ± Screw (Pozidriv) | PZ 1 |
| Conductor cross-sections | Rigid | Max. 2 × 2.5 mm$^2$ |
| | Flexible, with end sleeve | – |
| **Ambient conditions** | | |
| Permissible ambient temperature | | –20 ... +60 °C |
| Resistance to climate | Acc. to EN 60068-1 | 20/60/4 |



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# 5TT3 insulation monitors for industrial applications

## Are used for protection of persons and against fire in non-grounded systems (IT systems)

| | |
|---|---|
| **Mounting width** | 2 MW |



| Measurement voltage range $U_{meas}$ | Measuring range | Contacts | Rated control circuit voltage $U_c$ | |
|---|---|---|---|---|
| 0 ... 500 V AC | 5 ... 100 kΩ | 2 CO | 230 V AC | 5TT3470 |
| 12 ... 280 V DC | 5 ... 200 kΩ | 2 CO | – | 5TT3471 |

## Further technical specifications

| | | 5TT3470 | 5TT3471 |
|---|---|---|---|
| **Supply** | | | |
| Rated operational voltage $U_e$ | | 230 V AC | 12 ... 280 V DC |
| Rated operational current $I_s$ | Thermal current $I_{th}$ | 4 A | |
| | DC-13 at 24 V DC | – | 2 A |
| | DC-13 at 250 V DC | – | 0.2 A |
| | AC-15 | – | 3 A |
| | AC-15 NO | 5 A | – |
| | AC-15 NC | 2 A | – |
| Supply voltage $U_c$ | For AC supply | 220 ... 240 V AC | – |
| Primary operating range | For AC supply | 0.8 ... 1.1 × $U_c$ | – |
| Frequency range for $U_c$ | | 45 ... 400 Hz | – |
| Rated power dissipation $P_v$ | For AC supply | Approx. 2 VA | – |
| | For DC supply | – | Approx. 1 W |
| **Contacts** | | | |
| µ contact | | 2 CO | |
| Switching hysteresis | At $R_{meas}$ 50 kΩ | 15% | 10 ... 15% |
| **Measuring circuit** | | | |
| Measuring circuit | | For 3-phase and AC systems | For direct voltage systems |
| Measurement voltage range *Umeas* | | 0 ... 500 V AC | 12 ... 280 V DC |
| Measurement voltage *Umeas* | Internal | Approx. 15 V DC | – |
| Primary operating range | | 0 ... 1.1 × *Umeas* | 0.9 ... 1.1 × *Umeas* |
| Frequency range for *Umeas* | | 10 ... 10000 Hz | – |
| Alarm values | Measuring shunt $R_{AL}$ | 5 ... 100 kΩ | 5 ... 200 kΩ |
| Setting of alarm value | On absolute scale | Infinitely variable | Infinitely variable |
| Alternating current internal resistance | Internal testing resistance | > 250 kΩ | – |
| Direct current internal resistance | Internal testing resistance | > 250 kΩ | – |
| | L+ and L- to PE | – | 75 kΩ each |
| Max. measurement current $I_{meas}$ | Short circuit | < 0.1 mA | 0.2 ... 4 mA, depending on the voltage |
| Direct interference voltage | Max. permissible | 500 V DC | – |
| Response delay at $R_{AL}$ 50 kΩ and 1 µF | ∞ to 0.9 × $R_{meas}$ | < 1.3 s | 0.8 s |
| | $R_{meas}$ from ∞ to 0 Ω | < 0.7 s | 0.4 s |
| **Safety** | | | |
| Rated impulse withstand voltage $U_{imp}$ | Terminals A1 to A2 | < 4 kV | |
| | Terminals L to PE | < 4 kV | |
| | Terminals A1, A2 to L, PE | < 4 kV | < 3 kV |
| | Terminals against contacts | < 6 kV | |
| Degree of protection | Terminals (according to EN 60529) | IP20 | |
| | Enclosure (according to EN 60529) | IP40 | |
| **Connection** | | | |
| Terminals | ± Screw (Pozidriv) | PZ 2 | |
| Conductor cross-sections | Rigid | Max. 2 × 2.5 mm² | |
| | Flexible, with end sleeve | Min. 1 × 0.50 mm² | |
| **Ambient conditions** | | | |
| Permissible ambient temperature | | –20 ... +60 °C | |
| Resistance to climate | Acc. to EN 60068-1 | 20/060/04 | |





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# 5TT5 EMERGENCY STOP modules

## Efficient personal and machine protection in small units

| | |
|---|---|
| **Mounting width** | 4 MW |



| Rated operational voltage $U_e$ | Rated operational current $I_e$ | Rated control circuit voltage $U_c$ | |
|---|---|---|---|
| 400 V AC | 5 A | 230 V AC | 5TT5200 |

## Further technical specifications

| | | |
|---|---|---|
| **Standards** | | |
| Standards | | ISO 13849-1: 2015;<br>EN 62061: 2005 + AC: 2010 + A1: 2013 + A2: 2015;<br>ISO 13850: 2015;<br>EN 60204-1: 2006 + A1: 2009 + AC: 2010 (in extracts);<br>EN 60947-5: 2004 + A1: 2009;<br>EN 50178: 1997;<br>EN 61508 Parts 1-7: 2010;<br>EN 50156-1: 2005 (in extracts) |
| Certification | | German Technical Inspectorate Rheinland |
| **Supply** | | |
| Primary operating range | | 0.8 ... 1.1 × $U_c$ |
| Rated frequency $f_n$ | | 50 Hz |
| Rated power dissipation $P_v$ | Coil/drive | 3.5 VA |
| | Contact per pole | 0.8 VA |
| Control voltage | Terminal Y1 | 24 V AC/DC |
| Control current | Terminal Y1 | 45 mA |
| **Contacts** | | |
| Contacts | NO AC-15 | 3 A |
| | NC AC-15 | 2 A |
| | NO/NC AC-1 | 5 A |
| Contact gap | | > 1 mm |
| Electrical endurance | AC-15 (2 A, 230 V AC) | $10^5$ operating cycles |
| Reliable switching frequency | | 600 operating cycles/h |
| Recovery time | | 500 ms |
| **Safety** | | |
| Rated impulse withstand voltage $U_{imp}$ | Actuator/contact | > 4 kV |
| Electrical isolation, creepage distances and clearances | Actuator/contact | 3 mm |
| Vibration resistance | Amplitude acc. to EN 60068-2-610 (up to 55 Hz) | 0.35 mm |
| **Connection** | | |
| Terminals | ± Screw (Pozidriv) | PZ 1 |
| Conductor cross-sections of main current paths | Rigid | Max. 2 × 2.5 mm² |
| | Flexible, with end sleeve | Min. 1 × 0.50 mm² |
| **Ambient conditions** | | |
| Permissible ambient temperature | | 0 ... +50 °C |
| Resistance to climate | Acc. to EN 60068-1 | 0/55/04 |



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# 5TT3 level relays

## For level monitoring and control

| | |
|---|---|
| **Mounting width** | 2 MW |



| Rated operational voltage $U_e$ | Rated operational current $I_e$ | Rated control circuit voltage $U_c$ | |
|---|---|---|---|
| 250 V AC | 5 A | 230 V AC | 5TT3435 |

## Further technical specifications

| | | |
|---|---|---|
| **Standards** | | |
| Standards | | IEC 60255; DIN VDE 0435-110 |
| **Supply** | | |
| Rated operational voltage $U_e$ | | 250 V AC |
| Rated operational current $I_e$ | | 5 A |
| Rated control circuit voltage $U_c$ | | 230 V AC |
| Primary operating range | | 0.8 ... 1.1 × $U_c$ |
| Rated frequency $f_n$ | | 50/60 Hz |
| **Measuring circuit** | | |
| Setting range of the liquid level | | 2 ... 450 kΩ |
| Switching point hysteresis of setting value | At 450 kΩ | 3% |
| | At 2 kΩ | 6% |
| Electrode voltage | | Max. approx. 10 V AC |
| Electrode current | | Max. approx. 1.5 mA AC |
| Response delay | Adjustable | 0.2 ... 20 s |
| OFF-delay | Adjustable | 0.2 ... 20 s |
| Test voltage | Input/auxiliary circuit | 4 kV |
| | Input/output circuit | 4 kV |
| | Auxiliary/output circuit | 4 kV |
| Voltage temperature influence | From setting value | < 2% |
| Max. cable length to the electrodes at 100 µF/km | Setting value 450 kΩ | 50 m |
| | Setting value 100 kΩ | 200 m |
| | Setting value 35 kΩ | 500 m |
| | Setting value 10 kΩ | 1500 m |
| | Setting value 5 kΩ | 3000 m |
| **Connection** | | |
| Terminals | ± Screw (Pozidriv) | PZ 2 |
| Conductor cross-sections | Rigid, max. | Max. 2 × 2.5 mm² |
| | Flexible, with end sleeve | Min. 1 × 0.50 mm² |
| **Ambient conditions** | | |
| Permissible ambient temperature | | –20 ... +60 °C |
| Resistance to climate | Acc. to EN 60068-1 | 20/60/4 |

## Accessories

**Immersion electrodes**



- Made of stainless steel, with PG13 sealing cap
- Suitable for pure water in open containers

| Temperature range | Connection | Article No. |
|---|---|---|
| 0 ... 60 °C | Terminal connection | 5TG8223 |

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# 5TT3 line circuit relays

## To interrupt circuits where there are no active loads

| | |
|---|---|
| **Mounting width** | 1 MW |



| Rated operational voltage $U_e$ | Rated operational current $I_e$ | Contacts | Rated control circuit voltage $U_c$ | |
|---|---|---|---|---|
| 250 V AC | 16 A | 1 NC | 230 V AC | 5TT3171 |

## Further technical specifications

| | | |
|---|---|---|
| **Standards** | | |
| Standards | | IEC 60255; DIN VDE 0435-110 |
| **Supply** | | |
| Rated operational voltage $U_e$ | | 250 V AC |
| Rated operational current $I_e$ | AC-1 | 16 A |
| Rated control circuit voltage $U_c$ | | 230 V AC |
| Primary operating range | | 0.85 ... 1.15 × $U_c$ |
| Rated frequency | | 50/60 Hz |
| Rated power dissipation $P_v$ | Electronics | 5 VA |
| | Contacts | 2.6 VA |
| **Contacts** | | |
| Response value | Adjustable | 2 ... 20 VA |
| Release value | % of the response value | 70% |
| Electrical endurance | In switching cycles at 3 A (AC-11) | $5 \times 10^5$ |
| **Safety** | | |
| Rated impulse withstand voltage $U_{imp}$ | Input/output | > 4 V |
| Degree of protection | Acc. to IEC/EN 60529 | IP20, with connected conductors |
| Protection class | Acc. to EN 61140/VDE 0140-1 | II |
| Monitoring voltage | | 3 V |
| **Connection** | | |
| Terminals | ± Screw (Pozidriv) | PZ 1 |
| Conductor cross-sections | Rigid | Max. 2 × 2.5 mm² |
| | Flexible, with end sleeve | Min. 1 × 0.50 mm² |
| **Ambient conditions** | | |
| Permissible ambient temperature | | –20 ... +45 °C |
| Humidity class | Acc. to IEC 60068-2-30 | F |

## Accessories

**Base load resistors for electronic devices**

- With 15 cm connection wires, end sleeves and shrink sleeving

| Article No. |
|---|
| 5TG8222 |

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# 7LQ2 twilight switches

## For lighting system monitoring and control

| | |
|---|---|
| **Mounting width** | 1 MW |



| Rated operational voltage $U_e$ | Rated operational current $I_e$ | Contacts | Rated control circuit voltage $U_c$ | |
|---|---|---|---|---|
| 230 V AC | 16 A | 1 NO | 250 V AC | 7LQ2300 |

## Further technical specifications

| | | |
|---|---|---|
| **Standards** | | |
| Standards | | EN 60669-1 |
| **Supply** | | |
| Rated operational voltage $U_e$ | | 230 V AC |
| Rated frequency $f_n$ | | 50/60 Hz |
| **Safety** | | |
| Degree of protection | | IP30 |
| **Contacts** | | |
| Incandescent lamp/halogen lamp load | | 2000 W |
| Energy-saving lamp load | | 1000 W |
| Fluorescent lamp load | Series corrected | 2000 W |
| | Parallel corrected (at max. 70 µF) | 1000 W |
| LV halogen lamp load ECG | | 2000 W |
| Luminosity setting | | 1 ... 100000 Lux |
| **Measuring circuit** | | |
| ON/OFF-delay | | Approx. 90 s |
| **Connection** | | |
| Terminals | ± Screw (Pozidriv) | PZ1 |
| Conductor cross-sections | Rigid | Max. 2 × 1.5 mm² |
| **Mechanical data** | | |
| Width | | 17.5 mm (1 MW) |
| Mounting | | DIN rail |
| **Ambient conditions** | | |
| Permissible ambient temperature | | –20 ... +55 °C |

## Spare part

**Light sensor**



- Included in the 7LQ2300 package
- Degree of protection IP65

| Temperature range | Mounting | Article No. |
|---|---|---|
| –20 ... +70 °C | Surface mounting | 7LQ2920 |



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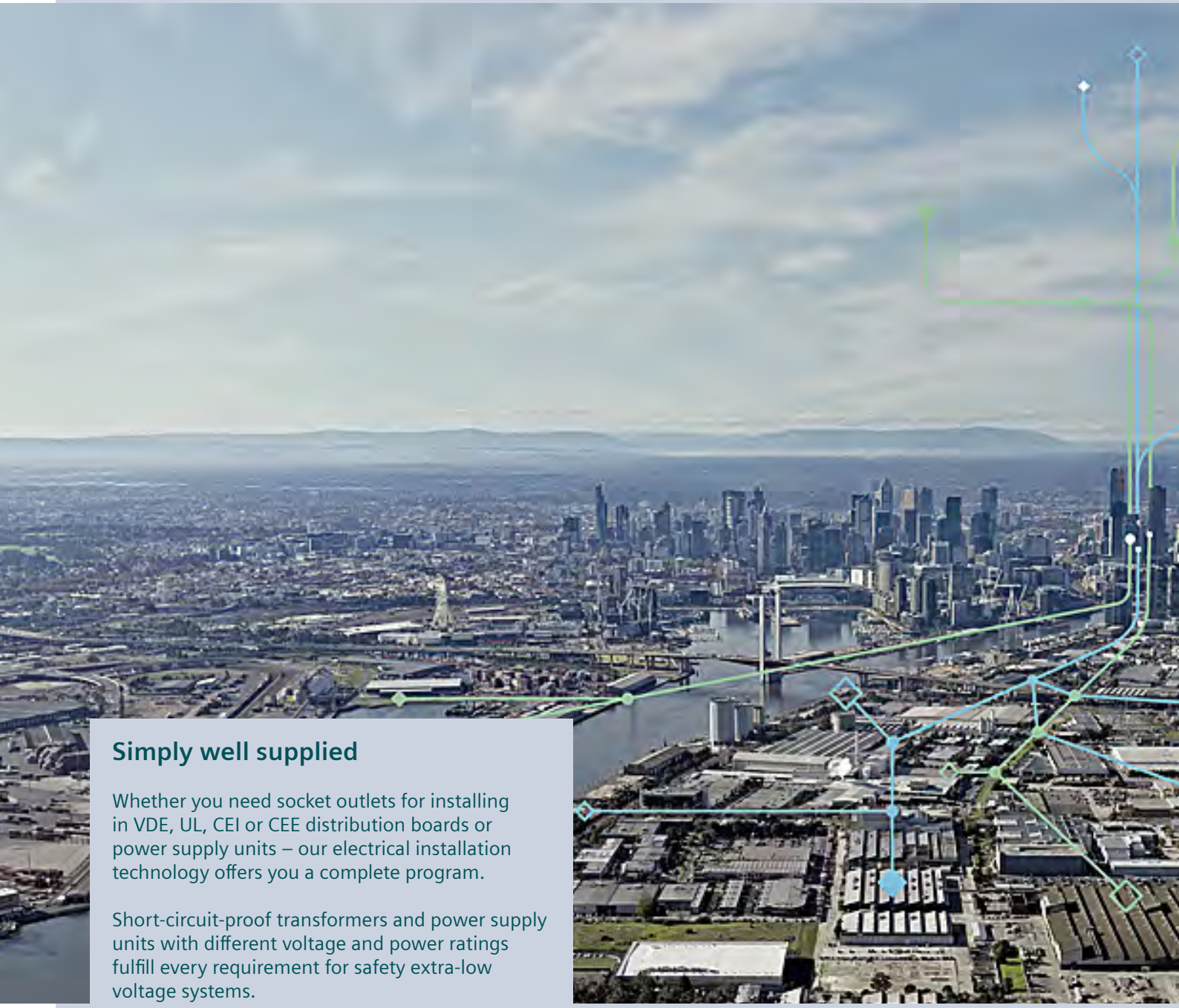
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## Simply well supplied

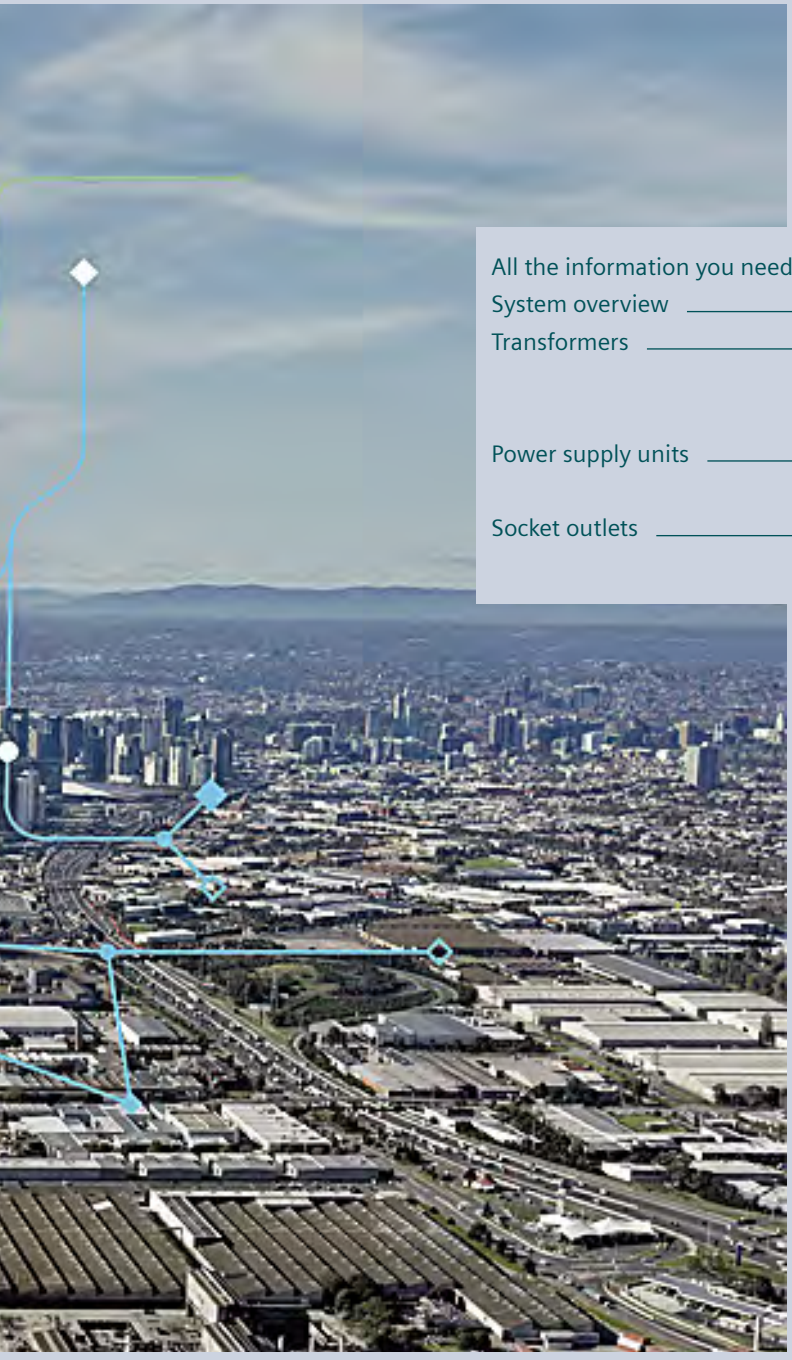
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# Transformers, Power Supply Units and Socket Outlets




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# A multitude of additional information ...

## Information + ordering

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Provision of 3D data (step and u3d data formats)

- SiePortal (product catalog)
  **www.siemens.com/lowvoltage/product-catalog**
- Image database
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- Configuration Manual
  – Transformers, power supply units and socket outlets **(45315886)**

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# System overview

## Transformers



4AC32 bell transformers



4AC37 safety transformers

## Power supply units



4AC2 electronic power supply units

## Socket outlets





5TE6 socket outlet for modular installation devices

## Accessories



Hinged lid

**Note:**
You will find a detailed range of accessories with the basic units.

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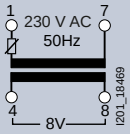
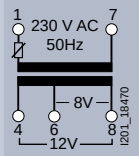


# 4AC32 bell transformer

## $U_e$ 230 V AC





| | | |
|---|---|---|
| **Mounting width** | 2 MW | 2 MW |
| |   |   |

| **Rated secondary current $I_{sec}$ AC at rated secondary voltage $U_{sec}$ AC** | | | **Rated operational power $P_s$** | |
|---|---|---|---|---|
| **8 V** | **12 V** | **24 V** | **8 VA** | **8 VA** |
| 1.0 A | – | – | 4AC3208-0 | – |
| | 0.6 A | – | – | 4AC3208-1 |
| 2.0 A | 1.3 A | 0.6 A | – | – |
| | 1.5 A | – | – | – |

## Further technical specifications

| | | 4AC3208-0 | 4AC3208-1 | 4AC3214-0 | 4AC3218-0 |
|---|---|---|---|---|---|
| **Standards** | | | | | |
| Standards | | EN 61558-1, EN 61558-2-8 | | | |
| **Supply** | | | | | |
| Rated operational voltage $U_e$ | | 230 V AC | | | |
| Primary operating range at 50 Hz | | 1.04 × $U_e$ | | | |
| Rated frequency | | 50 Hz | | | |
| Rated power dissipation $P_V$ | In no-load operation | 1.2 W | | 1.3 W | |
| | At a rated voltage of 8 V | 5.7 W | | 10.5 W | 8.1 W |
| | At a rated voltage of 12 V | – | 3.8 W | 7.4 W | 8.4 W |
| | At a rated voltage of 24 V | – | | 4.2 W | – |
| **Safety** | | | | | |
| Safe separation | Creepage distances and clearances | > 6 mm | | | |
| Insulation class | | E | | | |
| Test voltage (50 Hz, 1 s) | Primary against secondary winding | 4 kV | | | |
| **Connection** | | | | | |
| Conductor cross-section | Rigid | 1 × 4 mm² or 2 × 2.5 mm² | | | |
| | Flexible, with end sleeve | 1 × 2.5 mm² or 2 × 1.5 mm² | | | |
| **Ambient conditions** | | | | | |
| Permissible ambient temperature | | 40 °C | 35 °C | 40 °C | |
| Permissible humidity | | 91% | | | |
| Degree of protection | Acc. to EN 60629 | IP20 | | | |
| Protection class | Acc. to EN 61140 (VDE 0140-1) | II | | | |





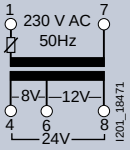
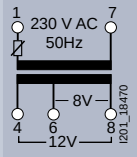
System overview, page 12/4

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| | |
|---|---|
| 2 MW | 2 MW |
|  |  |
| **14 VA** | **18 VA** |
| – | – |
| – | – |
| 4AC3214-0 | – |
| – | 4AC3218-0 |

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System overview, page 12/4

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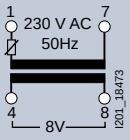
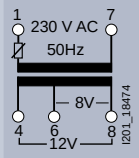


# 4AC37 safety transformer

## $U_e$ 230 V AC





| Mounting width | 2 MW | 3 MW |
|---|---|---|
| |   |   |

| Rated secondary current $I_{sec}$ AC at rated secondary voltage $U_{sec}$ AC | | | | | Rated operational power $P_s$ | |
|---|---|---|---|---|---|---|
| 8 V | 12 V | 16 V | 24 V | 32 V | 16 VA | 24 VA |
| 2.0 A | – | – | – | – | 4AC3716-0 | – |
| | 2.0 A | – | – | – | – | 4AC3724-0 |
| – | 3.3 A | 2.5 A | 1.6 A | 1.2 A | – | – |
| | | – | 1.6 A | – | – | – |
| | 5.2 A | – | 2.6 A | – | – | – |

## Further technical specifications

| | | 4AC3716-0 | 4AC3724-0 | 4AC3740-0 | 4AC3740-1 | 4AC3763-0 |
|---|---|---|---|---|---|---|
| **Standards** | | | | | | |
| Standards | | EN 61558-1, EN 61558-2-6 | | | | |
| **Supply** | | | | | | |
| Rated operational voltage $U_e$ | | 230 V AC | | | | |
| Primary operating range at 50 Hz | | 1.04 × $U_e$ | | | | |
| Rated frequency | | 50 Hz | | | | |
| Rated power dissipation $P_V$ | In no-load operation | 1.1 W | | 3.5 W | 3.9 W | |
| | At a rated voltage of 8 V | 6.8 W | 4.6 W | – | | |
| | At a rated voltage of 12 V | – | 7.6 W | 7.1 W | 7.5 W | 13.2 W |
| | At a rated voltage of 16 V | – | | | 7.7 W | – |
| | At a rated voltage of 24 V | – | | 7.7 W | 8.1 W | 13.5 W |
| | At a rated voltage of 32 V | – | | | 7.6 W | – |
| **Safety** | | | | | | |
| Safe separation | Creepage distances and clearances | > 6 mm | | | | |
| Insulation class | | E | | F | | |
| Test voltage (50 Hz, 1 s) | Primary against secondary winding | 4 kV | | | | |
| **Connection** | | | | | | |
| Conductor cross-section | Rigid | 1 × 4 mm² or 2 × 2.5 mm² | | | | |
| | Flexible, with end sleeve | 1 × 2.5 mm² or 2 × 1.5 mm² | | | | |
| **Ambient conditions** | | | | | | |
| Permissible ambient temperature | | 25 °C | | | | |
| Permissible humidity | | 91% | | | | |
| Degree of protection | Acc. to EN 60629 | IP20 | | | | |
| Protection class | Acc. to EN 61140 (VDE 0140-1) | II | | | | |

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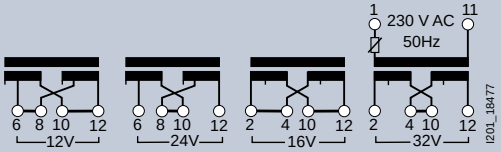
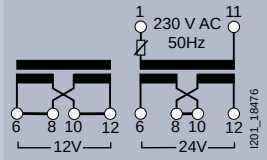
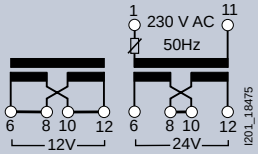
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| | | |
|---|---|---|
| 5 MW | 5 MW | 5 MW |
|  |  |  |
| **40 VA** | **40 VA** | **63 VA** |
| – | – | – |
| – | – | – |
| 4AC3740-1 | – | – |
| – | 4AC3740-0 | – |
| – | – | 4AC3763-0 |

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System overview, page 12/4

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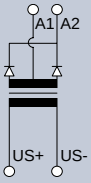


# 4AC2 electronic power supply unit

## SELV, short-circuit-proof



**Mounting width** 2 MW




| Rated operational voltage $U_e$ | | Rated secondary voltage $U_{sec}$ | Rated secondary current $I_{sec}$ | Rated operational power $P_s$ | |
|---|---|---|---|---|---|
| AC | DC | DC | DC | | |
| 85 ... 265 V | 85 ... 300 V | 24 ±5% V | 0.35 A | 8.4 W | 4AC2402 |

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System overview, page 12/4

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## Further technical specifications

| | | |
|---|---|---|
| **Standards** | | |
| Standards | | EN 60068-2, EN 61558-1, EN 61000-4 |
| Approvals | | – |
| **Supply** | | |
| Primary operating range | At 50/60 Hz | – |
| Rated frequency | | 50/60 Hz |
| Operating frequency range | | – |
| Rated power dissipation $P_v$ | In no-load operation | – |
| | At rated load | – |
| **Safety** | | |
| Current limitation | | Electronic overload protection |
| Residual ripple | | < 100 mV |
| Hum-free | Core molded | – |
| Safe separation, creepage distances and clearances | | > 5.5 mm |
| Insulation class | | – |
| Test voltage (50 Hz, 1 min) | Primary against secondary winding | – |
| Insulation resistance | | 4 kV |
| Rated impulse withstand voltage/Degree of pollution | Acc. to IEC 60664-1 | 6 kV/2 |
| Static discharge | Acc. to IEC/EN 61000-4-2 | 8 kV |
| RF irradiation | Acc. to IEC/EN 61000-4-3 | 10 V/m |
| Transient overvoltage (burst) | Acc. to IEC/EN 61000-4-4 | 4 kV |
| Transient overvoltage (surge) | Acc. to IEC/EN 61000-4-5 | |
| | Supply lines A1, A2 | 1 kV |
| | A1/A2 and ground | 2 kV |
| RF, conducted disturbance | Acc. to IEC/EN 61000-4-6 | 10 V |
| Interference suppression to lower limit class | Acc. to EN 61000-6-3 | Complied with |
| **Connection** | | |
| Terminals | Screw (slotted-head) | M2.5 |
| | ± Screw (Pozidriv) | – |
| Conductor cross-section | Rigid | 0.5 ... 2.5 mm² |
| | Flexible, with end sleeve, min. | 0.5 ... 1.5 mm² |
| **Ambient conditions** | | |
| Permissible ambient temperature | | –20 ... +60 °C |
| Resistance to climate | Acc. to IEC/EN 60068-1 | 20/045/04 |
| Resistance to vibrations, frequency 10 ... 55 Hz | Acc. to IEC/EN 60068-2-6 | 0.35 mm amplitude |
| Degree of protection | Acc. to EN 60529 | IP20, with connected conductors |
| Protection class | Acc. to EN 61140 | II |



System overview, page 12/4

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# 5TE6 socket outlet for modular installation devices

| Version | SCHUKO® socket outlet DIN VDE 0620-1 | |
|---|---|---|
| |  |  |

| Rated operational voltage $U_e$ | Rated operational current $I_e$ | Mounting width | | |
|---|---|---|---|---|
| **Without hinged lid** [1] | | | | |
| 125 V AC | 15 A | 2.5 MW | – | – |
| 230 V AC | 16 A | 2.5 MW | 5TE6800 | – |
| **With hinged lid** [2] | | | | |
| 230 V AC | 16 A | 2.5 MW | – | 5TE6801 |

## Accessories

**5TE6 hinged lids for socket outlets**



| | Mounting width | Article No. | Article No. |
|---|---|---|---|
| | 2.5 MW | 5TE9120 | – |

[1] The hinged lid can be retrofitted on all versions.
[2] In distribution boards with 55 mm mounting depth, the socket outlet can only be used without the hinged lid.
[3] In system components where equipment is still live even after the main switch has been disconnected, this must be indicated according to EN 50110-1 (VDE 0105-1) and IEC/EN 60204-1/VDE 0113-1. Yellow socket outlets are used for these applications.

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| Further technical specifications | | 5TE6800<br>5TE6801<br>5TE6810 | 5TE6802 | 5TE6803 | 5TE6804 |
|---|---|---|---|---|---|
| **Standards** | | | | | |
| Standards | | VDE 0620-1 | CEI 23-50 | CEE 7 standard sheet V | UL 498 |
| Approvals | | VDE 0620-1 | – | | UL File No. E258598/<br>CSA C22.2 No. 182.3M |
| **Connection** | | | | | |
| Terminals | ± Screw (Pozidriv) | PZ1 | | | |
| Terminal tightening torque | Max. | 0.8 ... 1 Nm | | | |
| Stripped length | | 10 mm | | | |
| Conductor cross-section | Rigid | 1.5 ... 6 mm² (AWG 10 ... 14) | | | |
| | Flexible, with end sleeve | 0.5 ... 4 mm² (AWG 14) | | | |
| **Ambient conditions** | | | | | |
| Permissible ambient temperature | | –10 ... +55 °C | | | |
| Degree of protection | Acc. to EN 60529 | IP20, with connected conductors | | | |
| Mounting position | Without hinged lid | Any | | | |
| | With hinged lid | Horizontally or vertically | | | |

System overview, page 12/4

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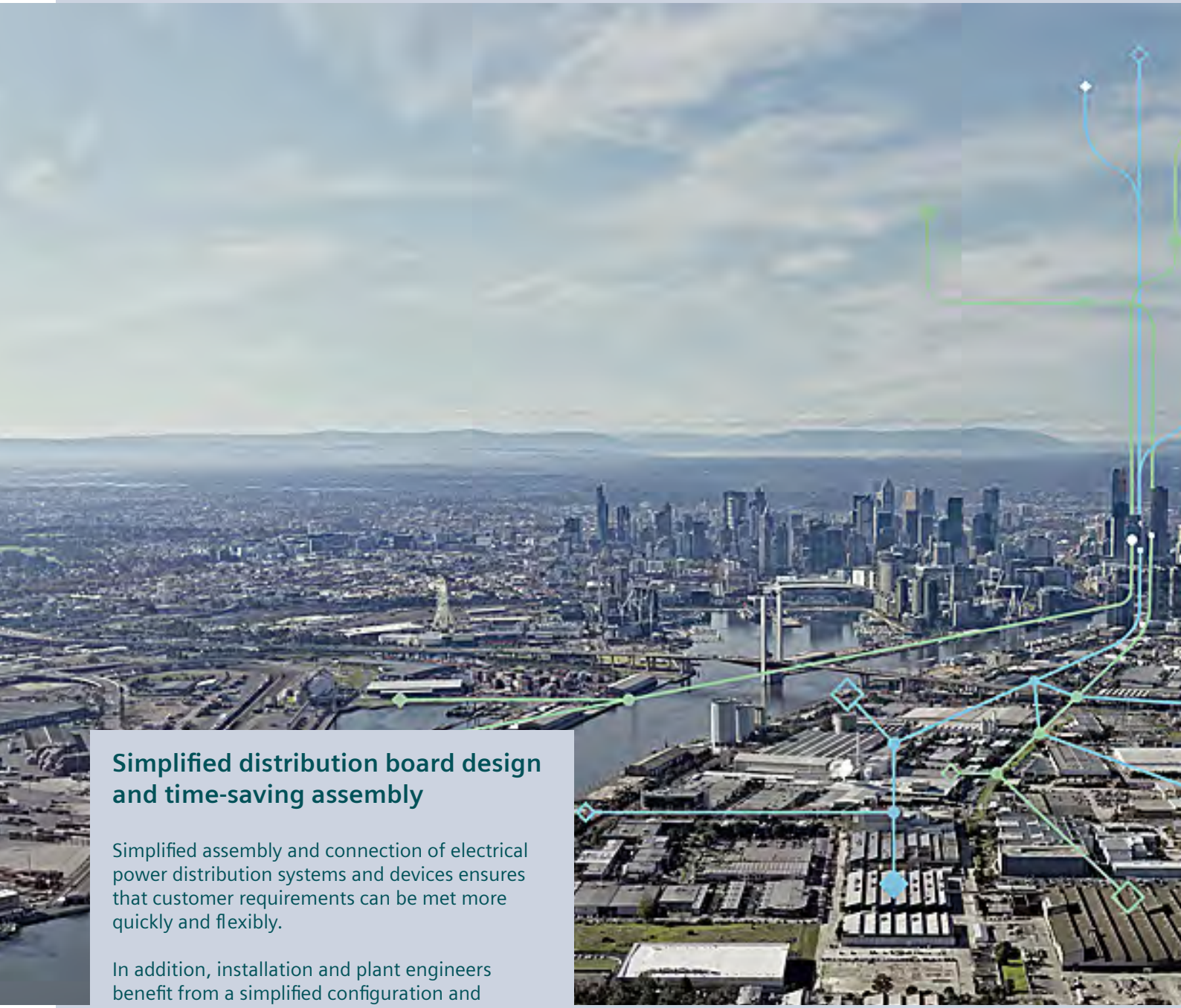
| | **Socket outlets**<br>**CEE 7 standard sheet V** | **Socket outlets**<br>**CEI 23-50** | **Socket outlets**<br>**UL 498** |
|---|---|---|---|
| Yellow RAL 1018 [3] | With grounding pin | | |
|  |  |  |  |
| | | | |
| – | – | – | 5TE6804 |
| 5TE6810 | 5TE6803 | – | – |
| | | | |
| – | – | 5TE6802 | – |
| | | | |
| **Article No.** | **Article No.** | **Article No.** | **Article No.** |
| – | 5TE9120 | – | 5TE9120 |

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System overview, page 12/4

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## Simplified distribution board design and time-saving assembly

Simplified assembly and connection of electrical power distribution systems and devices ensures that customer requirements can be met more quickly and flexibly.

In addition, installation and plant engineers benefit from a simplified configuration and reduced space requirements in distribution systems and control cabinets.

Our busbar systems for electrical installations offer a particularly easy way of fitting distribution systems with electrotechnical components.

The modular design saves space, while quick assembly contacts ensure fast mounting.

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# Busbar Systems




All the information you need 13/2
System overview 13/4
Quick selection guide 13/5
60 mm 8US compact busbar system 13/6
Basic assemblies 13/6
Infeeds and connection methods 13/8
Built-in components 13/8
Device adapters 13/10
60 mm 8US busbar system 13/12
Basic assemblies 13/12
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Built-in components 13/22
Device adapters and device holders 13/26
Busbar supports for 40 mm busbar center-to-center spacing 13/36

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# A multitude of additional information ...

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Manuals can be found in SiePortal at
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- Configuration Manual
  – 8US busbar systems **(109769746)**

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# System overview

## ❶ Basic assemblies



Busbar supports



N/PE busbar supports

## Accessories



Flat copper profiles



TT special profiles



Connection pieces



Cover profiles



Blanking covers

## ❷ Infeeds and connection methods



Connection modules



Terminals

## Accessories



Covers

## ❸ Built-in components



Bus-mounting fuse bases



Bus-mounting fuse holders



Bus-mounting switch disconnectors

## Accessories



Covers



Auxiliary switches



Lateral modules

## ❹ Device adapters



Device adapters



Device holders

## Accessories



N/PE modules



Lateral modules



Vibration & shock kits

## Busbar supports for 40 mm busbar center-to-center spacing



Busbar supports

## Accessories



Flat copper profiles



Cover profiles

**Note:**
You will find a detailed range of accessories with the basic units.

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# Quick selection guide





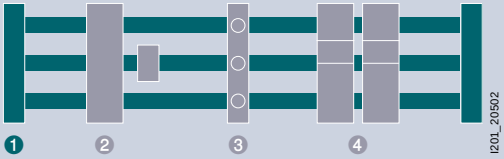
| | | 60 mm compact busbar system | 60 mm busbar system flat copper profile | 60 mm busbar system TT profile |
|---|---|---|---|---|
| **Busbars** | | | | |
| Busbar center-to-center spacing | | 60 mm | 60 mm | 60 mm |
| Flat copper profiles | 5 mm | 12 × 5 mm | 12 × 5 mm<br>15 × 5 mm<br>20 × 5 mm<br>25 × 5 mm<br>30 × 5 mm | – |
| | 10 mm | 12 × 10 mm | 20 × 10 mm<br>30 × 10 mm | – |
| TT special profile | | – | – | 2400 × 30 × 40 mm |
| **Rated values** | | | | |
| Rated operational current $I_e$ | IEC | 200 ... 360 A | 200 ... 900 A | 1020 ... 1600 A |
| | UL 508 | 300 A | 630 A | 1400 A |
| Rated operational voltage $U_e$ | IEC | 690 V AC | 690 V AC | 690 V AC |
| | UL 508 | 600 V AC | 600 V AC | 600 V AC |
| **Standards** | | | | |
| IEC | | ■ | ■ | ■ |
| UL 508 | | ■ | ■ | ■ |
| **Connection modules and terminals for** | | | | |
| Circular conductors | IEC | Cu 1.5 ... 150 mm² | Cu 1.5 ... 300 mm²<br>Al 95 ... 300 mm² | Cu 16 ... 300 mm² |
| | UL 508 | Cu AWG 2 ... MCM 300 | Cu AWG 16 ... MCM 600<br>Al AWG 3 | Cu AWG 4 ... MCM 600 |
| Laminated copper | | Cu lam.<br>15 ... 20 × 5 ... 10 mm | Cu lam.<br>3 × 20 × 1 ...10 × 32 × 1 mm | Cu lam.<br>2 × 40 × 10 mm |
| Cable lugs | | – | Max. 240 mm² | – |
| **Built-in components for** | | | | |
| NEOZED bus-mounting fuse bases | | ■ | ■ | ■ |
| DIAZED bus-mounting fuse bases | | – | ■ | ■ |
| Bus-mounting fuse holders for cylindrical fuses 10 × 38 mm | | – | ■ | ■ |
| Class CC bus-mounting fuse holders | | – | ■ | ■ |
| Class J bus-mounting fuse holders | | – | ■ | ■ |
| NEOZED bus-mounting switch disconnectors | | | ■ | ■ |
| **Device adapters for** | | | | |
| Universal application 3P/5P | | ■\|■ | ■\|■ | ■\|■ |
| Molded case circuit breakers | | ■ | ■ | ■ |
| Switch disconnectors | | – | ■ | ■ |
| Fuse switch disconnectors | | – | ■ | ■ |
| SIRIUS 3RM1 motor starters | | ■ | – | – |
| SIRIUS load feeders | | – | ■ | ■ |
| 3RM193 fuse module | | ■ | – | – |
| 5SY miniature circuit breakers | | ■ | – | – |
| **Further information** | | | | |
| | | See page 13/6 | See page 13/12 | See page 13/14 |

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# ❶ Basic assemblies

## For 8US compact busbar system up to 360 A (3P) or 200 A (5P)




| | Busbar supports [1] |
|---|---|
| No. of poles | 3P/5P |
| |  |

| Flat copper profiles | | Rated operational voltage $U_e$ | | Short-circuit current rating SCCR | | Standard | Dimensions | Min. order quantity | Connection |
|---|---|---|---|---|---|---|---|---|---|
| 12 × 5 mm | 12 × 10 mm | IEC | UL 508 | 3-pole | 5-pole | | | | L1 – L3 + N + PE/N |
| **Interior mounting** | | | | | | | | | |
| ■ | ■ | 690 V AC | – | 54 kA | 32 kA | IEC | 12 × 160 × 45 mm | 10 units | 8US1923-5CA02 |
| | | – | 600 V AC | 18 kA | – | UL 508 | 12 × 160 × 45 mm | 10 units | 8US1923-5CA02 |

[1] Including end cover

## Accessories

**Flat copper profiles**



| Surface | Length | Size | Article No. |
|---|---|---|---|
| Bare | 2400 mm | 12 × 5 mm | 8WC5123 |

**UL spacers for busbar supports**



| Dimensions | Minimum order quantity | Height | Article No. |
|---|---|---|---|
| 12 × 160 × 18 mm | 10 units | 18 mm | 8US1922-1CA02 |

**Stabilizing modules**



- Only for 12 × 5 mm busbars
- For protecting the N and PE busbars against bending

| Dimensions | Minimum order quantity | Article No. |
|---|---|---|
| 2 × 160 × 47 mm | 10 units | 8US1928-5CA02 |

**Cover profiles**



| Dimensions | Minimum order quantity | Article No. |
|---|---|---|
| 700 × 160 × 63 mm | 2 units | 8US1922-2CB02 |

**Holders for 8US1922-2CB02 cover profile**



| Dimensions | Minimum order quantity | Article No. |
|---|---|---|
| 5 × 156 × 55 mm | 10 units | 8US1922-2CA02 |

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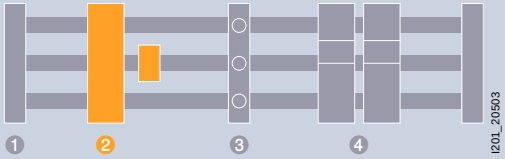
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# ❷ Infeeds and connection methods

## For 8US compact busbar system up to 360 A (3P) or 200 A (5P)

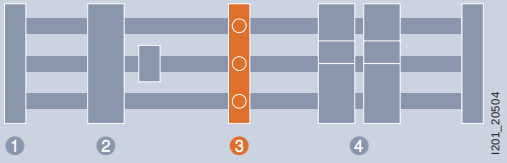



| Conductor cross-section | Rated operational current $I_e$ | | Rated operational voltage $U_e$ | | Rated peak withstand current | Standard | Minimum order quantity | Dimensions |
|---|---|---|---|---|---|---|---|---|
| | IEC | UL 508 | IEC | UL 508 | IEC $I_{pk}$ max | | | |
| **Spring terminal** | | | | | | | | |
| 1.5 ... 16 mm² | 63 A | 48 A | 690 V AC | 600 V AC | 10 kA | IEC, UL 508 | 6 units | 20 × 160 × 91 mm |
| **Connecting terminal** | | | | | | | | |
| 6 ... 50 mm² | 175 A | 175 A | 690 V AC | 600 V AC | 40.5 kA | IEC, UL 508 | 1 unit | 54 × 160 × 115 mm |
| 10 ... 120 mm² | 250 A | 200 A | 690 V AC | 600 V AC | 35.4 kA | IEC, UL 508 | 1 unit | 90 × 160 × 80 mm |
| | – | – | 690 V AC | 600 V AC | 35.1 kA | IEC, UL 508 | 1 unit | 30 × 160 × 80 mm |
| | | | | | 35.4 kA | IEC, UL 508 | 1 unit | 30 × 160 × 80 mm |
| 35 ... 150 mm² | 275 A | 285 A | 690 V AC | 600 V AC | 45.9 kA | IEC, UL 508 | 1 unit | 90 × 160 × 115 mm |

# ❸ Built-in components

## For 8US compact busbar systems up to 360 A (3P)






**Number of poles**
**Mounting width**

| Conductor cross-section | For flat copper profiles | | Rated operational current $I_e$ | Rated operational voltage $U_e$ | Standard | Minimum order quantity |
|---|---|---|---|---|---|---|
| | 12 × 5 mm | 12 × 10 mm | IEC | IEC | | |
| **Box terminals** | | | | | | |
| Rigid 1.5 ... 10 mm²<br>Flexible 1.5 ... 25 mm² | ■ | ■ | 63 A | 400 V AC | IEC | 6 units |

**See NEOZED screw caps, NEOZED adapter sleeves and NEOZED fuse links, from page 7/1 onwards**



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| For 12 × 5 mm and 12 × 10 mm flat copper profiles | | | |
|---|---|---|---|
| For 3-pole system (up to 360 A) | For 5-pole system (up to 200 A) | | |
|  |  |  |  |
| **Connection modules** | **Connection modules** | **Connection modules** | **Connection modules** |
| **3P** | **3P** | **N** | **PE** |
| 8US1921-1BA02 | – | – | – |
| 8US1921-1CB02 | – | – | – |
| – | 8US1921-1CD02 | – | – |
| – | – | 8US1921-1CE02 | – |
| – | – | – | 8US1921-1CF02 |
| 8US1921-1CC02 | – | – | – |

| NEOZED bus-mounting bases |
|---|
| Size D02 |
| 3P |
| 2 MW |
|  |
| **With touch protection** |
| 5SG6208 |

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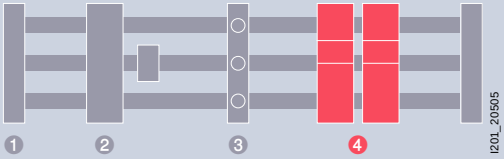
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# ❹ Device adapters

## For 8US compact busbar system up to 360 A (3P) or 200 A (5P)




**For 3-pole system**
**For universal applications**



| Rated operational current $I_e$ | | Rated operational voltage $U_e$ | | Standard | For flat copper profiles | | Adapters | | | Minimum order quantity | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| IEC | UL 508 | IEC | UL 508 | | 12 × 5 mm | 12 × 10 mm | Height | Width | Length | | |
| 16 A | – | 690 V AC | – | IEC, UL 508 | – | – | 160 mm | 22.5 mm | 122 mm | 4 units | – |
| | | | | | | | 200 mm | 22.5 mm | 122 mm | 5 units | – |
| 25 A | – | 690 V AC | – | IEC, UL 508 | ■ | – | 160 mm | 22.5 mm | 41.5 mm | 5 units | – |
| | | | | | | | 185 mm | 22.5 mm | 23.5 mm | 5 units | – |
| | | | | | | | 200 mm | 22.5 mm | 41.5 mm | 5 units | – |
| 32 A | – | 690 V AC | – | IEC | ■ | – | 160 mm | 18 mm | 73 mm | 12 units | – |
| | 25 A | 690 V AC | 600 V AC | IEC, UL 508 | ■ | ■ | 160 mm | 45 mm | 63 mm | 4 units | 8US1651-5DK02 |
| 63 A | – | 690 V AC | – | IEC | ■ | – | 160 mm | 18 mm | 73 mm | 12 units | – |
| | | | | | | | 160 mm | 18 mm | 82 mm | 12 units | – |
| | 65 A | 690 V AC | 600 V AC | IEC, UL 508 | ■ | ■ | 160 mm | 54 mm | 63 mm | 4 units | 8US1661-5FK02 |
| 144 A | – | 690 V AC | – | IEC | ■ | ■ | 160 mm | 77 mm | 35 mm | 1 unit | – |

## Accessories

**N modules**



| Rated voltage $U_e$ | Connecting terminal | Dimensions | Minimum order quantity | Article No. |
|---|---|---|---|---|
| 690 V AC | 1.5 ... 16 mm² | 9 × 160 × 114 mm | 12 units | – |

**PE modules**



| Rated voltage $U_e$ | Connecting terminal | Dimensions | Minimum order quantity | Article No. |
|---|---|---|---|---|
| 690 V AC | 1.5 ... 16 mm² | 9 × 160 × 114 mm | 12 units | – |

**Support modules**



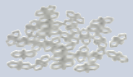
| Dimensions | Minimum order quantity | Article No. |
|---|---|---|
| 18 × 160 × 54 mm | 6 units | 8US1620-5AK02 |

**Lateral modules**



| Dimensions | Minimum order quantity | Article No. |
|---|---|---|
| 9 × 160 × 47 mm | 12 units | 8US1998-2BH02 |

**Set of module connectors**



| Use | Package | Article No. |
|---|---|---|
| For connecting adapters | 1 pack = 100 units | – |

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| For 3-pole system<br>For 3VA10/11 molded case circuit breakers | For 5-pole system<br>For universal applications | For SIRIUS 3RM1 motor starters and for relays | For 3RM193, 8US1615 and 8US1215 fuse modules | | For 5SY miniature circuit breakers |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
| With latching function | Adapters, 1-pole | With fuse module and DIN mounting rail | | With DIN mounting rail | Adapters, 1-pole |
| | | | | | |
| – | – | 8US1615-5CK10 | – | – | – |
| – | – | 8US1215-5CS10 | – | – | – |
| – | – | – | 8US1616-0AK02 | – | – |
| – | – | – | – | 8US1716-0RK00 | – |
| – | – | – | 8US1216-0AS00 | – | – |
| – | 8US1621-2NJ02 | – | – | – | – |
| – | – | – | – | – | – |
| – | 8US1621-2FK02 | – | – | – | – |
| – | – | – | – | – | 8US1624-2FK02 |
| – | – | – | – | – | – |
| 8US1613-4AU01 | – | – | – | – | – |

| Article No. | Article No. | Article No. | Article No. | Article No. | Article No. |
|---|---|---|---|---|---|
| – | 8US1600-0RE02 | 8US1600-0RE02 | 8US1600-0RE02 | 8US1600-0RE02 | 8US1600-0RE02 |
| **Article No.** | **Article No.** | **Article No.** | **Article No.** | **Article No.** | **Article No.** |
| – | 8US1600-0RF02 | 8US1600-0RF02 | 8US1600-0RF02 | 8US1600-0RF02 | 8US1600-0RF02 |
| **Article No.** | **Article No.** | **Article No.** | **Article No.** | **Article No.** | **Article No.** |
| 8US1620-5AK02 | 8US1620-5AK02 | 8US1620-5AK02 | 8US1620-5AK02 | 8US1620-5AK02 | 8US1620-5AK02 |
| **Article No.** | **Article No.** | **Article No.** | **Article No.** | **Article No.** | **Article No.** |
| 8US1998-2BH02 | 8US1998-2BH02 | 8US1998-2BH02 | 8US1998-2BH02 | 8US1998-2BH02 | 8US1998-2BH02 |
| **Article No.** | **Article No.** | **Article No.** | **Article No.** | **Article No.** | **Article No.** |
| – | 8US1998-1AA02 | 8US1998-1AA02 | 8US1998-1AA02 | 8US1998-1AA02 | 8US1998-1AA02 |



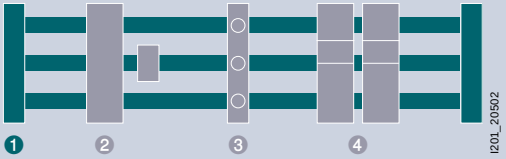
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# ❶ Basic assemblies

## Up to 630 A




| Flat copper profiles | | | | | | | Standard |
|---|---|---|---|---|---|---|---|
| 12 × 5 mm | 15 × 5 mm | 20 × 5 mm | 25 × 5 mm | 30 × 5 mm | 20 × 10 mm | 30 × 10 mm | |
| **Interior mounting** | | | | | | | |
| ■ | ■ | ■ | ■ | ■ | ■ | ■ | IEC 61439-1 |
| ■ | – | ■ | – | – | ■ | ■ | IEC 61439-1, UL 508 [1] |
| ■ | ■ | ■ | ■ | ■ | ■ | ■ | IEC 61439-1 |
| ■ | – | ■ | – | ■ | ■ | ■ | IEC 61439-1 |
| ■ | ■ | ■ | ■ | ■ | ■ | ■ | IEC 61439-1, UL 508 |
| **Exterior mounting** | | | | | | | |
| ■ | ■ | ■ | ■ | ■ | ■ | ■ | IEC 61439-1 |
| ■ | ■ | ■ | ■ | ■ | ■ | ■ | IEC 61439-1 |

[1] Only with base plate 8US1922-2UA01

## Accessories

**Flat copper profile**

| | Surface | Length | Size | Rated operational current | Cross-section | Standard | Article No. |
|---|---|---|---|---|---|---|---|
|  | Bare | 1100 mm | 25 × 5 mm | 400 A | 125 mm² | EN 12167 | 8WC5031-1AA00 |
| | | | 30 × 5 mm | 447 A | 150 mm² | EN 12167 | 8WC5033-1AA00 |
| | | 2400 mm | 12 × 5 mm | 200 A | 60 mm² | EN 12167 | 8WC5123 |
| | | | 15 × 5 mm | 250 A | 75 mm² | EN 12167 | 8WC5121 |
| | | | 20 × 5 mm | 320 A | 100 mm² | EN 12167 | 8WC5126 |
| | | | 25 × 5 mm | 400 A | 125 mm² | EN 12167 | 8WC5131 |
| | | | 30 × 5 mm | 447 A | 150 mm² | EN 12167 | 8WC5133 |
| | | | 20 × 10 mm | 520 A | 200 mm² | EN 12167 | 8WC5128 |
| | | | 30 × 10 mm | 630 A | 300 mm² | EN 12167 | 8WC5134 |
|  | Tin-coated | 2000 mm | 12 × 5 mm | 200 A | 60 mm² | EN 12167 | 8WC5051 |
| | | | 15 × 5 mm | 250 A | 75 mm² | EN 12167 | 8WC5052 |
| | | | 20 × 5 mm | 320 A | 100 mm² | EN 12167 | 8WC5053 |
| | | | 25 × 5 mm | 400 A | 125 mm² | EN 12167 | 8WC5054 |
| | | | 30 × 5 mm | 447 A | 150 mm² | EN 12167 | 8WC5055 |
| | | | 20 × 10 mm | 520 A | 200 mm² | EN 12167 | 8WC5063 |
| | | | 30 × 10 mm | 630 A | 300 mm² | EN 12167 | 8WC5065 |

**End covers**



- For covering free busbar ends

| For connection | For busbar support | Standard | Article No. |
|---|---|---|---|
| L1–L3 | 8US1923-2AA01, 8US1923-3AA01, 8US1923-3UA01 | IEC, UL 508 | 8US1922-1AC00 |
| L1–L3 + PE/N | 8US1923-4AA00 | IEC | 8US1922-1AB00 |

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| No. of poles | End and intermediate supports | | | N/PE busbar supports |
|---|---|---|---|---|
| | 3P | 2P | 4P | 1P |
| |  |  |  |  |
| | **Connection L1–L3** | **Connection L1/L2/L3/PE/N** | **Connection L1–L3 + PE/N** | **Connection PE/N** |
| | | | | |
| | 8US1923-3AA01 | – | – | – |
| | 8US1923-3UA01 | – | – | – |
| | – | – | 8US1923-4AA00 | – |
| | – | – | – | 5SH3540 |
| | – | – | – | 8US1923-1AA01 |
| | | | | |
| | 8US1923-2AA01 | – | – | – |
| | – | 8US1923-5AA00 | – | – |

**Cover profiles for busbars**



| Length | Width | Depth | Flat copper profile size | Standard | Article No. |
|---|---|---|---|---|---|
| 1000 mm | 15 mm | 10 mm | 12 × 5 mm | UL 508 | 8US1922-2CA00 |
| | 40 mm | 9 mm | 15, 20, 25, 30 × 5 mm | UL 508 | 8US1922-2AA00 |
| | 40 mm | 14 mm | 12, 15, 20, 25, 30 × 10 mm | UL 508 | 8US1922-2BA00 |

**Blanking covers**



| Length | Height | Depth | Standard | Article No. |
|---|---|---|---|---|
| 700 mm | 195 mm | 63 mm | UL 508 | 8US1922-2EB00 |

**Supports for blanking covers**



| Depth | Standard | Article No. |
|---|---|---|
| 32 mm | UL 508 | 8US1922-2EA00 |
| 107 mm | UL 508 | 8US1922-2EA01 |

**Base plates**



| Version | Length | Width | Standard | Article No. |
|---|---|---|---|---|
| For 3-pole system | 1100 mm | 240 mm | UL 508 | 8US1922-2UA01 |

**Connecting piece for flat copper profiles**





| Length | For flat copper profiles | Article No. |
|---|---|---|
| 40 mm | 20 × 5 mm, 25 × 5 mm, 30 × 5 mm, 20 × 10 mm, 25 × 10 mm, 30 × 10 mm | 8US1921-2BE00 |
| 55 mm | 12 × 5 mm, 15 × 5 mm, 20 × 5 mm 12 × 10 mm, 15 × 10 mm, 20 × 10 mm | 8US1921-2BF00 |

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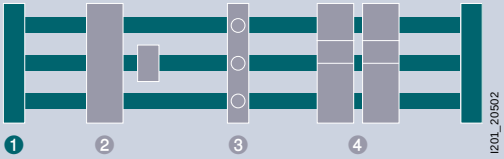
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# ❶ Basic assemblies

## Up to 1600 A




| | Busbar supports |
|---|---|
| No. of poles | 3P |
| |  |

| Copper profile | Rated operational current $I_e$ | | Rated operational voltage $U_e$ | | Short-circuit current rating SCCR | | Standard | Connection |
|---|---|---|---|---|---|---|---|---|
| | IEC | UL 508 | IEC | UL 508 | IEC | UL 508 | | L1–L3 |
| **Interior mounting** | | | | | | | | |
| TT special profile | 1600 A | 1400 A | 690 V AC | 600 V AC | 90 kA | 100 kA | IEC, UL 508 | 8US1943-3AA00 |

1 pack = 2 busbar supports + finger-safe end covers

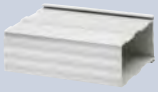
## Accessories

**TT special copper profile**



| Surface | Length | Rated operational current | Rated operational voltage | Cross-section | Article No. |
|---|---|---|---|---|---|
| Tin-coated | 2400 mm | 1600 A | 690 V AC | 720 mm² | 8US1948-2AA00 |

**Cover profile for TT special copper profile**



| Length | Article No. |
|---|---|
| 1000 mm | 8US1922-2DA00 |

**Blanking covers**



| Length | Height | Depth | Standard | Article No. |
|---|---|---|---|---|
| 700 mm | 195 mm | 63 mm | UL 508 | 8US1922-2EB00 |

**Supports for blanking covers**



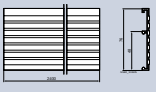
| Depth | Standard | Article No. |
|---|---|---|
| 32 mm | UL 508 | 8US1922-2EA00 |
| 107 mm | UL 508 | 8US1922-2EA01 |

**Connecting piece for TT special profile**



| | Article No. |
|---|---|
| | 8US1941-2BF01 |

**Partitions, closed**



- For additional lateral touch protection at the top/bottom

| Length | Depth | Article No. |
|---|---|---|
| 2400 mm | 76 mm | 8US1922-1JA00 |

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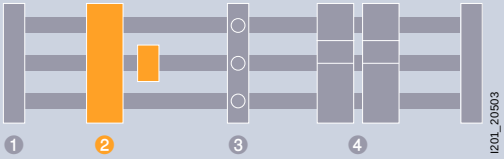
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# ❷ Infeeds and connection methods

## Up to 1600 A




| Conductor cross-section, circular conductor | | Conductor cross-section, laminated copper | Rated operational current $I_e$ | | Rated operational voltage $U_e$ | | Standard | Length |
|---|---|---|---|---|---|---|---|---|
| IEC | UL 508 | | IEC | UL 508 | IEC | UL 508 | | |
| **With cover** | | | | | | | | |
| Cu 1.5 ... 16 mm² | Cu AWG 16 ... 4 | Cu lam. 8 × 6 × 0.5 mm | 63 A | 48 A | 690 V AC | 600 V AC | IEC, UL 508 | 200 mm |
| Cu 6 ... 50 mm² | Cu AWG 10 ... 2 | – | 175 A | 175 A | 690 V AC | 600 V AC | IEC, UL 508 | 200 mm |
| Cu 25 ... 120 mm² | Cu AWG 6 ... MCM 250 | – | 250 A | 250 A | 690 V AC | 600 V AC | IEC, UL 508 | 200 mm |
| Cu 95 ... 300 mm²<br>Al 120 ... 240 mm² | AWG 3/0 ... MCM 600 | – | 500 A | 420 A | 690 V AC | – | IEC, UL 508 | 200 mm |
| **Without cover** | | | | | | | | |
| Cu 95 ... 300 mm² | AWG 3/0 ... MCM 600 | – | 500 A | 420 A | 690 V AC | 600 V AC | IEC, UL 508 | 184 mm |
| – | – | Cu lam. 20 × 3 ... 32 × 15 mm | 550 A | 420 A | 690 V AC | 600 V AC | IEC, UL 508 | 184 mm |
| **For 4th pole (PE/N)** [2] | | | | | | | | |
| Cu 1.5 ... 16 mm² | – | – | – | – | 690 V AC | 600 V AC | IEC, UL 508 | 242 mm |

[1] Shown without cover
[2] For mounting on device adapter or device holder

## Accessories

**Cover for connection module**



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| | Connection modules | | | |
|---|---|---|---|---|
| | For 5 mm and 10 mm flat copper profiles | For 5 mm and 10 mm flat copper profiles and TT special profile | | For laminated copper |
| |  |  | |  |
| **Width** | **Connection modules** | **Connection modules** | **Connection modules** | **Connection modules** |
| | **3P** | **3P** | **PE/N** | **3P** |
| 20 mm | 5SH3538 | – | – | – |
| 54 mm | – | 8US1921-1BA00 | – | – |
| 81 mm | – | 8US1921-1AA00 | – | – |
| 135 mm | – | 5SH3535 [1] | – | – |
| 153 mm | – | – | – | 8US1941-2AA03 |
| 153 mm | – | – | – | 8US1941-2AA04 |
| 18 mm | – | – | 8US1200-0AA00 | – |
| | **Article No.** | **Article No.** | **Article No.** | **Article No.** |
| | – | – | – | 8US1922-1GC00 |

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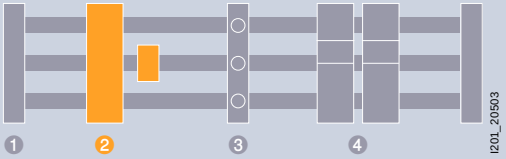
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# ❷ Infeeds and connection methods

## Up to 1600 A




| Conductor cross-section, circular conductor | | Conductor cross-section, laminated copper | Rated operational current $I_e$ | | Rated operational voltage $U_e$ | | Standard | Minimum order quantity |
|---|---|---|---|---|---|---|---|---|
| IEC | UL 508 | | IEC | UL 508 | IEC | UL 508 | | |
| Cu 1.5 ... 16 mm² | AWG 16 .. 6 | Cu lam. 8 × 6 × 0.5 mm | 65 A | 55 A | 690 V AC | 600 V AC | IEC, UL 508 | 15 units |
| | | | | | | | | 100 units |
| Cu 4 ... 35 mm² | AWG 10 ... 2 | Cu lam. 3 × 9 × 0.8 mm, Cu lam. 6 × 9 × 0.8 mm | 115 A | 115 A | 690 V AC | 600 V AC | IEC, UL 508 | 15 units |
| | | | | | | | | 50 units |
| Cu 16 ... 70 mm² | AWG 4 ... 2/0 | Cu lam. 2 × 9 × 0.8 mm, Cu lam. 6 × 9 × 0.8 mm, Cu lam. 6 × 13 × 0.5 mm | 175 A | 175 A | 690 V AC | 600 V AC | IEC, UL 508 | 15 units |
| | | | | | | | | 50 units |
| Cu 16 ... 120 mm² | AWG 4 ... MCM 250 | Cu lam. 4 × 15.5 × 0.8 mm, Cu lam. 6 × 15.5 × 0.8 mm, Cu lam. 10 × 15.5 × 0.5 mm | 250 A | 255 A | 690 V AC | 600 V AC | IEC, UL 508 | 15 units |
| | | | | | | | | 50 units |

[1] Finely stranded, directly clamped or with end sleeve, solid and stranded circular conductor

## Accessories

**Terminal covers for circular conductors**



- Fixing to busbar

| Length | Width |
|---|---|
| 200 mm | 84 mm |

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**Terminals** [1)]

| For 12 × 5 mm, 15 × 5 mm, 20 × 5 mm, 25 × 5 mm and 30 × 5 mm flat copper profiles | | | | For 12 × 10 mm, 15 × 10 mm, 20 × 10 mm, 25 × 10 mm and 30 × 10 mm flat copper profiles and TT special profile | | | |
|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |
| 8US1921-2AA01 | – | – | – | 8US1921-2BA01 | – | – | – |
| 8US1921-2AA00 | – | – | – | 8US1921-2BA00 | – | – | – |
| – | 8US1921-2AB01 | – | – | – | 8US1921-2BB01 | – | – |
| – | 8US1921-2AB00 | – | – | – | 8US1921-2BB00 | – | – |
| – | – | 8US1921-2AD01 | – | – | – | 8US1921-2BD01 | – |
| – | – | 8US1921-2AD00 | – | – | – | 8US1921-2BD00 | – |
| – | – | – | 8US1921-2AC01 | – | – | – | 8US1921-2BC01 |
| – | – | – | 8US1921-2AC00 | – | – | – | 8US1921-2BC00 |
| **Article No.** | **Article No.** | **Article No.** | **Article No.** | **Article No.** | **Article No.** | **Article No.** | **Article No.** |
| 8US1922-1GA00 | 8US1922-1GA00 | 8US1922-1GA00 | 8US1922-1GA00 | 8US1922-1GA00 | 8US1922-1GA00 | 8US1922-1GA00 | 8US1922-1GA00 |

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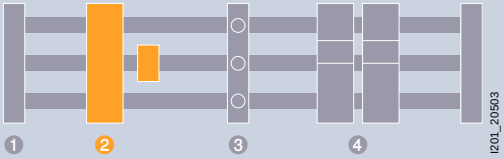
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# ❷ Infeeds and connection methods

## Up to 1600 A




| Conductor cross-section, circular conductor | | Conductor cross-section, laminated copper | Conductor cross-section, cable lugs | Rated operational current $I_e$ | | Rated operational voltage $U_e$ | | Standard |
|---|---|---|---|---|---|---|---|---|
| IEC | UL 508 | | | IEC | UL 508 | IEC | UL 508 | |
| Cu 95 ... 185 mm²<br>Al 95 ... 185 mm² | AWG 3/0 ... MCM 350 | – | – | 300 A | 310 A | 690 V AC | 600 V AC | IEC,<br>UL 508 |
| Cu 95 ... 300 mm²<br>Al 120 ... 140 mm² | AWG 3/0 ... MCM 600 | – | – | 500 A | 420 A | 690 V AC | 600 V AC | IEC,<br>UL 508 |
| – | – | Cu lam. 3 × 20 ×<br>1 ... 10 × 24 × 1 mm | – | 500 A | 420 A | 690 V AC | 600 V AC | IEC,<br>UL 508 |
| | | Cu lam. 2 × 40 × 10 mm | – | 1250 A | – | 690 V AC | – | IEC |
| | | – | Max. 240 mm² | 630 A | – | 690 V AC | – | IEC |

## Accessories

**Terminal covers for circular conductors**



- Fixing to busbar

| Length | Width |
|---|---|
| 200 mm | 270 mm |

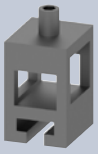
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| | Terminals | | | | |
|---|---|---|---|---|---|
| | For 20 × 5 mm, 25 × 5 mm and 30 × 5 mm flat copper profiles | | For 20 × 10 mm, 25 × 10 mm and 30 × 10 mm flat copper profiles | | For 40 × 25 mm and 30 × 10 mm flat copper profiles and TT special profile |
| |  | |  | |  |
| **Mounting** | | | | | |
| – | 8US1941-2AA01 | – | – | – | – |
| – | 8US1941-2AA02 | – | – | – | – |
| M16 threaded pin, size 8 Allen key | – | 8US1941-2BB00 | – | 8US1941-2BB00 | – |
| M16 threaded pin, size 8 Allen key | – | – | – | – | 8US1941-2BA00 |
| M16 threaded pin, size 8 Allen key, M10 hexagon bolt, width across flats 17 | – | – | 8US1941-2AC00 | – | – |
| | Article No. | Article No. | Article No. | Article No. | Article No. |
| | 8US1922-1GA02 | 8US1922-1GA02 | 8US1922-1GA02 | 8US1922-1GA02 | 8US1922-1GA02 |



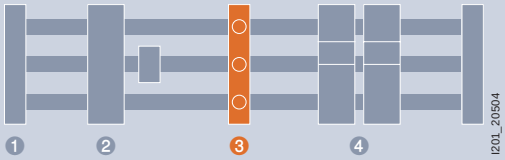
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# ❸ Built-in components

## Up to 630 A




| | | | | | | | NEOZED bus-mounting fuse bases Size D02 | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Mounting width | 1.5 MW | 1.5 MW | 2 MW |
| | | | | | | |  |  |  |
| **For flat copper profiles** | **Rated operational current $I_e$** | | **Rated operational voltage $U_e$** | | | **Standard** | **Standard** | **With touch protection** | |
| | **IEC** | **UL 508** | **IEC AC** | **IEC DC** | **UL** | | | | |
| **Box terminals** | | | | | | | | | |
| 5 mm and 10 mm | 25 A | – | 500 V AC | – | – | IEC | – | – | – |
| | 63 A | – | 400 V AC | 250 V DC | – | IEC | 5SG6202 [1] | 5SG6206 [1] | 5SG6207 |
| | | | 690 V AC | – | – | IEC | – | – | – |
| | – | 30 A | 690 V AC | – | 600 V AC | IEC, cULus, CCC | – | – | – |
| | | | – | – | 600 V AC | UL, CCC | – | – | – |
| | | 100 A | – | – | 600 V AC | cULus | – | – | – |
| | | 200 A | – | – | 600 V AC | cULus | – | – | – |
| | | 400 A | – | – | 600 V AC | CCC, cULus | – | – | – |
| **Further information** | | | | | | | | | |
| 3NP1 fuse switch disconnectors | | | | | | | See page 8/78 | See page 8/78 | See page 8/78 |

[1] From 35 A continuous current load, mount the fuse base with spacing and use a wider cover

**Note:**
NEOZED adapter sleeves or DIAZED screw adapters are required for NEOZED and DIAZED bus-mounting fuse bases.

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## Accessories

| | **NEOZED covers for standard version** | | | | | |
|---|---|---|---|---|---|---|
| | **Size** | **Version** | **Mounting width** | **Article No.** | **Article No.** | **Article No.** |
|  | D02 | Standard | 1.5 MW | 5SH5241 | – | – |
|  | | Extra wide | 2 MW | 5SH5242 | – | – |
| | | With double width | 3 MW | 5SH5243 | – | – |
| | **DIAZED covers for standard version** | | | | | |
|  | **Size** | | **Mounting width** | **Article No.** | **Article No.** | **Article No.** |
| | DII | | 2.3 MW | – | – | – |
| | DIII | | 3.2 MW | – | – | – |

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| DIAZED bus-mounting fuse bases | | Bus-mounting fuse holders | | | | |
|---|---|---|---|---|---|---|
| Size DII | Size DIII | Cylindrical fuses 10 × 38 mm | Class CC | Class J | | |
| 2.3 MW | 3.2 MW | 1.5 MW | 1.5 MW | 106 mm | 184 mm | 256 mm |
|  |  |  |  |  |  |  |
| **Standard** | **With touch protection** | | | **3P** | **3P** | **3P** |
| 5SF6015 | 5SF6020 | – | – | – | – | – |
| – | – | – | – | – | – | – |
| 5SF6215 | 5SF6220 | – | – | – | – | – |
| – | – | 3NW7431 | – | – | – | – |
| – | – | – | 3NW7431-0HG | – | – | – |
| – | – | – | – | 3NW7431-6HG | – | – |
| – | – | – | – | – | 3NW7431-7HG | – |
| – | – | – | – | – | – | 3NW7431-8HG |
| **See page 8/78** | **See page 8/78** | **See page 8/78** | **See page 8/78** | **See page 8/78** | **See page 8/78** | **See page 8/78** |

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| Article No. | Article No. | Article No. | Article No. | Article No. | Article No. | Article No. |
|---|---|---|---|---|---|---|
| – | – | – | – | – | – | – |
| – | – | – | – | – | – | – |
| – | – | – | – | – | – | – |

| Article No. | Article No. | Article No. | Article No. | Article No. | Article No. | Article No. |
|---|---|---|---|---|---|---|
| 5SH2042 | – | – | – | – | – | – |
| 5SH2242 | – | – | – | – | – | – |

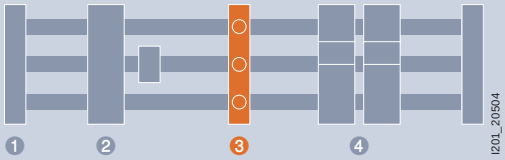
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# ❸ Built-in components

## Up to 630 A




| | | | | | | | NEOZED bus-mounting switch disconnectors Size D02 | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Mounting width | 1.5 MW | 1.5 MW | 1.5 MW |
| | | | | | | |  |  |  |
| For flat copper profiles | Rated operational current $I_e$ | | Rated operational voltage $U_e$ | | | Standard | Without LED signal detector | | With LED signal detector |
| | IEC | UL 508 | IEC AC | IEC DC | UL 508 | | | | |
| **Box terminals** | | | | | | | | | |
| 5 mm, 10 mm | 63 A | – | 400 V AC | – | – | IEC | 5SG7234-1 [2] | – | 5SG7234-2 [2] |
| | | | | 110 V DC | – | IEC | – | 5SG7230 [1] | – |

[1] From 35 A current load use 5SH5526 lateral module
[2] From 35 A current load use 5SH5533 lateral module

**Note:**
NEOZED adapter sleeves or DIAZED screw adapters are required for NEOZED and DIAZED bus-mounting fuse bases.

## Accessories

**Auxiliary switches**



- For signaling the switching state for bus-mounting switch disconnectors

| Contacts | Mounting width | Article No. | Article No. | Article No. |
|---|---|---|---|---|
| 1 CO | 0.5 MW | – | 5SH5525 | – |

**Lateral modules**



- For greater heat dissipation for loads from 35 A

| Mounting width | Article No. | Article No. | Article No. |
|---|---|---|---|
| 0.5 MW | 5SH5533 | 5SH5526 | 5SH5533 |

**Reducers**



- For NEOZED D01 fuse links in bus-mounting switch disconnectors

| | Article No. | Article No. | Article No. |
|---|---|---|---|
| | – | 5SH5527 | – |

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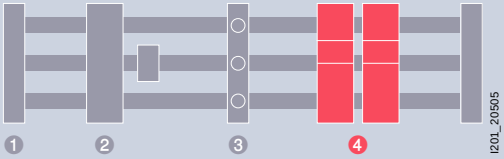
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# ❹ Device adapters and device holders

## For universal application up to 1600 A




| Rated operational current $I_e$ | | Rated operational voltage $U_e$ | | Standard | For copper profiles | Adapters | | Connecting cable | | |
|---|---|---|---|---|---|---|---|---|---|---|
| IEC | UL 508 | IEC | UL 508 | | | Width | Height | Cross-section | Max. temperature | Length |
| 25 A | 25 A | 690 V AC | 600 V AC | IEC, UL 508 | 5 mm, 10 mm, TT profile | 45 mm | 200 mm | AWG 12 | 150 °C | 99 mm |
| | | | | | | | | | | 167 mm |
| | | | | | | | 260 mm | AWG 12 | 150 °C | 99 mm |
| | | | | | | | | | | 167 mm |
| 32 A | 32 A | 690 V AC | 600 V AC | IEC, UL 508 | 5 mm, 10 mm, TT profile | 45 mm | 200 mm | AWG 10 | 105 °C | 118 mm |
| | | | | | | | | | 150 °C | 99 mm |
| | | | | | | | | | | 167 mm |
| | | | | | | | | – | – | – |
| | | | | | | | 260 mm | AWG 10 | 150 °C | 99 mm |
| | | | | | | | | | | 167 mm |
| | | | | | | | | – | – | – |
| 80 A | 80 A | 690 V AC | 600 V AC | IEC, UL 508 | 5 mm, 10 mm, TT profile | 54 mm | 200 mm | AWG 4 | 150 °C | 150 mm |
| | | | | | | | 260 mm | AWG 4 | 150 °C | 150 mm |
| | | | | | | 72 mm | 215 mm | AWG 4 | 150 °C | 210 mm |
| | | | | | | 119 mm | 260 mm | AWG 4 | 150 °C | 150 mm |
| – | – | – | – | – | 5 mm, 10 mm, TT profile | 45 mm | 200 mm | – | – | – |
| | | | | | | | | – | – | – |
| | | | | | | | 260 mm | – | – | – |

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## Accessories

**Lateral modules**



- For extending device adapters and device holders of the same length

| Length | Width |
|---|---|
| 200 mm | 9 mm |



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| Device adapters<br>For plug-in units | Device adapters with connecting cables<br>For contact with busbars | | | | | | Device holders<br>No electrical contact | |
|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |  |
| | | | | | | | | For lateral mounting on device adapter |
| – | 8US1251-5DS10 | – | – | – | – | – | – | – |
| – | 8US1251-5DS11 | – | – | – | – | – | – | – |
| – | 8US1251-5DT10 | – | – | – | – | – | – | – |
| – | 8US1251-5DT11 | – | – | – | – | – | – | – |
| – | – | 8US1211-1NS10 | – | – | – | – | – | – |
| – | – | – | 8US1251-5NS10 | – | – | – | – | – |
| – | – | – | 8US1251-5NS11 | – | – | – | – | – |
| 8US1216-5AS80 | – | – | – | – | – | – | – | – |
| – | – | – | 8US1251-5NT10 | – | – | – | – | – |
| – | – | – | 8US1251-5NT11 | – | – | – | – | – |
| 8US1216-5AT80 | – | – | – | – | – | – | – | – |
| – | – | – | – | 8US1261-5MS13 | – | – | – | – |
| – | – | – | – | 8US1261-6MT10 | – | – | – | – |
| – | – | – | – | – | 8US1211-4TR00 | – | – | – |
| – | – | – | – | – | – | 8US1211-6MT10 | – | – |
| – | – | – | – | – | – | – | – | 8US1250-1AA10 |
| – | – | – | – | – | – | – | 8US1250-5AS10 | – |
| – | – | – | – | – | – | – | 8US1250-5AT10 | – |
| Article No. | Article No. | Article No. | Article No. | Article No. | Article No. | Article No. | Article No. | Article No. |
| 8US1998-2BJ10 | 8US1998-2BJ10 | 8US1998-2BJ10 | 8US1998-2BJ10 | 8US1998-2BJ10 | – | – | 8US1998-2BJ10 | – |

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# ❹ Device adapters and device holders

## For universal application up to 1600 A

### Accessories

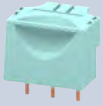
**Plug-in connectors to make contact with the 3RV2 motor starter protectors for 8US1216-5AS80 and 8US1216-5AT80**





| Use | Version | Size | Article No. |
|---|---|---|---|
| For spring-loaded terminals | Single-unit packaging | S00 [1] | 3RV2917-5AA00 |
| | | S0 [2] | 3RV2927-5AA00 |
| | Multi-unit packaging | S00 [1] | 3RV2917-5A |
| | | S0 [2] | 3RV2927-5A |
| For screw terminals | Single-unit packaging | S00 [1] [3] | 3RV2917-5CA00 |
| | | S0 [2] [4] | 3RV1927-5AA00 |
| | Multi-unit packaging | S00 [1] [3] | 3RV2917-5C |
| | | S0 [2] [4] | 3RV1927-5A |

**Plug-in connectors to make contact with the 3RV1011 motor starter protectors**



| Use | Version | Size | Article No. |
|---|---|---|---|
| For screw terminals | Single-unit packaging | S00 | 3RV1917-5CA00 |
| | Multi-unit packaging | S00 | 3RV1917-5C |

[1] $I > 14$ A, please note derating.
[2] $I > 16$ A, please note derating.
[3] The plug-in connector cannot be used for the 3RV2711 and 3RV2811 circuit breakers with size S00.
[4] The plug-in connector can be used for the 3RV2711, 3RV2811 (size S00) and 3RV2721, 3RV2821 (size S0) circuit breakers.





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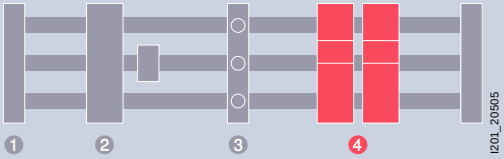
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# ❹ Device adapters and device holders

## For molded case circuit breakers and switch disconnectors up to 1600 A




| Rated operational current $I_e$ | | Rated operational voltage $U_e$ | | Standard | For copper profile | Adapters | | Connecting cable |
|---|---|---|---|---|---|---|---|---|
| IEC | UL 508 | IEC | UL 508 | | | Length | Width | |
| **Screw terminals** | | | | | | | | |
| 80 A | 80 A | – | 600 V AC | UL 508 | 5 mm, 10 mm, TT profile | 200 mm | 81 mm | AWG 4 |
| 125 A | 125 A | 690 V AC | 600 V AC | IEC, UL 508 | 5 mm, 10 mm, TT profile | 200 mm | 90 mm | Cu laminated 6 × 9 × 0.8 mm |
| **Busbar contact** | | | | | | | | |
| 144 A | – | 690 V AC | – | IEC | 5 mm, 10 mm, TT profile | 200 mm | 76 mm | – |
| 160 A | – | 690 V AC | – | IEC | 5 mm, 10 mm, TT profile | 175 mm | 108 mm | – |
| 250 A | – | 690 V AC | – | IEC | 5 mm, 10 mm, TT profile | 175 mm | 108 mm | – |
| **Tubular contacts** | | | | | | | | |
| 150 A | 150 A | 690 V AC | 600 V AC | IEC, UL 508 | 5 mm, 10 mm, TT profile | 190 mm | 105 mm | – |
| 250 A | 250 A | 690 V AC | 600 V AC | IEC, UL 508 | 5 mm, 10 mm, TT profile | 190 mm | 105 mm | – |
| | | | | | | 240 mm | 105 mm | – |
| | – | 690 V AC | – | IEC | 5 mm, 10 mm, TT profile | 270 mm | 140 mm | – |
| 400 A | 400 A | 690 V AC | 600 V AC | IEC, UL 508 | 5 mm, 10 mm, TT profile | 296 mm | 140 mm | – |
| 540 A | 540 A | 690 V AC | 600 V AC | IEC, UL 508 | 5 mm, 10 mm, TT profile | 296 mm | 140 mm | – |
| 580 A | – | 690 V AC | – | IEC | 5 mm, 10 mm, TT profile | 325 mm | 184 mm | – |
| 590 A | 600 A | 690 V AC | 600 V AC | IEC, UL 508 | 5 mm, 10 mm, TT profile | 300 mm | 140 mm | – |
| | – | 690 V AC | – | IEC | 5 mm, 10 mm, TT profile | 300 mm | 185 mm | – |
| **M10 pin connector** | | | | | | | | |
| 400 A | – | 690 V AC | – | IEC | 5 mm, 10 mm, TT profile | 320 mm | 184 mm | – |
| 630 A | 630 A | 690 V AC | 600 V AC | IEC, UL 508 | 5 mm, 10 mm, TT profile | 320 mm | 250 mm | – |
| | – | 690 V AC | – | IEC | 5 mm, 10 mm, TT profile | 320 mm | 184 mm | – |
| | | | | | | 320 mm | 250 mm | – |

[1] Observe the short-circuit strength of the busbar system: Short-circuit strength > 50 kA on request.
[2] Usable only for 3VL circuit breakers with line-side box terminals.
[3] Only for 3VL 250 A circuit breakers, for screw fixing with metric thread, for flat terminals.
[4] Without connecting cables. The connecting cable between adapter and device should be manufactured in accordance with the rated operational current as a circular conductor, e.g. H07V-R with cable lug, or as a flat conductor for an M10 pin connector.
[5] Without connecting cables. The connecting cable between adapter and device should be manufactured in accordance with the rated operational current as a circular conductor, e.g. H07V-R, bared at both ends for tunnel terminals.

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| | Device adapters | | | | |
|---|---|---|---|---|---|
| | For molded case circuit breakers | | | For switch disconnectors | For fuse switch disconnectors |
| | 3VA | | 3VL [1] | 3KA and 3KL | 3NP5 |
| |  |  |  |  |  |
| **Device** | **3-pole** | **4-pole** | **3-pole** | **3-pole** | **3-pole** |
| **Size/type** | | | | | |
| NGG, HGG, LGG | 8US1240-5MA00 | – | – | – | – |
| 3VA10, 3VA11, 3VA51, NGG, HGG, LGG (connection at top) | 8US1211-4SS00 | – | – | – | – |
| 3VA10, 3VA11, 3VA51 (connection at bottom) | 8US1215-4SS00 | – | – | – | – |
| 3VA10, 3VA11 | 8US1213-4AU01 | – | – | – | – |
| 3VL1 [2], 3VL2 [2] | – | – | 8US1211-4SL01 | – | – |
| 3NP5060 (NH00) | – | – | – | – | 8US1291-4SB00 |
| 3VL3 [3] | – | – | 8US1211-4SL00 | – | – |
| VL150X UL, CG frame | – | – | 8US1213-4AQ01 | – | – |
| VL150 UL, DG frame | – | – | 8US1213-4AQ03 | – | – |
| VL250 UL, FG frame | – | – | 8US1213-4AQ03 | – | – |
| 3VA12, 3VA20, 3VA21, 3VA22, 3VA52, 3VA61, 3VA62 | 8US1213-4AP03 | – | – | – | – |
| 3VA12, 3VA20, 3VA21, 3VA22 | – | 8US1313-4AH03 | – | – | – |
| VL400 UL, JG frame | – | – | 8US1213-4AH00 | – | – |
| VL400X UL, LG frame | – | – | 8US1213-4AH00 | – | – |
| 3VL5 | – | – | 8US1213-4AF00 | – | – |
| 3VA13, 3VA14, 3VA23, 3VA24, 3VA53, 3VA54, 3VA63, 3VA64 | 8US1213-4AH04 | – | – | – | – |
| 3VA13, 3VA14, 3VA23, 3VA24 | – | 8US1313-4AM04 | – | – | – |
| 3VL1 to 3VL4 (also with RCD module) [2] | – | – | 8US1210-4AF00 + 8US1927-4AF01 | – | – |
| 3NP52, 3NP53, 3NP54 [5] | – | – | – | – | 8US1210-4AG00 |
| 3KA52, 3KA53, 3KL52, 3KL53 | – | – | – | 8US1210-4AF00 [4] | – |
| 3KA55, 3KA57, 3KA58, 3KL55, 3KL57 | – | – | – | 8US1210-4AG00 [4] | – |

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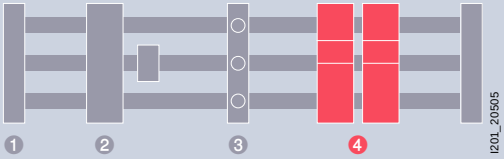
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# ❹ Device adapters and device holders

## For load feeders up to 1600 A




| Rated operational current $I_e$ | | Rated operational voltage $U_e$ | | | Standard | For copper profile | Adapters | | Connecting cable | | Device |
|---|---|---|---|---|---|---|---|---|---|---|---|
| IEC | UL 508 | IEC | UL 508 | , | | | Length | Width | Cross-section | Max. temperature | Size |
| **Screw terminals** | | | | | | | | | | | |
| 25 A | 25 A | 690 V AC | 600 V AC | – | IEC, UL 508 | 5 mm, 10 mm, TT profile | 200 mm | 45 mm | AWG 12 | 150 °C | S00 |
| | | | | | | | | | | | S0 |
| | | | | | | | 260 mm | 45 mm | AWG 12 | 150 °C | S00 |
| 32 A | 32 A | 690 V AC | 600 V AC | – | IEC, UL 508 | 5 mm, 10 mm, TT profile | 200 mm | 45 mm | AWG 10 | 150 °C | S0 |
| | | | | | | | | | – | – | S00/S0 |
| | | | | | | | 260 mm | 45 mm | AWG 10 | 150 °C | S0 |
| | | | | | | | | | – | – | S00/S0 |
| | | – | – | 690 V AC | , | 5 mm, 10 mm, TT profile | 200 mm | 45 mm | AWG 10 | 105 °C | S00/S0 |
| 80 A | 80 A | 690 V AC | 600 V AC | – | IEC, UL 508 | 5 mm, 10 mm, TT profile | 200 mm | 54 mm | AWG 4 | 150 °C | S2 |
| | | | | | | | 215 mm | 72 mm | AWG 4 | 150 °C | S3 |
| | | | | | | | 260 mm | 54 mm | AWG 4 | 150 °C | S2 |
| | | | | | | | | 119 mm | AWG 4 | 150 °C | S2 |
| **Spring-loaded terminals** | | | | | | | | | | | |
| 25 A | 25 A | 690 V AC | 600 V AC | – | IEC, UL 508 | 5 mm, 10 mm, TT profile | 200 mm | 45 mm | AWG 12 | 150 °C | S00 |
| | | | | | | | 260 mm | 45 mm | AWG 12 | 150 °C | S00 |
| 32 A | 32 A | 690 V AC | 600 V AC | – | IEC, UL 508 | 5 mm, 10 mm, TT profile | 200 mm | 45 mm | AWG 10 | 150 °C | S0 |
| | | | | | | | 260 mm | 45 mm | AWG 10 | 150 °C | S0 |

## Accessories

**Vibration & shock kit S2**



| Use |
|---|
| For size 2 devices |

**Lateral modules**



- For extending device adapters and device holders of the same length

| Length | Width |
|---|---|
| 200 mm | 9 mm |

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| For 3-pole system | | | | | | | |
|---|---|---|---|---|---|---|---|
| Device adapters for plug-in units | | Device adapters for load feeders | | | | | |
| SIRIUS | | SIRIUS 3RV2/3RT2 | | | SIRIUS 3RV1/3RT1 | SIRIUS 3RA6 | |
| Circuit breakers, Direct-on-line starters | Circuit breakers, Direct-on-line starters, Reversing starters | Circuit breakers | Direct-on-line starters | Reversing starters | Circuit breakers | Direct-on-line starters | Reversing starters |
|  |  |  |  |  |  |  |  |
| | | | | | | | |
| – | – | 8US1251-5DS10 | 8US1251-5DS10 | 8US1251-5DS10 + 8US1250-5AS10 | – | – | – |
| – | – | 8US1251-5DS10 | – | – | – | – | – |
| – | | – | 8US1251-5DT10 | – | – | – | – |
| – | – | 8US1251-5NS10 | – | – | – | – | – |
| 8US1216-5AS80 | – | – | – | – | – | – | – |
| – | – | 8US1251-5NT10 | 8US1251-5NT10 | 8US1251-5NT10 + 8US1250-5AT10 | – | – | – |
| 8US1216-5AT80 | 8US1216-5AT80 + 8US1250-5AT10 | – | – | – | – | – | – |
| – | – | – | – | – | – | 8US1211-1NS10 | 8US1211-1NS10 + 8US1250-1AA10 |
| – | – | 8US1261-5MS13 | – | – | – | – | – |
| – | – | – | – | – | 8US1211-4TR00 | – | – |
| – | – | – | 8US1261-6MT10 | – | – | – | – |
| – | – | – | – | 8US1211-6MT10 | – | – | – |
| | | | | | | | |
| – | – | 8US1251-5DS11 | – | – | – | – | – |
| – | – | 8US1251-5DT11 | 8US1251-5DT11 | 8US1251-5DT11 + 8US1250-5AT10 | – | – | – |
| – | – | 8US1251-5NS11 | – | – | – | – | – |
| – | – | 8US1251-5NT11 | 8US1251-5NT11 | 8US1251-5NT11 + 8US1250-5AT10 | – | – | – |
| | | | | | | | |
| Article No. | Article No. | Article No. | Article No. | Article No. | Article No. | Article No. | Article No. |
| 8US1998-1DA10 | 8US1998-1DA10 | 8US1998-1DA10 | 8US1998-1DA10 | 8US1998-1DA10 | – | – | – |
| | | | | | | | |
| | | | | | | | |
| Article No. | Article No. | Article No. | Article No. | Article No. | Article No. | Article No. | Article No. |
| 8US1998-2BJ10 | 8US1998-2BJ10 | 8US1998-2BJ10 | 8US1998-2BJ10 | 8US1998-2BJ10 | – | 8US1998-2BJ10 | 8US1998-2BJ10 |

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# ❹ Device adapters and device holders

## For load feeders up to 1600 A

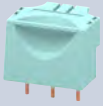
### Accessories

**Plug-in connectors to make contact with the 3RV2 motor starter protectors for 8US1216-5AS80 and 8US1216-5AT80**



| Use | Version | Size | Article No. |
|---|---|---|---|
| For spring-loaded terminals | Single-unit packaging | S00 [1] | 3RV2917-5AA00 |
| | | S0 [2] | 3RV2927-5AA00 |
| | Multi-unit packaging | S00 [1] | 3RV2917-5A |
| | | S0 [2] | 3RV2927-5A |
| For screw terminals | Single-unit packaging | S00 [1] [3] | 3RV2917-5CA00 |
| | | S0 [2] [4] | 3RV1927-5AA00 |
| | Multi-unit packaging | S00 [1] [3] | 3RV2917-5C |
| | | S0 [2] [4] | 3RV1927-5A |

**Plug-in connectors to make contact with the 3RV1011 motor starter protectors**



| Use | Version | Size | Article No. |
|---|---|---|---|
| For screw terminals | Single-unit packaging | S00 | 3RV1917-5CA00 |
| | Multi-unit packaging | S00 | 3RV1917-5C |

[1] $I > 14$ A, please note derating.
[2] $I > 16$ A, please note derating.
[3] The plug-in connector cannot be used for the 3RV2711 and 3RV2811 circuit breakers with size S00.
[4] The plug-in connector can be used for the 3RV2711, 3RV2811 (size S00) and 3RV2721, 3RV2821 (size S0) circuit breakers.



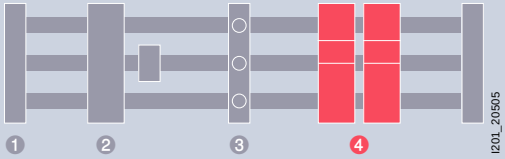


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# Accessories for device adapters for SIRIUS 3RV2/3RT2 load feeders




## Mounting rails (35 mm) made of plastic with fixing screws

| | Width | For adapter width | Article No. |
|---|---|---|---|
|  | 45 mm | 45 mm | 8US1998-7CB45 |
|  | 54 mm | 54 mm | 8US1998-7CB54 |
|  | 72 mm | 54 mm | 8US1998-7CB72 |

## Positioning pieces

- For pushing on
- Secures the adaptable devices on the adapter

| | For adapter width | Article No. |
|---|---|---|
|  | 45 mm | 8US1998-1DA45 |
|  | 54 mm | 8US1998-1DA54 |

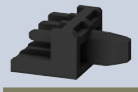
## Connecting element

- For connecting busbar adapters and device holders

| | Article No. |
|---|---|
|  | 8US1998-1AA10 |

## Spacers

- Fix the feeder to the busbar adapter

| | Article No. |
|---|---|
|  | 8US1998-1BA10 |

## Vibration & shock kit

| | Article No. |
|---|---|
| | 8US1998-1CA10 |

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# Busbar supports

## For 40 mm busbar center-to-center spacing

| | | | | | | Busbar supports | |
|---|---|---|---|---|---|---|---|
| | | | | | No. of poles | 3P | 5P |
| | | | | | |  |  |
| **Flat copper profiles** | | | | **Rated operational voltage $U_e$** | **Standard** | **Connection** | **Connection** |
| **12 × 5 mm** | **15 × 5 mm** | **12 × 10 mm** | **15 × 10 mm** | **IEC** | | **L1 – L3** | **L1 – L3 + N + PE/N** |
| **Interior mounting** | | | | | | | |
| ■ | ■ | ■ | ■ | 690 V AC | IEC | 8US1903-3AB00 [1] | – |
| ■ | – | ■ | – | 690 V AC | IEC | – | 8US1903-5AA00 |
| **Further information** | | | | | | | |
| 3NP1 fuse switch disconnectors | | | | | | See page 8/78 | See page 8/78 |

[1] One package contains 2 busbar supports including inlay parts for bar thickness 5 mm and lateral finger-safe covers.

## Accessories

| | | | | 3P | 5P |
|---|---|---|---|---|---|
| **Flat copper profile** | | | | | |
|  | **Surface** | **Length** | **Size** | **Article No.** | **Article No.** |
| | Bare | 2400 mm | 12 × 5 mm | 8WC5123 | 8WC5123 |
| | | | 15 × 5 mm | 8WC5121 | – |
| **Cover profiles for busbars** | | | | | |
|  | **Material** | **Length** | **Size** | **Article No.** | **Article No.** |
| | Plastic profile | 1000 mm | 12 × 5 mm | 8US1922-2CA00 | 8US1922-2CA00 |
| | | | 15 × 5 mm | 8US1922-2AA00 | – |

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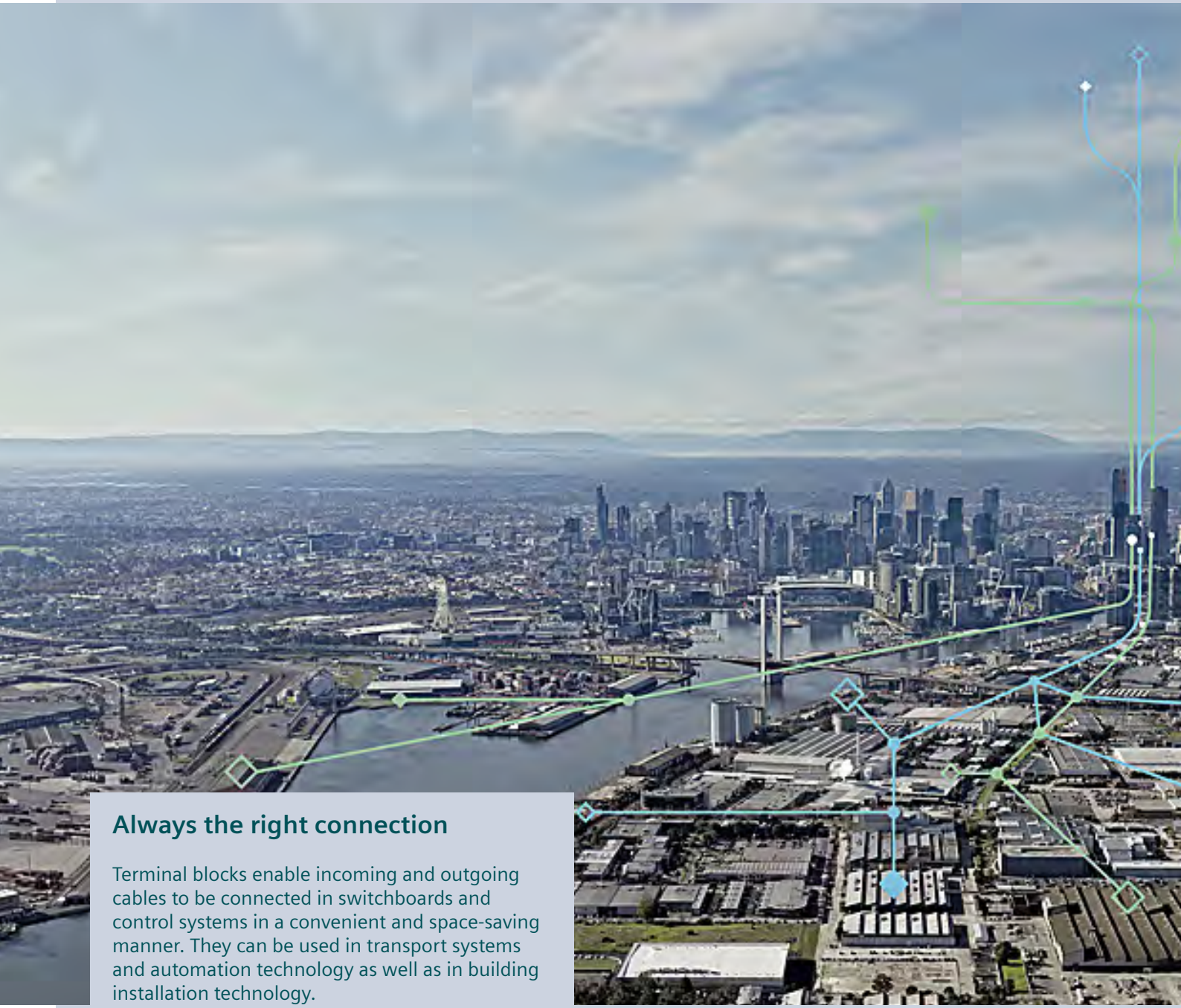
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## Always the right connection

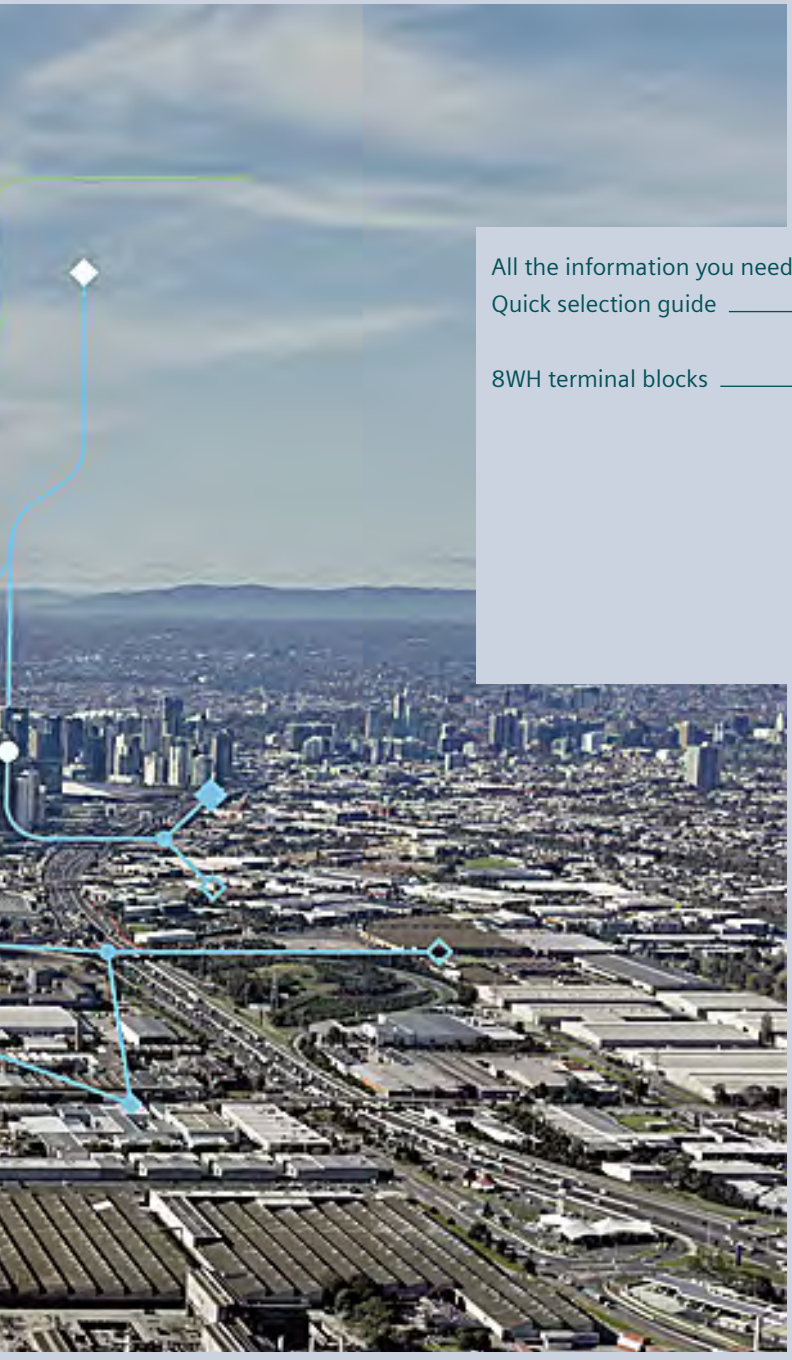
Terminal blocks enable incoming and outgoing cables to be connected in switchboards and control systems in a convenient and space-saving manner. They can be used in transport systems and automation technology as well as in building installation technology.

We offer you the complete range of connection technology with screw terminals, spring-loaded terminals and In-Push-out (iPo) terminals, combination plug-in terminals, insulation displacement terminals and a wide variety of accessories. These can be combined with each other. This allows you to benefit from a high level of flexibility as well as simplified configuration.

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# Terminal Blocks




All the information you need 14/2
Quick selection guide 14/4
8WH terminal blocks 14/4
8WH terminal blocks 14/6
8WH6 iPo plug-in terminals 14/6
8WH6 iPo installation terminals 14/16
8WH2 spring-loaded terminals 14/22
8WH5 combination plug-in terminals 14/34
8WH3 insulation displacement terminals 14/38
8WH screw terminals 14/42
Accessories for 8WH terminal blocks 14/55

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# A multitude of additional information ...

## Information + ordering

### All the important things at a glance

For information about terminal blocks, please visit our website **www.siemens.com/distribution-components**

### Your product in detail

Use our conversion tool for quick and easy conversion to Siemens products **www.siemens.com/conversion-tool**

### Siemens YouTube channel

- Siemens ALPHA FIX terminal blocks – 8WH2 terminal with spring-loaded-connection **sie.ag/6FTjPN**

### Everything you need for your order

Refer to SiePortal to find an overview of your products (product catalog)

- Terminal blocks **sie.ag/2kW8ZXo**

Direct forwarding to the individual products in SiePortal by clicking on the article number in the catalog or entering this web address incl. article number **www.siemens.com/product_catalog_SIEP?Article No.**

### The fast track to the experts

## Contact persons in your region

We offer a comprehensive portfolio of services.
You can find your local contacts at
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You will find further information on services at
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### Your product in detail

The SiePortal platform (knowledge base) provides detailed technical information
**www.siemens.com/lowvoltage/product-support**

- Operating instructions
- Certificates

Online Support app available for download from the **App Store** and **Play Store**
You will find further information at
**www.siemens.com/support-app**

Provision of 3D data (step and u3d data formats)

- SiePortal (product catalog)
  **www.siemens.com/lowvoltage/product-catalog**
- Image database
  **www.siemens.com/lowvoltage/picturedb**

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
**www.siemens.com/cax**

### Technical overview – Terminal blocks

#### The fast way to get you to our online services

This page provides you with comprehensive information and links on terminal blocks
**www.siemens.com/lowvoltage/product-support (109769088)**

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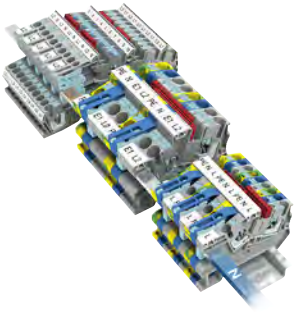


# 8WH terminal blocks



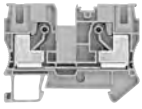
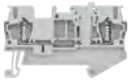
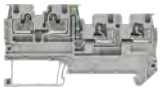
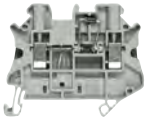


**8WH6 iPo plug-in terminals**





**8WH6 iPo installation terminals**

| | | | |
|---|---|---|---|
| **Through-type terminals**  | Through-type terminals | 2.5 ... 150 mm² See page 14/6 | 2.5 ... 35 mm² See page 14/16 |
| | Two-tier terminals | 2.5 ... 4 mm² See page 14/9 | – |
| | Three-tier terminals | – | – |
| | Four-tier motor terminals | – | – |
| **Isolating terminals**  | Isolating and isolating blade terminals | 2.5 ... 4 mm² See page 14/10 | – |
| | Two-tier isolating terminals | – | – |
| | N conductor isolating terminals | – | 2.5 ... 35 mm² See page 14/18 |
| | Measuring transformer isolating terminals | – | – |
| **Initiator/actuator terminals**  | Initiator terminals | 1.5 mm² See page 14/13 | – |
| | Actuator terminals | 1.5 mm² See page 14/13 | – |
| | Infeed terminals | 2.5 mm² See page 14/14 | – |
| **Function terminals**  | Fuse terminals | 4 mm² See page 14/12 | – |
| | Three-tier terminals | – | 2.5 mm² See page 14/20 |
| | Three-tier isolating terminals | – | 2.5 mm² See page 14/21 |
| | Diode terminals | – | – |
| | Two-tier diode terminals | – | – |
| | Shield terminals | – | – |
| | Further information | From page 14/6 | From page 14/16 |

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## 8WH2 spring-loaded terminals





## 8WH5 combination plug-in terminals





## 8WH3 insulation displacement terminals





## 8WH1 screw terminals

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.5 ... 35 mm² | See page 14/22 | 2.5 mm² | See page 14/34 | 1.5 ... 2.5 mm² | See page 14/38 | 2.5 ... 240 mm² | See page 14/42 |
| 1.5 ... 4 mm² | See page 14/25 | – | | 1.5 mm² | See page 14/39 | 2.5 ... 4 mm² | See page 14/45 |
| 2.5 mm² | See page 14/26 | – | | – | | – | |
| 2.5 ... 4 mm² | See page 14/27 | – | | – | | – | |
| 2.5 ... 4 mm² | See page 14/28 | – | | 1.5 ... 2.5 mm² | See page 14/40 | 4 ... 6 mm² | See page 14/46 |
| – | | – | | – | | 4 mm² | See page 14/48 |
| – | | – | | – | | – | |
| – | | – | | – | | 6 mm² | See page 14/49 |
| – | | – | | – | | – | |
| – | | – | | – | | – | |
| – | | – | | – | | – | |
| 4 mm² | See page 14/30 | – | | – | | 4 ... 6 mm² | See page 14/50 |
| – | | – | | – | | – | |
| – | | – | | – | | – | |
| 2.5 mm² | See page 14/32 | – | | – | | 4 mm² | See page 14/52 |
| 2.5 mm² | See page 14/33 | – | | – | | 2.5 mm² | See page 14/53 |
| – | | – | | – | | Diameter 2 ... 35 mm | See page 14/54 |
| From page 14/22 | | From page 14/34 | | From page 14/38 | | From page 14/42 | |

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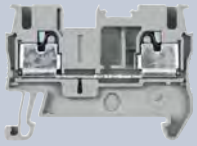
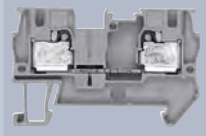
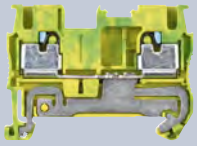
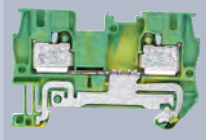


# 8WH6 iPo plug-in terminals

## Through-type terminals

① ②

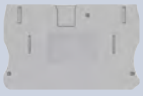
| | Terminal size 2.5 mm² | 4 mm² |
|---|---|---|
| Terminal width | 5.2 mm | 6.2 mm |
| Max. load current $I_{max}$ | 24 A | 32 A |
| Max. operational voltage $U_{max}$ | 800 V | 800 V |
| AWG | 26 ... 12 | 24 ... 10 |
| Connection capacity, one rigid conductor | 0.14 ... 4 mm² | 0.2 ... 6 mm² |
| Connection capacity, one flexible conductor with end sleeve | 0.14 ... 2.5 mm² | 0.2 ... 4 mm² |
| Standard | IEC 60947-7-1, IEC 60947-7-2, cULus | IEC 60947-7-1, IEC 60947-7-2, cULus |

| Terminals | Color | | |
|---|---|---|---|
| ❶ Through-type terminals | | | |
| 2 | Gray | 8WH6000-0AF00 | 8WH6000-0AG00 |
| | Blue | 8WH6000-0AF01 | 8WH6000-0AG01 |
| 3 | Gray | 8WH6003-0AF00 | 8WH6003-0AG00 |
| | Blue | 8WH6003-0AF01 | 8WH6003-0AG01 |
| 4 | Gray | 8WH6004-0AF00 | 8WH6004-0AG00 |
| | Blue | 8WH6004-0AF01 | 8WH6004-0AG01 |
| ❷ PE through-type terminals | | | |
| 2 | Green-yellow | 8WH6000-0CF07 | 8WH6000-0CG07 |
| 3 | Green-yellow | 8WH6003-0CF07 | 8WH6003-0CG07 |
| 4 | Green-yellow | 8WH6004-0CF07 | 8WH6004-0CG07 |

## Specific accessories

**Covers**



| Terminals | Color | Width | Article No. | Article No. |
|---|---|---|---|---|
| 2 | Gray | 2.2 mm | 8WH9000-1GA00 | 8WH9003-1GA00 |
| 3 | Gray | 2.2 mm | 8WH9000-2GA00 | 8WH9003-2SA00 |
| 4 | Gray | 2.2 mm | 8WH9000-4GA00 | 8WH9003-4SA00 |

**Compartment partitions**



| Terminals | Color | Width | Article No. | Article No. |
|---|---|---|---|---|
| 2 | Gray | 2.0 mm | 8WH9070-0AA00 | 8WH9070-0AA00 |
| 3 | Gray | 2.0 mm | 8WH9070-0GA00 | 8WH9070-0GA00 |
| 4 | Gray | 2.0 mm | 8WH9070-0HA00 | 8WH9070-0HA00 |

**Cover segments**



| Color | Article No. | Article No. |
|---|---|---|
| Gray | 8WH9000-0GA00 | – |

**Warning covers**

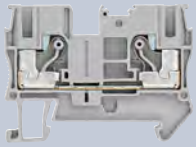
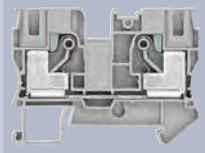
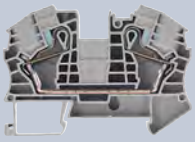
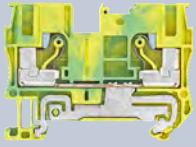
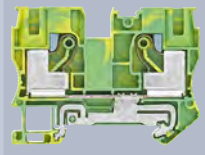


| Article No. | Article No. |
|---|---|
| 8WH9060-5CA06 | 8WH9063-5CA06 |

**See general accessories,** from page 14/55 onwards

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| 6 mm² | 10 mm² | 16 mm² | 35 mm² |
|---|---|---|---|
| 8.2 mm | 10.2 mm | 12.2 mm | 16 mm |
| 41 A | 57 A | 90 A | 125 A |
| 1000 V | 1000 V | 1000 V | 1000 V |
| 20 ... 8 | 20 ... 6 | 20 ... 4 | 10 ... 2 |
| 0.5 ... 10 mm² | 0.5 ... 16 mm² | 0.5 ... 25 mm² | 6 ... 35 mm² |
| 0.5 ... 6 mm² | 0.5 ... 10 mm² | 0.5 ... 16 mm² | 6 ... 35 mm² |
| IEC 60947-7-1, IEC 60947-7-2, cULus | IEC 60947-7-1, IEC 60947-7-2, cULus | IEC 60947-7-1, IEC 60947-7-2, UL, CSA | IEC 60947-7-1, IEC 60947-7-2, UL, CSA |
|  |  |  |  |
|  |  |  |  |
| | | | |
| | | | |
| 8WH6000-0AH00 | 8WH6000-0AJ00 | 8WH6000-0AK00 | 8WH6000-0AM00 |
| 8WH6000-0AH01 | 8WH6000-0AJ01 | 8WH6000-0AK01 | 8WH6000-0AM01 |
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |
| | | | |
| 8WH6000-0CH07 | 8WH6000-0CJ07 | 8WH6000-0CK07 | 8WH6000-0CM07 |
| – | – | – | – |
| – | – | – | – |

| Article No. | Article No. | Article No. | Article No. |
|---|---|---|---|
| 8WH9004-3SA00 | 8WH9005-1SA00 | 8WH9006-1SA00 | – |
| – | – | – | – |
| – | – | – | – |

| Article No. | Article No. | Article No. | Article No. |
|---|---|---|---|
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |

| Article No. | Article No. | Article No. | Article No. |
|---|---|---|---|
| – | – | – | – |

| Article No. | Article No. | Article No. | Article No. |
|---|---|---|---|
| 8WH9063-5CA06 | 8WH9065-5CA06 | 8WH9066-5CA06 | 8WH9067-5CA06 |

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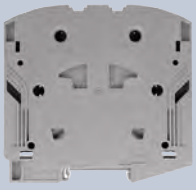
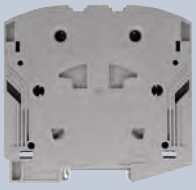
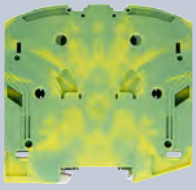
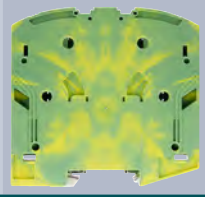


# 8WH6 iPo plug-in terminals

## Through-type terminals for high-current applications

① 

② 

| | Terminal size | | |
|---|---|---|---|
| | 50 mm² | 95 mm² | 150 mm² |
| Terminal width | 20 mm | 25 mm | 31 mm |
| Max. load current $I_{max}$ | 150 A | 232 A | 309 A |
| Operational voltage AC/DC | 1000 V/1500 V | 1000 V/1500 V | 1000 V/1500 V |
| AWG | 8 ... 2/0 | 4 ... 3/0 | 1/0 ... 300 |
| Connection capacity, rigid | 10 ... 70 mm² | 25 ... 95 mm² | 95 ... 150 mm² |
| Connection capacity, flexible with end sleeve | 10 ... 50 mm² | 25 ... 95 mm² | 95 ... 150 mm² |
| Standard | IEC 60947-7-1, IEC 60947-7-2, cULus | IEC 60947-7-1, IEC 60947-7-2, cULus | IEC 60947-7-1, cULus |
| |  |  |  |
| |  |  |  |

| Terminals | Color | | | |
|---|---|---|---|---|
| ❶ Through-type terminals | | | | |
| 2 | Gray | 8WH6000-0AN00 | 8WH6000-0AQ00 | 8WH6000-0AS00 |
| | Blue | 8WH6000-0AN01 | 8WH6000-0AQ01 | 8WH6000-0AS01 |
| ❷ PE through-type terminals | | | | |
| 2 | Green-yellow | 8WH6000-0CN07 | 8WH6000-0CQ07 | – |

## Specific accessories

| Connecting combs | | | | |
|---|---|---|---|---|
|  | Number of poles | Article No. | Article No. | Article No. |
| | 2-pole | 8WH9020-3AB00 | 8WH9020-3AD00 | 8WH9020-3AF00 |
| | 3-pole | 8WH9020-3AC00 | 8WH9020-3AE00 | 8WH9020-3AG00 |
| **Tap-off terminal** | | | | |
|  | Number of poles | Article No. | Article No. | Article No. |
| | 1-pole | 8WH9120-0DA00 | 8WH9120-0DA00 | 8WH9120-0DA00 |
| **Test plugs** | | | | |
|  | Surface | Article No. | Article No. | Article No. |
| | Metal | 8WH9010-0NB00 | 8WH9010-0NB00 | 8WH9010-0NB00 |
| **Insulating sleeves for test plugs** | | | | |
|  | Color | Article No. | Article No. | Article No. |
| | Red | 8WH9010-0MB02 | 8WH9010-0MB02 | 8WH9010-0MB02 |
| **Warning covers** | | | | |
|  | | Article No. | Article No. | Article No. |
| | | 8WH9067-5CA06 | 8WH9068-5CA06 | 8WH9068-5CA06 |

**See general accessories,** from page 14/55 onwards

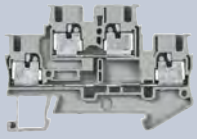
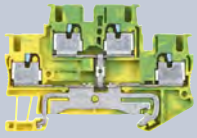
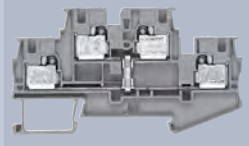
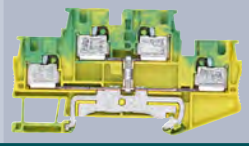
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# Two-tier terminals

① 

② 

| | Terminal size | |
|---|---|---|
| | 2.5 mm² | 4 mm² |
| Terminal width | 5.2 mm | 6.2 mm |
| Max. load current $I_{max}$ | 26 A | 32 A |
| Max. operational voltage $U_{max}$ | 500 V | 500 V |
| AWG | 26 ... 12 | 24 ... 10 |
| Connection capacity, one rigid conductor | 0.14 ... 4 mm² | 0.2 ... 6 mm² |
| Connection capacity, one flexible conductor with end sleeve | 0.14 ... 2.5 mm² | 0.2 ... 4 mm² |
| Standard | IEC 60947-7-1, IEC 60947-7-2, cULus | IEC 60947-7-1, IEC 60947-7-2, cULus |
| |   |   |

| Version | Color | | | |
|---|---|---|---|---|
| **❶ Two-tier terminals** | | | | |
| Without equipotential bonding | | Gray | 8WH6020-0AF00 | 8WH6020-0AG00 |
| | | Blue | 8WH6020-0AF01 | 8WH6020-0AG01 |
| With equipotential bonding | | Gray | 8WH6025-0AF00 | 8WH6025-0AG00 |
| **❷ PE two-tier terminals** [1] | | | | |
| | | Green-yellow | 8WH6020-0CF07 | 8WH6020-0CG07 |

[1] Bridging the terminal is only possible in the top tier (in the center).

## Specific accessories

**Covers**



| Terminals | Color | Width | Article No. | Article No. |
|---|---|---|---|---|
| 4 | Gray | 2.2 mm | 8WH9000-4SE00 | – |
| | | | – | 8WH9003-1VA00 |

**Compartment partitions**



| Terminals | Color | Width | Article No. | Article No. |
|---|---|---|---|---|
| 4 | Gray | 2 mm | 8WH9070-0BA00 | 8WH9070-0BA00 |

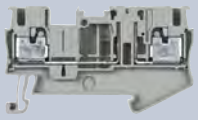
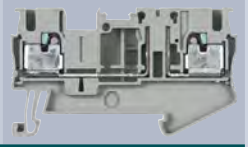
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# 8WH6 iPo plug-in terminals

## Isolating terminals

| | Terminal size | |
|---|---|---|
| | **2.5 mm²** | **4 mm²** |
| **Terminal width** | 5.2 mm | 6.2 mm |
| **Max. load current $I_{max}$** | 20 A | 20 A |
| **Max. operational voltage $U_{max}$** | 400 V | 500 V |
| **AWG** | 26 ... 12 | 24 ... 10 |
| **Connection capacity, one rigid conductor** | 0.14 ... 4 mm² | 0.2 ... 6 mm² |
| **Connection capacity, one flexible conductor with end sleeve** | 0.14 ... 2.5 mm² | 0.2 ... 4 mm² |
| **Standard** | IEC 60947-7-1, cULus | IEC 60947-7-1, cULus |
| |  |  |

| Terminals | Color | | | |
|---|---|---|---|---|
| 2 | Gray | 8WH6000-6CF00 | 8WH6000-6AG00 |
| 3 | Gray | 8WH6003-6CF00 | – |
| 4 | Gray | 8WH6004-6CF00 | – |

## Specific accessories

**Covers**



| Terminals | Color | Width | Article No. | Article No. |
|---|---|---|---|---|
| 2 | Gray | 2.2 mm | 8WH9000-3SC00 | 8WH9003-1GA00 |
| 3 | Gray | 2.2 mm | 8WH9000-3SD00 | – |
| 4 | Gray | 2.2 mm | 8WH9000-5GA00 | – |

**Compartment partitions**



| Terminals | Color | Width | Article No. | Article No. |
|---|---|---|---|---|
| 2 | Gray | 2.2 mm | 8WH9070-0AA00 | 8WH9070-0AA00 |
| 3 | Gray | 2.2 mm | 8WH9070-0GA00 | – |

**Plug-in zone connectors**

| Types | Color | $I_{max}$ | Illuminated display | Article No. | Article No. |
|---|---|---|---|---|---|
|  Isolating plugs | Orange | – | – | 8WH9040-0DB04 | 8WH9040-0DB04 |
|  Through-type connectors | Gray | 16 A | – | 8WH9020-8AB00 | 8WH9020-8AB00 |
|  Fused connectors [1] | Black | 6.3 A | 12 ... 30 V, 1 ... 2.5 mA | 8WH9040-3AB08 | 8WH9040-3AB08 |
| | | | Without | 8WH9040-3DB08 | 8WH9040-3DB08 |
|  Component connectors | Gray | 6 A | – | 8WH9040-0BB00 | 8WH9040-0BB00 |

[1] The G fuse holders must be selected according to the maximum power loss (heat dissipation) of the G fuse links.
Depending on the application and method of installation, the heat rise conditions in closed fuse holders must be tested.
Higher ambient temperatures represent an additional load for the fuse links.
A shift in rated current should therefore be taken into account in such applications.

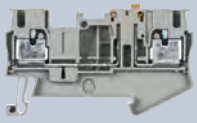
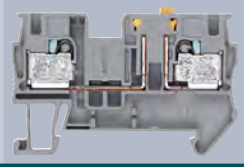
**See general accessories,** from page 14/55 onwards

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# Isolating blade terminals



| | Terminal size | |
|---|---|---|
| | 2.5 mm² | 4 mm² |
| Terminal width | 5.2 mm | 6.2 mm |
| Max. load current $I_{max}$ | 20 A | 20 A |
| Max. operational voltage $U_{max}$ | 400 V | 400 V |
| AWG | 26 ... 12 | 24 ... 10 |
| Connection capacity, one rigid conductor | 0.14 ... 4 mm² | 0.2 ... 6 mm² |
| Connection capacity, two rigid conductors | – | 0.5 ... 6 mm² |
| Connection capacity, one flexible conductor | 0.14 ... 2.5 mm² | 0.2 ... 4 mm² |
| Standard | IEC 60947-7-1, cULus | IEC 60947-7-1, cULus |
| |  |  |

| Terminals | Color | | |
|---|---|---|---|
| 2 | Gray | 8WH6000-6AF00 | 8WH6000-6CG00 |
| 3 | Gray | 8WH6003-6AF00 | – |
| 4 | Gray | 8WH6004-6AF00 | – |

## Specific accessories

**Covers**



| Terminals | Color | Width | Article No. | Article No. |
|---|---|---|---|---|
| 2 | Gray | 2.2 mm | 8WH9000-3SC00 | 8WH9003-1GA00 |
| 3 | Gray | 2.2 mm | 8WH9000-3SD00 | – |
| 4 | Gray | 2.2 mm | 8WH9000-5GA00 | – |

**Compartment partitions**



| Terminals | Color | Width | Article No. | Article No. |
|---|---|---|---|---|
| 2 | Gray | 2 mm | 8WH9070-0AA00 | 8WH9070-0AA00 |

**See general accessories,** from page 14/55 onwards

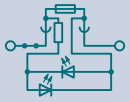
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# 8WH6 iPo plug-in terminals

## Fuse terminals

① 

② 

| | Terminal size<br>4 mm² |
|---|---|
| Terminal width | 6.2 mm |
| Max. load current $I_{max}$ | 6.3 A |
| Max. operational voltage $U_{max}$ | 500 V |
| AWG | 24 ... 10 |
| Connection capacity, one rigid conductor | 0.2 ... 6 mm² |
| Connection capacity, one flexible conductor with end sleeve | 0.2 ... 4 mm² |
| Standard | cULus, CE |



| LED | Color | | |
|---|---|---|---|
| **Fuse terminals for 5 × 20 mm G fuse links** | | | |
| ① Without | ● | Black | 8WH6000-1GG08 |
| ② 10 ... 30 V AC/DC | ● | Black | 8WH6000-1KG38 |
| ② 110 ... 250 V AC/DC | ● | Black | 8WH6000-1MG88 |

## Specific accessories

**Covers**



| Terminals | Color | | Width | Article No. |
|---|---|---|---|---|
| 2 | ● | Gray | 2.2 mm | 8WH9003-1GA00 |

**5 × 25 mm G fuse links**



| Types | Breaking capacity | Rated uninterrupted current | Article No. |
|---|---|---|---|
| Quick | Large | 1 A | 8WA1822-7EF16 |
| | | 1.6 A | 8WA1822-7EF18 |
| | | 2.5 A | 8WA1822-7EF21 |
| | | 4 A | 8WA1822-7EF23 |
| | | 6.3 A | 8WA1822-7EF25 |
| Slow | Small | 1 A | 8WA1822-7EF76 |
| | | 1.6 A | 8WA1822-7EF78 |
| | | 2.5 A | 8WA1822-7EF81 |
| | | 4 A | 8WA1822-7EF83 |
| | | 6.3 A | 8WA1822-7EF85 |

**Isolating links, 5 × 20 mm**



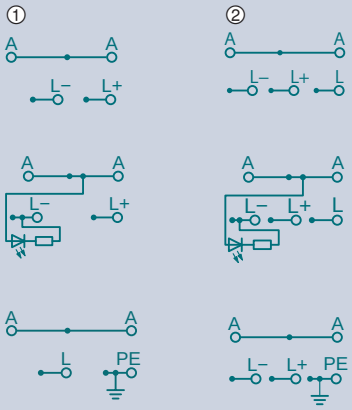
| Size | Article No. |
|---|---|
| 5 × 20 mm | 8WH9021-0CB12 |

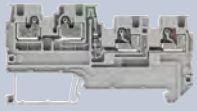
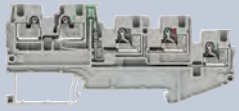
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# Initiator/actuator terminals




| | Terminal size 1.5 mm² | |
|---|---|---|
| Terminal width | 3.5 mm | 3.5 mm |
| Max. load current $I_{max}$ | 13.5 A | 13.5 A |
| Max. operational voltage $U_{max}$ | 250 V | 250 V |
| AWG | 26 ... 14 | 26 ... 14 |
| Connection capacity, flexible with end sleeve, with plastic sleeve | 0.14 ... 1.0 mm² | 0.14 ... 1.0 mm² |
| Connection capacity, flexible with end sleeve, without plastic sleeve | 0.14 ... 1.5 mm² | 0.14 ... 1.5 mm² |
| Standard | IEC 60947-7-1 | IEC 60947-7-1 |
| |  |  |

| Conductors [1] | Number of connections | LED | Color | | |
|---|---|---|---|---|---|
| **❶ Initiator terminal** | | | | | |
| 3-wire, L+, L–, A | 4 | – | Gray | 8WH6003-0DE00 | – |
| 3-wire, L+, L–, A | 4 | Green, 24 V (15 ... 30 V DC) | Gray | 8WH6003-0FE00 | – |
| 3-wire, L, A, PE | 4 | – | Gray | 8WH6003-0HE00 | – |
| **❷ Actuator terminal** | | | | | |
| 4-wire, L+, L–, L, A | 5 | – | Gray | – | 8WH6004-0DE00 |
| 4-wire, L+, L–, L, A | 5 | Green, 24 V (15 ... 30 V DC) | Gray | – | 8WH6004-0FE00 |
| 4-wire, L+, L–, PE, A | 5 | – | Gray | – | 8WH6004-0HE00 |

[1] L+ = red, L– = blue, A (output) = petrol, L = petrol, PE (ground) = green/yellow

## Specific accessories

**Covers**



| Version | Width | Color | Article No. | Article No. |
|---|---|---|---|---|
| For 3-wire | 2.2 mm | Gray | 8WH9001-2VD00 | – |
| For 4-wire | 2.2 mm | Gray | – | 8WH9001-4VE00 |

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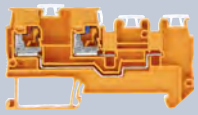
# 8WH6 iPo plug-in terminals

## Infeed terminals for initiator/actuator terminals

① L+ L–

② PE L+ L–

| | Terminal size 2.5 mm² |
|---|---|
| Terminal width | 7 mm |
| Max. load current $I_{max}$ | 20 A |
| Max. operational voltage $U_{max}$ | 250 V |
| AWG | 24 ... 12 |
| Connection capacity, flexible with end sleeve, with plastic sleeve | 0.2 ... 2.5 mm² |
| Connection capacity, flexible with end sleeve, without plastic sleeve | 0.2 ... 2.5 mm² |
| Standard | IEC 60947-7-1 |



| Conductors [1] | Color | |
|---|---|---|
| ① 3-wire, L+, L– | Orange | 8WH6003-0DF04 |
| ② 4-wire, L+, L–, PE | Orange | 8WH6004-0HE04 |

[1] L+ = red, L– = blue, A (output) = petrol, L = petrol, PE (ground) = green/yellow

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## Specific accessories for 8WH6 initiator/actuator terminals

### Connecting combs



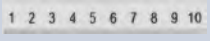
| Number of poles | Load current | Color | Article No. |
|---|---|---|---|
| 2-pole | 17.5 A | Red | 8WH9020-6JC02 |
| | | Blue | 8WH9020-6JC01 |
| | | Gray | 8WH9020-6JC00 |
| 3-pole | 17.5 A | Red | 8WH9020-6JD02 |
| | | Blue | 8WH9020-6JD01 |
| | | Gray | 8WH9020-6JD00 |
| 4-pole | 17.5 A | Red | 8WH9020-6JE02 |
| | | Blue | 8WH9020-6JE01 |
| | | Gray | 8WH9020-6JE00 |
| 5-pole | 17.5 A | Red | 8WH9020-6JF02 |
| | | Blue | 8WH9020-6JF01 |
| | | Gray | 8WH9020-6JF00 |
| 10-pole | 17.5 A | Red | 8WH9020-6JL02 |
| | | Blue | 8WH9020-6JL01 |
| | | Gray | 8WH9020-6JL00 |
| 20-pole | 17.5 A | Red | 8WH9020-6JS02 |
| | | Blue | 8WH9020-6JS01 |
| | | Gray | 8WH9020-6JS00 |

### Labels, front, for terminal width 3.5 mm and terminal size 1.5 mm²



| Types | | Color | Article No. |
|---|---|---|---|
| Blank | | White | 8WH8110-0AA05 |
| Custom inscription | Printed vertically | White | 8WH8140-0XA05-Z Y01 |
| | Printed horizontally | White | 8WH8120-0XA05-Z Y01 |

### Labels, flat, for terminal width 3.5 mm and terminal size 1.5 mm²







| Types | | Inscription | Color | Article No. |
|---|---|---|---|---|
| Blank | | | White | 8WH8111-0AA05 |
| Consecutive numbering | Printed vertically | 1 ... 10 (10×) | White | 8WH8141-0AB05 |
| | | 11 ... 20 (10×) | White | 8WH8141-0AB15 |
| | | 21 ... 30 (10×) | White | 8WH8141-0AB25 |
| | | 31 ... 40 (10×) | White | 8WH8141-0AB35 |
| | | 41 ... 50 (10×) | White | 8WH8141-0AB45 |
| | Printed horizontally | 1 ... 10 (10×) | White | 8WH8121-0AB05 |
| | | 11 ... 20 (10×) | White | 8WH8121-0AB15 |
| | | 21 ... 30 (10×) | White | 8WH8121-0AB25 |
| | | 31 ... 40 (10×) | White | 8WH8121-0AB35 |
| | | 41 ... 50 (10×) | White | 8WH8121-0AB45 |
| Custom inscription | Printed vertically | | White | 8WH8141-0XA05-Z Y01 |
| | Printed horizontally | | White | 8WH8121-0XA05-Z Y01 |

### Labels for 8WH initiator/actuator terminals for labeling system



| Types | Terminal width | Standard | Color | Article No. |
|---|---|---|---|---|
| Front, blank | 3.5 mm | WIN 486 | White | 8WH8112-0AA05 |
| Flat, blank | 3.5 mm | WIN 416 | White | 8WH8113-0AA05 |

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# 8WH6 iPo installation terminals

## Through-type terminals

① 

② 

| | Terminal size | | | |
|---|---|---|---|---|
| | 2.5 mm² | | 4 mm² | |
| Terminal width | 5.2 mm | 5.2 mm | 6.2 mm | 6.2 mm |
| Terminal length | 59.5 mm | 59.5 mm | 66 mm | 66 mm |
| Terminal height | 42.5 mm | 43 mm | 44 mm | 46.3 mm |
| Max. load current $I_{max}$ | 24 A | – | 32 A | – |
| Max. operational voltage $U_{max}$ | 800 V | – | 800 V | – |
| Rated impulse voltage | – | – | – | – |
| AWG | 26 ... 12 | 24 ... 12 | 24 ... 10 | 24 ... 10 |
| Connection capacity, one rigid conductor | 0.14 ... 4 mm² | 0.2 ... 4 mm² | 0.2 ... 6 mm² | 0.2 ... 6 mm² |
| Connection capacity, two rigid conductors | – | – | – | – |
| Connection capacity, flexible with end sleeve | 0.14 ... 2.5 mm² | 0.25 ... 2.5 mm² | 0.25 ... 4 mm² | 0.25 ... 4 mm² |
| Connection capacity, flexible without end sleeve | 0.14 ... 2.5 mm² | 0.25 ... 2.5 mm² | 0.25 ... 4 mm² | 0.25 ... 4 mm² |
| Tightening torque | – | – | – | – |
| Standard | IEC 60947-7-1 | IEC 60947-7-2 | IEC 60947-7-1 | IEC 60947-7-2 |
| |  |  |  |  |

| Terminals | Color | iPo plug-in technology | | iPo plug-in technology | |
|---|---|---|---|---|---|
| ❶ Through-type terminals | | | | | |
| 2 | Gray | 8WH6001-0AF00 | – | 8WH6001-0AG00 | – |
| | Blue | 8WH6001-0AF01 | – | 8WH6001-0AG01 | – |
| ❷ PE through-type terminals | | | | | |
| 2 | Green-yellow | – | 8WH6001-0CF07 | – | 8WH6001-0CG07 |

## Specific accessories

**Covers**



| Color | Width | Article No. | Article No. |
|---|---|---|---|
| Gray | 1.8 mm | – | – |
| | 2.2 mm | 8WH9000-1WA00 | 8WH9003-7WA00 |

**N conductor support brackets**



- For holding the N busbar

| Color | Article No. | Article No. |
|---|---|---|
| Blue | 8WH9143-0AF01 | 8WH9143-0AF01 |

**Connecting combs**



| Number of poles | Article No. | Article No. |
|---|---|---|
| 2-pole | – | – |
| 3-pole | – | – |
| 10-pole | – | – |

**Compartment partitions**



| Color | Article No. | Article No. |
|---|---|---|
| Gray | – | – |

**Connecting terminals**



| Color | Width | Article No. | Article No. |
|---|---|---|---|
| Blue | 10.3 mm | 8WH9126-0BA01 | 8WH9126-0BA01 |

**N busbars, 10 × 3 mm**



| Version | Length | Article No. | Article No. |
|---|---|---|---|
| Copper, tinned | 1000 mm | 8WH9030-2AB12 | 8WH9030-2AB12 |

**See general accessories,** from page 14/55 onwards

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| 6 mm² | | 16 mm² | | 35 mm² | |
|---|---|---|---|---|---|
| 8.2 mm | 8.2 mm | 12.2 mm | 12.2 mm | 15.2 mm | 15 mm |
| 66 mm | 66 mm | 51 mm | 51 mm | 55 mm | 55 mm |
| 50 mm | 50 mm | 50 mm | 50 mm | 51 mm | 51 mm |
| 41 A | – | 76 A | – | 125 A | 125 A |
| 800 V | – | 400 V | – | 800 V | – |
| – | – | 6 kV | 6 kV | 8 kV | 8 kV |
| 20 ... 8 | 20 ... 8 | 22 ... 4 | 22 ... 4 | 18 ... 2 | 18 ... 2 |
| 0.5 ... 10 mm² | 0.5 ... 10 mm² | 6 ... 25 mm² | 6 ... 25 mm² | 0.75 ... 35 mm² | 0.75 ... 35 mm² |
| – | – | 2.5 ... 10 mm² | 2.5 ... 10 mm² | 0.75 ... 10 mm² | 0.75 ... 10 mm² |
| 0.5 ... 6 mm² | 0.5 ... 6 mm² | 6 ... 16 mm² | 6 ... 16 mm² | 0.75 ... 35 mm² | 0.75 ... 35 mm² |
| 0.5 ... 6 mm² | 0.5 ... 6 mm² | 6 ... 16 mm² | 6 ... 16 mm² | 0.75 ... 10 mm² | 0.75 ... 10 mm² |
| – | – | 2.5 ... 3.0 Nm | 2.5 ... 3.0 Nm | 3.2 ... 3.7 Nm | 3.2 ... 3.7 Nm |
| IEC 60947-7-1 | IEC 60947-7-2 | IEC 60947-7-1, IEC 60947-7-2, cULus | IEC 60947-7-1, IEC 60947-7-2, cULus, CE | cULus, CE | cULus, CE |
|  |  |  |  |  |  |
| **iPo plug-in technology** | | **Screw terminals** | | **Screw terminals** | |
| | | | | | |
| 8WH6001-0AH00 | – | 8WH1201-0AK00 | – | 8WH1201-0AM00 | – |
| 8WH6001-0AH01 | – | 8WH1201-0AK01 | – | 8WH1201-0AM01 | – |
| | | | | | |
| – | 8WH6001-0CH07 | – | 8WH1201-0CK07 | – | 8WH1201-0CM07 |

| Article No. | Article No. | Article No. |
|---|---|---|
| – | 8WH9005-3PA00 | – |
| 8WH9004-1WA00 | – | – |

| Article No. | Article No. | Article No. |
|---|---|---|
| 8WH9143-0AH01 | – | – |

| Article No. | Article No. | Article No. |
|---|---|---|
| – | – | 8WH9030-6BC00 |
| – | – | 8WH9030-6BD00 |
| – | 8WH9030-6AL00 | – |

| Article No. | Article No. | Article No. |
|---|---|---|
| – | 8WH9070-6HA00 | – |

| Article No. | Article No. | Article No. |
|---|---|---|
| 8WH9126-0BA01 | 8WH9126-0BA01 | – |

| Article No. | Article No. | Article No. |
|---|---|---|
| 8WH9030-2AB12 | 8WH9030-2AB12 | 8WH9030-2AB12 |

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# 8WH6 iPo installation terminals

## N conductor isolating terminals

| | Terminal size | |
|---|---|---|
| | 2.5 mm² | 4 mm² |
| Terminal width | 5.2 mm | 6.2 mm |
| Terminal length | 59 mm | 66 mm |
| Terminal height | 46.3 mm | 46.3 mm |
| Max. load current $I_{max}$ / cross-section | 24 A/2.5 mm² | 32 A/4 mm² |
| Max. operational voltage $U_{max}$ | 250 V | 250 V |
| Rated impulse voltage | 4 kV | 6 kV |
| AWG | 26 ... 12 | 24 ... 10 |
| Connection capacity, one rigid conductor | 0.14 ... 4 mm² | 0.2 ... 6 mm² |
| Connection capacity, two rigid conductors | 0.2 ... 1.5 mm² | 0.2 ... 2 mm² |
| Connection capacity, one flexible conductor with end sleeve | 0.14 ... 2.5 mm² | 0.25 ... 4 mm² |
| Connection capacity, two flexible conductors with end sleeve | max. 0.5 mm² | max. 1 mm² |
| Tightening torque | – | – |
| Standard | IEC 60947-7-1 | IEC 60947-7-1 |
| |  |  |

| Terminals | Color | iPo plug-in technology | iPo plug-in technology |
|---|---|---|---|
| 2 | Blue | 8WH6001-0BF01 | 8WH6001-0BG01 |

## Specific accessories

### Covers





| Color | Width | Article No. | Article No. |
|---|---|---|---|
| Blue | 2.2 mm | 8WH9000-1SA00 | 8WH9003-1SA00 |
| Gray | 2.2 mm | – | – |

### N conductor support brackets

- For holding the N busbar 10 × 3 mm
- To be placed every 20 cm





| Color | Article No. | Article No. |
|---|---|---|
| Blue | 8WH9143-0AF01 | 8WH9143-0AF01 |
| | – | – |

### Connecting terminals



| Color | Width | Article No. | Article No. |
|---|---|---|---|
| Blue | 10.3 mm | 8WH9126-0BA01 | 8WH9126-0BA01 |

### N busbars, 10 × 3 mm



| Version | Length | Article No. | Article No. |
|---|---|---|---|
| Copper, tinned | 1000 mm | 8WH9030-2AB12 | 8WH9030-2AB12 |

**See general accessories,** from page 14/55 onwards

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| 6 mm² | 10 mm² | 16 mm² | 35 mm² |
|---|---|---|---|
| 8.2 mm | 10.2 mm | 12.2 mm | 15 mm |
| 66.3 mm | 55 mm | 55 mm | 55 mm |
| 50 mm | 47 mm | 50 mm | 50 mm |
| 41 A/6 mm² | 57 A/16 mm² | 76 A/25 mm² | 110 A/35 mm² |
| 400 V | 400 V | 400 V | 400 V |
| 6 kV | 6 kV | 6 kV | 6 kV |
| 20 ... 8 | – | – | – |
| 0.5 ... 10 mm² | 0.5 ... 16 mm² | 6 ... 25 mm² | 0.75 ... 35 mm² |
| 0.5 ... 4 mm² | 0.5 ... 4 mm² | 2.5 ... 10 mm² | 0.75 ... 10 mm² |
| 0.5 ... 6 mm² | 0.5 ... 10 mm² | 6 ... 16 mm² | 0.75 ... 35 mm² |
| 0.5 ... 1.5 mm² | 0.5 ... 2.5 mm² | 4 ... 6 mm² | 0.75 ... 10 mm² |
| – | 1.5 ... 1.8 Nm | 1.5 ... 1.8 Nm | 3.2 ... 3.7 Nm |
| IEC 60947-7-1 | IEC 60947-7-1 | IEC 60947-7-1 | IEC 60947-7-1 |
|  |  |  |  |
| **iPo plug-in technology** | **Screw terminals** | **Screw terminals** | **Screw terminals** |
| 8WH6001-0BH01 | 8WH1201-0BJ01 | 8WH1201-0BK01 | 8WH1201-0BM01 |

| Article No. | Article No. | Article No. | Article No. |
|---|---|---|---|
| 8WH9004-1SA00 | – | – | – |
| – | 8WH9005-3PB00 | 8WH9005-3PB00 | – |

| Article No. | Article No. | Article No. | Article No. |
|---|---|---|---|
| 8WH9143-0AH01 | – | – | – |
| – | 8WH9141-0BC01 | 8WH9141-0BC01 | 8WH9141-0BC01 |

| Article No. | Article No. | Article No. | Article No. |
|---|---|---|---|
| 8WH9126-0BA01 | 8WH9126-0BA01 | 8WH9126-0BA01 | – |

| Article No. | Article No. | Article No. | Article No. |
|---|---|---|---|
| 8WH9030-2AB12 | 8WH9030-2AB12 | 8WH9030-2AB12 | 8WH9030-2AB12 |

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# 8WH6 iPo installation terminals

## Three-tier terminals



| | Terminal size 2.5 mm² |
|---|---|
| Terminal width | 5.2 mm |
| Terminal length | 101 mm |
| Terminal height | 50.5 mm |
| Max. load current $I_{max}$/cross-section | 24 A/4 mm² |
| Max. operational voltage $U_{max}$ (L–L) | 400 V |
| Rated voltage $U_n$ (L–N, L–PE) | 250 V |
| AWG | 26 ... 12 |
| Connection capacity, rigid | 0.14 ... 4 mm² |
| Connection capacity, flexible with end sleeve | 0.14 ... 2.5 mm² |



| Types | Color | |
|---|---|---|
| L | Gray | 8WH6001-4QF00 |
| L/L | Gray | 8WH6001-4DF00 |
| L/N | Gray | 8WH6001-4CF00 |
| PE/L/L | Gray | 8WH6001-4HF00 |
| PE/L/N | Gray | 8WH6001-4EF00 |
| PE/L/NT | Gray | 8WH6001-4FF00 |

## Specific accessories

**Covers**



| Color | Width | Article No. |
|---|---|---|
| Gray | 2.2 mm | 8WH9000-3SA00 |

**N conductor support brackets**



- For holding the N busbar
- To be placed every 20 cm

| Color | Width | Article No. |
|---|---|---|
| Blue | 2 mm | 8WH9142-0AF01 |

**Connecting terminals**



| Color | Width | Article No. |
|---|---|---|
| Blue | 10.3 mm | 8WH9126-0BA01 |

**N busbars, 10 × 3 mm**



| Version | Length | Article No. |
|---|---|---|
| Copper, tinned [1] | 1000 mm | 8WH9030-2AB12 |

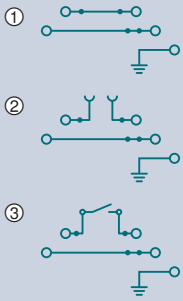
[1] Only copper busbars may be installed.

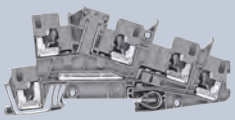
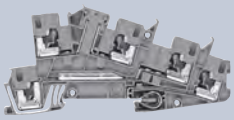
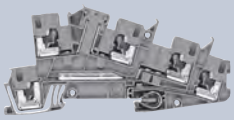
**See general accessories,** from page 14/55 onwards

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# Three-tier isolating terminals




| | Terminal size 2.5 mm² | | |
|---|---|---|---|
| **Terminal width** | 5.2 mm | 5.2 mm | 5.2 mm |
| **Terminal length** | 101 mm | 101 mm | 101 mm |
| **Terminal height** | 50.5 mm | 50.5 mm | 50.5 mm |
| **Max. load current $I_{max}$/cross-section** | 24 A/4 mm² | 24 A/4 mm² | 24 A/4 mm² |
| **Max. operational voltage $U_{max}$ (L–L)** | 400 V | 400 V | 400 V |
| **Rated voltage $U_n$ (L–N, L–PE)** | 250 V | 250 V | 250 V |
| **AWG** | 26 ... 12 | 26 ... 12 | 26 ... 12 |
| **Connection capacity, rigid** | 0.25 ... 4 mm² | 0.25 ... 4 mm² | 0.25 ... 4 mm² |
| **Connection capacity, flexible with end sleeve** | 0.25 ... 2.5 mm² | 0.25 ... 2.5 mm² | 0.25 ... 2.5 mm² |
| |  |  |  |

| Types | Color | | | |
|---|---|---|---|---|
| **❶ Through-type terminals with identical contour** | | | | |
| PE/L/L | Gray | – | – | 8WH6001-4PF00 |
| **❷ Isolating terminals** | | | | |
| PE/L/L isolation | Gray | 8WH6001-4MF00 | – | – |
| **❸ Isolating blade terminals** | | | | |
| PE/L/L isolating blade | Gray | – | 8WH6001-4NF00 | – |
| PE/L/N isolating blade | Gray | – | 8WH6001-4GF00 | – |

## Specific accessories

| Covers for isolating terminal in the contour | | | | | |
|---|---|---|---|---|---|
|  | Color | Width | Article No. | Article No. | Article No. |
| | Gray | 2.2 mm | – | 8WH9000-6SA00 | 8WH9000-6SA00 |

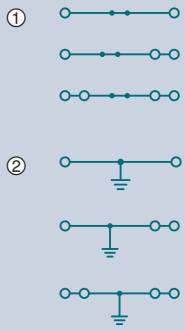
**See general accessories,** from page 14/55 onwards

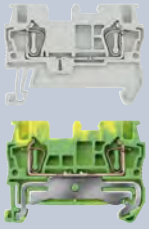
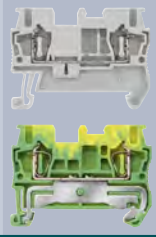
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# 8WH2 spring-loaded terminals

## Through-type terminals



| | Terminal size | |
|---|---|---|
| | 1.5 mm² | 2.5 mm² |
| Terminal width | 4.2 mm | 5.2 mm |
| Max. load current $I_{max}$ | 17.5 A | 31 A |
| Max. operational voltage $U_{max}$ | 500 V | 800 V |
| AWG | 28 ... 16 | 28 ... 12 |
| Connection capacity, rigid | 0.08 ... 1.5 mm² | 0.08 ... 4 mm² |
| Connection capacity, flexible with end sleeve | 0.14 ... 1.5 mm² | 0.14 ... 2.5 mm² |
| Standard | IEC 60947-7-1, IEC 60947-7-2, cULus, CB | IEC 60947-7-1, IEC 60947-7-2, cULus |
| |  |  |

| Terminals | Color | | |
|---|---|---|---|
| ❶ Through-type terminals | | | |
| 2 | Gray | 8WH2000-0AE00 | 8WH2000-0AF00 |
| | Blue | 8WH2000-0AE01 | 8WH2000-0AF01 |
| | Orange | 8WH2000-0AE04 | 8WH2000-0AF04 |
| | Red | 8WH2000-0AE02 | 8WH2000-0AF02 |
| | Black | 8WH2000-0AE08 | 8WH2000-0AF08 |
| | Green | 8WH2000-0AE03 | 8WH2000-0AF03 |
| | White | 8WH2000-0AE05 | 8WH2000-0AF05 |
| | Yellow | 8WH2000-0AE06 | 8WH2000-0AF06 |
| 3 | Gray | 8WH2003-0AE00 | 8WH2003-0AF00 |
| | Blue | 8WH2003-0AE01 | 8WH2003-0AF01 |
| | Orange | 8WH2003-0AF04 | 8WH2003-0AF04 |
| 4 | Gray | 8WH2004-0AE00 | 8WH2004-0AF00 |
| | Blue | 8WH2004-0AE01 | 8WH2004-0AF01 |
| | Orange | 8WH2004-0AF04 | 8WH2004-0AF04 |
| ❷ PE through-type terminals | | | |
| 2 | Green-yellow | 8WH2000-0CE07 | 8WH2000-0CF07 |
| 3 | Green-yellow | 8WH2003-0CE07 | 8WH2003-0CF07 |
| 4 | Green-yellow | 8WH2004-0CE07 | 8WH2004-0CF07 |

## Specific accessories

**Covers**



| Color | Width | Terminals | Article No. | Article No. |
|---|---|---|---|---|
| Gray | 2.2 mm | 2 | 8WH9000-1GA00 | 8WH9000-1GA00 |
| | | 3 | 8WH9000-2GA00 | 8WH9000-2GA00 |
| | | 4 | 8WH9000-4GA00 | 8WH9000-4GA00 |

**Compartment partitions**



| Color | Terminals | Article No. | Article No. |
|---|---|---|---|
| Gray | 2 | 8WH9070-0AA00 | 8WH9070-0AA00 |
| | 3 | 8WH9070-0GA00 | 8WH9070-0GA00 |
| | 4 | 8WH9070-0HA00 | 8WH9070-0HA00 |

**Cover segments**



- For covering multi-wire terminals when mounting two-wire terminals side-by-side

| Color | Article No. | Article No. |
|---|---|---|
| Gray | 8WH9000-0GA00 | 8WH9000-0GA00 |

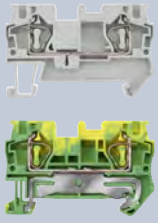
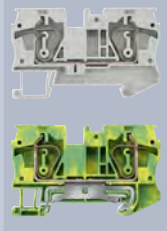
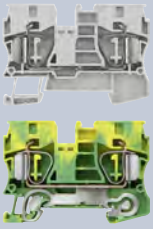
**Warning covers for the operating shafts of 8WH2 through-type terminals**



| | Article No. | Article No. |
|---|---|---|
| | 8WH9061-5AA06 | 8WH9060-5AA06 |

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| 4 mm² | 6 mm² | 10 mm² | 16 mm² | 35 mm² |
|---|---|---|---|---|
| 6.2 mm | 8.2 mm | 10.2 mm | 12.2 mm | 16 mm |
| 40 A | 52 A | 65 A | 90 A | 125 A |
| 800 V | 1000 V | 1000 V | 1000 V | 1000 V |
| 28 ... 10 | 24 ... 8 | 24 ... 6 | 24 ... 4 | 14 ... 2 |
| 0.08 ... 6 mm² | 0.2 ... 10 mm² | 1.5 ... 16 mm² | 0.2 ... 25 mm² | 2.5 ... 35 mm² |
| 0.14 ... 4 mm² | 0.25 ... 6 mm² | 1.5 ... 10 mm² | 0.25 ... 16 mm² | 2.5 ... 35 mm² |
| IEC 60947-7-1, IEC 60947-7-2, cULus | IEC 60947-7-1, IEC 60947-7-2, cULus | IEC 60947-7-1, IEC 60947-7-2, cULus | IEC 60947-7-1, IEC 60947-7-2, cULus | IEC 60947-7-1, IEC 60947-7-2, cULus |
|  |  |  |  |  |
|  |  |  |  |  |
| | | | | |
| | | | | |
| 8WH2000-0AG00 | 8WH2000-0AH00 | 8WH2000-0AJ00 | 8WH2000-0AK00 | 8WH2000-0AM00 |
| 8WH2000-0AG01 | 8WH2000-0AH01 | 8WH2000-0AJ01 | 8WH2000-0AK01 | 8WH2000-0AM01 |
| 8WH2000-0AG04 | – | – | – | – |
| 8WH2000-0AG02 | – | – | – | – |
| 8WH2000-0AG08 | – | – | – | – |
| 8WH2000-0AG03 | – | – | – | – |
| 8WH2000-0AG05 | – | – | – | – |
| 8WH2000-0AG06 | – | – | – | – |
| 8WH2003-0AG00 | 8WH2003-0AH00 | – | – | – |
| 8WH2003-0AG01 | 8WH2003-0AH01 | – | – | – |
| – | – | – | – | – |
| 8WH2004-0AG00 | – | – | – | – |
| 8WH2004-0AG01 | – | – | – | – |
| – | – | – | – | – |
| | | | | |
| 8WH2000-0CG07 | 8WH2000-0CH07 | 8WH2000-0CJ07 | 8WH2000-0CK07 | 8WH2000-0CM07 |
| 8WH2003-0CG07 | 8WH2003-0CH07 | – | – | – |
| 8WH2004-0CG07 | – | – | – | – |

| Article No. | Article No. | Article No. | Article No. | Article No. |
|---|---|---|---|---|
| 8WH9003-1GA00 | 8WH9004-1GA00 | 8WH9005-1GA00 | 8WH9006-1GA00 | – |
| 8WH9003-2GA00 | 8WH9004-2GA00 | – | – | – |
| 8WH9003-4GA00 | – | – | – | – |

| Article No. | Article No. | Article No. | Article No. | Article No. |
|---|---|---|---|---|
| 8WH9070-0AA00 | 8WH9070-0DA00 | – | – | – |
| 8WH9070-0GA00 | 8WH9070-0DA00 | – | – | – |
| 8WH9070-0HA00 | – | – | – | – |

| Article No. | Article No. | Article No. | Article No. | Article No. |
|---|---|---|---|---|
| 8WH9003-0GA00 | – | – | – | – |

| Article No. | Article No. | Article No. | Article No. | Article No. |
|---|---|---|---|---|
| 8WH9063-5AA06 | 8WH9064-5AA06 | – | – | 8WH9067-5AA06 |

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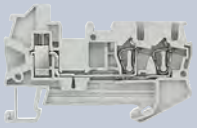
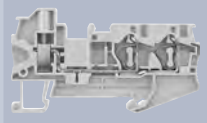
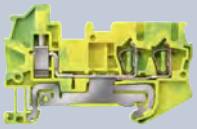
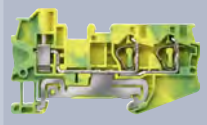


# 8WH2 spring-loaded terminals

## Hybrid through-type terminals

① 

② 

| | Terminal size | |
|---|---|---|
| | **2.5 mm²** | **4 mm²** |
| **Terminal width** | 5.2 mm | 6.2 mm |
| **Max. load current $I_{max}$** | 28 A | 32 A |
| **Max. operational voltage $U_{max}$** | 800 V | 800 V |
| **AWG spring** | 28 ... 12 | 28 ... 10/26 ... 10 |
| **Connection capacity, rigid, spring-loaded** | 0.08 ... 4 mm² | 0.08 ... 6 mm² |
| **Connection capacity, flexible, spring-loaded** | 0.08 ... 2.5 mm² | 0.08 ... 4 mm² |
| **AWG screw** | 26 ... 14 | 28 ... 10/26 ... 10 |
| **Connection capacity, rigid, screw-type** | 0.14 ... 4 mm² | 0.14 ... 6 mm² |
| **Connection capacity, flexible, screw-type** | 0.14 ... 2.5 mm² | 0.14 ... 4 mm² |
| **Standard** | IEC 60947-7-1, IEC 60947-7-2 | IEC 60947-7-1, IEC 60947-7-2 |
| |  |  |
| |  |  |

| Terminals | Color | Screw connection and spring-loaded connection | Screw connection and spring-loaded connection |
|---|---|---|---|
| ❶ Hybrid through-type terminals | | | |
| 3 | Gray | 8WH2103-2BF00 | 8WH2103-2BG00 |
| | Blue | 8WH2103-2BF01 | 8WH2103-2BG01 |
| ❷ PE hybrid through-type terminals | | | |
| 3 | Green-yellow | 8WH2103-3BF07 | 8WH2103-3BG07 |

## Specific accessories

**Covers**



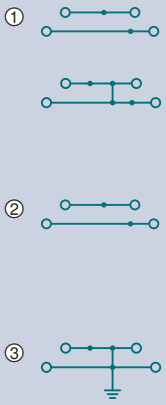
| Color | Width | Terminals | Article No. | Article No. |
|---|---|---|---|---|
| Gray | 2.2 mm | 3 | 8WH9000-2HA00 | 8WH9003-2HA00 |

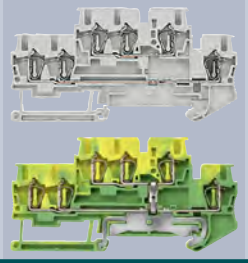
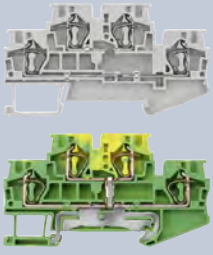
**See general accessories,** from page 14/55 onwards

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# Two-tier terminals



| | Terminal size | | |
|---|---|---|---|
| | 1.5 mm² | 2.5 mm² | 4 mm² |
| Terminal width | 4.2 mm | 5.2 mm | 6.2 mm |
| Max. load current $I_{max}$ | 17.5 A | 26 A | 32 A |
| Max. operational voltage $U_{max}$ | 500 V | 500 V | 500 V |
| AWG | 28 ... 16 | 28 ... 12 | 28 ... 10 |
| Connection capacity, rigid | 0.08 ... 1.5 mm² | 0.08 ... 4 mm² | 0.08 ... 6 mm² |
| Connection capacity, flexible with end sleeve | 0.08 ... 1.5 mm² | 0.08 ... 2.5 mm² | 0.08 ... 4 mm² |
| Standard | IEC 60947-7-1, IEC 60947-7-2, cULus, CB | IEC 60947-7-1, IEC 60947-7-2, cULus | IEC 60947-7-1, IEC 60947-7-2, cULus |
| |  |  |  |

| Version | Number of poles | Terminals | Color | | | |
|---|---|---|---|---|---|---|
| **❶ Two-tier terminals** | | | | | | |
| Without equipotential bonding | 2-pole | 4 | Gray | 8WH2020-0AE00 | 8WH2020-0AF00 | 8WH2020-0AG00 |
| | | | Blue | 8WH2020-0AE01 | 8WH2020-0AF01 | 8WH2020-0AG01 |
| | | 6 | Gray | – | 8WH2023-0AF00 | – |
| | | | Blue | – | 8WH2023-0AF01 | – |
| With equipotential bonding | 1-pole | 4 | Gray | 8WH2025-0AE00 | 8WH2025-0AF00 | 8WH2025-0AG00 |
| | | | Blue | – | 8WH2025-0AF01 | – |
| | | 6 | Gray | – | 8WH2022-0AF00 | – |
| **❷ Two-tier terminals, N at top and L at bottom** | | | | | | |
| Without equipotential bonding | 2-pole | 4 | Gray | – | 8WH2020-4CF00 | – |
| **❸ PE two-tier terminals** [1] | | | | | | |
| | | 4 | Green-yellow | 8WH2020-0CE07 | 8WH2020-0CF07 | 8WH2020-0CG07 |
| | | 6 | Green-yellow | – | 8WH2023-0CF07 | – |

[1] Only top tier can be fitted with connecting combs.

14

## Specific accessories

**Covers**



| Width | Terminals | Color | Article No. | Article No. | Article No. |
|---|---|---|---|---|---|
| 2.2 mm | 4 | Gray | 8WH9000-1VA00 | 8WH9000-1VA00 | 8WH9003-1VA00 |
| | 6 | Gray | – | 8WH9000-2VA00 | – |

**Compartment partitions**



| | Color | Article No. | Article No. | Article No. |
|---|---|---|---|---|
| | Gray | 8WH9070-0BA00 | 8WH9070-0BA00 | 8WH9070-0BA00 |

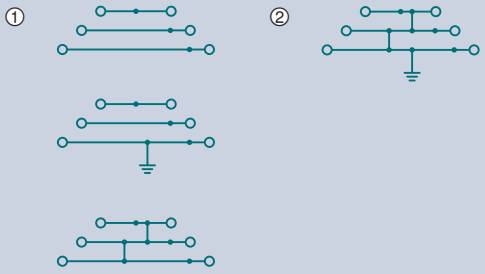
**See general accessories, from page 14/55 onwards**

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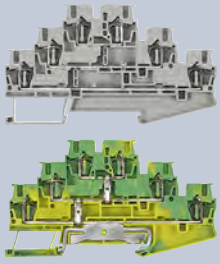


# 8WH2 spring-loaded terminals

## Three-tier terminals

① ② 

| | Terminal size<br>2.5 mm² |
|---|---|
| Terminal width | 5.2 mm |
| Max. load current $I_{max}$ | 28 A [1] |
| Max. operational voltage $U_{max}$ | 500 V |
| AWG | 28 ... 12 |
| Connection capacity, rigid | 0.08 ... 4 mm² |
| Connection capacity, flexible with end sleeve | 0.08 ... 2.5 mm² |
| Standard | IEC 60947-7-1, IEC 60947-7-2, cULus |



| Version | Types | Color | |
|---|---|---|---|
| **❶ Three-tier terminals** | | | |
| Without equipotential bonding | – | Gray | 8WH2030-0AF00 |
| | | Blue | 8WH2030-0AF01 |
| | PE/L/N | Gray | 8WH2030-4EF00 |
| | PE/L/L | Gray | 8WH2030-4HF00 |
| With equipotential bonding | | Gray | 8WH2035-0AF00 |
| | | Blue | 8WH2035-0AF01 |
| **❷ PE three-tier terminals** | | | |
| | | Green-yellow | 8WH2035-0CF07 |

[1] The total current through all connected conductors must not exceed the maximum load current.

## Specific accessories

**Covers**



| Width | Color | Article No. |
|---|---|---|
| 2.2 mm | Gray | 8WH9000-1GD00 |

**Label holder**



| Color | Article No. |
|---|---|
| Gray | 8WH9060-4BA00 |

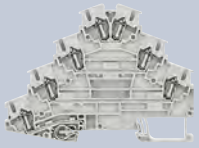
**See general accessories,** from page 14/55 onwards

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# Four-tier motor terminals



| | Terminal size | |
|---|---|---|
| | 2.5 mm² | 4 mm² |
| Terminal width | 5.2 mm | 6.2 mm |
| Max. load current $I_{max}$ | 26 A | 32 A |
| Max. operational voltage $U_{max}$ | 800 V | 800 V |
| AWG | 28 ... 12 | 28 ... 10 |
| Connection capacity, rigid | 0.08 ... 4 mm² | 0.08 ... 6 mm² |
| Connection capacity, flexible with end sleeve | 0.08 ... 2.5 mm² | 0.08 ... 4 mm² |
| Standard | IEC 60947-7-1, IEC 60947-7-2, cULus | IEC 60947-7-1, IEC 60947-7-2, cULus, CE |
| |  |  |
| **Types** | **Color** | | |
| L/L/L/PE | Gray | 8WH2040-4LF00 | 8WH2040-4LG00 |

## Specific accessories

**Covers**



| Color | Width | Article No. | Article No. |
|---|---|---|---|
| Gray | 2.2 mm | 8WH9000-1GE00 | – |

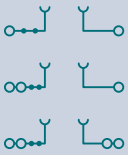
**See general accessories, from page 14/55 onwards**

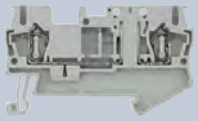
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# 8WH2 spring-loaded terminals

## Isolating terminals



| | Terminal size | |
|---|---|---|
| | 2.5 mm² | 4 mm² |
| Terminal width | 5.2 mm | 6.2 mm |
| Max. load current $I_{max}$ | 16 A | 16 A |
| Max. operational voltage $U_{max}$ | 400 V | 400 V |
| AWG | 28 ... 12 | 28 ... 10 |
| Connection capacity, rigid | 0.08 ... 4 mm² | 0.08 ... 6 mm² |
| Connection capacity, flexible with end sleeve | 0.08 ... 2.5 mm² | 0.08 ... 4 mm² |
| Standard | IEC 60947-7-1, cULus | IEC 60947-7-1, cULus |
| |  |  |

| Terminals | Color | | |
|---|---|---|---|
| 2 | Gray | 8WH2000-6AF00 | 8WH2000-6AG00 |
| 3 | Gray | 8WH2003-6AF00 | – |
| 4 | Gray | 8WH2004-6AF00 | – |

## Specific accessories

**Covers**



| Width | Color | Terminals | Article No. | Article No. |
|---|---|---|---|---|
| 2.2 mm | Gray | 2 | 8WH9000-2GA00 | – |
| | | 3 | 8WH9000-4GA00 | – |
| | | 4 | 8WH9000-5GA00 | – |

**Compartment partitions**



| Color | Terminals | Article No. | Article No. |
|---|---|---|---|
| Gray | 2 | 8WH9070-0AA00 | 8WH9070-0AA00 |
| | 3 | 8WH9070-0GA00 | – |
| | 4 | 8WH9070-0HA00 | – |

**Cover segments**



- For covering multi-wire terminals when mounting two-wire terminals side-by-side

| Color | Terminals | Article No. | Article No. |
|---|---|---|---|
| Gray | 3/4 | 8WH9000-0GA00 | – |

**Plug-in zone connectors**

| Types | Color | $I_{max}$ | Illuminated display | Article No. | Article No. |
|---|---|---|---|---|---|
|  Isolating plugs | Orange | 20 A | – | 8WH9040-0DB04 | 8WH9040-0DB04 |
|  Through-type connectors | Gray | 16 A | – | 8WH9020-8AB00 | 8WH9020-8AB00 |
|  Fused connectors [1] | Black | 6.3 A | 12 ... 30 V, 1 ... 2.5 mA | 8WH9040-3AB08 | 8WH9040-3AB08 |
| | | | Without | 8WH9040-3DB08 | 8WH9040-3DB08 |
|  Component connectors | Gray | 6 A | – | 8WH9040-0BB00 | 8WH9040-0BB00 |

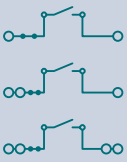
[1] The G fuse holders must be selected according to the maximum power loss (heat dissipation) of the G fuse links. Depending on the application and method of installation, the heat rise conditions in closed fuse holders must be tested. Higher ambient temperatures represent an additional load for the fuse links. A shift in rated current should therefore be taken into account in such applications.

**See general accessories,** from page 14/55 onwards

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# Isolating blade terminals



| | Terminal size | | |
|---|---|---|---|
| | 2.5 mm² | | 4 mm² |
| Terminal width | 5.2 mm | 5.2 mm | 6.2 mm |
| Max. load current $I_{max}$ | 16 A | 16 A [1] | 16 A |
| Max. operational voltage $U_{max}$ | 400 V | 400 V | 400 V |
| AWG | 28 ... 12 | 26 ... 14 | 28 ... 10 |
| Connection capacity, rigid | 0.08 ... 4 mm² | 0.14 ... 4 mm² | 0.08 ... 6 mm² |
| Connection capacity, flexible with end sleeve | 0.08 ... 2.5 mm² | 0.14 ... 2.5 mm² | 0.08 ... 4 mm² |
| Standard | IEC 60947-7-1, cULus | IEC 60947-7-1, cULus | IEC 60947-7-1, cULus |
| |  |  |  |

| Terminals | Color | | | |
|---|---|---|---|---|
| 2 | Gray | 8WH2000-6CF00 | – | 8WH2000-6CG00 |
| 3 | Gray | – | 8WH2003-6CF00 | – |
| 4 | Gray | – | 8WH2004-6CF00 | – |

[1] On terminals with three and four clamping points, the total current through all connected conductors must not exceed the max. load current.

## Specific accessories

**Covers**



| Color | Width | Terminals | Article No. | Article No. | Article No. |
|---|---|---|---|---|---|
| Gray | 2.2 mm | 2 | 8WH9000-2GA00 | 8WH9000-2GA00 | – |
| | | 3 | 8WH9000-4GA00 | 8WH9000-4GA00 | – |
| | | 4 | 8WH9000-5GA00 | 8WH9000-5GA00 | – |

**Compartment partitions**



| Color | Terminals | Article No. | Article No. | Article No. |
|---|---|---|---|---|
| Gray | 2 | 8WH9070-0AA00 | 8WH9070-0AA00 | 8WH9070-0AA00 |
| | 3 | 8WH9070-0GA00 | 8WH9070-0GA00 | – |
| | 4 | 8WH9070-0HA00 | 8WH9070-0HA00 | – |

**Cover segments**



| Color | Terminals | Article No. | Article No. | Article No. |
|---|---|---|---|---|
| Gray | 3/4 | 8WH9000-0GA00 | 8WH9000-0GA00 | – |

**See general accessories,** from page 14/55 onwards

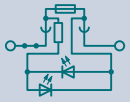
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# 8WH2 spring-loaded terminals

## Fuse terminals

① 

② 

| | Terminal size 4 mm² | | |
|---|---|---|---|
| Terminal width | 6.2 mm | 8.2 mm | 8.2 mm |
| Max. load current $I_{max}$ | 6.3 A | 10 A | 30 A |
| Max. operational voltage $U_{max}$ | 250 V | 400 V | 400 V |
| Max. individual power loss as overload protection | 1.6 W | – | – |
| Max. power loss as a group as overload protection | 1.6 W | – | – |
| Max. individual power loss as short-circuit protection | 4 W | – | – |
| Max. power loss as a group as short-circuit protection | 2.5 W | – | – |
| AWG | 28 ... 10 | 28 ... 10 | 28 ... 10 |
| Connection capacity, rigid | 0.08 ... 6 mm² | 0.08 ... 6 mm² | 0.08 ... 6 mm² |
| Connection capacity, flexible with end sleeve | 0.08 ... 4 mm² | 0.08 ... 4 mm² | 0.08 ... 4 mm² |
| Standard | IEC 60947-7-3, cULus | IEC 60947-7-3, cULus | IEC 60947-7-3, cULus |
| |  |  |  |

| Illuminated display | Color | | | | |
|---|---|---|---|---|---|
| **For 5 × 20 mm G fuse links** | | | | | |
| ① Without | ● | Black | 8WH2000-1GG08 | – | – |
| ② 15 ... 30 V | ● | Black | 8WH2000-1JG38 | – | – |
| ② 30 ... 60 V | ● | Black | 8WH2000-1JG68 | – | – |
| ② 110 ... 250 V | ● | Black | 8WH2000-1MG08 | – | – |
| **For 6.3 × 32 mm G fuse links** | | | | | |
| ① Without | ● | Black | – | 8WH2000-1HG08 | – |
| ② 100 ... 250 V | ● | Black | – | 8WH2000-1RG08 | – |
| **For blade-type fuses according to ISO/DIS 8820 and DIN 72581-3** [1] | | | | | |
| ① Without | ● | Black | – | – | 8WH2000-1AG08 |
| ② 12 V | ● | Black | – | – | 8WH2000-1BG28 |
| ② 24 V | ● | Black | – | – | 8WH2000-1BG38 |

[1] Blade-type fuses must be ordered separately.

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## Specific accessories

**Compartment partitions**



| Color | Terminals | Article No. | Article No. | Article No. |
|---|---|---|---|---|
| ● Gray | 2 | 8WH9070-0AA00 | 8WH9070-0AA00 | 8WH9070-0AA00 |

**See general accessories,** from page 14/55 onwards

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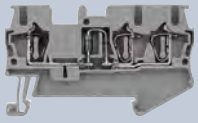
# 8WH2 spring-loaded terminals

## Diode terminals

① 

② 

| | Terminal size 2.5 mm² |
|---|---|
| Terminal width | 5.2 mm |
| Max. load current $I_{max}$ | Determined by the diode |
| Uninterrupted limiting current | 0.5 A |
| Max. operational voltage $U_{max}$ | 500 V |
| Blocking voltage | 1300 V |
| AWG | 28 ... 12 |
| Connection capacity, rigid | 0.08 ... 4 mm² |
| Connection capacity, flexible with end sleeve | 0.08 ... 2.5 mm² |
| Diode | 1N 4007, integrated |
| Standard | cULus |



| Terminals | Color | Let-through | |
|---|---|---|---|
| 3 | Gray | ① From left to right | 8WH2003-5DF00 |
| | Gray | ② From right to left | 8WH2003-5CF00 |

## Specific accessories

**Covers**



| Color | Width | Terminals | Article No. |
|---|---|---|---|
| Gray | 2.2 mm | 3 | 8WH9000-4GA00 |

**Compartment partitions**



| Color | Terminals | Article No. |
|---|---|---|
| Gray | 3 | 8WH9070-0GA00 |

**Cover segments**



- For covering multi-wire terminals when mounting two-wire terminals side-by-side

| Color | Terminals | Article No. |
|---|---|---|
| Gray | 3 | 8WH9000-0GA00 |

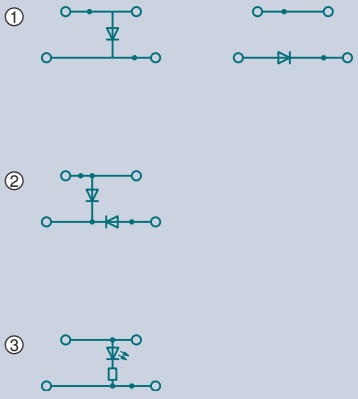


**See general accessories,** from page 14/55 onwards

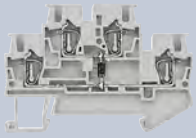
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# Two-tier diode terminals



| | Terminal size<br>2.5 mm² |
|---|---|
| Terminal width | 5.2 mm |
| Max. load current $I_{max}$ | 26 A |
| Uninterrupted limiting current | 0.5 A |
| Max. operational voltage $U_{max}$ | 500 V |
| Blocking voltage | 1300 V |
| AWG | 28 ... 12 |
| Connection capacity, rigid | 0.08 ... 4 mm² |
| Connection capacity, flexible with end sleeve | 0.08 ... 2.5 mm² |
| Diode | 1N 4007, integrated |
| Standard | cULus |



| Types | Color | |
|---|---|---|
| **❶ With one diode** | | |
| Let-through from top to bottom | Gray | 8WH2020-5AF00 |
| Let-through from bottom left to bottom right | Gray | 8WH2020-5DF00 |
| **❷ With two diodes** | | |
| Let-through from top to bottom left and from bottom right to bottom left | Gray | 8WH2020-5KF00 |
| **❸ With illuminated display** | | |
| 15 ... 30 V DC/2.5 ... 7.5 A | Gray | 8WH2020-5JF30 |

## Specific accessories

**Covers**



| Width | Color | Article No. |
|---|---|---|
| 2.2 mm | Gray | 8WH9000-1VA00 |

**Compartment partitions**



| Color | Article No. |
|---|---|
| Gray | 8WH9070-0BA00 |

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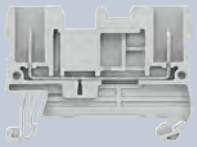
# 8WH5 combination plug-in terminals

## Through-type terminals

① 

② 

| | Terminal size 2.5 mm² |
|---|---|
| Terminal width | 5.2 mm |
| Max. load current $I_{max}$ | 24 A |
| Max. operational voltage $U_{max}$ | 500 V |
| Standard | IEC 61984, cULus |





| Terminals | Color | Combination plug-in connection |
|---|---|---|
| **❶ Through-type terminals** | | |
| 2 | Gray | 8WH5000-0AF00 |
| | Blue | 8WH5000-0AF01 |
| **❷ PE through-type terminals** | | |
| 2 | Green-yellow | 8WH5000-0CF07 |

## Specific accessories

**Covers**



| Terminals | Color | Width | Article No. |
|---|---|---|---|
| 2 | Gray | 2.2 mm | 8WH9000-1VA00 |

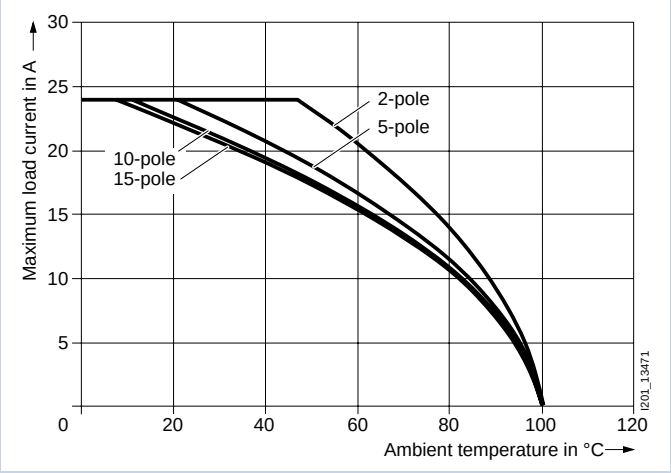
**Compartment partitions**



| Terminals | Color | Article No. |
|---|---|---|
| 2 | Gray | 8WH9070-0BA00 |

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**See general accessories,** from page 14/55 onwards

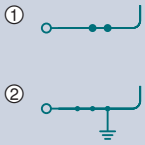



Derating curve for 8WH5000-0AF00

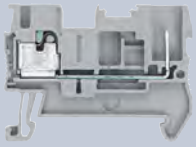
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# Hybrid through-type terminals



| | Terminal size<br>2.5 mm² |
|---|---|
| Terminal width | 5.2 mm |
| Max. load current $I_{max}$/cross-section | 24 A/2.5 mm² |
| Max. operational voltage $U_{max}$ | 500 V |
| AWG | 26 ... 12 |
| Connection capacity, rigid | 0.14 ... 4 mm² |
| Connection capacity, flexible with end sleeve | 0.14 ... 2.5 mm² |
| Standard | cULus |





| Terminals | Color | iPo plug-in connection and combination plug-in connection |
|---|---|---|
| ❶ Hybrid through-type terminals | | |
| 2 | Gray | 8WH5100-2PF00 |
| ❷ PE hybrid through-type terminals | | |
| 2 | Green-yellow | 8WH5100-3PF07 |

## Specific accessories

**Covers**



| Terminals | Color | Width | Article No. |
|---|---|---|---|
| 2 | Gray | 2.2 mm | 8WH9000-1GA00 |

**Compartment partitions**



| Terminals | Color | Article No. |
|---|---|---|
| 4 | Gray | 8WH9070-0HA00 |

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# 8WH5 combination plug-in terminals

## 8WH9 plugs

| | Terminal size 2.5 mm² | |
|---|---|---|
| **Terminal width** | 5.2 mm | 5.2 mm |
| **Max. load current $I_{max}$** | 24 A | 24 A |
| **Max. operational voltage $U_{max}$** | 500 V | 500 V |
| **AWG** | 28 ... 12 | 28 ... 12 |
| **Connection capacity, rigid** | 0.08 ... 4 mm² | 0.08 ... 4 mm² |
| **Connection capacity, flexible with end sleeve** | 0.08 ... 2.5 mm² | 0.08 ... 2.5 mm² |
| **Number of poles** | 1P | 1P |
| **Standard** | cULus | cULus |
| |  |  |
| |  |  |

| Version | Color | With slot for comb | Without slot for comb |
|---|---|---|---|
| **Plug** | | | |
| Left element | Gray | 8WH9040-1DB00 | 8WH9040-1AB00 |
| | Blue | 8WH9040-1DB01 | 8WH9040-1AB01 |
| Central element | Gray | 8WH9040-1EB00 | 8WH9040-1BB00 |
| | Blue | 8WH9040-1EB01 | 8WH9040-1BB01 |
| Right element | Gray | 8WH9040-1FB00 | 8WH9040-1CB00 |
| | Blue | 8WH9040-1FB01 | 8WH9040-1CB01 |
| **PE plugs** | | | |
| Left element | Green-yellow | 8WH9040-1DB07 | 8WH9040-1AB07 |
| Central element | Green-yellow | 8WH9040-1EB07 | – |
| Right element | Green-yellow | 8WH9040-1FB07 | 8WH9040-1CB07 |

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## Specific accessories

**Latches**



| Version | Color | Article No. | Article No. |
|---|---|---|---|
| With strain relief | Orange | 8WH9050-2BA04 | 8WH9050-2BA04 |
| Without strain relief | Orange | 8WH9050-2AA04 | 8WH9050-2AA04 |

**Shielding**



- For connection of shielded cables

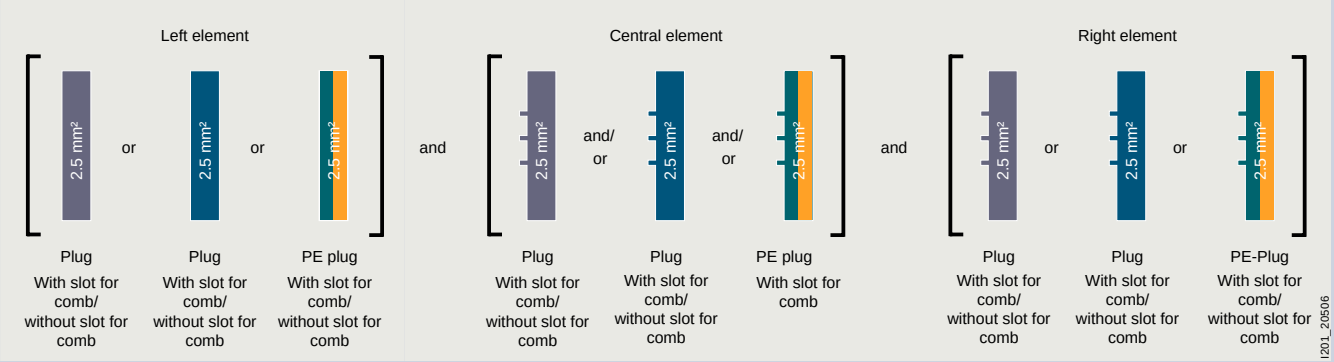
| Cable diameter | Color | Article No. | Article No. |
|---|---|---|---|
| 5 ... 10 mm | Black | 8WH9120-0DB08 | 8WH9120-0DB08 |

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## Configuration of combination plug




**Note:**

The configuration concept shown is just one example of how combination plugs can be configured.

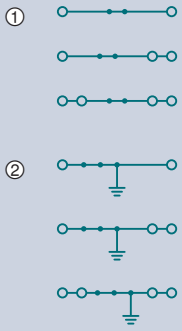
14

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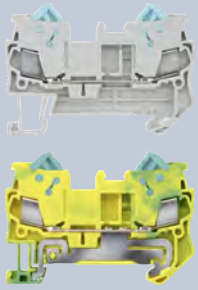


# 8WH3 insulation displacement terminals

## Through-type terminals




| | Terminal size 1.5 mm² |
|---|---|
| Terminal width | 5.2 mm |
| Max. load current $I_{max}$ | 17.5 A [1] |
| Max. operational voltage $U_{max}$ | 800 V |
| AWG | 24 ... 16 |
| Connection capacity, rigid | 0.25 ... 1.5 mm² |
| Connection capacity, flexible with end sleeve | 0.25 ... 1.5 mm² |



| Terminals | Color | | |
|---|---|---|---|
| ❶ Through-type terminals | | | |
| 2 | Gray | | 8WH3000-0AE00 |
| | Blue | | 8WH3000-0AE01 |
| 3 | Gray | | 8WH3003-0AE00 |
| | Blue | | 8WH3003-0AE01 |
| 4 | Gray | | 8WH3004-0AE00 |
| | Blue | | 8WH3004-0AE01 |
| ❷ PE through-type terminals | | | |
| 2 | Green-yellow | | 8WH3000-0CE07 |
| 3 | Green-yellow | | 8WH3003-0CE07 |
| 4 | Green-yellow | | 8WH3004-0CE07 |

[1] On terminals with three and four clamping points, the total current through all connected conductors must not exceed the maximum load current.

## Specific accessories

**Covers**



| Terminals | Color | Width | Article No. |
|---|---|---|---|
| 2 | Gray | 2.2 mm | 8WH9001-1AA00 |
| 3 | Gray | 2.2 mm | 8WH9001-2AA00 |
| 4 | Gray | 2.2 mm | 8WH9001-4AA00 |

**Compartment partitions**



| Terminals | Color | Width | Article No. |
|---|---|---|---|
| 4 | Gray | 2 mm | 8WH9070-0MA00 |

**Cover segments**



- For covering multi-wire terminals when mounting two-wire terminals side-by-side

| Terminals | Color | Article No. |
|---|---|---|
| 3 | Gray | – |

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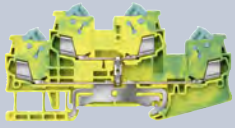
## Two-tier terminals

① 

② 

| | Terminal size 1.5 mm² |
|---|---|
| Terminal width | 5.2 mm |
| Max. load current $I_{max}$ | 17.5 A |
| Max. operational voltage $U_{max}$ | 500 V |
| AWG | 24 ... 16 |
| Connection capacity, rigid | 0.25 ... 1.5 mm² |
| Connection capacity, flexible with end sleeve | 0.25 ... 1.5 mm² |
| Standard | cULus |





| Version | Color | |
|---|---|---|
| **❶ Two-tier terminals** | | |
| Without equipotential bonding | Gray | 8WH3020-0AE00 |
| | Blue | 8WH3020-0AE01 |
| **❷ PE two-tier terminals** | | |
| | Green-yellow | 8WH3020-0CE07 |

## Specific accessories

**Covers**



| Width | Color | Article No. |
|---|---|---|
| 2.2 mm | Gray | 8WH9001-1BA00 |

**Compartment partitions**



| Color | Article No. |
|---|---|
| Gray | 8WH9070-0MA00 |

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# 8WH3 insulation displacement terminals

## Isolating terminals

| | Terminal size 1.5 mm² |
|---|---|
| Terminal width | 5.2 mm |
| Max. load current $I_{max}$ | 16 A |
| Max. operational voltage $U_{max}$ | 400 V |
| AWG | 24 ... 16 |
| Connection capacity, rigid | 0.25 ... 1.5 mm² |
| Connection capacity, flexible with end sleeve | 0.25 ... 1.5 mm² |
| Standard | cULus |



| Terminals | Color | |
|---|---|---|
| 2 | Gray | 8WH3000-6AE00 |

## Specific accessories

**Covers**



| Width | Color | Article No. |
|---|---|---|
| 2.2 mm | Gray | 8WH9001-2AA00 |

**Plug-in zone connectors**

| | Types | Color | $I_{max}$ | Illuminated display | Article No. |
|---|---|---|---|---|---|
|  | Isolating plugs | Orange | – | – | 8WH9040-0DB04 |
|  | Through-type connectors | Gray | 16 A | – | 8WH9020-8AB00 |
|  | Fused connectors [1] | Black | 6.3 A | 12 ... 30 V, 1 ... 2.5 mA | 8WH9040-3AB08 |
| | | | | Without | 8WH9040-3DB08 |
|  | Component connectors | Gray | 6 A | – | 8WH9040-0BB00 |

[1] The G fuse holders must be selected according to the maximum power loss (heat dissipation) of the G fuse links. Depending on the application and method of installation, the heat rise conditions in closed fuse holders must be tested. Higher ambient temperatures represent an additional load for the fuse links. A shift in rated current should therefore be taken into account in such applications.

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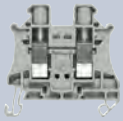
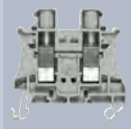
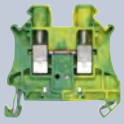
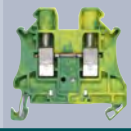


# 8WH screw terminals

## 8WH1 through-type terminals



| | Terminal size | |
|---|---|---|
| | 2.5 mm² | 4 mm² |
| Terminal width | 5.2 mm | 6.2 mm |
| Max. load current $I_{max}$ | 32 A | 41 A |
| Max. operational voltage $U_{max}$ | 1000 V | 1000 V |
| AWG | 26 ... 12 | 26 ... 10 |
| Connection capacity, one rigid conductor | 0.14 ... 4 mm² | 0.14 ... 6 mm² |
| Connection capacity, two rigid conductors | 0.14 ... 1.5 mm² | 0.14 ... 1.5 mm² |
| Connection capacity, one flexible conductor with end sleeve | 0.14 ... 2.5 mm² | 0.14 ... 4 mm² |
| Connection capacity, two flexible conductors with end sleeve | 0.14 ... 1.5 mm² | 0.14 ... 1.5 mm² |
| Tightening torque | 0.5 ... 0.6 Nm | 0.6 ... 0.8 Nm |
| Standard | IEC 60947-7-1, IEC 60947-7-2, cULus, CB | IEC 60947-7-1, IEC 60947-7-2, cULus, CB |

| Terminals | Color | | |
|---|---|---|---|
| ❶ Through-type terminals | | | |
| 2 | Gray | 8WH1000-0AF00 | 8WH1000-0AG00 |
| | Blue | 8WH1000-0AF01 | 8WH1000-0AG01 |
| | Orange | 8WH1000-0AF04 | 8WH1000-0AG04 |
| | Red | 8WH1000-0AF02 | 8WH1000-0AG02 |
| | Black | 8WH1000-0AF08 | 8WH1000-0AG08 |
| | Green | 8WH1000-0AF03 | – |
| | Yellow | 8WH1000-0AF06 | – |
| ❷ PE through-type terminals | | | |
| 2 | Green-yellow | 8WH1000-0CF07 | 8WH1000-0CG07 |

## Specific accessories

**Covers**



| Width | Color | Article No. | Article No. |
|---|---|---|---|
| 2.2 mm | Gray | 8WH9000-1PA00 | 8WH9000-1PA00 |

**Compartment partitions**



| Width | Color | Article No. | Article No. |
|---|---|---|---|
| 2 mm | Gray | 8WH9070-6BA00 | 8WH9070-6BA00 |

**Reducing combs**



| Version | Color | Article No. | Article No. |
|---|---|---|---|
| From screw to screw | Turquoise | – | – |
| From screw to spring | Turquoise | – | – |

**Warning covers for 8WH1**

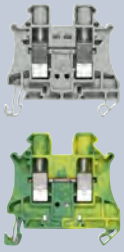
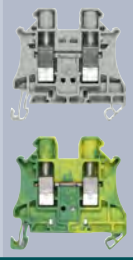
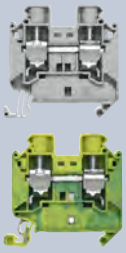


| Image | Color | Article No. | Article No. |
|---|---|---|---|
| Lightning symbol | Yellow | 8WH9060-5BA06 | 8WH9063-5BA06 |

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| 6 mm² | 10 mm² | 16 mm² | 35 mm² | |
|---|---|---|---|---|
| 8.2 mm | 10.2 mm | 12.2 mm | 16 mm | 16 mm |
| 57 A | 76 A | 101 A | 150 A | – |
| 1000 V | 1000 V | 1000 V | 1000 V | – |
| 24 ... 8 | 20 ... 6 | 16 ... 4 | 16 ... 1/0 | 16 ... 2 |
| 0.2 ... 10 mm² | 0.5 ... 16 mm² | 1.5 ... 25 mm² | 1.5 ... 50 mm² | 1.5 ... 35 mm² |
| 0.2 ... 2.5 mm² | 0.5 ... 4 mm² | 1 ... 6 mm² | 1.5 ... 16 mm² | 1.5 ... 16 mm² |
| 0.25 ... 6 mm² | 0.5 ... 10 mm² | 1 ... 16 mm² | 1.5 ... 35 mm² | 1.5 ... 35 mm² |
| 0.2 ... 2.5 mm² | 0.5 ... 4 mm² | 1 ... 6 mm² | 1.5 ... 10 mm² | 1.5 ... 10 mm² |
| 1.5 ... 1.8 Nm | 1.6 ... 1.8 Nm | 2.5 ... 3.0 Nm | 3.2 ... 3.7 Nm | 3.2 ... 3.7 Nm |
| IEC 60947-7-1, IEC 60947-7-2, cULus, CE | IEC 60947-7-1, IEC 60947-7-2, cULus, CE | IEC 60947-7-1, IEC 60947-7-2, cULus, CE | IEC 60947-7-1, IEC 60947-7-2, cULus, CE | IEC 60947-7-1, IEC 60947-7-2, cULus, CE |
|  |  |  |  |  |
|  |  |  | | |
| | | | | |
| | | | | |
| 8WH1000-0AH00 | 8WH1000-0AJ00 | 8WH1000-0AK00 | 8WH1000-0AM00 | – |
| 8WH1000-0AH01 | 8WH1000-0AJ01 | 8WH1000-0AK01 | 8WH1000-0AM01 | – |
| – | – | – | – | – |
| 8WH1000-0AH02 | – | – | – | – |
| 8WH1000-0AH08 | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| | | | | |
| 8WH1000-0CH07 | 8WH1000-0CJ07 | 8WH1000-0CK07 | – | 8WH1000-0CM07 |
| | | | | |
| Article No. | Article No. | Article No. | Article No. | Article No. |
| 8WH9000-1PA00 | 8WH9000-1PA00 | 8WH9076-1PA00 | – | – |
| | | | | |
| Article No. | Article No. | Article No. | Article No. | Article No. |
| 8WH9070-6BA00 | 8WH9070-6BA00 | – | – | – |
| | | | | |
| Article No. | Article No. | Article No. | Article No. | Article No. |
| 8WH9002-8AC10 | – | 8WH9002-8EC10 | 8WH9002-8GC10 | 8WH9002-8GC10 |
| – | – | 8WH9002-8FC10 | 8WH9002-8HC10 | 8WH9002-8HC10 |
| | | | | |
| Article No. | Article No. | Article No. | Article No. | Article No. |
| 8WH9064-5BA06 | 8WH9065-5BA06 | 8WH9066-5BA06 | 8WH9067-5BA06 | 8WH9067-5BA06 |

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# 8WH screw terminals

## 8WH1 through-type terminals for high-current applications

① 

② 

| | Terminal size | | | | |
|---|---|---|---|---|---|
| | 50 mm² | 70 mm² | 95 mm² | 150 mm² | 240 mm² |
| Terminal width | 20 mm | 20 mm | 25 mm | 31 mm | 36 mm |
| Max. load current $I_{max}$ | 150 A | 192 A | 232 A | 309 A | 415 A |
| Max. operational voltage $U_{max}$ | 1000 V | 1000 V | 1000 V | 1000 V | 1000 V |
| AWG | 6 ... 0 | 4 ... 000 | 4 ... 000 | 2 ... 300 | 00 ... 500 |
| Connection capacity, rigid | 16 ... 70 mm² | 16 ... 95 mm² | 25 ... 95 mm² | 35 ... 150 mm² | 70 ... 240 mm² |
| Connection capacity, flexible with end sleeve | 25 ... 50 mm² | 16 ... 70 mm² | 35 ... 95 mm² | 50 ... 150 mm² | 70 ... 185 mm² |
| Tightening torque | 6 ... 8 Nm | 8 ... 10 Nm | 15 ... 20 Nm | 25 ... 30 Nm | 25 ... 30 Nm |
| Standard | IEC 60947-7-1, IEC 60947-7-2, cULus | IEC 60947-7-1, IEC 60947-7-2, cULus | IEC 60947-7-1, IEC 60947-7-2, cULus | IEC 60947-7-1, cULus | IEC 60947-7-1, cULus |
| |  |  |  |  |  |

| Terminals | Color | | | | | |
|---|---|---|---|---|---|---|
| ❶ Through-type terminals | | | | | | |
| 2 | Gray | 8WH1000-0AN00 | 8WH1000-0AP00 | 8WH1000-0AQ00 | 8WH1000-0AS00 | 8WH1000-0AU00 |
| | Blue | 8WH1000-0AN01 | 8WH1000-0AP01 | 8WH1000-0AQ01 | 8WH1000-0AS01 | 8WH1000-0AU01 |
| ❷ PE through-type terminals | | | | | | |
| 2 | Green-yellow | 8WH1000-0CN07 | 8WH1000-0CP07 | 8WH1000-0CQ07 | – | – |

## Specific accessories

### Tap-off terminal



- When wiring a tap-off with a smaller cross-section, observe the overload and short-circuit strength specified in VDE 0100 Part 430

| $I_{max}$ | Cross-section | Article No. | Article No. | Article No. | Article No. | Article No. |
|---|---|---|---|---|---|---|
| 57 A | 10 mm² | 8WH9120-0AA00 | – | 8WH9120-0BA00 | 8WH9120-0CA00 | 8WH9120-0CA00 |

### Insertion profiles



- Evens out the prismatic sleeve base when using flat conductors

| | | | | | |
|---|---|---|---|---|---|
| Article No. | Article No. | Article No. | Article No. | Article No. |
| 8WH9020-3MA00 | – | 8WH9020-3NA00 | 8WH9020-3PA00 | 8WH9020-3PA00 |

### Combs



- Fully insulated, fitted in the clamping sleeve and latched with the terminal enclosure

| $I_{max}$ | Number of poles | Article No. | Article No. | Article No. | Article No. | Article No. |
|---|---|---|---|---|---|---|
| 232 A | 2-pole | – | – | 8WH9020-3AA00 | 8WH9020-3CA00 | – |
| | 3-pole | – | – | 8WH9020-3BA00 | 8WH9020-3DA00 | – |
| 320 A | 2-pole | – | – | – | – | 8WH9020-3EA00 |
| | 3-pole | – | – | – | – | 8WH9020-3FA00 |

### Permanent links



- For cross links
- Screw heads with insulating collar
- Remove partition first

| $I_{max}$ | Number of poles | Article No. | Article No. | Article No. | Article No. | Article No. |
|---|---|---|---|---|---|---|
| 150 A | 2-pole | 8WH9020-6HC00 | 8WH9020-3AH00 | – | – | – |
| | 3-pole | 8WH9020-6HD00 | 8WH9020-3AJ00 | – | – | – |

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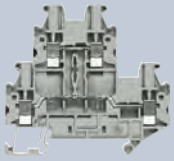
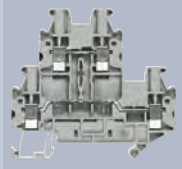
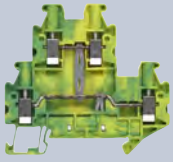


## 8WH1 two-tier terminals

① 



② 

| | Terminal size | |
|---|---|---|
| | 2.5 mm² | 4 mm² |
| Terminal width | 5.2 mm | 6.2 mm |
| Max. load current $I_{max}$ | 28 A | 36 A |
| Max. operational voltage $U_{max}$ | 500 V | 800 V |
| AWG | 26 ... 12 | 26 ... 10 |
| Connection capacity, one rigid conductor | 0.14 ... 4 mm² | 0.14 ... 6 mm² |
| Connection capacity, two rigid conductors | 0.14 ... 1.5 mm² | 0.14 ... 1.5 mm² |
| Connection capacity, one flexible conductor with end sleeve | 0.14 ... 2.5 mm² | 0.14 ... 4 mm² |
| Connection capacity, two flexible conductors with end sleeve | 0.14 ... 1.5 mm² | 0.14 ... 1.5 mm² |
| Tightening torque | 0.5 ... 0.6 Nm | 0.6 ... 0.8 Nm |
| Standard | cULus, CE | cULus, CE |
| |  |  |
| |  |  |

| Version | Color | | |
|---|---|---|---|
| ❶ Two-tier terminals | | | |
| Without equipotential bonding | Gray | 8WH1020-0AF00 | 8WH1020-0AG00 |
| | Blue | 8WH1020-0AF01 | 8WH1020-0AG01 |
| With equipotential bonding | Gray | 8WH1025-0AF00 | 8WH1025-0AG00 |
| ❷ PE two-tier terminals | | | |
| | Green-yellow | 8WH1020-0CF07 | 8WH1020-0CG07 |

## Specific accessories

### Covers



| Width | Color | Article No. | Article No. |
|---|---|---|---|
| 2.2 mm | Gray | 8WH9000-1QA00 | 8WH9000-1QA00 |

### Compartment partitions



| Width | Color | Article No. | Article No. |
|---|---|---|---|
| 2 mm | Gray | 8WH9070-6FA00 | 8WH9070-6FA00 |

### Spacer plates



- Compensates for tier offset if other terminals are mounted side by side

| Width | Color | Article No. | Article No. |
|---|---|---|---|
| 2.5 mm | Gray | 8WH9160-0AA00 | 8WH9160-0AA00 |

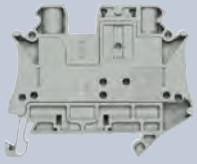
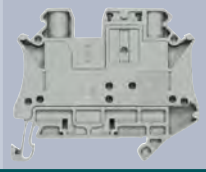
**See general accessories,** from page 14/55 onwards

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# 8WH screw terminals

## 8WH1 isolating terminals

| | Terminal size | |
|---|---|---|
| | 4 mm² | 6 mm² |
| Terminal width | 6.2 mm | 8.2 mm |
| Max. load current $I_{max}$ | 20 A | 20 A |
| Max. operational voltage $U_{max}$ | 400 V | 500 V |
| AWG | 26 ... 10 | 24 ... 8 |
| Connection capacity, one rigid conductor | 0.14 ... 6 mm² | 0.2 ... 10 mm² |
| Connection capacity, two rigid conductors | 0.14 ... 1.5 mm² | 0.2 ... 2.5 mm² |
| Connection capacity, one flexible conductor with end sleeve | 0.14 ... 6 mm² | 0.2 ... 10 mm² |
| Connection capacity, two flexible conductors with end sleeve | 0.14 ... 1.5 mm² | 0.2 ... 2.5 mm² |
| Tightening torque | 0.6 ... 0.8 Nm | 1.5 ... 1.8 Nm |
| Standard | cULus, CSA | cULus |
| |  |  |
| **Terminals** | **Color** | | |
| 2 | Gray | 8WH1000-6AG00 | 8WH1000-6AH00 |

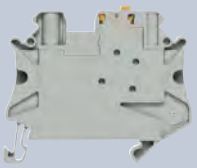
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# 8WH1 isolating blade terminals



| | Terminal size<br>4 mm² |
|---|---|
| Terminal width | 6.2 mm |
| Max. load current $I_{max}$ | 20 A |
| Max. operational voltage $U_{max}$ | 500 V |
| AWG | 26 ... 12 |
| Connection capacity, one rigid conductor | 0.14 ... 4 mm² |
| Connection capacity, two rigid conductors | 0.14 ... 1.5 mm² |
| Connection capacity, one flexible conductor with end sleeve | 0.14 ... 4 mm² |
| Connection capacity, two flexible conductors with end sleeve | 0.14 ... 1.5 mm² |
| Tightening torque | 0.6 ... 0.8 Nm |
| Standard | cULus, CE |



| Terminals | Color | |
|---|---|---|
| 2 | Gray | 8WH1000-6CG00 |

## Specific accessories

**Warning covers for 8WH1**



| Image | Color | Article No. |
|---|---|---|
| Lightning symbol | Yellow | 8WH9063-5BA06 |

**See general accessories,** from page 14/55 onwards

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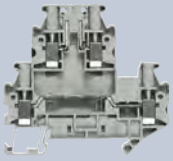
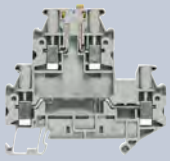


# 8WH screw terminals

## 8WH1 two-tier terminals with isolating function

① 

② 

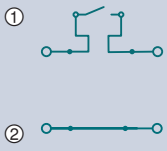
| | Terminal size<br>4 mm² | |
|---|---|---|
| **Terminal width** | 6.2 mm | 6.2 mm |
| **Max. load current $I_{max}$** | 38 A | 38 A |
| **Max. operational voltage $U_{max}$** | 500 V | 500 V |
| **AWG** | 26 ... 10 | 26 ... 10 |
| **Connection capacity, one rigid conductor** | 0.14 ... 6 mm² | 0.14 ... 6 mm² |
| **Connection capacity, two rigid conductors** | 0.14 ... 1.5 mm² | 0.14 ... 1.5 mm² |
| **Connection capacity, one flexible conductor with end sleeve** | 0.14 ... 6 mm² | 0.14 ... 6 mm² |
| **Connection capacity, two flexible conductors with end sleeve** | 0.14 ... 1.5 mm² | 0.14 ... 1.5 mm² |
| **Tightening torque** | 0.6 ... 0.8 Nm | 0.6 ... 0.8 Nm |
| **Standard** | cULus, CE | cULus, CE |
| |  |  |

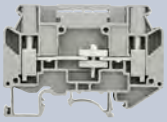
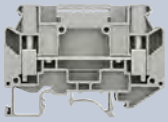
| Version | Color | | |
|---|---|---|---|
| **❶ Isolating terminal** | | | |
| Isolating terminal in the upper tier | Gray | 8WH1020-6AG00 | – |
| **❷ Isolating blade** | | | |
| Isolating blade in the upper tier | Gray | – | 8WH1020-6AC00 |

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# 8WH1 measuring transformer isolating terminals



| | Terminal size 6 mm² | |
|---|---|---|
| Terminal width | 8.2 mm | 8.2 mm |
| Rated uninterrupted current $I_u$ | 41 A | 41 A |
| Rated insulation voltage $U_i$ | 500 V | 800 V |
| AWG | 24 | 8 |
| Connection capacity, rigid | 0.5 ... 10 mm² | 0.5 ... 10 mm² |
| Connection capacity, flexible with end sleeve | 0.5 ... 6 mm² | 0.5 ... 6 mm² |
| Disconnect slide tightening torque | 0.6 ... 0.8 Nm | – |
| Tightening torque | 1.5 ... 1.6 Nm | 1.5 ... 1.6 Nm |
| Standard | cULus, CE | cULus, CE |
| |  |  |

| Terminals | Color | | |
|---|---|---|---|
| **❶ Isolating terminals** | | | |
| 2 recesses for screwing in the test sockets | Gray | 8WH1000-7AH00 | – |
| **❷ Through-type terminals with identical contour** | | | |
| 2 recesses for screwing in the test sockets | Gray | – | 8WH1000-7BH00 |

## Specific accessories

**Covers**



| Width | Color | Article No. | Article No. |
|---|---|---|---|
| 2.2 mm | Gray | 8WH9000-3UA00 | 8WH9000-3UA00 |

**Disconnecting links**



- For bridging two adjacent terminals
- Cannot be used with the bare 8WH9010-0MB12 test socket

| Tightening torque | Number of poles | Color | Article No. | Article No. |
|---|---|---|---|---|
| 0.6 ... 0.8 Nm | 2-pole | Gray | 8WH9021-0AC00 | 8WH9021-0AC00 |

**Connecting combs, separable**



- Consisting of connection wire, spacer sleeves and screws
- For bridging terminals, the connection wire is adjustable
- Cannot be used with the bare 8WH9010-0MB12 test socket

| Tightening torque | Number of poles | Color | Article No. | Article No. |
|---|---|---|---|---|
| 0.6 ... 0.8 Nm | 10-pole | Gray | 8WH9021-0AL00 | 8WH9021-0AL00 |

**Short-circuiting plugs, fully insulated**



- For short-circuiting adjacent terminals
- For simple transformer measurements
- Required when the bare 8WH9010-0MB12 test adapter is used in the measuring transformer terminal

| $I_{max}$ | Number of poles | Color | Article No. | Article No. |
|---|---|---|---|---|
| 20 A | 2-pole | Black | 8WH9010-0BC08 | 8WH9010-0BC08 |

**Test sockets, insulated**



- For screwing into the measuring transformer terminals
- The 8WH9021-0AC00 disconnecting link shall be used for short-circuiting adjacent terminals

| Tightening torque | Color | Article No. | Article No. |
|---|---|---|---|
| 0.6 ... 0.8 Nm | Green | 8WH9010-0MB03 | 8WH9010-0MB03 |
| | Violet | 8WH9010-0MB11 | 8WH9010-0MB11 |
| | Yellow | 8WH9010-0MB06 | 8WH9010-0MB06 |

**Test sockets, bare**



- For screwing into the measuring transformer terminals
- For simple transformer measurements
- For tapping with test plug
- The 8WH9010-0BC08 short-circuiting plug shall be used for short-circuiting adjacent terminals

| Tightening torque | Article No. | Article No. |
|---|---|---|
| 0.6 ... 0.8 Nm | 8WH9010-0MB12 | 8WH9010-0MB12 |

**See general accessories, from page 14/55 onwards**

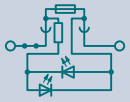
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# 8WH screw terminals

## 8WH1 fuse terminals

① 

② 

| | Terminal size | |
|---|---|---|
| | 4 mm² | 6 mm² |
| Terminal width | 6.2 mm | 8.2 mm |
| Max. load current $I_{max}$ | 6.3 A | 10 A |
| Max. operational voltage $U_{max}$ | 500 V | 630 V |
| AWG | 26 ... 10 | 24 ... 8 |
| Connection capacity, one rigid conductor | 0.14 ... 6 mm² | 0.2 ... 10 mm² |
| Connection capacity, two rigid conductors | 0.14 ... 1.5 mm² | 0.2 ... 2.5 mm² |
| Connection capacity, one flexible conductor with end sleeve | 0.14 ... 6 mm² | 0.2 ... 10 mm² |
| Connection capacity, two flexible conductors with end sleeve | 0.14 ... 1.5 mm² | 0.2 ... 2.5 mm² |
| Tightening torque | 0.6 ... 0.8 Nm | 1.5 ... 1.8 Nm |
| Standard | IEC 60947-7-3, cULus, CE | IEC 60947-7-3, cULus, CE |
| |  |  |

| LED | Color | | | |
|---|---|---|---|---|
| **For 5 × 20 mm G fuse links** | | | | |
| ① Without | ● | Black | 8WH1000-1GG08 | – |
| ② AC/DC with LED 10 ... 30 V | ● | Black | 8WH1000-1KG38 | – |
| ② AC/DC with LED 110 ... 250 V | ● | Black | 8WH1000-1MG88 | – |
| **For 6.3 × 32 mm G fuse links (inch fuses)** | | | | |
| ① Without | ● | Black | – | 8WH1000-1HH08 |
| ② AC/DC with LED 12 ... 30 V | ● | Black | – | 8WH1000-1PH38 |

## Specific accessories

**Plug-in zone connectors**



| Version | Color | $I_{max}$ | Illuminated display | Article No. | Article No. |
|---|---|---|---|---|---|
| Fused connectors [1] | ● Black | 6.3 A | 12 ... 30 V, 1 ... 2.5 mA | 8WH9040-3AB08 | 8WH9040-3AB08 |
| | | | Without | 8WH9040-3DB08 | 8WH9040-3DB08 |

**Reducing combs**



- For connecting terminals from terminal size 6 mm² to 2.5 mm² or 4 mm²

| Version | Color | Article No. | Article No. |
|---|---|---|---|
| From screw to screw | ● Turquoise | – | 8WH9002-8AC10 |

[1] The G fuse holders must be selected according to the maximum power loss (heat dissipation) of the G fuse links. Depending on the application and method of installation, the heat rise conditions in closed fuse holders must be tested. Higher ambient temperatures represent an additional load for the fuse links. A shift in rated current should therefore be taken into account in such applications.

**See general accessories, from page 14/55 onwards**

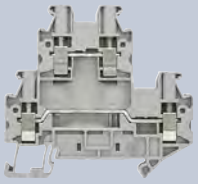
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## 8WH1 two-tier terminals for soldering of components [1)]



| | Terminal size 2.5 mm² |
|---|---|
| Terminal width | 5.2 mm |
| Max. load current $I_{max}$ | 28 A |
| Max. operational voltage $U_{max}$ | 500 V |
| AWG | 26 ... 10 |
| Connection capacity, one rigid conductor | 0.14 ... 4 mm² |
| Connection capacity, two rigid conductors | 0.14 ... 1.5 mm² |
| Connection capacity, one flexible conductor with end sleeve | 0.14 ... 4 mm² |
| Connection capacity, two flexible conductors with end sleeve | 0.14 ... 1.5 mm² |
| Tightening torque | 0.5 ... 0.6 Nm |
| Standard | cULus, CSA |



| Terminals | Color | |
|---|---|---|
| 4 | Gray | 8WH1020-5LF00 |

[1)] Supplied without components; the appropriate components (resistors, diodes, capacitors, ...) are to be soldered in by user

## Specific accessories

**Covers**



| Width | Color | Article No. |
|---|---|---|
| 2.2 mm | Gray | 8WH9000-1QA00 |

**Compartment partitions**



| Width | Color | Article No. |
|---|---|---|
| 2 mm | Gray | 8WH9070-6FA00 |

**Spacer plates**



- Compensates for tier offset if other terminals are mounted side by side

| Width | Color | Article No. |
|---|---|---|
| 2.5 mm | Gray | 8WH9160-0AA00 |

**See general accessories,** from page 14/55 onwards

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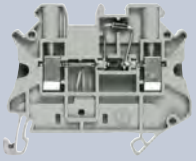
# 8WH screw terminals

## 8WH1 diode terminals

① 

② 

| | Terminal size<br>4 mm² |
|---|---|
| Terminal width | 6.2 mm |
| Uninterrupted limiting current | 0.5 A |
| Max. operational voltage $U_{max}$ | 800 V |
| Blocking voltage | 1300 V |
| AWG | 26 ... 10 |
| Connection capacity, one rigid conductor | 0.14 ... 6 mm² |
| Connection capacity, two rigid conductors | 0.14 ... 1.5 mm² |
| Connection capacity, one flexible conductor with end sleeve | 0.14 ... 4 mm² |
| Connection capacity, two flexible conductors with end sleeve | 0.14 ... 1.5 mm² |
| Tightening torque | 0.6 ... 0.8 Nm |
| Diode | 1N 4007, integrated |
| Standard | cULus, CE |



| Let-through | Color | |
|---|---|---|
| ① From left to right | Gray | 8WH1000-6LG00 |
| ② From right to left | Gray | 8WH1000-6KG00 |

## Specific accessories

**Covers**



| Width | Color | Article No. |
|---|---|---|
| 2.2 mm | Gray | 8WH9000-2PA00 |

**Warning covers**



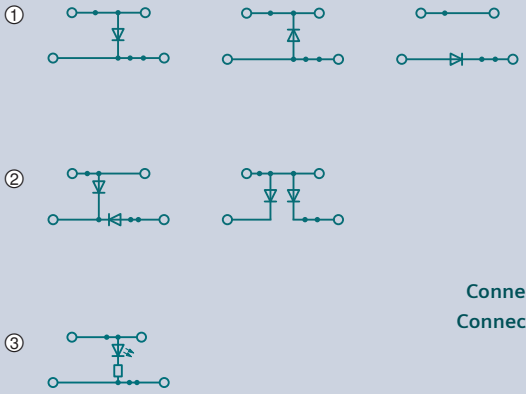
| Image | Color | Article No. |
|---|---|---|
| Lightning symbol | Yellow | 8WH9063-5CA06 |

**See general accessories,** from page 14/55 onwards

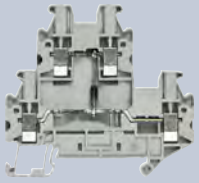
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# 8WH1 two-tier diode terminals



| | Terminal size<br>2.5 mm² |
|---|---|
| Terminal width | 5.2 mm |
| Max. load current $I_{max}$ | 28 A |
| Uninterrupted limiting current | 0.5 A |
| Max. operational voltage $U_{max}$ | 500 V |
| AWG | 26 ... 10 |
| Connection capacity, one rigid conductor | 0.14 ... 4 mm² |
| Connection capacity, two rigid conductors | 0.14 ... 1.5 mm² |
| Connection capacity, one flexible conductor with end sleeve | 0.14 ... 2.5 mm² |
| Connection capacity, two flexible conductors with end sleeve | 0.14 ... 1.5 mm² |
| Tightening torque | 0.5 ... 0.6 Nm |
| Diode | 1N 4007, integrated |
| Standard | cULus, CE |



| Types | LED | Color | |
|---|---|---|---|
| **❶ With one diode** | | | |
| Let-through from top to bottom | | Gray | 8WH1020-5AF00 |
| Let-through from bottom to top | | Gray | 8WH1020-5BF00 |
| Let-through from bottom left to bottom right | | Gray | 8WH1020-5DF00 |
| **❷ With two diodes** | | | |
| Let-through from top to bottom left and from bottom right to bottom left | | Gray | 8WH1020-5FF00 |
| Let-through from top to bottom left and from top to bottom right | | Gray | 8WH1020-5HF00 |
| **❸ With illuminated display** | | | |
| Let-through from top to bottom | 24 V DC | Gray | 8WH1020-5JF30 |

## Specific accessories

**Covers**



| Width | Color | Article No. |
|---|---|---|
| 2.2 mm | Gray | 8WH9000-1QA00 |

**Compartment partitions**



| Width | Color | Article No. |
|---|---|---|
| 2 mm | Gray | 8WH9070-6FA00 |

**Spacer plates**



- Compensates for tier offset if other terminals are mounted side by side

| Width | Color | Article No. |
|---|---|---|
| 2.5 mm | Gray | 8WH9160-0AA00 |

**See general accessories,** from page 14/55 onwards

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# 8WH screw terminals

## 8WH9 shield terminals

| | Terminal diameter | | | |
|---|---|---|---|---|
| | 3 ... 8 mm | 3 ... 14 mm | 3 ... 20 mm | 20 ... 35 mm |
| Tightening torque | 0.6 Nm | 0.8 Nm | 0.8 Nm | 1.5 ... 1.8 Nm |
| Sheet thickness, mounting plate | 1 ... 2 mm | 1 ... 2 mm | 1 ... 2 mm | 1 ... 2 mm |
| |  |  |  |  |
| |  |  |  |  |
| **Version** | | | | |
| **For direct shield attachment on conductive mounting plate** | | | | |
| For connecting cable shield and enclosure ground | 8WH9130-0AA00 | 8WH9130-0BA00 | 8WH9130-0CA00 | 8WH9130-0DA00 |
| **For 10 × 3 mm busbars** | | | | |
| For connecting cable shield and enclosure ground | 8WH9130-0LA00 | 8WH9130-0MA00 | 8WH9130-0NA00 | 8WH9130-0PA00 |

## Specific accessories

**N conductor support brackets**

| | Version | Article No. | Article No. | Article No. | Article No. |
|---|---|---|---|---|---|
|  | Made of molded plastic and conductive connection with retaining screw | 8WH9140-0DA00 | 8WH9140-0DA00 | 8WH9140-0DA00 | 8WH9140-0DA00 |
|  | For mounting rail with clearance of approx. 30 mm to the busbar | 8WH9140-0BA00 | 8WH9140-0BA00 | 8WH9140-0BA00 | – |
|  | For mounting rail with clearance of approx. 65 mm to the busbar | 8WH9140-0CA00 | 8WH9140-0CA00 | 8WH9140-0CA00 | – |

**N busbars, 10 × 3 mm**

| | Version | Length | Article No. | Article No. | Article No. | Article No. |
|---|---|---|---|---|---|---|
|  | Copper, tinned | 1000 mm | 8WH9030-2AB12 | 8WH9030-2AB12 | 8WH9030-2AB12 | 8WH9030-2AB12 |

**See general accessories,** from page 14/55 onwards

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# Accessories for 8WH terminal blocks

## Individual labeling system

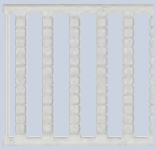
**Labeling systems for**
- Terminal blocks
- Modular installation devices
- Circuit breakers
- Switch disconnectors

The inscription labels can be inscribed with Murrplastik labeling systems or by hand.

The WIN designation facilitates assignment in the inscription software.

**Labeling systems available from:**
Murrplastik Systemtechnik GmbH
Dieselstraße 10
D-71570 Oppenweiler
Telephone: +49 7191-482-0
email: info@murrplastik.de

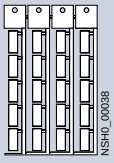
### Blank labels



- Horizontal and vertical labeling

| Version | Terminal width | Designation | Color | Article No. |
|---|---|---|---|---|
| Front | 3.5 mm | WIN 97 | White | 8WH8112-0AA05 |
| | 4.2 mm | WIN 97 | White | 8WH8112-1AA05 |
| | 5.2 and 6.2 mm | WIN 88 | White | 8WH8112-2AA05 |
| | 8.2, 10.2, 12.2 and 16 mm | WIN 40 | White | 8WH8112-4AA05 |
| Flat | 3.5 mm | WIN 97 | White | 8WH8113-0AA05 |
| | 4.2 mm | WIN 180 | White | 8WH8113-1AA05 |
| | 5.2 mm | WIN 182 | White | 8WH8113-1AA05 |
| | 6.2 mm | WIN 184 | White | 8WH8113-1AA05 |
| | 8.2 mm | WIN 186 | White | 8WH8113-1AA05 |
| | 10.2 mm | WIN 188 | White | 8WH8113-1AA05 |
| | 12.2 and 16 mm | WIN 46Z | White | 8WH8113-6AA05 |

### Snap-on device labels




- For identification of, e.g. circuit breakers, contactors and control systems

| Version | Designation | Color | Article No. |
|---|---|---|---|
| 20 × 7 mm, snap-on hooks at side | WIN 95 | White | 8WH8210-0AA55 |
| 20 × 7 mm, snap-on hooks at side | WIN 95 | Turquoise | 8WH8210-0AA56 |

### Adhesive device labels



- For identification of, e.g. modular installation devices and switch disconnectors

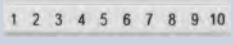
| Types | Designation | Color | Article No. |
|---|---|---|---|
| 15 × 6 mm | WIN 098 | White | 8WH8210-0AA35 |
| | WIN 099 | Yellow | 8WH8210-0AA36 |
| 19 × 8 mm | WIN 088 | White | 8WH8210-0AA45 |
| | WIN 082 | Yellow | 8WH8210-0AA46 |

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# Accessories for 8WH terminal blocks

## Standard labeling system

| | | | Terminal size | 1.5 mm² | 2.5 mm² |
|---|---|---|---|---|---|
| | | | Terminal width | 4.2 mm/5.2 mm (8WH3) | 5.2 mm/6.2 mm (8WH3) |
| **Front** | | | | | |
| | Text alignment | Inscription | Numbering | Article No. | Article No. |
|  | Vertical | Consecutive numbering | 1 ... 10 (10×) | 8WH8120-1AB05 | 8WH8120-2AB05 |
| | | | 11 ... 20 (10×) | 8WH8120-1AB15 | 8WH8120-2AB15 |
| | | | 21 ... 30 (10×) | 8WH8120-1AB25 | 8WH8120-2AB25 |
| | | | 31 ... 40 (10×) | 8WH8120-1AB35 | 8WH8120-2AB35 |
| | | | 41 ... 50 (10×) | 8WH8120-1AB45 | 8WH8120-2AB45 |
| | | | 51 ... 60 (10×) | 8WH8120-1AB55 | 8WH8120-2AB55 |
| | | | 61 ... 70 (10×) | 8WH8120-1AB65 | 8WH8120-2AB65 |
| | | | 71 ... 80 (10×) | 8WH8120-1AB75 | 8WH8120-2AB75 |
| | | | 81 ... 90 (10×) | 8WH8120-1AB85 | 8WH8120-2AB85 |
| | | | 91 ... 100 (10×) | 8WH8120-1AC05 | 8WH8120-2AC05 |
| | | L1, L2, L3, N, PE | – | – | 8WH8120-2AA15 |
| | | Custom inscription | – | 8WH8120-1XA05-Z Y01 | 8WH8120-2XA05-Z Y01 |
|  | Horizontal | Consecutive numbering | 1 ... 10 (10×) | 8WH8140-1AB05 | 8WH8140-2AB05 |
| | | | 11 ... 20 (10×) | 8WH8140-1AB15 | 8WH8140-2AB15 |
| | | | 21 ... 30 (10×) | 8WH8140-1AB25 | 8WH8140-2AB25 |
| | | | 31 ... 40 (10×) | 8WH8140-1AB35 | 8WH8140-2AB35 |
| | | | 41 ... 50 (10×) | – | 8WH8140-2AB45 |
| | | | 51 ... 60 (10×) | – | 8WH8140-2AB55 |
| | | | 61 ... 70 (10×) | – | 8WH8140-2AB65 |
| | | | 71 ... 80 (10×) | – | 8WH8140-2AB75 |
| | | | 81 ... 90 (10×) | – | 8WH8140-2AB85 |
| | | | 91 ... 100 (10×) | – | 8WH8140-2AC05 |
| | | Custom inscription | – | 8WH8140-1XA05-Z Y01 | 8WH8140-2XA05-Z Y01 |
|  | Blank | – | – | 8WH8110-1AA05 | 8WH8110-2AA05 |
| **Flat** | | | | | |
| | Text alignment | Inscription | Numbering | Article No. | Article No. |
|  | Vertical | Consecutive numbering | 1 ... 10 (10×) | 8WH8121-1AB05 | 8WH8121-2AB05 |
| | | | 11 ... 20 (10×) | 8WH8121-1AB15 | 8WH8121-2AB15 |
| | | | 21 ... 30 (10×) | 8WH8121-1AB25 | 8WH8121-2AB25 |
| | | | 31 ... 40 (10×) | 8WH8121-1AB35 | 8WH8121-2AB35 |
| | | | 41 ... 50 (10×) | 8WH8121-1AB45 | 8WH8121-2AB45 |
| | | | 51 ... 60 (10×) | 8WH8121-1AB55 | 8WH8121-2AB55 |
| | | | 61 ... 70 (10×) | – | 8WH8121-2AB65 |
| | | | 71 ... 80 (10×) | – | 8WH8121-2AB75 |
| | | | 81 ... 90 (10×) | – | 8WH8121-2AB85 |
| | | | 91 ... 100 (10×) | – | 8WH8121-2AC05 |
| | | Custom inscription | – | 8WH8121-1XA05-Z Y01 | 8WH8121-2XA05-Z Y01 |
|  | Horizontal | Consecutive numbering | 1 ... 10 (10×) | 8WH8141-1AB05 | 8WH8141-2AB05 |
| | | | 11 ... 20 (10×) | 8WH8141-1AB15 | 8WH8141-2AB15 |
| | | | 21 ... 30 (10×) | 8WH8141-1AB25 | 8WH8141-2AB25 |
| | | | 31 ... 40 (10×) | 8WH8141-1AB35 | 8WH8141-2AB35 |
| | | | 41 ... 50 (10×) | 8WH8141-1AB45 | 8WH8141-2AB45 |
| | | | 51 ... 60 (10×) | – | 8WH8141-2AB55 |
| | | | 61 ... 70 (10×) | – | 8WH8141-2AB65 |
| | | | 71 ... 80 (10×) | – | 8WH8141-2AB75 |
| | | | 81 ... 90 (10×) | – | 8WH8141-2AB85 |
| | | | 91 ... 100 (10×) | – | 8WH8141-2AC05 |
| | | Custom inscription | – | 8WH8141-1XA05-Z Y01 | 8WH8141-2XA05-Z Y01 |
|  | Blank | – | – | 8WH8111-1AA05 | 8WH8111-2AA05 |

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| 4 mm² | 6 mm² | 10 and 16 mm² | 35 mm² |
|---|---|---|---|
| 6.2 mm | 8.2 mm | 10.2 and 12.2 mm | 16 mm |
| Article No. | Article No. | Article No. | Article No. |
| 8WH8120-3AB05 | 8WH8120-4AB05 | 8WH8120-5AB05 | – |
| 8WH8120-3AB15 | 8WH8120-4AB15 | 8WH8120-5AB15 | – |
| 8WH8120-3AB25 | 8WH8120-4AB25 | 8WH8120-5AB25 | – |
| 8WH8120-3AB35 | 8WH8120-4AB35 | 8WH8120-5AB35 | – |
| 8WH8120-3AB45 | 8WH8120-4AB45 | – | – |
| 8WH8120-3AB55 | 8WH8120-4AB55 | – | – |
| 8WH8120-3AB65 | 8WH8120-4AB65 | – | – |
| 8WH8120-3AB75 | 8WH8120-4AB75 | – | – |
| 8WH8120-3AB85 | – | – | – |
| 8WH8120-3AC05 | – | – | – |
| 8WH8120-3AA15 | 8WH8120-4AA15 | 8WH8120-5AA15 | 8WH8120-7AA15 |
| 8WH8120-3XA05-Z Y01 | 8WH8120-4XA05-Z Y01 | 8WH8120-5XA05-Z Y01 | 8WH8120-7XA05-Z Y01 |
| 8WH8140-3AB05 | 8WH8140-4AB05 | 8WH8140-5AB05 | – |
| 8WH8140-3AB15 | 8WH8140-4AB15 | 8WH8140-5AB15 | – |
| 8WH8140-3AB25 | 8WH8140-4AB25 | – | – |
| 8WH8140-3AB35 | – | – | – |
| 8WH8140-3AB45 | – | – | – |
| 8WH8140-3AB55 | – | – | – |
| 8WH8140-3AB65 | – | – | – |
| 8WH8140-3AB75 | – | – | – |
| 8WH8140-3AB85 | – | – | – |
| 8WH8140-3AC05 | – | – | – |
| 8WH8140-3XA05-Z Y01 | 8WH8140-4XA05-Z Y01 | 8WH8140-5XA05-Z Y01 | 8WH8140-7XA05-Z Y01 |
| 8WH8110-3AA05 | 8WH8110-4AA05 | 8WH8110-5AA05 | 8WH8110-7AA05 |

| Article No. | Article No. | Article No. | Article No. |
|---|---|---|---|
| 8WH8121-3AB05 | 8WH8121-4AB05 | 8WH8121-5AB05 | – |
| 8WH8121-3AB15 | 8WH8121-4AB15 | 8WH8121-5AB15 | – |
| 8WH8121-3AB25 | – | 8WH8121-5AB25 | – |
| 8WH8121-3AB35 | – | – | – |
| 8WH8121-3AB45 | – | – | – |
| 8WH8121-3AB55 | – | – | – |
| 8WH8121-3AB65 | – | – | – |
| 8WH8121-3AB75 | – | – | – |
| 8WH8121-3AB85 | – | – | – |
| 8WH8121-3AC05 | – | – | – |
| 8WH8121-3XA05-Z Y01 | 8WH8121-4XA05-Z Y01 | 8WH8121-5XA05-Z Y01 | – |
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |
| 8WH8141-3XA05-Z Y01 | 8WH8141-4XA05-Z Y01 | 8WH8141-5XA05-Z Y01 | – |
| 8WH8111-3AA05 | 8WH8111-4AA05 | 8WH8111-5AA05 | 8WH8111-7AA05 |

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# Accessories for 8WH terminal blocks

## Mounting accessories

### Lateral mounting test plugs



- For individual assembly of test plug connectors
- Cannot be used for 8WH3 insulation displacement terminals.

| Terminal size | Terminal width | Color | Article No. |
|---|---|---|---|
| 2.5 mm² | 5.2 mm | Red | 8WH9010-0EB02 |

### Spacer plates



- For skipping single terminals for individual test plug assembly
- Not suitable for 8WH3 insulation displacement terminals

| Terminal size | Terminal width | Color | Article No. |
|---|---|---|---|
| 2.5 mm² | 5.2 mm | Red | 8WH9010-2BA02 |

### Bare infeed terminals, for N busbars



| Size | Conductor cross-section | Rated uninterrupted current | Article No. |
|---|---|---|---|
| 6 × 6 mm and 10 × 3 mm | Up to 4 mm² | 32 A | 8WA2867 |
| | Up to 25 mm² | 76 A | 8WA2868 |
| | Up to 35 mm² | 125 A | 8WA2870 |

### Terminal strip markers, for end retainers



- Height-adjustable
- For quick-fit end retainers
- Can be provided with two front labels, for terminal width 10.2 mm and terminal strip markers

| Labeling field size | Color | Article No. |
|---|---|---|
| 20 × 8 mm | Gray | 8WH9150-1CA00 |

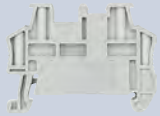
### Test adapters



- When plugged in, finger-safe against accidental direct contact according to EN 50274
- For 4 mm test plugs and terminal blocks with 4.2 mm ... 8.2 mm spacing

| | Color | Article No. |
|---|---|---|
| | Gray | 8WH9010-0JB00 |

### Quick-fit end retainers



- Can be provided with front labels, for terminal width 5.2 mm and terminal strip markers

| | Color | Article No. |
|---|---|---|
| | Gray | 8WH9150-0CA00 |

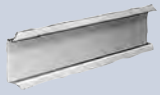
### End retainers, steel



- Suitable for 8WA1806 end label
- An 8WA1820 barrier must be inserted if using end retainers against an 8WA189 connection bar (size 2.5)

| Mounting width | Article No. |
|---|---|
| 10.3 mm | 8WA1805 |

### DIN rails



| Version | Material | Norm | Length | Thickness | Article No. |
|---|---|---|---|---|---|
| Perforated | Steel, sendzimir-galvanized | EN 60715-35 × 7.5 | 2 m | 1 mm | 5ST1145 |
| Non-perforated | Steel, sendzimir-galvanized | EN 60715-35 × 7.5 | 2 m | 1 mm | 5ST1141 |
| | Copper | EN 60715-35 × 15 | 2 m | 2.3 mm | 8WA7551 |
| | Steel, zinc-plated, chromated | Similar to EN 50022-35 × 15 | 2 m | 1.5 mm | 5ST1142 |

### N busbars, 6 × 6 mm



| Version | Length | Rated uninterrupted current | Article No. |
|---|---|---|---|
| For four-field | 1109 mm | 125 A | 8GF9324-2 |

### Insulation carriers



| Use | Article No. |
|---|---|
| For mounting insulated mounting rails | 8WA1857 |

### Isolating links, 5 × 20 mm



| Size | Article No. |
|---|---|
| 5 × 20 mm | 8WH9021-0CB12 |

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## 5 × 25 mm G fuse links



| Types | Breaking capacity | Rated uninterrupted current | Article No. |
|---|---|---|---|
| Quick | Large | 1 A | 8WA1822-7EF16 |
| | | 1.6 A | 8WA1822-7EF18 |
| | | 2.5 A | 8WA1822-7EF21 |
| | | 4 A | 8WA1822-7EF23 |
| | | 6.3 A | 8WA1822-7EF25 |
| Slow | Small | 1 A | 8WA1822-7EF76 |
| | | 1.6 A | 8WA1822-7EF78 |
| | | 2.5 A | 8WA1822-7EF81 |
| | | 4 A | 8WA1822-7EF83 |
| | | 6.3 A | 8WA1822-7EF85 |

## Reducing combs



- For connecting two through-type terminals
- Cannot be used for 8WH1 through-type terminals and 8WH3 insulation displacement terminals

| From terminal size | To terminal size | Color | Article No. |
|---|---|---|---|
| 2.5 mm² or 4 mm² | 1.5 mm² | Turquoise | 8WH9020-0CC10 |
| | 6 mm² | Turquoise | 8WH9020-0FC10 |
| | 10 mm² | Turquoise | 8WH9020-0AC10 |
| | 16 mm² | Turquoise | 8WH9020-0BC10 |
| | 35 mm² | Turquoise | 8WH9020-0EC10 |
| 16 mm² | 35 mm² | Turquoise | 8WH9020-0DC10 |

## Connecting combs



| Terminal size | Terminal width | Max. load current $I_{max}$ | Used for 8WH3 | Number of poles | Article No. |
|---|---|---|---|---|---|
| 1.5 mm² | 4.2 mm | 17.5 A | Cannot be used | 2-pole | 8WH9020-6AC10 |
| | | | | 3-pole | 8WH9020-6AD10 |
| | | | | 4-pole | 8WH9020-6AE10 |
| | | | | 5-pole | 8WH9020-6AF10 |
| | | | | 10-pole | 8WH9020-6AL10 |
| | | | | 20-pole | 8WH9020-6AS10 |
| 2.5 mm² | 5.2 mm | 24 A | Can be used for terminal size 1.5 mm² | 2-pole | 8WH9020-6BC10 |
| | | | | 3-pole | 8WH9020-6BD10 |
| | | | | 4-pole | 8WH9020-6BE10 |
| | | | | 5-pole | 8WH9020-6BF10 |
| | | | | 10-pole | 8WH9020-6BL10 |
| | | | | 20-pole | 8WH9020-6BS10 |
| | | | | 50-pole | 8WH9020-6BT10 |
| 4 mm² | 6.2 mm | 32 A | Can be used for terminal size 2.5 mm² | 2-pole | 8WH9020-6CC10 |
| | | | | 3-pole | 8WH9020-6CD10 |
| | | | | 4-pole | 8WH9020-6CE10 |
| | | | | 5-pole | 8WH9020-6CF10 |
| | | | | 10-pole | 8WH9020-6CL10 |
| | | | | 20-pole | 8WH9020-6CS10 |
| | | | | 50-pole | 8WH9020-6CT10 |
| 6 mm² | 8.2 mm | 41 A | Cannot be used | 2-pole | 8WH9020-6DC10 |
| | | | | 3-pole | 8WH9020-6DD10 |
| | | | | 4-pole | 8WH9020-6DE10 |
| | | | | 5-pole | 8WH9020-6DF10 |
| | | | | 10-pole | 8WH9020-6DL10 |
| 10 mm² | 10.2 mm | 57 A | Cannot be used | 2-pole | 8WH9020-6EC10 |
| 16 mm² | 12.2 mm | 76 A | Cannot be used | 2-pole | 8WH9020-6FC10 |
| 35 mm² | 16 mm | 101 A | Cannot be used | 2-pole | 8WH9020-6GC10 |

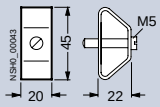
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# Accessories for 8WH terminal blocks

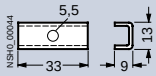
## Mounting accessories

### Spacer brackets



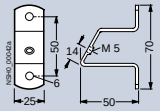

| Version | Article No. |
|---|---|
| For raised mounting of terminal strips | 8WA753 |

### Spacers



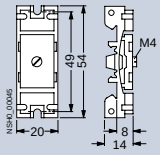

| Version | Drill hole | Article No. |
|---|---|---|
| For raised mounting of terminal strips | 5.5 mm | 8WA752 |

### Mounting brackets




| Version | Article No. |
|---|---|
| For mounting rails | 8WA746 |

### Insulation carriers




| Version | Article No. |
|---|---|
| For insulated mounting of mounting rails onto plates, frame profiles and DIN rails EN 50022-35 | 8WA1857 |

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## Reliable and efficient power supply in infrastructure and industrial applications

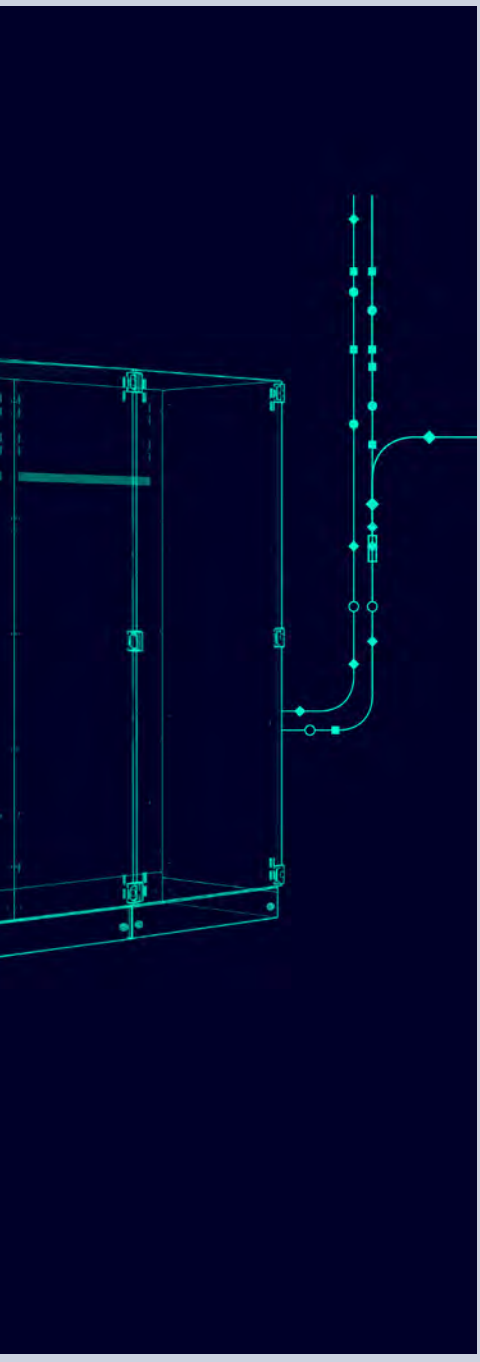
The electrical power distribution in buildings, infrastructure and industry is undergoing a transformation. A growing number of electrical loads, fluctuating load conditions and an increasing level of automation pose new challenges for switchboard manufacturers and electrical planners. Availability, safety and efficiency of the power distribution system are becoming more important. This is reflected in detailed standards and regulations and in requirements for company power management.

The planning and operation of electrical power distribution systems are becoming more complex, and the technical demands placed on the underlying systems and products are rising – in particular with respect to flexibility, communication capability and integrability. A data-based engineering process, hardware and software systems, an intelligent data management must all interact smoothly to provide optimum support to dynamic industrial and infrastructure processes.

The basis for a reliable and efficient power supply is provided by our portfolio of power distribution boards and distribution boards with innovative products and systems. A data-based engineering process with SIMARIS software tools, high availability of product-related data support the value chain of the switchgear manufacturer – from planning to documentation of the installation.

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# Switchboards, Distribution Boards and Small Distribution Boards




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# A multitude of additional information ...

## Information + ordering

### All the important things at a glance

For information about Switchboards, distribution boards and small distribution boards, please visit our websites
**www.siemens.com/sivacon-S8**
**www.siemens.com/distributionsystems**

### Your product in detail

The SiePortal platform (knowledge base) provides comprehensive information
**www.siemens.com/lowvoltage/product-support**

- Brochure
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### Siemens YouTube channel

- Power distribution – SIVACON (general) **sie.ag/6wacV9**
- Siemens SIVACON S4 power distribution boards up to 4000 A **sie.ag/6v6kNm**
- SIMARIS create **sie.ag/4JTAHi**

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Refer to SiePortal to find an overview of your products (product catalog)

- Switchboards **sie.ag/3Ier6zp**
- SIVACON S8 Power distribution boards and motor control centers **sie.ag/3EbN0kC**
- SIVACON S4 (NF) **sie.ag/2JUQwE4**
- Distribution boards **sie.ag/2kURLd8**
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- Planning the power distribution system **sie.ag/2m3oFbS**

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Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at
**www.siemens.com/support-request**

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# … can be found in our online services

## Commissioning + operation

### SIMARIS configuration

The SIMARIS configuration software supports the engi-neer-ing process of the SIVACON and ALPHA distribution systems from planning right through to plant documenta-tion. The software provides 3D data for SIVACON S4 and ALPHA 3200 Eco as well as IFC data for SIVACON S8
**www.siemens.com/simarisconfig**

### SIMARIS create

SIMARIS create is an innovative configuration and ordering software for ALPHA DIN/NF distribution boards. With this cloud application, all documents are stored centrally and can be retrieved at any time
**www.siemens.com/simaris-create**

### Manuals

Manuals can be found in SiePortal at
**www.siemens.com/lowvoltage/manuals**

- Planning Manual
  – SIVACON S8 – Technical planning information **(107113936)**
- Application Manual
  – SIVACON S4 Power distribution boards up to 6300 A **(25909512)**

### SIMARIS planning tools

The SIMARIS planning tools effectively assist you in your planning process. Project-specific IFC data (Building Information Modeling) for cross-package planning is also possible.
**www.siemens.com/simaris**

### Your product in detail

The SiePortal platform (knowledge base) provides detailed technical information
**www.siemens.com/lowvoltage/product-support**

- Operating instructions
- Characteristic curves
- Certificates

Online Support app available for download from the **App Store** and **Play Store**
You will find further information at
**www.siemens.com/support-app**

Provision of 3D data (step and u3d data formats)

- SiePortal (product catalog)
  **www.siemens.com/lowvoltage/product-catalog**
- Image database
  **www.siemens.com/lowvoltage/picturedb**

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
**www.siemens.com/cax**

### Face-to-face or online training

Our training courses can be found at
**www.siemens.com/sitrain-lowvoltage**

- SIMARIS configuration (WT-LVASIMC)

### Technical overview – Switchboards, distribution boards and small distribution boards

#### The fast way to get you to our online services

This page provides you with comprehensive information and links on switchboards, distribution boards and small distribution boards

**www.siemens.com/lowvoltage/product-support (109769089)**

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# Distribution systems

## Power distribution boards (NF technology)



| | | | SIVACON S4 |
|---|---|---|---|
| **Basic data** | | | |
| Rated current | | A | 6300 |
| Busbar position | | | Top, rear (NF) |
| Overvoltage category | | | III/IV |
| Rated impulse withstand voltage $U_{imp}$ | | kV | 12 |
| Rated insulation voltage $U_i$ | | V | 1000 |
| Rated operational voltage $U_e$ | | V AC | 690 |
| Rated peak withstand current $I_{pk}$ | | kA | 220 |
| Rated short-time current $I_{cw}$ (1 s) | | kA | 100 |
| Degree of protection according to IEC 60529/EN 60529 | | | IP40 + IPX1/IP55 |
| Form of internal separation | | | 4b |
| Protection class | | | I |
| Color | | | RAL 7035 (light gray) |
| **Dimensions** | | | |
| Height | | mm | 2000<br>Base 100/200 |
| Width | | mm | 400 ... 1200 |
| Depth | | mm | 400 ... 1200 |
| **Standards and specifications** | | | |
| DIN | | | EN 61439-1/-2 |
| IEC | | | IEC 61439-1/-2 |
| VDE | | | VDE 0660-600-1/-2 |
| Operating personnel | Ordinary person | | – |
| | Electrically skilled person | | ■ |
| Approvals | | | VDE, EAC |
| **Other** | | | |
| Type of installation | | | Wall/back to back |
| Pre-assembled solutions | Without copper | | ■ |
| | With copper | | ■ |
| **Further information** | | | |
| | | | See page 15/62 |

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# ALPHA UNIVERSAL distribution boards (NF technology)

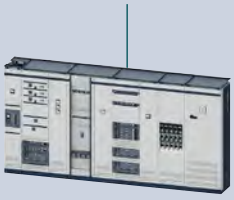




| ALPHA 800 UNIVERSAL | ALPHA 630 UNIVERSAL | ALPHA 125 UNIVERSAL |
|---|---|---|
| | | |
| 800 | 630 | 125 |
| – | – | – |
| III | III | III |
| 6 | 6 | 6 |
| 690 | 690 | 400 |
| 690 | 690 | 400 |
| 74 | 53 | 10 |
| 35 | 25 | 17 |
| IP30/IP43/IP55 | IP30/IP43/IP55 | IP30/IP31D/IP43 |
| 1 | 1 | 1 |
| I | I | I |
| RAL 7035 (light gray) | RAL 7035 (light gray) | RAL 7035 (light gray) |
| | | |
| 1800/2000 | 400/600/800/1000/1200/ 1600/1800/2000 | 400/600/800/1000/1200 |
| 300/600/900 | 600 + 250/900 | 600 |
| 400 | 250 | 140 |
| | | |
| EN 61439-1/-2 | EN 61439-1/-2 | EN 61439-1/-3 |
| IEC 61439-1/-2 | IEC 61439-1/-2 | IEC 61439-1/-3 |
| VDE 0660-600-1/-2 | VDE 0660-600-1/-2 | VDE 0660-600-1/-3 |
| – | – | ■ |
| ■ | ■ | ■ |
| – | – | – |
| | | |
| Wall | Wall | Wall |
| – | – | – |
| – | – | – |
| | | |
| See page 15/172 | See page 15/174 | See page 15/180 |

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# Distribution systems

| | | | Power distribution boards and motor control centers | Power distribution boards (DIN technology) | |
|---|---|---|---|---|---|
| | | |  |  | |
| | | | **SIVACON S8** | **ALPHA 3200** | **ALPHA 3200 Eco** |
| **Basic data** | | | | | |
| Rated current | | A | 7010 | 3200 | 3200 |
| Busbar position | | | Top, rear | Rear | Center |
| Overvoltage category | | | IV | III/IV | III/IV |
| Rated impulse withstand voltage $U_{imp}$ | | kV | 12 [1] | 8 | 8 |
| Rated insulation voltage $U_i$ | | V | 1000 | 1000 | 1000 |
| Rated operational voltage $U_e$ | | V AC | 690 | 690 | 400 |
| Rated peak withstand current $I_{pk}$ | | kA | 330 | 165 | 165 |
| Rated short-time current $I_{cw}$ (1 s) | | kA | 150 | 75 | 75 |
| Degree of protection according to IEC 60529/EN 60529 | | | IP30 ... IP54 | IP40 + IPX1/ IP54 | IP30 + IPX1/IP54 |
| Form of internal separation | | | 4b | 2b | 1 |
| Protection class | | | I | I | I |
| Color | | | RAL 7035 (light gray) | RAL 7035 (light gray) | RAL 7035 (light gray) |
| **Dimensions** | | | | | |
| Height | | mm | 2000/2200<br>Base 100/200 | 2000<br>Base 100/200 | 2000<br>Base 100/200 |
| Width | | mm | 200 ... 1400 | 350 ... 1400 | 350 ... 1100 |
| Depth | | mm | 500 ... 1200 | 600 | 400/600 |
| **Standards and specifications** | | | | | |
| DIN | | | EN 61439-2 | EN 61439-1/-2 | EN 61439-1/-2 |
| IEC | | | IEC 61439-2 | IEC 61439-1/-2 | IEC 61439-1/-2 |
| VDE | | | VDE 0660-600-2 | VDE 0660-600-2 | VDE 0660-600-2 |
| Operating personnel | Ordinary person | | – | – | – |
| | Electrically skilled person | | ■ | ■ | ■ |
| Approvals | | | DNV GL, ASTA, EAC, CCC, DEKRA | – | – |
| **Other** | | | | | |
| Type of installation | | | Wall/back to back/ double-fronted | Wall/back to back | Wall/back to back |
| Pre-assembled solutions | Without copper | | ■ | ■ | ■ |
| | With copper | | ■ | ■ | ■ |
| **Further information** | | | | | |
| | | | See page 15/10 | See page 15/12 | See page 15/12 |

[1] Depending on the devices used

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## ALPHA distribution boards (DIN technology)

## Small distribution boards








| ALPHA 1250 | ALPHA 630 | ALPHA 400 | ALPHA 160 | ALPHA SIMBOX XL | ALPHA SIMBOX WP |
|---|---|---|---|---|---|
| | | | | | |
| 1250 | 630 | 400 | 160 | 63 | 63 |
| – | – | – | – | – | – |
| III | III | III | II | II | II |
| 8 | 6 | 6 | 6 | – | – |
| 690 | 690 | 690 | 690 | – | 1000 |
| 690 | 690 | 690 | 690 | 400 | 400 |
| 110 | 76 | 76 | – | – | – |
| 35 | 34 | 34 | – | – | – |
| IP55 | IP43/IP55 | IP31/IP43/IP55 | IP31/IP43/IP44 | IP30 | IP65 |
| – | – | – | – | – | – |
| I | I/II | I/II | II | II | II |
| RAL 7035 (light gray) | RAL 7035 (light gray) | RAL 9016 (traffic white)/ RAL 7035 (light gray) | RAL 9016 (traffic white)/ RAL 7035 (light gray) | RAL 9010 (pure white) | RAL 7035 (light gray) |
| | | | | | |
| 1950 Base 100 | 1950 Base 100 | 650/800/950/1100/ 1250/1400 | 500/650/800/950/1100 | 1- ... 4-tier | 1- ... 4-tier |
| 300/550/800/ 1050/1300 | 300/550/800/ 1050/1300 | 300/550/800/ 1050/1300 | 300/550 | 305 | 4 ... 18 MW |
| 400 | 210/250/320 | 210 | 140 | 88/99 | 100/140/160 |
| | | | | | |
| EN 61439-1/-2/-3 | EN 61439-1/-2/-3 | EN 61439-1/-2/-3 | EN 61439-1/-3 | DIN 43871 | EN 61439-1/-3, DIN 43871 |
| IEC 61439-1/-2/-3 | IEC 61439-1/-2/-3 | IEC 61439-1/-2/-3 | IEC 61439-1/-3 | IEC 61439-1/-3 | IEC 61439-1/-3 |
| VDE 0660-600-1/-2/-3 | VDE 0660-600-1/-2/-3 | VDE 0660-600-1/-2/-3 | VDE 0660-600-1/-3 | DIN VDE 0603 | DIN VDE 0603-1, VDE 0660-500/-504 |
| – | – | ■ | ■ | ■ | ■ |
| ■ | ■ | ■ | ■ | ■ | ■ |
| VDE, EAC | VDE, EAC | VDE, EAC | VDE, EAC | VDE, EAC | VDE, EAC |
| | | | | | |
| Surface mounting | Surface mounting | Surface mounting/ flush mounting | Surface mounting/ flush mounting | Flush mounting/ hollow wall/ surface mounting | Surface mounting |
| ■ | ■ | ■ | ■ | – | – |
| – | – | – | – | – | – |
| | | | | | |
| See page 15/204 | See page 15/208 | See page 15/212 | See page 15/216 | See page 15/248 | See page 15/251 |

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# Distribution systems

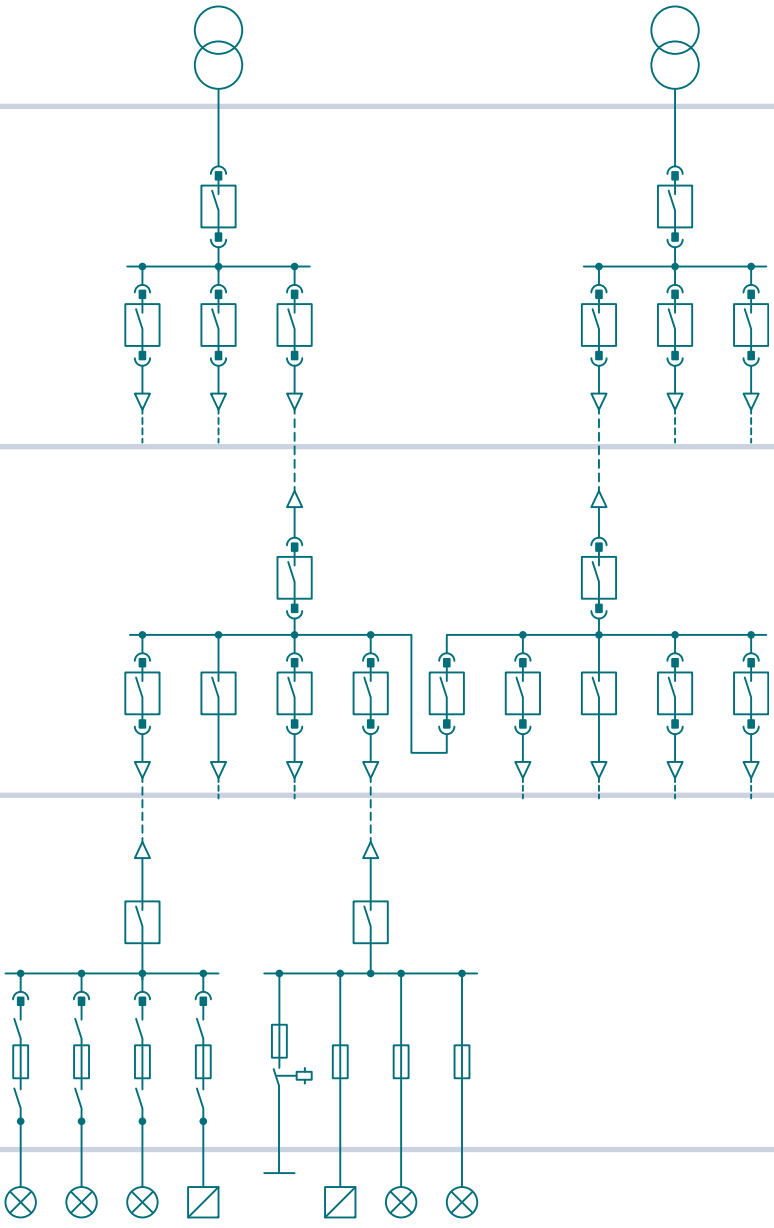
## Applications

Power Center

Main distribution boards

Subdistribution boards

Loads



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## SIVACON S8



## SIVACON S8



## SIVACON S4 (NF technology)



## ALPHA 3200 (DIN technology)



## ALPHA 3200 Eco (DIN technology)



## ALPHA UNIVERSAL (NF technology)



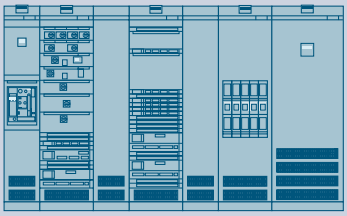
## ALPHA (DIN technology)



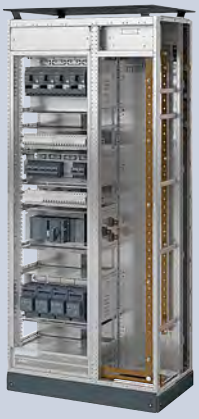
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# System overview

## SIVACON S8



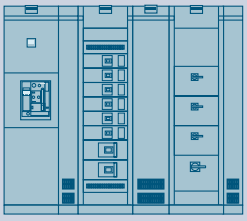






| | Circuit breaker design | Fixed-mounted design | In-line design, plugged in |
|---|---|---|---|
| **Devices** | 3WA and 3VA | 3VA, 3RV, 3NP, 3K... and 5S... | 3NJ6 |
| **Installation system** | Fixed-mounted<br>Withdrawable | Fixed-mounted with front covers | Plug-in |
| **Functions** | Infeed,<br>Outgoing feeder,<br>Coupling | Outgoing cable feeders | Outgoing cable feeders |
| **Rated values** | 6300 A | 630 A | 630 A |
| **Connection type** | Front or rear | Front | Front |

## SIVACON S4









| | Circuit breaker design | Molded case circuit breakers | Fixed-mounted |
|---|---|---|---|
| **Devices** | 3WA | 3VA15,<br>3VA25 – 3VA27 | 3WA, 3VA, 3NP1,<br>Modular installation devices |
| **Installation system** | Fixed-mounted<br>Withdrawable | Fixed-mounted<br>Withdrawable | Fixed-mounted with front covers or modular doors |
| **Functions** | Infeed,<br>Outgoing feeder,<br>Coupling | Infeed<br>Outgoing feeder | Infeed<br>Outgoing cable feeders |
| **Rated values** | 6300 A | 1600 A | 2000 A |
| **Connection type** | Front or rear | Front or rear | Front or rear |

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| In-line design, Fixed-mounted | Reactive power compensation | Active protection against internal arcing | Universal mounting design/ motor control center | Frequency converter technology |
|---|---|---|---|---|
| 3NJ4 | Capacitor units, controllers | Internal arcing protection system | 3VA, 3RV, 3NP, 3K..., 3R..., 3UF, 3NJ6 and 3LD | SINAMICS G120 (6SL) |
| Fixed-mounted | Fixed-mounted | Fixed-mounted | Withdrawable<br>Fixed-mounted<br>with compartment doors<br>Plug-in | Fixed-mounted (modules) |
| Outgoing cable feeders | Central compensation of reactive power | Active protection against internal arcing | Outgoing cable feeders<br>Motor feeders (MCC) | Motor feeders (MCC) |
| 630 A | Up to 500 kvar (with/without inductor) | Short-circuit-proof up to 100 kA at 690 V | 630 A, 250 kW | 132 kW |
| Front | Front | – | Front or rear | Front |



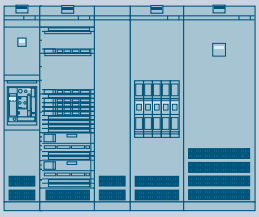


| In-line design, plugged in | In-line design, Fixed-mounted | Mounting plates |
|---|---|---|
| 3NJ63 | 3NJ4 | Section for free configuration |
| Plug-in | Fixed-mounted | Fixed-mounted |
| Outgoing cable feeders | Outgoing cable feeders | Control equipment |
| 630 A | 630 A | – |
| Front | Front | Front |

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# System overview

## ALPHA 3200



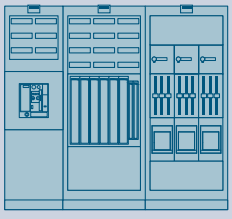






| | Circuit breaker design | Fixed-mounted design | In-line design, plugged in |
|---|---|---|---|
| **Devices** | 3WA and 3VA | 3VA, 3RV, 3NP, 3K.. | 3NJ6 |
| **Installation system** | Fixed-mounted<br>Withdrawable | Fixed-mounted with front covers | Plug-in |
| **Functions** | Infeed<br>Outgoing feeder<br>Coupling | Outgoing cable feeders | Outgoing cable feeders |
| **Rated values** | 3200 A | 630 A | 630 A |
| **Connection type** | Front or rear | Front | Front |

## ALPHA 3200 Eco









| | Circuit breaker design | Molded case circuit breakers | Transformer metering section |
|---|---|---|---|
| **Devices** | 3WA, 3WL10 | 3VA14 – 3VA15,<br>3VA24 – 3VA27 | Current transformers |
| **Installation system** | Fixed-mounted<br>Withdrawable | Fixed-mounted | DIN VDE 0603-2-2<br>DIN 42600-2 |
| **Functions** | Infeed<br>Outgoing feeder<br>Coupling up to 2000 A | Infeed<br>Outgoing feeder | Utility company measurements |
| **Rated values** | 3200 A | 1600 A | 3200 A |
| **Connection type** | Front | Front | Front |

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| In-line design, Fixed-mounted | Reactive power compensation |
|---|---|
| 3NJ4 | Capacitor units, controllers |
| Fixed-mounted | Fixed-mounted |
| Outgoing cable feeders | Central compensation of reactive power |
| 630 A | Without inductor up to 600 kvar<br>With inductor up to 500 kvar |
| Front | Front |







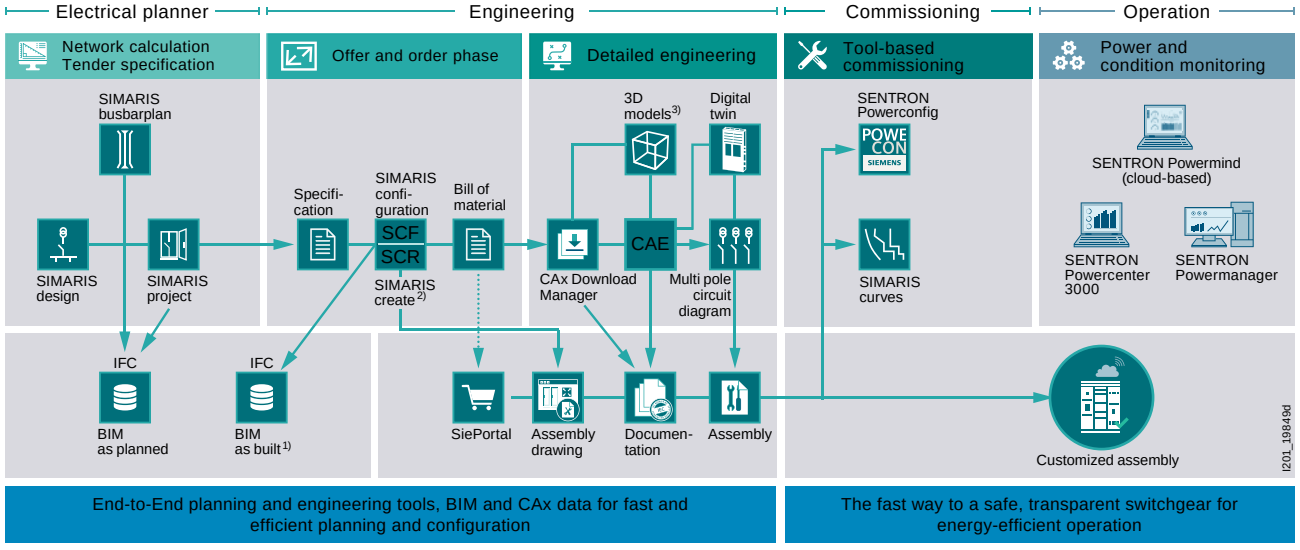
| In-line design, fixed-mounted | ALPHA DIN modular installation system | Mounting plates |
|---|---|---|
| 3NJ4 | ALPHA 8GK | Section for free configuration |
| Fixed-mounted | Fixed-mounted | Fixed-mounted |
| Outgoing cable feeders | Branch circuits<br>Utility company measurements | Control equipment |
| 630 A | 630 A | 710 W |
| Front | Front | Front |

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# SIMARIS planning tools

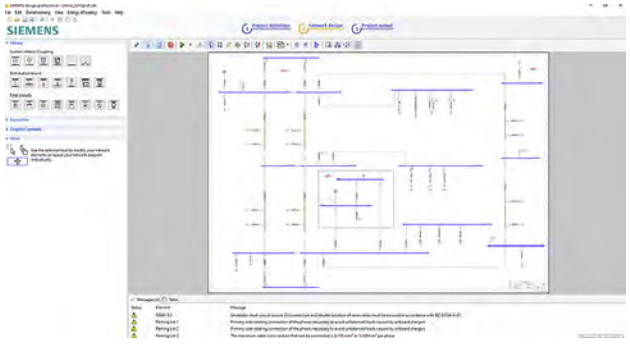
## For planning and visualizing the power distribution system

### From planning to operation




1) available for SIVACON S8
2) available for ALPHA DIN/NF
3) available for ALPHA 3200 Eco and SIVACON S4

## SIMARIS design

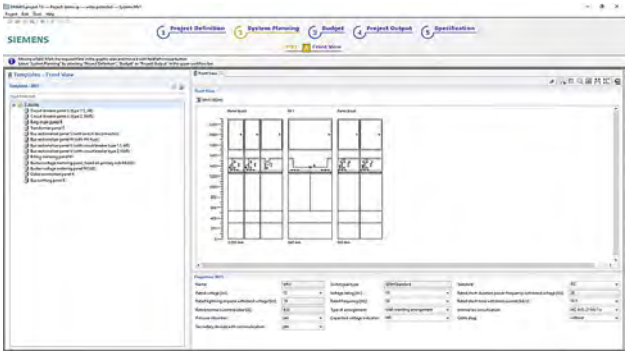


SIMARIS design is a planning tool for quick, effective network calculations and dimensioning of electrical power distribution systems for non-residential and industrial buildings.

- Dimensioning of electrical networks on the basis of real products according to acknowledged rules of technology and the applicable standards (VDE, IEC)
- Automatic selection of the appropriate components from the integrated product database

SIMARIS design forms part of SIMARIS Suite.
Free download of the SIMARIS Suite and further information at:
**www.siemens.com/simarisdesign**

## SIMARIS project



SIMARIS project is a planning tool for fast calculation of space requirements and electrical power distribution system budgets for non-residential and industrial buildings, and for generating specifications automatically.

- Import of projects created in SIMARIS design
- Export of 3D data in IFC 4.x format for BIM (Building Information Modeling)

SIMARIS project forms part of SIMARIS Suite.
Free download of the SIMARIS Suite and further information at:
**www.siemens.com/simarisproject**

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## SIMARIS create

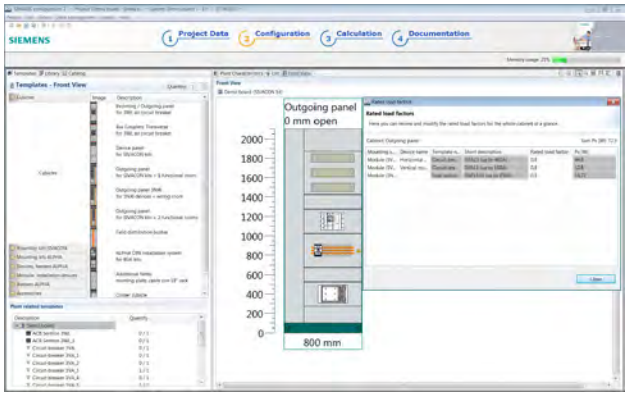


SIMARIS create is cloud-based configuration software with which the ALPHA DIN/NF distribution boards can be configured and ordered with just a few clicks.

- Simple selection of enclosures and products with filter functions
- Various ways of starting and performing a configuration – material list – system view – Circuit diagram
- Ordering via electrical wholesale trade and SiePortal
- Automatic, central storage of all relevant documents (technical data sheets, power loss reports, circuit diagram, ...)

For free use and more information, visit:
**www.siemens.com/simaris-create**

## SIMARIS configuration

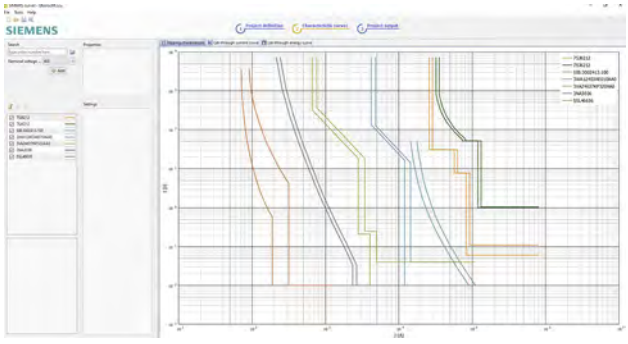



With the SIMARIS configuration software, both the SIVACON S8, ALPHA 3200 and SIVACON S4 power distribution boards and the ALPHA and ALPHA UNIVERSAL distribution boards can be quickly and reliably configured.

- Comprehensive documentation of the installation with design verification acc. to IEC 61439
- Configuration of the devices from the SENTRON portfolio with the exact article numbers and integrated price calculation feature

Free download and further information at:
**www.siemens.com/simarisconfig**

## SIMARIS curves




SIMARIS curves is a planning tool for visualizing and evaluating characteristic curves of Siemens low-voltage protection equipment and fuses (IEC) quickly and easily, including the possibility of simulating instrument settings.

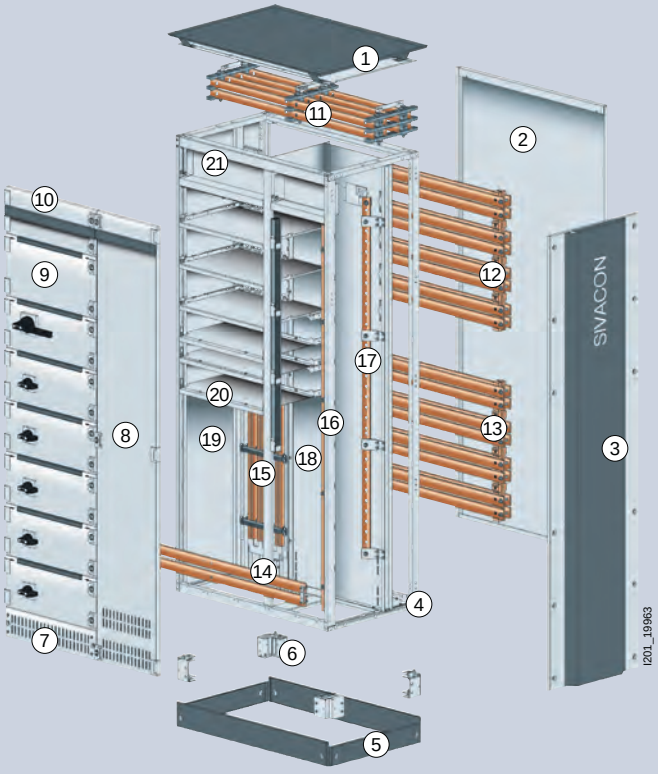
- Available as a PC version, as a web version and also as an app for use on a tablet PC or a smartphone

SIMARIS curves forms part of SIMARIS Suite.
Free download of the SIMARIS Suite and further information at:
**www.siemens.com/simariscurves**

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# System overview

## SIVACON S8 power distribution boards and motor control centers




**Enclosure**

1. Roof plate
2. Rear wall
3. Design side wall
4. Frame
5. Base cover
6. Base
7. Base compartment cover, ventilated
8. Cubicle door, ventilated
9. Compartment door
10. Head compartment door

**Busbars**

11. Main busbar (L1 ... L3, N), top
12. Main busbar (L1 ... L3, N), rear, top
13. Main busbar (L1 ... L3, N), rear, bottom
14. Main busbar (PE), bottom
15. Distribution busbar (L1 ... L3, N) – device compartment
16. Distribution busbar (PE) – cable compartment
17. Distribution busbar (N) – cable compartment

**Internal separation**

18. Device compartment/busbar compartment
19. Cubicle to cubicle
20. Compartment to compartment
21. Cross-wiring compartment

The SIVACON S8 low-voltage switchboard is a design-verified, low-voltage switchgear and controlgear assembly according to IEC 61439-1/2.

Furthermore, the verified testing under arcing conditions in compliance with the requirements of IEC/TR 61641 ensures the optimum safety of personnel. SIVACON S8 also integrates arc-fault protection systems in accordance with IEC/TS6107 and thus offers a high level of safety.

SIVACON S8 can be used as a type-tested power distribution board and motor control center up to 7000 A.

The optional, likewise design-verified, efficient and redundantly-designed ventilation system additionally contributes to ensuring safe and reliable operation.

Thanks to the complete building information modeling data (BIM) of SIVACON S8, the entire lifecycle of the switchboard in an infrastructure is supported from the planning stage to operation and service.

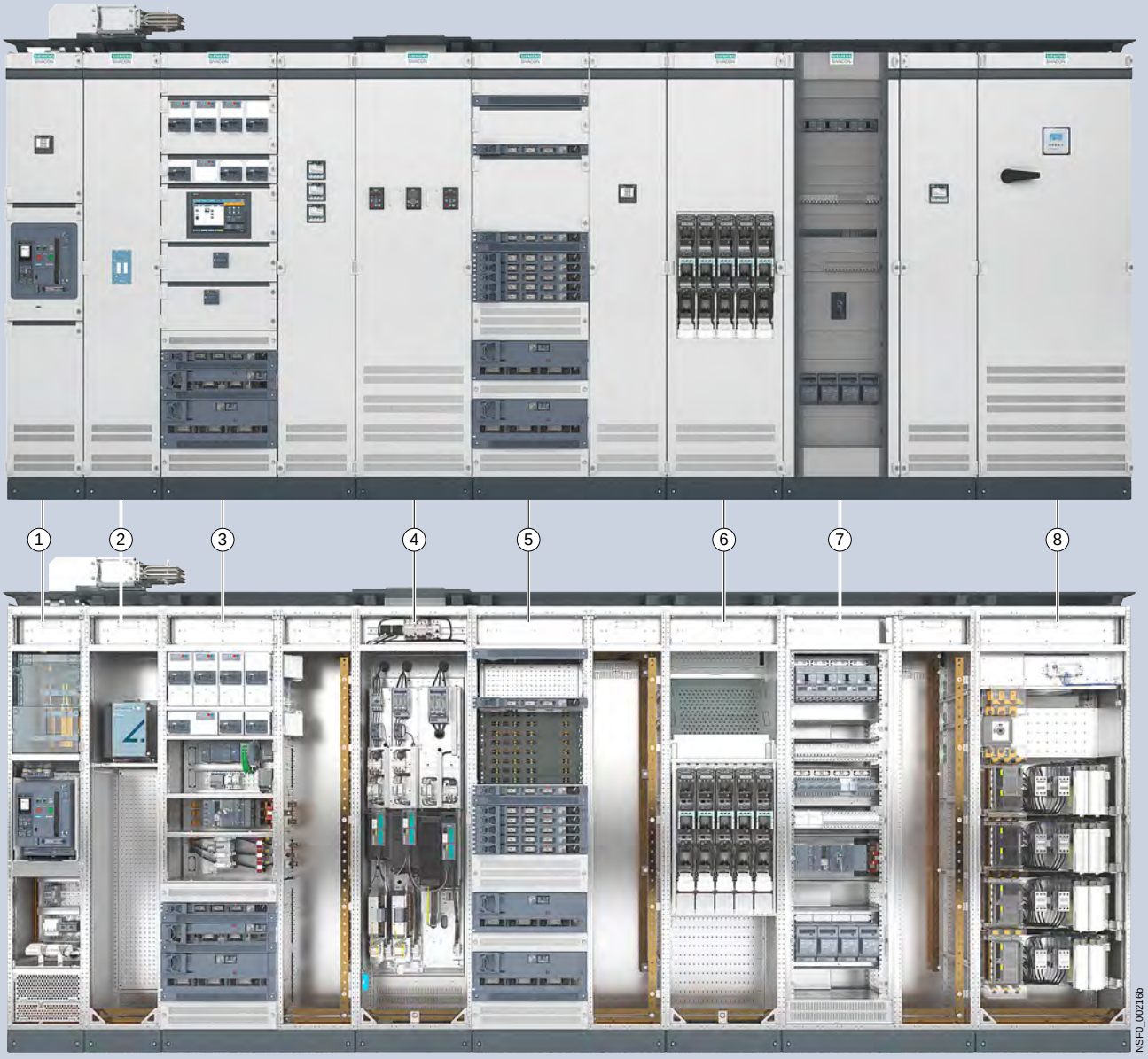
### Highlights

- Design verification in accordance with IEC 61439-2 and testing in the event of arcing due to an internal fault in accordance with IEC/TR 61641
- Extended protection against internal arcing with active protection system
- Redundantly designed, efficient ventilation system
- Universal design-verified connection to SIVACON 8PS busbar trunking systems
- Innovative, modular system
- Space-optimized use with compact withdrawable design
- Optimum application thanks to high-performance SIMOCODE pro motor management system

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# Design

## Mounting designs




1. Circuit breaker design with 3WA air circuit breaker up to 6300A or 3VA molded case circuit breaker up to 1000A
2. Protection against internal arcing, the extended active protection against internal arcing
3. Universal mounting design section for motor and cable feeders up to 630 A in withdrawable design with combination options with fixed-mounted design (modular door) and plug-in design
4. Frequency converter cubicle up to 132 kW
5. In-line design, plugged-in, for outgoing cables up to 630 A
6. In-line design, fixed-mounted in vertical version for cable feeders up to 630 A
7. In-line design section, in vertical version for cable feeders up to 630 A
8. Reactive power compensation section up to 500 kvar

SIVACON S8 low-voltage switchboard with standardized and typified components

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System overview, page 15/16

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# Design

## Universal mounting design and withdrawable design

### Universal mounting design

In many applications it is necessary for space reasons to integrate various mounting designs in one and the same section. The universal mounting design from SIVACON S8 offers high efficiency, safety and high variability through the combination of

- withdrawable,
- fixed-mounted with compartment doors and
- plug-in version.

### Withdrawable

The flexible withdrawable unit design is suitable for different applications, e.g. as a motor control center. The following features are offered to improve personnel and machine safety:

- Uniform operation for all withdrawable unit sizes
- Integrated operating error protection for all withdrawable units
- Unambiguous indication of withdrawable unit positions
- Separate actuation for main control switch and withdrawable unit position
- Test and disconnected position with door closed, without cancelation of degree of protection
- Withdrawable unit coding prevents swapping of withdrawable units of same size
- Lockable disconnected position
- Swiveling instrument panel on standard withdrawable units for making settings during operation
- Small withdrawable units for motor and cable feeders up to 63 A

### Withdrawable unit versions

Small withdrawable units:

- Size 1/4 and 1/2
- up to 48 withdrawable units per section



Flexible withdrawable design with standard and small withdrawable units for high packing densities

Standard withdrawable units:

- Height 100 to 700 mm
- up to 18 withdrawable units per section



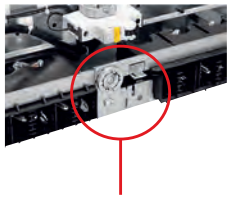
Standard withdrawable unit

### Withdrawable unit coding and initialization modules

The mechanical withdrawable unit coding prevents swapping of withdrawable units of the same size. Alternatively, motor starters can be fitted with SIMOCODE pro initialization modules that considerably simplify commissioning and replacement.



Withdrawable unit coding in the compartment



Withdrawable unit coding on the unit



SIMOCODE per initialization module

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## SIMARIS control

When visualized with SIMARIS control, all communication-capable switching devices can be operated and monitored uniformly by means of the SIVACON S8 low-voltage switchboard.

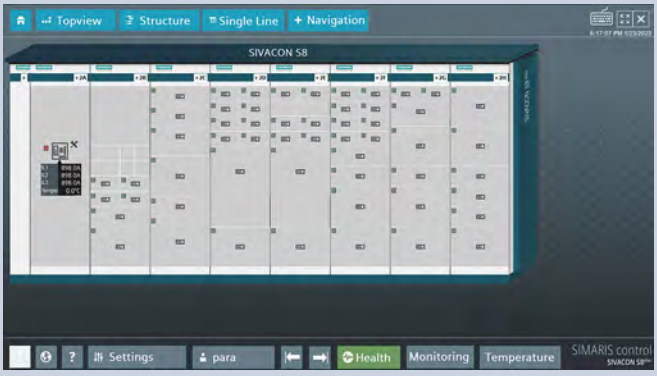
In addition, the data can be integrated into higher-level automation or energy management systems. Cloud-based analysis systems such as Insights Hub open up new opportunities of enhanced switchboard availability and high transparency of power flows. As a digital twin of the switchboard, SIMARIS control provides an ideal solution for local or remote visualization and control of the installed communication-capable switching devices.

SIMARIS control integrates various bus systems. A standardized data model for motor control centers enables uniform visualization of the data, Which means that all the information delivered by the communication-capable switching, protection and measuring devices used in SIVACON S8 is displayed in SIMARIS control clearly and in a structured, needs-oriented format.

**Highlights**

- An integrated system with easier and faster identification of events thanks to in-app alerts and email notifications
- Greater flexibility in on-site operation with local control and monitoring functions
- Increased system availability thanks to the Health Index function for accurate system health monitoring
- Easy maintenance with digital documentation and maintenance logbook
- Saves costs and space that would otherwise be required for various monitoring devices in the switchboard by displaying power flows and electrical measured values
- Easy integration with a cloud-based system
- Parallel independent operation with a higher-level control system (DC/E-SCADA)

SIMARIS control is part of the curated and modular Siemens Xcelerator portfolio.




System overview, page 15/16

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# System overview

## ALPHA 3200 Eco power distribution boards

### Frame and enclosure



### Accessories



Double-bit key



Standardized parts



Tools

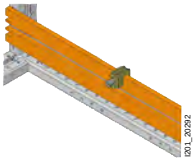


Transport aids

### Busbar systems



185 mm center-to-center spacing



PE bars

### Section expansion



3WA, 3WL10 incoming feeder panels



3WA coupling panels



Transformer metering section new



3VA molded case circuit breakers



3NJ4 in-line design



ALPHA 8GK modular installation system



Mounting plates

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## ALPHA assembly kits



Modular installation devices



Terminal blocks



3NJ4
fuse switch disconnectors



3K
switch disconnectors



3VA
molded case circuit breakers



8US
busbar-adaptable units



3NP1
fuse switch disconnectors



Meter support plate



Transformer measurement



Mounting plates

## ALPHA accessories



Front covers
closed



transparent



deep-drawn

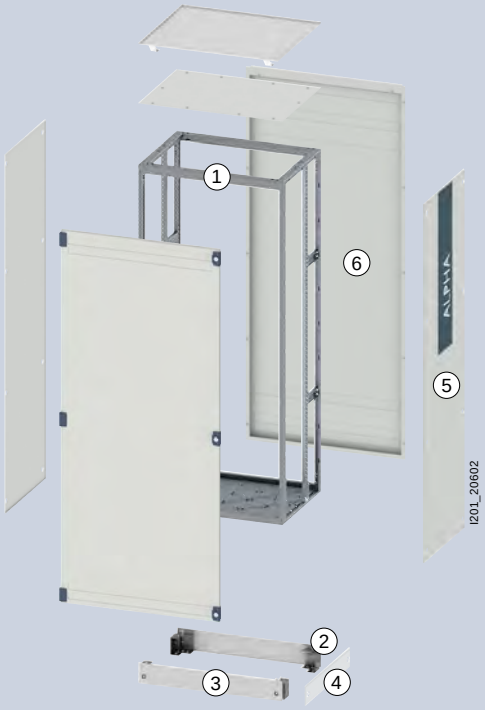


Door connection module

**See ALPHA 8GK assembly kits from page 15/218**

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# Frame and enclosure






| | | ❶ Frame | ❷ Base corner pieces Height | | ❸ Base cover Height | |
|---|---|---|---|---|---|---|
| **Depth** | **Width** | | **100 mm** | **200 mm** | **100 mm** | **200 mm** |
| 400 mm | 350 mm | 8LK1200-4AA03 | 8LK1010-0AA01 | 8LK1020-0AA11 | 8LK1014-0AA02 | 8LK1024-0AA04 |
| | 400 mm | 8LK1204-4AA01 | 8LK1010-0AA01 | 8LK1020-0AA11 | 8LK1014-0AA03 | 8LK1024-0AA05 |
| | 600 mm | 8LK1206-4AA01 | 8LK1010-0AA01 | 8LK1020-0AA11 | 8LK1016-0AA02 | 8LK1026-0AA04 |
| | 800 mm | 8LK1208-4AA01 | 8LK1010-0AA01 | 8LK1020-0AA11 | 8LK1018-0AA06 | 8LK1028-0AA07 |
| | 850 mm | 8LK1200-4AA04 | 8LK1010-0AA01 | 8LK1020-0AA11 | 8LK1018-0AA04 | 8LK1028-0AA05 |
| | 1100 mm | 8LK1200-4AA05 | 8LK1010-0AA01 | 8LK1020-0AA11 | 8LK1011-0AA05 | 8LK1021-0AA06 |
| 600 mm | 350 mm | 8LK1200-6AA05 | 8LK1010-0AA01 | 8LK1020-0AA11 | 8LK1014-0AA02 | 8LK1024-0AA04 |
| | 400 mm | 8LK1204-6AA01 | 8LK1010-0AA01 | 8LK1020-0AA11 | 8LK1014-0AA03 | 8LK1024-0AA05 |
| | 600 mm | 8LK1206-6AA01 | 8LK1010-0AA01 | 8LK1020-0AA11 | 8LK1016-0AA02 | 8LK1026-0AA04 |
| | 800 mm | 8LK1208-6AA01 | 8LK1010-0AA01 | 8LK1020-0AA11 | 8LK1018-0AA06 | 8LK1028-0AA07 |
| | 850 mm | 8LK1208-6AA02 | 8LK1010-0AA01 | 8LK1020-0AA11 | 8LK1018-0AA04 | 8LK1028-0AA05 |
| | 1100 mm | 8LK1200-6AA06 | 8LK1010-0AA01 | 8LK1020-0AA11 | 8LK1011-0AA05 | 8LK1021-0AA06 |

## Accessories

**Self-tapping screws – frame**

| | Type | Version | Scope of supply | Article No. |
|---|---|---|---|---|
|   | Cylinder-head screws DIN 7500-PE, ST, Zinc-plated | M6 × 10 mm | 100 pieces | 8PQ9500-0BA34 |
| | | M6 × 16 mm | 100 pieces | 8PQ9500-0BA32 |
| | | M6 × 20 mm | 100 pieces | 8PQ9500-0BA31 |
|   | Countersunk screws DIN 7500-QE, ST, Zinc-plated | M6 × 12 mm | 100 pieces | 8PQ9500-1BA07 |
|   | Screwdriver insert Drive: 1/4"/6.3 mm | length 200 mm | 2 pieces | 8PQ9400-0BA10 |

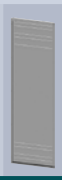
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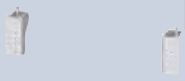





| ❹ Base cover lateral Height | | ❺ Side panels | | ❻ Rear panels | |
|---|---|---|---|---|---|
| 100 mm | 200 mm | IP30 new | IP54 new | IP30 new | IP54 new |
| 8LK1010-4AA01 | 8LK1020-4AA01 | 8LK2520-4AA13 | 8LK2520-4AA12 | 8LK2420-0AA26 | 8LK2420-0AA27 |
| 8LK1010-4AA01 | 8LK1020-4AA01 | 8LK2520-4AA13 | 8LK2520-4AA12 | 8LK2420-4AA10 | 8LK2420-4AA11 |
| 8LK1010-4AA01 | 8LK1020-4AA01 | 8LK2520-4AA13 | 8LK2520-4AA12 | 8LK2420-6AA10 | 8LK2420-6AA11 |
| 8LK1010-4AA01 | 8LK1020-4AA01 | 8LK2520-4AA13 | 8LK2520-4AA12 | 8LK2420-8AA10 | 8LK2420-8AA11 |
| 8LK1010-4AA01 | 8LK1020-4AA01 | 8LK2520-4AA13 | 8LK2520-4AA12 | 8LK2420-0AA28 | 8LK2420-0AA31 |
| 8LK1010-4AA01 | 8LK1020-4AA01 | 8LK2520-4AA13 | 8LK2520-4AA12 | 8LK2420-0AA30 | 8LK2420-0AA32 |
| 8LK1010-0AA05 | 8LK1020-0AA14 | 8LK2520-6AA20 | 8LK2520-6AA18 | 8LK2420-0AA26 | 8LK2420-0AA27 |
| 8LK1010-0AA05 | 8LK1020-0AA14 | 8LK2520-6AA20 | 8LK2520-6AA18 | 8LK2420-4AA10 | 8LK2420-4AA11 |
| 8LK1010-0AA05 | 8LK1020-0AA14 | 8LK2520-6AA20 | 8LK2520-6AA18 | 8LK2420-6AA10 | 8LK2420-6AA11 |
| 8LK1010-0AA05 | 8LK1020-0AA14 | 8LK2520-6AA20 | 8LK2520-6AA18 | 8LK2420-8AA10 | 8LK2420-8AA11 |
| 8LK1010-0AA05 | 8LK1020-0AA14 | 8LK2520-6AA20 | 8LK2520-6AA18 | 8LK2420-0AA28 | 8LK2420-0AA31 |
| 8LK1010-0AA05 | 8LK1020-0AA14 | 8LK2520-6AA20 | 8LK2520-6AA18 | 8LK2420-0AA30 | 8LK2420-0AA32 |

## Accessories

### Cross-wiring



| Version | Scope of supply | Article No. |
|---|---|---|
| Brackets | 1 set = 2 units | 8LK3011-6AA30 |

### Seals IP54




| Version | Width | Height | Scope of supply | Article No. |
|---|---|---|---|---|
| Base corner pieces | 30 mm | 0.05 mm | 1 roll = 228 m | 8LK1000-0AA78 |
| Frame sealing corners | | | 1 set = 8 units | 8LK1000-0AA25 |

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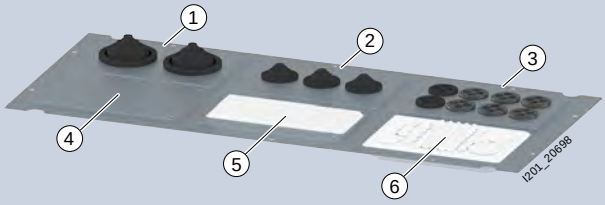
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# Frame and enclosure

## Floor plates and roof plates




| Depth | Width | Floor plate IP30 | Floor plate IP54 | Roof plate IP30 | Roof plate IP54 | Number of module inserts |
|---|---|---|---|---|---|---|
| 400 mm new | 350 mm | 8LK2300-4AA48 | 8LK2300-4AA45 | 8LK2300-4AA62 | 8LK2300-4AA58 | 2 |
| | 400 mm | 8LK2300-4AA53 | 8LK2300-4AA52 | 8LK2300-4AA66 | 8LK2300-4AA65 | 2 |
| | 600 mm | 8LK2300-4AA55 | 8LK2300-4AA54 | 8LK2300-4AA68 | 8LK2300-4AA67 | 4 |
| | 800 mm | 8LK2300-4AA57 | 8LK2300-4AA56 | 8LK2300-4AA71 | 8LK2300-4AA70 | 4 |
| | 850 mm | 8LK2300-4AA50 | 8LK2300-4AA46 | 8LK2300-4AA63 | 8LK2300-4AA60 | 6 |
| | 1100 mm | 8LK2300-4AA51 | 8LK2300-4AA47 | 8LK2300-4AA64 | 8LK2300-4AA61 | 8 |
| 600 mm new | 350 mm | 8LK2300-6AB01 | 8LK2300-6AA87 | 8LK2300-6AB14 | 8LK2300-6AB11 | 3 |
| | 400 mm | 8LK2300-6AB05 | 8LK2300-6AB04 | 8LK2300-6AB18 | 8LK2300-6AB17 | 3 |
| | 600 mm | 8LK2300-6AB07 | 8LK2300-6AB06 | 8LK2300-6AB21 | 8LK2300-6AB20 | 6 |
| | 800 mm | 8LK2300-6AB10 | 8LK2300-6AB08 | 8LK2300-6AB23 | 8LK2300-6AB22 | 6 |
| | 850 mm | 8LK2300-6AB02 | 8LK2300-6AA88 | 8LK2300-6AB15 | 8LK2300-6AB12 | 9 |
| | 1100 mm | 8LK2300-6AB03 | 8LK2300-6AB00 | 8LK2300-6AB16 | 8LK2300-6AB13 | 12 |

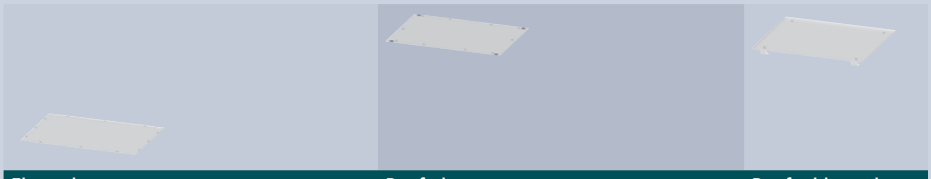



| | Insert IP30 | Insert IP54 | Cable entry | Cable diameter |
|---|---|---|---|---|
| 1 | 8LK2300-0AA48 | 8LK2300-0AA45 | 8HC6900 | 1 x 14 - 65 mm |
| 2 | 8LK2300-0AA47 | 8LK2300-0AA44 | 8LK9400-4AA40 | 1 x 14 - 38 mm |
| 3 | 8LK2300-0AA50 | 8LK2300-0AA46 | 8HP1805<br>8HP1806<br>8HP1807<br>8HP1808 | 1 x 12 - 29 mm<br>2 x 6 - 15 mm<br>3 x 4 - 12,5 mm<br>4 x 4 - 12 mm |
| 4 | 8LK2300-0AA42 | 8LK2300-0AA40 | – | – |
| 5 | 8LK2300-0AA43 | 8LK2300-0AA41 | 8GK9100-0KK01 | 44 x 9 mm<br>22 x 12 mm |
| 6 | – | – | 8GK9101-0KK00 | 58 x 5 - 10 mm<br>2 x 16 - 35 mm<br>8 x 11 - 16 mm<br>2 x 15 - 45 mm |



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| | | Floor plate | | Roof plate | | Roof add-on-plate |
|---|---|---|---|---|---|---|
| **Depth** | **Width** | **IP30** | **IP54** | **IP30** | **IP54** | **IPX1** |
| 400 mm | 350 mm | 8LK2300-4AA32 | 8LK2300-4AA07 | 8LK2300-4AA38 | 8LK2300-4AA11 | 8LK2304-4AA66 |
| | 400 mm | 8LK2304-4AA68 | 8LK2304-4AA56 | 8LK2304-4AA72 | 8LK2304-4AA57 | 8LK2304-4AA67 |
| | 600 mm | 8LK2306-4AB13 | 8LK2306-4AB83 | 8LK2306-4AB16 | 8LK2306-4AA86 | 8LK2306-4AB04 |
| | 800 mm | 8LK2308-4AB25 | 8LK2308-4AB05 | 8LK2308-4AB28 | 8LK2308-4AB06 | 8LK2308-4AB15 |
| | 850 mm | 8LK2300-4AA33 | 8LK2300-4AA08 | 8LK2300-4AA40 | 8LK2300-4AA12 | 8LK2300-4AA31 |
| | 1100 mm | 8LK2300-4AA34 | 8LK2300-4AA10 | 8LK2300-4AA41 | 8LK2300-4AA13 | 8LK2301-4AB03 |
| 600 mm | 350 mm | 8LK2300-6AA62 | 8LK2300-6AA34 | 8LK2300-6AA68 | 8LK2300-6AA36 | 8LK2300-6AA43 |
| | 400 mm | 8LK2304-6AB18 | 8LK2304-6AB07 | 8LK2304-6AB22 | 8LK2304-6AB08 | 8LK2304-6AB11 |
| | 600 mm | 8LK2306-6AC32 | 8LK2306-6AC87 | 8LK2306-6AC35 | 8LK2306-6AC00 | 8LK2306-6AC02 |
| | 800 mm | 8LK2308-6AC61 | 8LK2308-6AC07 | 8LK2308-6AC63 | 8LK2308-6AC08 | 8LK2308-8AC20 |
| | 850 mm | 8LK2300-6AA63 | 8LK2300-6AA51 | 8LK2300-6AA70 | 8LK2300-6AA37 | 8LK2300-6AA44 |
| | 1100 mm | 8LK2300-6AA64 | 8LK2300-6AA35 | 8LK2300-6AA71 | 8LK2300-6AA38 | 8LK2300-6AA45 |

## Accessories

**Seals**



| Version | Width | Scope of supply | Article No. |
|---|---|---|---|
| Sealing foil base of frame | 19 mm | 1 roll = 50 m | 8LK2000-0AJ71 |

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# Frame and enclosure

## Doors



**Locking** — **Type A**



Single locking

Rotary handle:
– Double-bit
– Flat cylinder

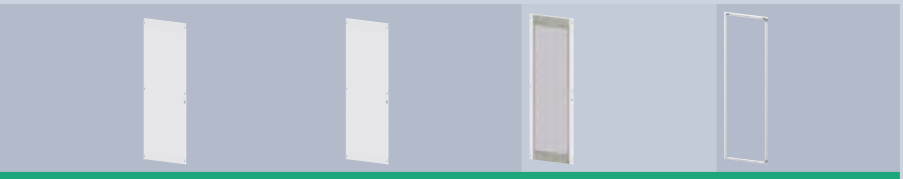
| Hinge | Width | ❶ Door IP30 | ❶ Door IP54 | Glass door IP54 | Sealing frame IP54 |
|---|---|---|---|---|---|
| Left | 350 mm | 8LK2197-4AD56 | 8LK2197-4AD55 | – | + 8LK2197-0AA35 |
| | 400 mm | 8LK2197-4AD57 | 8LK2197-4AD54 | – | + 8LK2197-4AD43 |
| | 600 mm | 8LK2197-6AC75 | 8LK2197-6AC74 | 8LK2197-6AC82 | + 8LK2197-6AC64 |
| | 800 mm | 8LK2197-8AD41 | 8LK2197-8AD40 | – | + 8LK2197-8AD24 |
| | 850 mm | 8LK2197-8AD42 | 8LK2197-8AD38 | 8LK2197-8AD64 | + 8LK2197-0AA34 |
| | 1100 mm | 8LK2197-1AC07 | 8LK2197-1AC10 | – | + 8LK2197-0AA33 |
| Right | 350 mm | 8LK2197-4AD56 | 8LK2197-4AD55 | – | + 8LK2197-0AA35 |
| | 400 mm | 8LK2197-4AD57 | 8LK2197-4AD54 | – | + 8LK2197-4AD43 |
| | 600 mm | 8LK2197-6AC75 | 8LK2197-6AC74 | 8LK2197-6AC82 | + 8LK2197-6AC64 |
| | 800 mm | 8LK2197-8AD41 | 8LK2197-8AD40 | – | + 8LK2197-8AD24 |
| | 850 mm | 8LK2197-8AD42 | 8LK2197-8AD38 | 8LK2197-8AD64 | + 8LK2197-0AA34 |
| | 1100 mm | 8LK2197-1AC07 | 8LK2197-1AC10 | – | + 8LK2197-0AA33 |
| **❷ Hinge** | | | | | |
|  | Ti-Grey | 3 × 8LK2000-0AH55 | 3 × 8LK2000-0AH55 | 3 × 8LK2000-0AH55 | – |
| **❸ Single locking** | | | | | |
|  | Handle | 8LK2000-0AH56 | 8LK2000-0AH56 | 8LK2000-0AH56 | – |
| | Handle, lockable | 8LK2000-0AH61 | 8LK2000-0AH61 | 8LK2000-0AH61 | – |
|  | Double-bit | 8LK2000-0AH58 | 8LK2000-0AH58 | 8LK2000-0AH58 | – |
| **❹ Central locking** | | | | | |
|  | Rotary handle | 8LK2000-0AH57 | 8LK2000-0AH57 | 8LK2000-0AH57 | – |
| | Rotary handle, double-bit | 8LK2000-0AH60 | 8LK2000-0AH60 | 8LK2000-0AH60 | – |
| | Rotary handle, flat cylinder | 8LK2000-0AH62 | 8LK2000-0AH62 | 8LK2000-0AH62 | – |
| | Rotary handle for profile semicylinder | – | – | – | – |
|  | Profile semicylinder | – | – | – | – |
|  | Locking rods | 8LK2100-0AA06 | 8LK2100-0AA06 | 8LK2100-0AA06 | – |
| **Accessories** | | | | | |
|  | Inner door struts | 8LK2000-0AD07 | 8LK2000-0AD07 | – | – |

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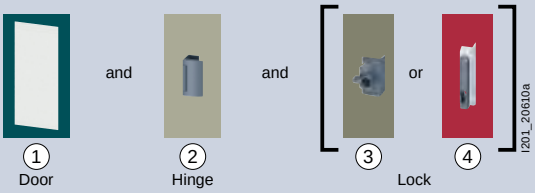
**Type B**



Rotary handle:
– Profile semicylinder

| Door | | Glass door | Sealing frame |
|---|---|---|---|
| IP30 | IP54 | IP54 | IP54 |
| 8LK2197-4AD45 | 8LK2197-4AD47 | – | + 8LK2197-0AA35 |
| 8LK2197-4AD50 | 8LK2197-4AD52 | – | + 8LK2197-4AD43 |
| 8LK2197-6AC66 | 8LK2197-6AC68 | 8LK2197-6AC83 | + 8LK2197-6AC64 |
| 8LK2197-8AD26 | 8LK2197-8AD28 | – | + 8LK2197-8AD24 |
| 8LK2197-8AD31 | 8LK2197-8AD33 | 8LK2197-8AD65 | + 8LK2197-0AA34 |
| 8LK2197-1AC08 | 8LK2197-1AC11 | – | + 8LK2197-0AA33 |
| 8LK2197-4AD46 | 8LK2197-4AD48 | – | + 8LK2197-0AA35 |
| 8LK2197-4AD51 | 8LK2197-4AD53 | – | + 8LK2197-4AD43 |
| 8LK2197-6AC67 | 8LK2197-6AC70 | 8LK2197-6AC84 | + 8LK2197-6AC64 |
| 8LK2197-8AD27 | 8LK2197-8AD30 | – | + 8LK2197-8AD24 |
| 8LK2197-8AD32 | 8LK2197-8AD34 | 8LK2197-8AD66 | + 8LK2197-0AA34 |
| 8LK2197-1AC08 | 8LK2197-1AC11 | – | + 8LK2197-0AA33 |
| | | | |
| 3 × 8LK2000-0AH55 | 3 × 8LK2000-0AH55 | 3 × 8LK2000-0AH55 | – |
| | | | |
| – | – | – | – |
| – | – | – | – |
| – | – | – | – |
| | | | |
| – | – | – | – |
| | | | |
| – | – | – | – |
| – | – | – | – |
| 8LK2000-0AH63 | 8LK2000-0AH63 | 8LK2000-0AH63 | – |
| 8PQ9400-0BA26 | 8PQ9400-0BA26 | 8PQ9400-0BA26 | – |
| 8LK2100-0AA07 | 8LK2100-0AA07 | 8LK2100-0AA07 | – |
| | | | |
| 8LK2000-0AD07 | 8LK2000-0AD07 | – | – |

## Ordering guide

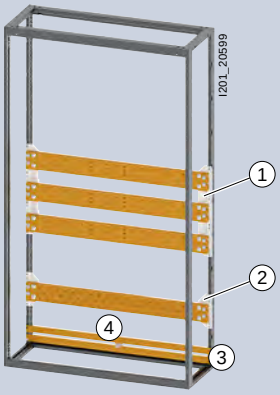



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# Busbar systems

## 185 mm center-to-center spacing

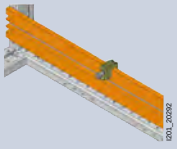



| Busbar supports | | Grounding | ❸ Frame connection | ❹ Mounting brackets |
|---|---|---|---|---|
|  |  |  |  |  |
| ❶ L1 ... L3 | ❷ N | PEN | ❸ PE | ❹ PE |
| 8LK4002-6AA38 | 8LK4002-6AA40 | 8LK4002-6AA48 | 8LK4002-7AA28 | 8LK4003-2AA76 |

## Accessories

| | Designation | Connection | Scope of supply | Article No. |
|---|---|---|---|---|
|  | Busbar clamps new<br>1 subconductor | M10 | 20 units | 8LK6036-6AA21 |
|  | Busbar clamps<br>2 subconductor | M10 | 20 units | 8LK6034-7AA41 |
|  | Roll<br>Ø outside: 25 mm | M10 | 20 units | 8LK4003-1AA27 |
|  | Intermediate piece<br>Potential: N | M12 | 10 units | 8LK4002-6AA47 |
|  | Intermediate piece cable connection<br>Potential: N | M12 | 1 unit | 8LK6035-2AA60 |
|  | Press nut new | M13 | | 8LK4003-3AA63 |

### Circular conductors

| | Busbar thickness | Ø Cable | Scope of supply | Article No. |
|---|---|---|---|---|
|  | 5 mm | 1.5 ... 16 mm² | 100 units | 8US1921-2AA00 |
| | | 1.5 ... 35 mm² | 50 units | 8US1921-2AB00 |
| | | 16 ... 70 mm² | 50 units | 8US1921-2AC00 |
| | | 16 ... 120 mm² | 50 units | 8US1921-2AD00 |
| | 10 mm | 1.5 ... 16 mm² | 100 units | 8US1921-2BA00 |
| | | 1.5 ... 35 mm² | 50 units | 8US1921-2BB00 |
| | | 16 ... 70 mm² | 50 units | 8US1921-2BC00 |
| | | 16 ... 120 mm² | 50 units | 8US1921-2BD00 |

### Connecting lugs

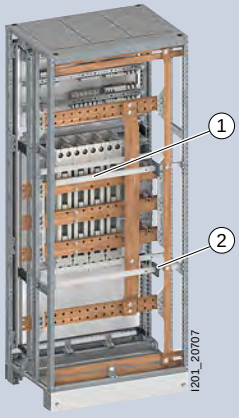
| | Potential | Busbar connection | Article No. |
|---|---|---|---|
|  | L1 ... L3 | 30 × 10 mm | 8LK4002-6AA41 |
| | N | 40 × 10 mm | 8LK4002-6AA42 |
| | | 50 × 10 mm | 8LK4002-6AA43 |
| | | 60 × 10 mm | 8LK4002-6AA44 |
| | | 80 × 10 mm | 8LK4002-6AA45 |
| | | 100 × 10 mm | 8LK4002-6AA46 |
|  | PE | 20 × 5 mm | 8LK4002-7AA30 |
| | | 30 × 10 mm | 8LK4002-7AA30 |
| | | 40 × 5 mm | 8LK4002-7AA31 |

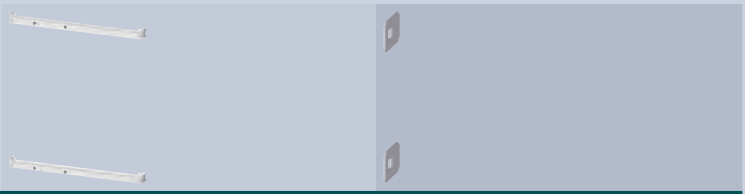
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# N/PE elevations new



| Width | ❶ Holders | ❷ Spacer |
|---|---|---|
| 350 mm | 8LK6036-6AA68 | 8LK6036-6AA73 |
| 400 mm | 8LK6036-6AA70 | 8LK6036-6AA73 |
| 600 mm | 8LK6036-6AA63 | 8LK6036-6AA73 |
| 800 mm | 8LK6036-6AA64 | 8LK6036-6AA73 |
| 850 mm | 8LK6036-6AA65 | 8LK6036-6AA73 |
| 1100 mm | 8LK6036-6AA66 | 8LK6036-6AA73 |

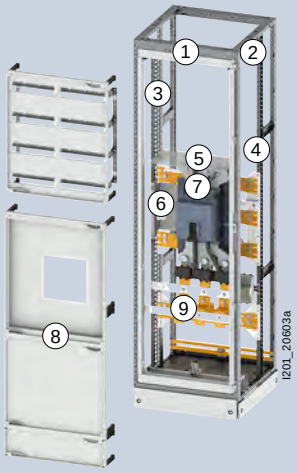


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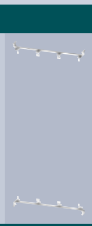
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# Section expansion

## 3VA molded case circuit breakers

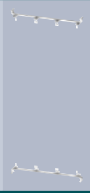



### 3-pole

| Depth | Width | MCCB | $I_n$ | Trip unit | ❶ Cover frames | ❷ 8GK adaptation |
|---|---|---|---|---|---|---|
| 400 mm | 350 mm | 3VA14 | 630 A | TM | 8LK3011-5AA85 | 8LK3011-6AA31 |
| | | 3VA24 | 630 A | ETU | 8LK3011-5AA85 | 8LK3011-6AA31 |
| | | 3VA15 | 1000 A | TM | 8LK3011-5AA85 | 8LK3011-6AA31 |
| | | 3VA25 | 1000 A | ETU | 8LK3011-5AA85 | 8LK3011-6AA31 |
| | 600 mm | 3VA26 | 1250 A | ETU | 8LK3011-5AA86 | 8LK3011-6AA32 |
| | | 3VA27 | 1600 A | ETU | 8LK3011-5AA86 | 8LK3011-6AA32 |
| 600 mm | 350 mm | 3VA14 | 630 A | TM | 8LK3011-5AA85 | 8LK3011-6AA31 |
| | | 3VA24 | 630 A | ETU | 8LK3011-5AA85 | 8LK3011-6AA31 |
| | | 3VA15 | 1000 A | TM | 8LK3011-5AA85 | 8LK3011-6AA31 |
| | | 3VA25 | 1000 A | ETU | 8LK3011-5AA85 | 8LK3011-6AA31 |
| | 600 mm | 3VA26 | 1250 A | ETU | 8LK3011-5AA86 | 8LK3011-6AA32 |
| | | 3VA27 | 1600 A | ETU | 8LK3011-5AA86 | 8LK3011-6AA32 |

### 4-pole

| Depth | Width | MCCB | $I_n$ | Trip unit | ❶ Cover frames | ❷ 8GK adaptation |
|---|---|---|---|---|---|---|
| 400 mm | 350 mm | 3VA14 | 630 A | TM | 8LK3011-5AA85 | 8LK3011-6AA31 |
| | | 3VA24 | 630 A | ETU | 8LK3011-5AA85 | 8LK3011-6AA31 |
| | 600 mm | 3VA15 | 1000 A | TM | 8LK3011-5AA86 | 8LK3011-6AA32 |
| | | 3VA25 | 1000 A | ETU | 8LK3011-5AA86 | 8LK3011-6AA32 |
| | | 3VA26 | 1250 A | ETU | 8LK3011-5AA86 | 8LK3011-6AA32 |
| | | 3VA27 | 1600 A | ETU | 8LK3011-5AA86 | 8LK3011-6AA32 |
| 600 mm | 350 mm | 3VA14 | 630 A | TM | 8LK3011-5AA85 | 8LK3011-6AA31 |
| | | 3VA24 | 630 A | ETU | 8LK3011-5AA85 | 8LK3011-6AA31 |
| | 600 mm | 3VA15 | 1000 A | TM | 8LK3011-5AA86 | 8LK3011-6AA32 |
| | | 3VA25 | 1000 A | ETU | 8LK3011-5AA86 | 8LK3011-6AA32 |
| | | 3VA26 | 1250 A | ETU | 8LK3011-5AA86 | 8LK3011-6AA32 |
| | | 3VA27 | 1600 A | ETU | 8LK3011-5AA86 | 8LK3011-6AA32 |

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## Accessories

**DIN rail overvoltage protection**



| Position | Article No. |
|---|---|
| Lateral overvoltage protection, see page 6/10 | 8LK6034-3AA10 |

**Circuit breaker insulation**



| Width | Scope of supply | Article No. |
|---|---|---|
| 35 mm | 1 roll = 15 m | 8LK6036-2AA14 |









| ❸ Longitudinal stays | ❹ Uprights | ❺ Obstacle | ❻ Mounting plates | ❼ Busbar connection | ❽ Section covers | ❾ Cable connection |
|---|---|---|---|---|---|---|
| Height 1800 mm | Depth 600 mm | | | | | |
| 8GK4853-8KK02 | – | 8LK3011-8AA40 | 8LK5002-1AA41 | 8LK6035-1AA52 | 8LK5002-1AA46 | 8LK6035-1AA57 |
| 8GK4853-8KK02 | – | 8LK3011-8AA40 | 8LK5002-1AA41 | 8LK6035-1AA52 | 8LK5002-1AA46 | 8LK6035-1AA57 |
| 8GK4853-8KK02 | – | 8LK3011-8AA40 | 8LK5002-1AA42 | 8LK6035-1AA53 | 8LK5002-1AA47 | 8LK6035-1AA58 |
| 8GK4853-8KK02 | – | 8LK3011-8AA40 | 8LK5002-1AA42 | 8LK6035-1AA53 | 8LK5002-1AA47 | 8LK6035-1AA58 |
| 8GK4853-8KK02 | – | 8LK3011-8AA41 | 8LK5002-1AA44 | 8LK6035-1AA55 | 8LK5002-1AA50 | 8LK6035-1AA61 |
| 8GK4853-8KK02 | – | 8LK3011-8AA41 | 8LK5002-1AA45 | 8LK6035-1AA56 | 8LK5002-1AA51 | 8LK6035-1AA62 |
| 8GK4853-8KK02 | 8LK3011-8AA38 | 8LK3011-8AA40 | 8LK5002-1AA41 | 8LK6035-1AA52 | 8LK5002-1AA46 | 8LK6035-1AA57 |
| 8GK4853-8KK02 | 8LK3011-8AA38 | 8LK3011-8AA40 | 8LK5002-1AA41 | 8LK6035-1AA52 | 8LK5002-1AA46 | 8LK6035-1AA57 |
| 8GK4853-8KK02 | 8LK3011-8AA38 | 8LK3011-8AA40 | 8LK5002-1AA42 | 8LK6035-1AA53 | 8LK5002-1AA47 | 8LK6035-1AA58 |
| 8GK4853-8KK02 | 8LK3011-8AA38 | 8LK3011-8AA40 | 8LK5002-1AA42 | 8LK6035-1AA53 | 8LK5002-1AA47 | 8LK6035-1AA58 |
| 8GK4853-8KK02 | 8LK3011-8AA38 | 8LK3011-8AA41 | 8LK5002-1AA44 | 8LK6035-1AA55 | 8LK5002-1AA50 | 8LK6035-1AA61 |
| 8GK4853-8KK02 | 8LK3011-8AA38 | 8LK3011-8AA41 | 8LK5002-1AA45 | 8LK6035-1AA56 | 8LK5002-1AA51 | 8LK6035-1AA62 |









| ❸ Longitudinal stays | ❹ Uprights | ❺ Obstacle | ❻ Mounting plates | ❼ Busbar connection | ❽ Section covers | ❾ Cable connection |
|---|---|---|---|---|---|---|
| Height 1800 mm | Depth 600 mm | | | | | |
| 8GK4853-8KK02 | – | 8LK3011-8AA40 | 8LK5002-1AA41 | 8LK6035-1AA52 | 8LK5002-1AA46 | 8LK6035-1AA57 |
| 8GK4853-8KK02 | – | 8LK3011-8AA40 | 8LK5002-1AA41 | 8LK6035-1AA52 | 8LK5002-1AA46 | 8LK6035-1AA57 |
| 8GK4853-8KK02 | – | 8LK3011-8AA41 | 8LK5002-1AA43 | 8LK6035-1AA54 | 8LK5002-1AA48 | 8LK6035-1AA60 |
| 8GK4853-8KK02 | – | 8LK3011-8AA41 | 8LK5002-1AA43 | 8LK6035-1AA54 | 8LK5002-1AA48 | 8LK6035-1AA60 |
| 8GK4853-8KK02 | – | 8LK3011-8AA41 | 8LK5002-1AA44 | 8LK6035-1AA55 | 8LK5002-1AA50 | 8LK6035-1AA61 |
| 8GK4853-8KK02 | – | 8LK3011-8AA41 | 8LK5002-1AA45 | 8LK6035-1AA56 | 8LK5002-1AA51 | 8LK6035-1AA62 |
| 8GK4853-8KK02 | 8LK3011-8AA38 | 8LK3011-8AA40 | 8LK5002-1AA41 | 8LK6035-1AA52 | 8LK5002-1AA46 | 8LK6035-1AA57 |
| 8GK4853-8KK02 | 8LK3011-8AA38 | 8LK3011-8AA40 | 8LK5002-1AA41 | 8LK6035-1AA52 | 8LK5002-1AA46 | 8LK6035-1AA57 |
| 8GK4853-8KK02 | 8LK3011-8AA38 | 8LK3011-8AA41 | 8LK5002-1AA43 | 8LK6035-1AA54 | 8LK5002-1AA48 | 8LK6035-1AA60 |
| 8GK4853-8KK02 | 8LK3011-8AA38 | 8LK3011-8AA41 | 8LK5002-1AA43 | 8LK6035-1AA54 | 8LK5002-1AA48 | 8LK6035-1AA60 |
| 8GK4853-8KK02 | 8LK3011-8AA38 | 8LK3011-8AA41 | 8LK5002-1AA44 | 8LK6035-1AA55 | 8LK5002-1AA50 | 8LK6035-1AA61 |
| 8GK4853-8KK02 | 8LK3011-8AA38 | 8LK3011-8AA41 | 8LK5002-1AA45 | 8LK6035-1AA56 | 8LK5002-1AA51 | 8LK6035-1AA62 |

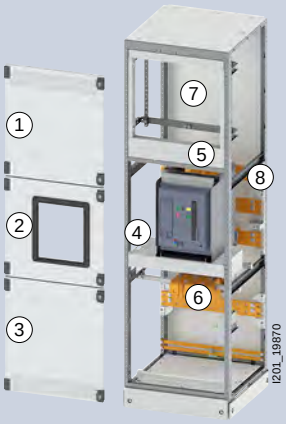


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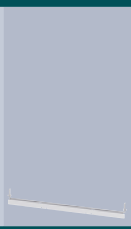
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# Section expansion

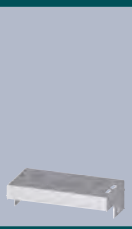
## Incoming feeder panels, 3-pole




### IP30





| Cable connection | Size | $I_n$ | Width | ❶ Compartment doors at top [1] | Door strut | ❷ Compartment doors 3W [1] | Sealing frame | ❸ Compartment doors at bottom [1] | ❹ Device compartment Mounting plates |
|---|---|---|---|---|---|---|---|---|---|
| **Fixed-mounted** | | | | | | | | | |
| At bottom | 0 | 1250 A | 400 mm | 8LK2067-4AA07 | 2 × 8LK3011-6AA57 | 8LK2060-4AA61 | + 3VW9011-0AP01 | 8LK2070-4AA21 | 8LK5002-0AA38 |
| | 1 | 2000 A | 400 mm | 8LK2067-4AA07 | 8LK3011-6AA57 | 8LK2060-4AA68 | + 3WA9111-0AP01 | 8LK2070-4AA21 | 8LK5002-1AA52 |
| | | | 600 mm | 8LK2067-6AA07 | 8LK3011-6AA58 | 8LK2060-6AA60 | + 3WA9111-0AP01 | 8LK2070-6AA23 | 8LK5002-1AA53 |
| | 2 | 3200 A | 600 mm | 8LK2067-6AA07 | 8LK3011-6AA58 | 8LK2060-6AA64 | + 3WA9111-0AP01 | 8LK2070-6AA23 | 8LK5002-1AA53 |
| | | | 800 mm | 8LK2067-8AA11 | 8LK3011-8AA82 | 8LK2060-8AA41 | + 3WA9111-0AP01 | 8LK2070-8AA42 | 8LK5002-1AA54 |
| At top | 0 | 1250 A | 400 mm | 8LK2067-4AA07 | 2 × 8LK3011-6AA57 | 8LK2060-4AA61 | + 3VW9011-0AP01 | 8LK2070-4AA21 | 8LK5002-0AA38 |
| | 1 | 2000 A | 400 mm | 8LK2067-4AA07 | 8LK3011-6AA57 | 8LK2060-4AA68 | + 3WA9111-0AP01 | 8LK2070-4AA21 | 8LK5002-1AA52 |
| | | | 600 mm | 8LK2067-6AA07 | 8LK3011-6AA58 | 8LK2060-6AA60 | + 3WA9111-0AP01 | 8LK2070-6AA23 | 8LK5002-1AA53 |
| | 2 | 3200 A | 600 mm | 8LK2067-6AA07 | 8LK3011-6AA58 | 8LK2060-6AA64 | + 3WA9111-0AP01 | 8LK2070-6AA23 | 8LK5002-1AA53 |
| | | | 800 mm | 8LK2067-8AA11 | 8LK3011-8AA82 | 8LK2060-8AA41 | + 3WA9111-0AP01 | 8LK2070-8AA42 | 8LK5002-1AA54 |
| **Withdrawable** | | | | | | | | | |
| At bottom | 0 | 1250 A | 400 mm | 8LK2067-4AA07 | 2 × 8LK3011-6AA57 | 8LK2060-4AA62 | + 3VW9011-0AP02 | 8LK2070-4AA21 | 8LK5002-0AA40 |
| | 1 | 2000 A | 400 mm | 8LK2067-4AA07 | 8LK3011-6AA57 | 8LK2060-4AA68 | + 3WA9111-0AP01 | 8LK2070-4AA21 | 8LK5002-1AA52 |
| | | | 600 mm | 8LK2067-6AA07 | 8LK3011-6AA58 | 8LK2060-6AA60 | + 3WA9111-0AP01 | 8LK2070-6AA23 | 8LK5002-1AA53 |
| | 2 | 3200 A | 600 mm | 8LK2067-6AA07 | 8LK3011-6AA58 | 8LK2060-6AA64 | + 3WA9111-0AP01 | 8LK2070-6AA23 | 8LK5002-1AA53 |
| | | | 800 mm | 8LK2067-8AA11 | 8LK3011-8AA82 | 8LK2060-8AA41 | + 3WA9111-0AP01 | 8LK2070-8AA42 | 8LK5002-1AA54 |
| At top | 0 | 1250 A | 400 mm | 8LK2067-4AA07 | 2 × 8LK3011-6AA57 | 8LK2060-4AA62 | + 3VW9011-0AP02 | 8LK2070-4AA21 | 8LK5002-0AA40 |
| | 1 | 2000 A | 400 mm | 8LK2067-4AA07 | 8LK3011-6AA57 | 8LK2060-4AA68 | + 3WA9111-0AP01 | 8LK2070-4AA21 | 8LK5002-1AA52 |
| | | | 600 mm | 8LK2067-6AA07 | 8LK3011-6AA58 | 8LK2060-6AA60 | + 3WA9111-0AP01 | 8LK2070-6AA23 | 8LK5002-1AA53 |
| | 2 | 3200 A | 600 mm | 8LK2067-6AA07 | 8LK3011-6AA58 | 8LK2060-6AA64 | + 3WA9111-0AP01 | 8LK2070-6AA23 | 8LK5002-1AA53 |
| | | | 800 mm | 8LK2067-8AA11 | 8LK3011-8AA82 | 8LK2060-8AA41 | + 3WA9111-0AP01 | 8LK2070-8AA42 | 8LK5002-1AA54 |

[1] Without locking and hinge

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## Accessories

**Hinge**



| Version | Article No. |
|---|---|
| Ti-Grey | 8LK2000-0AH55 |

**Locking**



| Version | Article No. |
|---|---|
| Double-bit | 8LK2000-0AH58 |



| | |
|---|---|
| Handle | 8LK2000-0AH56 |
| Handle, lockable | 8LK2000-0AH61 |



| | |
|---|---|
| Inner door struts | 8LK2000-0AD15 |

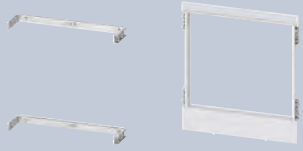
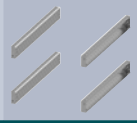
**DIN rail overvoltage protection**



| Position | Article No. |
|---|---|
| Lateral overvoltage protection, see page 6/10 | 8LK6034-3AA10 |





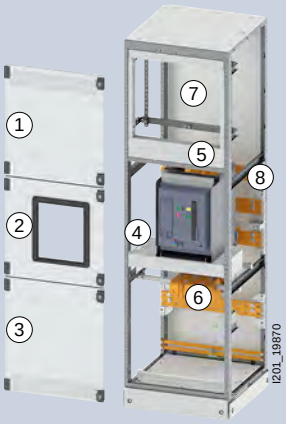
| | | ❺ Busbar connection | ❻ Cable connection | | ❼ Auxiliary device compartments | | ❽ Uprights |
|---|---|---|---|---|---|---|---|
| Separation | Insulation | | Obstacle | Holders | 8GK adaptation | Cover frames | |
| 8LK3011-6AA42 | – | 8LK6034-2AA63 | 8LK3011-6AA41 | 8LK6034-2AA34 | 8LK3011-6AA43 | 8LK3011-6AA45 | 8LK3011-6AA60 + 8LK3011-8AA38 |
| 8LK3013-5AA51 | – | 8LK6035-3AA07 | 8LK3011-6AA41 | 8LK6035-3AA33 | 8LK3011-6AA43 | 8LK3011-6AA45 | 8LK3012-0AA32 |
| 8LK3013-5AA55 | – | 8LK6035-3AA10 | 8LK3011-6AA61 | 8LK6035-3AA34 | 8LK3011-6AA44 | 8LK3011-6AA50 | 8LK3012-0AA32 |
| 8LK3013-5AA57 | – | 8LK6035-3AA12 | 8LK3011-6AA61 | 8LK6035-3AA36 | 8LK3011-6AA44 | 8LK3011-6AA50 | 8LK3012-0AA32 |
| 8LK3013-5AA62 | – | 8LK6035-3AA14 | 8LK3012-0AA00 | 8LK6035-3AA38 | 8LK3011-8AA83 | 8LK3011-8AA88 | 8LK3012-0AA32 |
| 8LK3011-6AA42 | – | 8LK6034-2AA63 | 8LK3011-6AA41 | 8LK6034-2AA34 | 8LK3011-6AA43 | 8LK3011-6AA47 | 8LK3011-6AA60 + 8LK3011-8AA38 |
| 8LK3013-5AA51 | – | 8LK6035-3AA07 | 8LK3011-6AA41 | 8LK6035-3AA33 | 8LK3011-6AA43 | 8LK3011-6AA47 | 8LK3012-0AA16 |
| 8LK3013-5AA55 | – | 8LK6035-3AA10 | 8LK3011-6AA61 | 8LK6035-3AA34 | 8LK3011-6AA44 | 8LK3011-6AA52 | 8LK3012-0AA16 |
| 8LK3013-5AA57 | – | 8LK6035-3AA12 | 8LK3011-6AA61 | 8LK6035-3AA36 | 8LK3011-6AA44 | 8LK3011-6AA52 | 8LK3012-0AA16 |
| 8LK3013-5AA62 | – | 8LK6035-3AA14 | 8LK3012-0AA00 | 8LK6035-3AA38 | 8LK3011-8AA83 | 8LK3011-8AA86 | 8LK3012-0AA16 |
| 8LK3011-6AA54 | – | 8LK6034-2AA64 | 8LK3011-6AA41 | 8LK6034-2AA37 | 8LK3011-6AA43 | 8LK3011-6AA45 | 8LK3011-6AA60 + 8LK3011-8AA38 |
| 8LK3013-5AA52 | 8LK6035-3AA68 | 8LK6035-3AA06 | 8LK3011-6AA41 | 8LK6035-3AA32 | 8LK3011-6AA43 | 8LK3011-6AA45 | 8LK3012-0AA32 |
| 8LK3013-5AA54 | – | 8LK6035-3AA08 | 8LK3011-6AA61 | 8LK6035-2AA33 | 8LK3011-6AA44 | 8LK3011-6AA50 | 8LK3012-0AA32 |
| 8LK3013-5AA58 | – | 8LK6035-3AA11 | 8LK3011-6AA61 | 8LK6035-3AA35 | 8LK3011-6AA44 | 8LK3011-6AA50 | 8LK3012-0AA32 |
| 8LK3013-5AA61 | – | 8LK6035-3AA13 | 8LK3012-0AA00 | 8LK6035-2AA34 | 8LK3011-8AA83 | 8LK3011-8AA88 | 8LK3012-0AA32 |
| 8LK3011-6AA54 | – | 8LK6034-2AA64 | 8LK3011-6AA41 | 8LK6034-2AA37 | 8LK3011-6AA43 | 8LK3011-6AA47 | 8LK3011-6AA60 + 8LK3011-8AA38 |
| 8LK3013-5AA52 | 8LK6035-3AA68 | 8LK6035-3AA06 | 8LK3011-6AA41 | 8LK6035-3AA32 | 8LK3011-6AA43 | 8LK3011-6AA47 | 8LK3012-0AA16 |
| 8LK3013-5AA54 | – | 8LK6035-3AA08 | 8LK3011-6AA61 | 8LK6035-2AA33 | 8LK3011-6AA44 | 8LK3011-6AA52 | 8LK3012-0AA16 |
| 8LK3013-5AA58 | – | 8LK6035-3AA11 | 8LK3011-6AA61 | 8LK6035-3AA35 | 8LK3011-6AA44 | 8LK3011-6AA52 | 8LK3012-0AA16 |
| 8LK3013-5AA61 | – | 8LK6035-3AA13 | 8LK3012-0AA00 | 8LK6035-2AA34 | 8LK3011-8AA83 | 8LK3011-8AA86 | 8LK3012-0AA16 |

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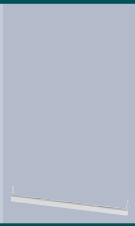
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# Section expansion

## Incoming feeder panels, 3-pole




### IP54





| Cable connection | Size | $I_n$ | Width | ❶ Compartment doors at top [1] | Door strut | ❷ Compartment doors 3W [1] | Plexiglas cover + Fixing element | ❸ Compartment doors at bottom [1] | Sealing frame |
|---|---|---|---|---|---|---|---|---|---|
| **Fixed-mounted** | | | | | | | | | |
| At bottom | 0 | 1250 A | 400 mm | 8LK2067-4AA08 | 2 × 8LK3011-6AA57 | 8LK2060-4AA57 | + 3WA9111-0AP03 + 8LK2000-0AJ65 | 8LK2070-4AA22 | 8LK2197-4AD44 |
| | 1 | 2000 A | 400 mm | 8LK2067-4AA08 | 8LK3011-6AA57 | 8LK2060-4AA70 | + 3WA9111-0AP03 | 8LK2070-4AA22 | 8LK2197-4AD44 |
| | | | 600 mm | 8LK2067-6AA08 | 8LK3011-6AA58 | 8LK2060-6AA61 | + 3WA9111-0AP03 | 8LK2070-6AA24 | 8LK2197-6AC65 |
| | 2 | 3200 A | 600 mm | 8LK2067-6AA08 | 8LK3011-6AA58 | 8LK2060-6AA65 | + 3WA9111-0AP03 | 8LK2070-6AA24 | 8LK2197-6AC65 |
| | | | 800 mm | 8LK2067-8AA12 | 8LK3011-8AA82 | 8LK2060-8AA42 | + 3WA9111-0AP03 | 8LK2070-8AA43 | 8LK2197-8AD25 |
| At top | 0 | 1250 A | 400 mm | 8LK2067-4AA08 | 2 × 8LK3011-6AA57 | 8LK2060-4AA57 | + 3WA9111-0AP03 + 8LK2000-0AJ65 | 8LK2070-4AA22 | 8LK2197-4AD44 |
| | 1 | 2000 A | 400 mm | 8LK2067-4AA08 | 8LK3011-6AA57 | 8LK2060-4AA70 | + 3WA9111-0AP03 | 8LK2070-4AA22 | 8LK2197-4AD44 |
| | | | 600 mm | 8LK2067-6AA08 | 8LK3011-6AA58 | 8LK2060-6AA61 | + 3WA9111-0AP03 | 8LK2070-6AA24 | 8LK2197-6AC65 |
| | 2 | 3200 A | 600 mm | 8LK2067-6AA08 | 8LK3011-6AA58 | 8LK2060-6AA65 | + 3WA9111-0AP03 | 8LK2070-6AA24 | 8LK2197-6AC65 |
| | | | 800 mm | 8LK2067-8AA12 | 8LK3011-8AA82 | 8LK2060-8AA42 | + 3WA9111-0AP03 | 8LK2070-8AA43 | 8LK2197-8AD25 |
| **Withdrawable** | | | | | | | | | |
| At bottom | 0 | 1250 A | 400 mm | 8LK2067-4AA08 | 2 × 8LK3011-6AA57 | 8LK2060-4AA60 | + 3WA9111-0AP03 + 8LK2000-0AJ65 | 8LK2070-4AA22 | 8LK2197-4AD44 |
| | 1 | 2000 A | 400 mm | 8LK2067-4AA08 | 8LK3011-6AA57 | 8LK2060-4AA70 | + 3WA9111-0AP03 | 8LK2070-4AA22 | 8LK2197-4AD44 |
| | | | 600 mm | 8LK2067-6AA08 | 8LK3011-6AA58 | 8LK2060-6AA61 | + 3WA9111-0AP03 | 8LK2070-6AA24 | 8LK2197-6AC65 |
| | 2 | 3200 A | 600 mm | 8LK2067-6AA08 | 8LK3011-6AA58 | 8LK2060-6AA65 | + 3WA9111-0AP03 | 8LK2070-6AA24 | 8LK2197-6AC65 |
| | | | 800 mm | 8LK2067-8AA12 | 8LK3011-8AA82 | 8LK2060-8AA42 | + 3WA9111-0AP03 | 8LK2070-8AA43 | 8LK2197-8AD25 |
| At bottom | 0 | 1250 A | 400 mm | 8LK2067-4AA08 | 2 × 8LK3011-6AA57 | 8LK2060-4AA60 | + 3WA9111-0AP03 + 8LK2000-0AJ65 | 8LK2070-4AA22 | 8LK2197-4AD44 |
| | 1 | 2000 A | 400 mm | 8LK2067-4AA08 | 8LK3011-6AA57 | 8LK2060-4AA70 | + 3WA9111-0AP03 | 8LK2070-4AA22 | 8LK2197-4AD44 |
| | | | 600 mm | 8LK2067-6AA08 | 8LK3011-6AA58 | 8LK2060-6AA61 | + 3WA9111-0AP03 | 8LK2070-6AA24 | 8LK2197-6AC65 |
| | 2 | 3200 A | 600 mm | 8LK2067-6AA08 | 8LK3011-6AA58 | 8LK2060-6AA65 | + 3WA9111-0AP03 | 8LK2070-6AA24 | 8LK2197-6AC65 |
| | | | 800 mm | 8LK2067-8AA12 | 8LK3011-8AA82 | 8LK2060-8AA42 | + 3WA9111-0AP03 | 8LK2070-8AA43 | 8LK2197-8AD25 |

[1] Without locking and hinge

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## Accessories

**Hinge**



| Version | Article No. |
|---|---|
| Ti-Grey | 8LK2000-0AH55 |

**Locking**







| Version | Article No. |
|---|---|
| Double-bit | 8LK2000-0AH58 |
| Handle | 8LK2000-0AH56 |
| Handle, lockable | 8LK2000-0AH61 |
| Inner door struts | 8LK2000-0AD15 |

**DIN rail overvoltage protection**



| Position | Article No. |
|---|---|
| Lateral overvoltage protection, see page 6/10 | 8LK6034-3AA10 |



| ❹ Device compartment | | | ❺ Busbar connection | ❻ Cable connection | | ❼ Auxiliary device compartments | | ❽ Uprights |
|---|---|---|---|---|---|---|---|---|
| Mounting plates | Separation | Insulation | | Obstacle | Holders | 8GK adaptation | Cover frames | |
| 8LK5002-0AA38 | 8LK3011-6AA42 | – | 8LK6034-2AA63 | 8LK3011-6AA41 | 8LK6034-2AA34 | 8LK3011-6AA43 | 8LK3011-6AA46 | 8LK3011-6AA60 + 8LK3011-8AA38 |
| 8LK5002-1AA52 | 8LK3013-5AA51 | – | 8LK6035-3AA07 | 8LK3011-6AA41 | 8LK6035-3AA33 | 8LK3011-6AA43 | 8LK3011-6AA46 | 8LK3012-0AA32 |
| 8LK5002-1AA53 | 8LK3013-5AA55 | – | 8LK6035-3AA10 | 8LK3011-6AA61 | 8LK6035-3AA34 | 8LK3011-6AA44 | 8LK3011-6AA51 | 8LK3012-0AA32 |
| 8LK5002-1AA53 | 8LK3013-5AA57 | – | 8LK6035-3AA12 | 8LK3011-6AA61 | 8LK6035-3AA36 | 8LK3011-6AA44 | 8LK3011-6AA51 | 8LK3012-0AA32 |
| 8LK5002-1AA54 | 8LK3013-5AA62 | – | 8LK6035-3AA14 | 8LK3012-0AA00 | 8LK6035-3AA38 | 8LK3011-8AA83 | 8LK3011-8AA85 | 8LK3012-0AA32 |
| 8LK5002-0AA38 | 8LK3011-6AA42 | – | 8LK6034-2AA63 | 8LK3011-6AA41 | 8LK6034-2AA34 | 8LK3011-6AA43 | 8LK3011-6AA48 | 8LK3011-6AA60 + 8LK3011-8AA38 |
| 8LK5002-1AA52 | 8LK3013-5AA51 | – | 8LK6035-3AA07 | 8LK3011-6AA41 | 8LK6035-3AA33 | 8LK3011-6AA43 | 8LK3011-6AA48 | 8LK3012-0AA16 |
| 8LK5002-1AA53 | 8LK3013-5AA55 | – | 8LK6035-3AA10 | 8LK3011-6AA61 | 8LK6035-3AA34 | 8LK3011-6AA44 | 8LK3011-6AA53 | 8LK3012-0AA16 |
| 8LK5002-1AA53 | 8LK3013-5AA57 | – | 8LK6035-3AA12 | 8LK3011-6AA61 | 8LK6035-3AA36 | 8LK3011-6AA44 | 8LK3011-6AA53 | 8LK3012-0AA16 |
| 8LK5002-1AA54 | 8LK3013-5AA62 | – | 8LK6035-3AA14 | 8LK3012-0AA00 | 8LK6035-3AA38 | 8LK3011-8AA83 | 8LK3011-8AA87 | 8LK3012-0AA16 |
| 8LK5002-0AA40 | 8LK3011-6AA54 | – | 8LK6034-2AA64 | 8LK3011-6AA41 | 8LK6034-2AA37 | 8LK3011-6AA43 | 8LK3011-6AA46 | 8LK3011-6AA60 + 8LK3011-8AA38 |
| 8LK5002-1AA52 | 8LK3013-5AA52 | 8LK6035-3AA68 | 8LK6035-3AA06 | 8LK3011-6AA41 | 8LK6035-3AA32 | 8LK3011-6AA43 | 8LK3011-6AA46 | 8LK3012-0AA32 |
| 8LK5002-1AA53 | 8LK3013-5AA54 | – | 8LK6035-3AA08 | 8LK3011-6AA61 | 8LK6035-2AA33 | 8LK3011-6AA44 | 8LK3011-6AA51 | 8LK3012-0AA32 |
| 8LK5002-1AA53 | 8LK3013-5AA58 | – | 8LK6035-3AA11 | 8LK3011-6AA61 | 8LK6035-3AA35 | 8LK3011-6AA44 | 8LK3011-6AA51 | 8LK3012-0AA32 |
| 8LK5002-1AA54 | 8LK3013-5AA61 | – | 8LK6035-3AA13 | 8LK3012-0AA00 | 8LK6035-2AA34 | 8LK3011-8AA83 | 8LK3011-8AA85 | 8LK3012-0AA32 |
| 8LK5002-0AA40 | 8LK3011-6AA54 | – | 8LK6034-2AA64 | 8LK3011-6AA41 | 8LK6034-2AA37 | 8LK3011-6AA43 | 8LK3011-6AA48 | 8LK3011-6AA60 + 8LK3011-8AA38 |
| 8LK5002-1AA52 | 8LK3013-5AA52 | 8LK6035-3AA68 | 8LK6035-3AA06 | 8LK3011-6AA41 | 8LK6035-3AA32 | 8LK3011-6AA43 | 8LK3011-6AA48 | 8LK3012-0AA16 |
| 8LK5002-1AA53 | 8LK3013-5AA54 | – | 8LK6035-3AA08 | 8LK3011-6AA61 | 8LK6035-2AA33 | 8LK3011-6AA44 | 8LK3011-6AA53 | 8LK3012-0AA16 |
| 8LK5002-1AA53 | 8LK3013-5AA58 | – | 8LK6035-3AA11 | 8LK3011-6AA61 | 8LK6035-3AA35 | 8LK3011-6AA44 | 8LK3011-6AA53 | 8LK3012-0AA16 |
| 8LK5002-1AA54 | 8LK3013-5AA61 | – | 8LK6035-3AA13 | 8LK3012-0AA00 | 8LK6035-2AA34 | 8LK3011-8AA83 | 8LK3011-8AA87 | 8LK3012-0AA16 |



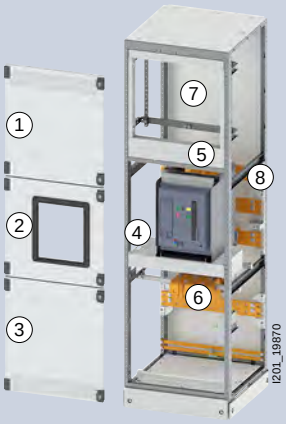
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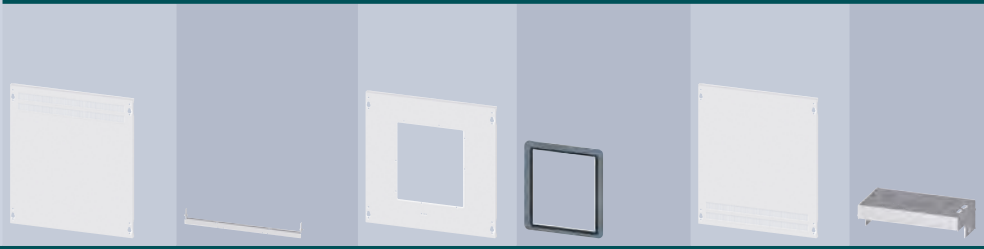


# Section expansion

## Incoming feeder panels, 4-pole




### IP30



| Cable connection | Size | $I_n$ | Width | ❶ Compartment doors at top [1] | Door strut | ❷ Compartment doors 3W [1] | Sealing frame | ❸ Compartment doors at bottom [1] | ❹ Device compartment Mounting plates |
|---|---|---|---|---|---|---|---|---|---|
| **Fixed-mounted** | | | | | | | | | |
| At bottom | 0 | 1250 A | 400 mm | 8LK2067-4AA07 | 2 × 8LK3011-6AA57 | 8LK2060-4AA61 | 3VW9011-0AP01 | 8LK2070-4AA21 | 8LK5002-0AA38 |
| | 1 | 2000 A | 600 mm | 8LK2067-6AA07 | 8LK3011-6AA58 | 8LK2060-6AA60 | 3WA9111-0AP01 | 8LK2070-6AA23 | 8LK5002-1AA53 |
| | 2 | 3200 A | 800 mm | 8LK2067-8AA11 | 8LK3011-8AA82 | 8LK2060-8AA41 | 3WA9111-0AP01 | 8LK2070-8AA42 | 8LK5002-1AA54 |
| At top | 0 | 1250 A | 400 mm | 8LK2067-4AA07 | 2 × 8LK3011-6AA57 | 8LK2060-4AA61 | 3VW9011-0AP01 | 8LK2070-4AA21 | 8LK5002-0AA38 |
| | 1 | 2000 A | 600 mm | 8LK2067-6AA07 | 8LK3011-6AA58 | 8LK2060-6AA60 | 3WA9111-0AP01 | 8LK2070-6AA23 | 8LK5002-1AA53 |
| | 2 | 3200 A | 800 mm | 8LK2067-8AA11 | 8LK3011-8AA82 | 8LK2060-8AA41 | 3WA9111-0AP01 | 8LK2070-8AA42 | 8LK5002-1AA54 |
| **Withdrawable** | | | | | | | | | |
| At bottom | 0 | 1250 A | 600 mm | 8LK2067-6AA07 | 2 × 8LK3011-6AA58 | 8LK2060-6AA54 | 3VW9011-0AP02 | 8LK2070-6AA23 | 8LK5002-0AA41 |
| | 1 | 2000 A | 600 mm | 8LK2067-6AA07 | 8LK3011-6AA58 | 8LK2060-6AA60 | 3WA9111-0AP01 | 8LK2070-6AA23 | 8LK5002-1AA53 |
| | 2 | 3200 A | 800 mm | 8LK2067-8AA11 | 8LK3011-8AA82 | 8LK2060-8AA41 | 3WA9111-0AP01 | 8LK2070-8AA42 | 8LK5002-1AA54 |
| At top | 0 | 1250 A | 600 mm | 8LK2067-6AA07 | 2 × 8LK3011-6AA58 | 8LK2060-6AA54 | 3VW9011-0AP02 | 8LK2070-6AA23 | 8LK5002-0AA41 |
| | 1 | 2000 A | 600 mm | 8LK2067-6AA07 | 8LK3011-6AA58 | 8LK2060-6AA60 | 3WA9111-0AP01 | 8LK2070-6AA23 | 8LK5002-1AA53 |
| | 2 | 3200 A | 800 mm | 8LK2067-8AA11 | 8LK3011-8AA82 | 8LK2060-8AA41 | 3WA9111-0AP01 | 8LK2070-8AA42 | 8LK5002-1AA54 |

[1] Without locking and hinge

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## Accessories

**Hinge**



| Version | Article No. |
|---|---|
| Ti-Grey | 8LK2000-0AH55 |

**Locking**



| Version | Article No. |
|---|---|
| Double-bit | 8LK2000-0AH58 |



| | |
|---|---|
| Handle | 8LK2000-0AH56 |
| Handle, lockable | 8LK2000-0AH61 |



| | |
|---|---|
| Inner door struts | 8LK2000-0AD15 |

**DIN rail overvoltage protection**



| Position | Article No. |
|---|---|
| Lateral overvoltage protection, see page 6/10 | 8LK6034-3AA10 |

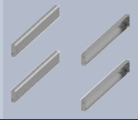












| | ❺ Busbar connection | ❻ Cable connection | | ❼ Auxiliary device compartments | | ❽ Uprights |
|---|---|---|---|---|---|---|
| Separation | | Obstacle | Holders | 8GK adaptation | Cover frames | |
| 8LK3011-6AA42 | 8LK6034-2AA63 | 8LK3011-6AA41 | 8LK6034-2AA34 | 8LK3011-6AA43 | 8LK3011-6AA45 | 8LK3011-6AA60 + 8LK3011-8AA38 |
| 8LK3013-5AA55 | 8LK6035-3AA15 | 8LK3011-6AA61 | 8LK6035-3AA37 | 8LK3011-6AA44 | 8LK3011-6AA50 | 8LK3012-0AA32 |
| 8LK3013-5AA62 | 8LK6035-3AA16 | 8LK3012-0AA00 | 8LK6035-3AA40 | 8LK3011-8AA83 | 8LK3011-8AA88 | 8LK3012-0AA32 |
| 8LK3011-6AA42 | 8LK6034-2AA63 | 8LK3011-6AA41 | 8LK6034-2AA34 | 8LK3011-6AA43 | 8LK3011-6AA47 | 8LK3011-6AA60 + 8LK3011-8AA38 |
| 8LK3013-5AA55 | 8LK6035-3AA15 | 8LK3011-6AA61 | 8LK6035-3AA37 | 8LK3011-6AA44 | 8LK3011-6AA52 | 8LK3012-0AA16 |
| 8LK3013-5AA62 | 8LK6035-3AA16 | 8LK3012-0AA00 | 8LK6035-3AA40 | 8LK3011-8AA83 | 8LK3011-8AA86 | 8LK3012-0AA16 |
| 8LK3011-6AA56 | 8LK6034-2AA65 | 8LK3011-6AA61 | 8LK6034-2AA42 | 8LK3011-6AA44 | 8LK3011-6AA50 | 8LK3011-6AA60 + 8LK3011-8AA38 |
| 8LK3013-5AA56 | 8LK6035-2AA27 | 8LK3011-6AA61 | 8LK6035-2AA33 | 8LK3011-6AA44 | 8LK3011-6AA50 | 8LK3012-0AA32 |
| 8LK3013-5AA63 | 8LK6035-2AA67 | 8LK3012-0AA00 | 8LK6035-4AA78 | 8LK3011-8AA83 | 8LK3011-8AA88 | 8LK3012-0AA32 |
| 8LK3011-6AA56 | 8LK6034-2AA65 | 8LK3011-6AA61 | 8LK6034-2AA42 | 8LK3011-6AA44 | 8LK3011-6AA52 | 8LK3011-6AA60 + 8LK3011-8AA38 |
| 8LK3013-5AA56 | 8LK6035-2AA27 | 8LK3011-6AA61 | 8LK6035-2AA33 | 8LK3011-6AA44 | 8LK3011-6AA52 | 8LK3012-0AA16 |
| 8LK3013-5AA63 | 8LK6035-2AA67 | 8LK3012-0AA00 | 8LK6035-4AA78 | 8LK3011-8AA83 | 8LK3011-8AA86 | 8LK3012-0AA16 |



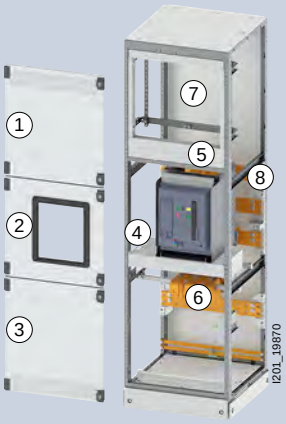
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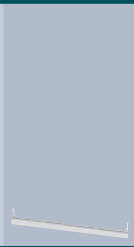


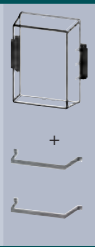
# Section expansion

## Incoming feeder panels, 4-pole




### IP54






| Cable connection | Size | $I_n$ | Width | ❶ Compartment doors at top [1] | Door strut | ❷ Compartment doors 3W [1] | Plexiglas cover + Fixing element | ❸ Compartment doors at bottom [1] | Sealing frame |
|---|---|---|---|---|---|---|---|---|---|
| **Fixed-mounted** | | | | | | | | | |
| At bottom | 0 | 1250 A | 400 mm | 8LK2067-4AA08 | 2 × 8LK3011-6AA57 | 8LK2060-4AA57 | + 3WA9111-0AP03 + 8LK2000-0AJ65 | 8LK2070-4AA22 | 8LK2197-4AD44 |
| | 1 | 2000 A | 600 mm | 8LK2067-6AA08 | 8LK3011-6AA58 | 8LK2060-6AA61 | + 3WA9111-0AP03 | 8LK2070-6AA24 | 8LK2197-6AC65 |
| | 2 | 3200 A | 800 mm | 8LK2067-8AA12 | 8LK3011-8AA82 | 8LK2060-8AA42 | + 3WA9111-0AP03 | 8LK2070-8AA43 | 8LK2197-8AD25 |
| At top | 0 | 1250 A | 400 mm | 8LK2067-4AA08 | 2 × 8LK3011-6AA57 | 8LK2060-4AA57 | + 3WA9111-0AP03 + 8LK2000-0AJ65 | 8LK2070-4AA22 | 8LK2197-4AD44 |
| | 1 | 2000 A | 600 mm | 8LK2067-6AA08 | 8LK3011-6AA58 | 8LK2060-6AA61 | + 3WA9111-0AP03 | 8LK2070-6AA24 | 8LK2197-6AC65 |
| | 2 | 3200 A | 800 mm | 8LK2067-8AA12 | 8LK3011-8AA82 | 8LK2060-8AA42 | + 3WA9111-0AP03 | 8LK2070-8AA43 | 8LK2197-8AD25 |
| **Withdrawable** | | | | | | | | | |
| At bottom | 0 | 1250 A | 600 mm | 8LK2067-6AA08 | 2 × 8LK3011-6AA58 | 8LK2060-6AA53 | + 3WA9111-0AP03 + 8LK2000-0AJ65 | 8LK2070-6AA24 | 8LK2197-6AC65 |
| | 1 | 2000 A | 600 mm | 8LK2067-6AA08 | 8LK3011-6AA58 | 8LK2060-6AA61 | + 3WA9111-0AP03 | 8LK2070-6AA24 | 8LK2197-6AC65 |
| | 2 | 3200 A | 800 mm | 8LK2067-8AA12 | 8LK3011-8AA82 | 8LK2060-8AA42 | + 3WA9111-0AP03 | 8LK2070-8AA43 | 8LK2197-8AD25 |
| At top | 0 | 1250 A | 600 mm | 8LK2067-6AA08 | 2 × 8LK3011-6AA58 | 8LK2060-6AA53 | + 3WA9111-0AP03 + 8LK2000-0AJ65 | 8LK2070-6AA24 | 8LK2197-6AC65 |
| | 1 | 2000 A | 600 mm | 8LK2067-6AA08 | 8LK3011-6AA58 | 8LK2060-6AA61 | + 3WA9111-0AP03 | 8LK2070-6AA24 | 8LK2197-6AC65 |
| | 2 | 3200 A | 800 mm | 8LK2067-8AA12 | 8LK3011-8AA82 | 8LK2060-8AA42 | + 3WA9111-0AP03 | 8LK2070-8AA43 | 8LK2197-8AD25 |

[1] Without locking and hinge

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## Accessories

**Hinge**



| Version | Article No. |
|---|---|
| Ti-Grey | 8LK2000-0AH55 |

**Locking**







| Version | Article No. |
|---|---|
| Double-bit | 8LK2000-0AH58 |
| Handle | 8LK2000-0AH56 |
| Handle, lockable | 8LK2000-0AH61 |
| Inner door struts | 8LK2000-0AD15 |

**DIN rail overvoltage protection**



| Position | Article No. |
|---|---|
| Lateral overvoltage protection, see page 6/10 | 8LK6034-3AA10 |





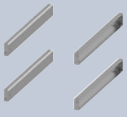












| ❹ Device compartment | | ❺ Busbar connection | ❻ Cable connection | | ❼ Auxiliary device compartments | | ❽ Uprights |
|---|---|---|---|---|---|---|---|
| Mounting plates | Separation | | Obstacle | Holders | 8GK adaptation | Cover frames | |
| 8LK5002-0AA38 | 8LK3011-6AA42 | 8LK6034-2AA63 | 8LK3011-6AA41 | 8LK6034-2AA34 | 8LK3011-6AA43 | 8LK3011-6AA46 | 8LK3011-6AA60 + 8LK3011-8AA38 |
| 8LK5002-1AA53 | 8LK3013-5AA55 | 8LK6035-3AA15 | 8LK3011-6AA61 | 8LK6035-3AA37 | 8LK3011-6AA44 | 8LK3011-6AA51 | 8LK3012-0AA32 |
| 8LK5002-1AA54 | 8LK3013-5AA62 | 8LK6035-3AA16 | 8LK3012-0AA00 | 8LK6035-3AA40 | 8LK3011-8AA83 | 8LK3011-8AA85 | 8LK3012-0AA32 |
| 8LK5002-0AA38 | 8LK3011-6AA42 | 8LK6034-2AA63 | 8LK3011-6AA41 | 8LK6034-2AA34 | 8LK3011-6AA43 | 8LK3011-6AA48 | 8LK3011-6AA60 + 8LK3011-8AA38 |
| 8LK5002-1AA53 | 8LK3013-5AA55 | 8LK6035-3AA15 | 8LK3011-6AA61 | 8LK6035-3AA37 | 8LK3011-6AA44 | 8LK3011-6AA53 | 8LK3012-0AA16 |
| 8LK5002-1AA54 | 8LK3013-5AA62 | 8LK6035-3AA16 | 8LK3012-0AA00 | 8LK6035-3AA40 | 8LK3011-8AA83 | 8LK3011-8AA87 | 8LK3012-0AA16 |
| 8LK5002-0AA41 | 8LK3011-6AA56 | 8LK6034-2AA65 | 8LK3011-6AA61 | 8LK6034-2AA42 | 8LK3011-6AA44 | 8LK3011-6AA51 | 8LK3011-6AA60 + 8LK3011-8AA38 |
| 8LK5002-1AA53 | 8LK3013-5AA56 | 8LK6035-2AA27 | 8LK3011-6AA61 | 8LK6035-2AA33 | 8LK3011-6AA44 | 8LK3011-6AA51 | 8LK3012-0AA32 |
| 8LK5002-1AA54 | 8LK3013-5AA63 | 8LK6035-2AA67 | 8LK3012-0AA00 | 8LK6035-4AA78 | 8LK3011-8AA83 | 8LK3011-8AA85 | 8LK3012-0AA32 |
| 8LK5002-0AA41 | 8LK3011-6AA56 | 8LK6034-2AA65 | 8LK3011-6AA61 | 8LK6034-2AA42 | 8LK3011-6AA44 | 8LK3011-6AA53 | 8LK3011-6AA60 + 8LK3011-8AA38 |
| 8LK5002-1AA53 | 8LK3013-5AA56 | 8LK6035-2AA27 | 8LK3011-6AA61 | 8LK6035-2AA33 | 8LK3011-6AA44 | 8LK3011-6AA53 | 8LK3012-0AA16 |
| 8LK5002-1AA54 | 8LK3013-5AA63 | 8LK6035-2AA67 | 8LK3012-0AA00 | 8LK6035-4AA78 | 8LK3011-8AA83 | 8LK3011-8AA87 | 8LK3012-0AA16 |

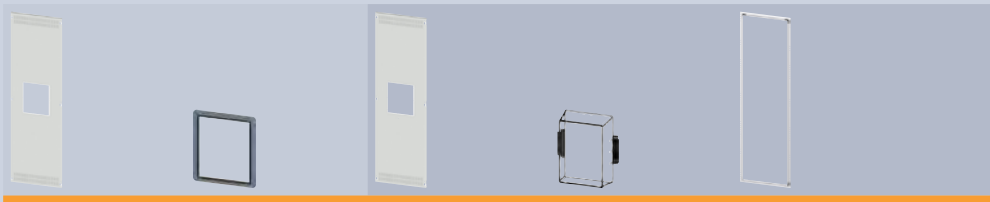
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# Section expansion

## Incoming feeder panels, doors new



Locking — Type A



Single locking

Rotary handle:
– Double-bit
– Flat cylinder

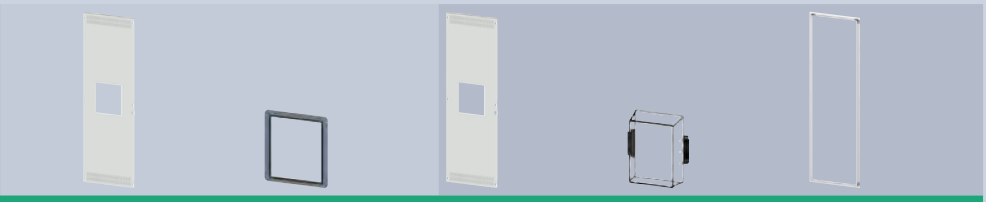
| ❶ Doors | Hinge | | Width | Double-bit IP30 | Dichtrahmen | Double-bit IP54 | Covers | Sealing frame |
|---|---|---|---|---|---|---|---|---|
| **Fixed-mounted** | | | | | | | | |
| 3-pole | Left | 0 | 400 mm | – | – | – | – | – |
| | | 1 | 600 mm | 8LK2197-6AD07 | 3WA9111-0AP01 | 8LK2197-6AD11 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| | | 2 | 600 mm | 8LK2197-6AD12 | 3WA9111-0AP01 | 8LK2197-6AD13 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| | | | 800 mm | 8LK2197-8AE87 | 3WA9111-0AP01 | 8LK2197-8AE88 | 3WA9111-0AP03 | 8LK2197-8AD24 |
| | Right | 0 | 400 mm | – | – | – | – | – |
| | | 1 | 600 mm | 8LK2197-6AD07 | 3WA9111-0AP01 | 8LK2197-6AD11 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| | | 2 | 600 mm | 8LK2197-6AD12 | 3WA9111-0AP01 | 8LK2197-6AD13 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| | | | 800 mm | 8LK2197-8AE87 | 3WA9111-0AP01 | 8LK2197-8AE88 | 3WA9111-0AP03 | 8LK2197-8AD24 |
| 4-pole | Left | 0 | 400 mm | – | – | – | – | – |
| | | 1 | 600 mm | 8LK2197-6AD07 | 3WA9111-0AP01 | 8LK2197-6AD11 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| | | 2 | 800 mm | 8LK2197-8AE87 | 3WA9111-0AP01 | 8LK2197-8AE88 | 3WA9111-0AP03 | 8LK2197-8AD24 |
| | Right | 0 | 400 mm | – | – | – | – | – |
| | | 1 | 600 mm | 8LK2197-6AD07 | 3WA9111-0AP01 | 8LK2197-6AD11 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| | | 2 | 800 mm | 8LK2197-8AE87 | 3WA9111-0AP01 | 8LK2197-8AE88 | 3WA9111-0AP03 | 8LK2197-8AD24 |
| **Withdrawable** | | | | | | | | |
| 3-pole | Links | 0 | 400 mm | – | – | – | – | – |
| | | 1 | 600 mm | 8LK2197-6AD07 | 3WA9111-0AP01 | 8LK2197-6AD11 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| | | 2 | 600 mm | 8LK2197-6AD12 | 3WA9111-0AP01 | 8LK2197-6AD13 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| | | | 800 mm | 8LK2197-8AE87 | 3WA9111-0AP01 | 8LK2197-8AE88 | 3WA9111-0AP03 | 8LK2197-8AD24 |
| | Right | 0 | 400 mm | – | – | – | – | – |
| | | 1 | 600 mm | 8LK2197-6AD07 | 3WA9111-0AP01 | 8LK2197-6AD11 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| | | 2 | 600 mm | 8LK2197-6AD12 | 3WA9111-0AP01 | 8LK2197-6AD13 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| | | | 800 mm | 8LK2197-8AE87 | 3WA9111-0AP01 | 8LK2197-8AE88 | 3WA9111-0AP03 | 8LK2197-8AD24 |
| 4-pole | Left | 0 | 600 mm | 8LK2197-6AD17 | 3VW9011-0AP01 | 8LK2197-6AD16 | 3WA9111-0AP03 + 8LK2000-0AJ65 | 8LK2197-6AC64 |
| | | 1 | 600 mm | 8LK2197-6AD07 | 3WA9111-0AP01 | 8LK2197-6AD11 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| | | 2 | 800 mm | 8LK2197-8AE87 | 3WA9111-0AP01 | 8LK2197-8AE88 | 3WA9111-0AP03 | 8LK2197-8AD24 |
| | Right | 0 | 600 mm | 8LK2197-6AD17 | 3VW9011-0AP01 | 8LK2197-6AD16 | 3WA9111-0AP03 + 8LK2000-0AJ65 | 8LK2197-6AC64 |
| | | 1 | 600 mm | 8LK2197-6AD07 | 3WA9111-0AP01 | 8LK2197-6AD11 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| | | 2 | 800 mm | 8LK2197-8AE87 | 3WA9111-0AP01 | 8LK2197-8AE88 | 3WA9111-0AP03 | 8LK2197-8AD24 |
| **❷ Hinge** | | | | | | | | |
|  | Ti-Grey | | | 3 x 8LK2000-0AH55 | – | 3 x 8LK2000-0AH55 | – | – |
| **❸ Single locking** | | | | | | | | |
|  | Handle | | | 8LK2000-0AH61 | – | 8LK2000-0AH61 | – | – |
| | Handle, lockable | | | 8LK2000-0AH58 | – | 8LK2000-0AH58 | – | – |
|  | Double-bit | | | 8LK2000-0AH58 | – | 8LK2000-0AH58 | – | – |
| **❹ Central locking** | | | | | | | | |
|  | Rotary handle | | | 8LK2000-0AH57 | – | 8LK2000-0AH57 | – | – |
| | Rotary handle double-bit | | | 8LK2000-0AH60 | – | 8LK2000-0AH60 | – | – |
| | Rotary handle, flat cylinder | | | 8LK2000-0AH62 | – | 8LK2000-0AH62 | – | – |
| | Rotary handle for profile semicylinder | | | | – | | – | – |
|  | Profile semicylinder | | | | – | | – | – |
|  | Locking rods | | | 8LK2100-0AA06 | – | 8LK2100-0AA06 | – | – |

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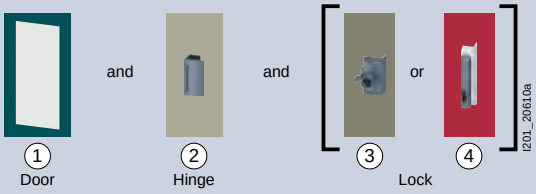
**Type B**



Rotary handle:
– Profile semicylinder

| Rotary handle IP30 | Sealing frame | Rotary handle IP54 | Covers | Sealing frame |
|---|---|---|---|---|
| | | | | |
| – | – | – | – | – |
| 8LK2197-6AD08 | 3WA9111-0AP01 | – | 3WA9111-0AP03 | – |
| 8LK2197-6AD14 | 3WA9111-0AP01 | 8LK2197-6AD27 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| 8LK2197-8AF00 | 3WA9111-0AP01 | 8LK2197-8AF02 | 3WA9111-0AP03 | 8LK2197-8AD24 |
| – | – | – | – | – |
| 8LK2197-6AD06 | 3WA9111-0AP01 | 8LK2197-6AD10 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| 8LK2197-6AD15 | 3WA9111-0AP01 | 8LK2197-6AD28 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| 8LK2197-8AF01 | 3WA9111-0AP01 | 8LK2197-8AF03 | 3WA9111-0AP03 | 8LK2197-8AD24 |
| – | – | – | – | – |
| 8LK2197-6AD08 | 3WA9111-0AP01 | – | 3WA9111-0AP03 | – |
| 8LK2197-8AF00 | 3WA9111-0AP01 | 8LK2197-8AF02 | 3WA9111-0AP03 | 8LK2197-8AD24 |
| – | – | – | – | – |
| 8LK2197-6AD06 | 3WA9111-0AP01 | 8LK2197-6AD10 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| 8LK2197-8AF01 | 3WA9111-0AP01 | 8LK2197-8AF03 | 3WA9111-0AP03 | 8LK2197-8AD24 |
| | | | | |
| – | – | – | – | – |
| 8LK2197-6AD08 | 3WA9111-0AP01 | – | 3WA9111-0AP03 | – |
| 8LK2197-6AD14 | 3WA9111-0AP01 | 8LK2197-6AD27 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| 8LK2197-8AF00 | 3WA9111-0AP01 | 8LK2197-8AF02 | 3WA9111-0AP03 | 8LK2197-8AD24 |
| – | – | – | – | – |
| 8LK2197-6AD06 | 3WA9111-0AP01 | 8LK2197-6AD10 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| 8LK2197-6AD15 | 3WA9111-0AP01 | 8LK2197-6AD28 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| 8LK2197-8AF01 | 3WA9111-0AP01 | 8LK2197-8AF03 | 3WA9111-0AP03 | 8LK2197-8AD24 |
| 8LK2197-6AD20 | 3VW9011-0AP01 | – | – | – |
| 8LK2197-6AD08 | 3WA9111-0AP01 | – | – | – |
| 8LK2197-8AF00 | 3WA9111-0AP01 | 8LK2197-8AF02 | 3WA9111-0AP03 | 8LK2197-8AD24 |
| 8LK2197-6AD21 | 3VW9011-0AP01 | 8LK2197-6AD18 | 3WA9111-0AP03 + 8LK2000-0AJ65 | 8LK2197-6AC64 |
| 8LK2197-6AD06 | 3WA9111-0AP01 | 8LK2197-6AD10 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| 8LK2197-8AF01 | 3WA9111-0AP01 | 8LK2197-8AF03 | 3WA9111-0AP03 | 8LK2197-8AD24 |
| | | | | |
| 3 x 8LK2000-0AH55 | – | 3 x 8LK2000-0AH55 | – | – |
| | | | | |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| | | | | |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| 8LK2000-0AH63 | – | 8LK2000-0AH63 | – | – |
| 8PQ9400-0BA26 | – | 8PQ9400-0BA26 | – | – |
| 8LK2100-0AA07 | – | 8LK2100-0AA07 | – | – |

## Ordering guide




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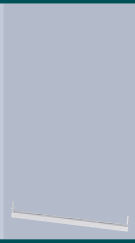
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# Section expansion

## Coupling panels











| Degree of protection | Size | $I_n$ | Type of mounting | Width | ❶ Compartment doors at top [1] | Door strut | ❷ Compartment doors 3W [1] | Sealing frame | Plexiglas cover | ❸ Compartment doors at bottom [1] |
|---|---|---|---|---|---|---|---|---|---|---|
| **3-pole** | | | | | | | | | | |
| IP30 | 1 | 2000 A | Fixed-mounted | 600 mm | 8LK2067-6AA07 | 8LK3011-6AA58 | 8LK2060-4AA66 | + 3WA9111-0AP01 | – | 8LK2070-6AA23 |
| | | | With-drawable | 600 mm | 8LK2067-6AA07 | 8LK3011-6AA58 | 8LK2060-4AA66 | + 3WA9111-0AP01 | – | 8LK2070-6AA23 |
| IP54 | 1 | 2000 A | Fixed-mounted | 600 mm | 8LK2067-6AA08 | 8LK3011-6AA58 | 8LK2060-6AA67 | – | + 3WA9111-0AP03 | 8LK2070-6AA24 |
| | | | With-drawable | 600 mm | 8LK2067-6AA08 | 8LK3011-6AA58 | 8LK2060-6AA67 | – | + 3WA9111-0AP03 | 8LK2070-6AA24 |
| **4-pole** | | | | | | | | | | |
| IP30 | 1 | 2000 A | Fixed-mounted | 600 mm | 8LK2067-6AA07 | 8LK3011-6AA58 | 8LK2060-4AA66 | + 3WA9111-0AP01 | – | 8LK2070-6AA23 |
| | | | With-drawable | 600 mm | 8LK2067-6AA07 | 8LK3011-6AA58 | 8LK2060-4AA66 | + 3WA9111-0AP01 | – | 8LK2070-6AA23 |
| IP54 | 1 | 2000 A | Fixed-mounted | 600 mm | 8LK2067-6AA08 | 8LK3011-6AA58 | 8LK2060-6AA67 | – | + 3WA9111-0AP03 | 8LK2070-6AA24 |
| | | | With-drawable | 600 mm | 8LK2067-6AA08 | 8LK3011-6AA58 | 8LK2060-6AA67 | – | + 3WA9111-0AP03 | 8LK2070-6AA24 |

[1] Without locking and hinge

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System overview, page 15/20

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## Accessories

**Hinge**



| Version | Article No. |
|---|---|
| Ti-Grey | 8LK2000-0AH55 |

**Locking**

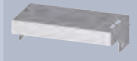






| Version | Article No. |
|---|---|
| Double-bit | 8LK2000-0AH58 |
| Handle | 8LK2000-0AH56 |
| Handle, lockable | 8LK2000-0AH61 |
| Inner door struts | 8LK2000-0AD15 |





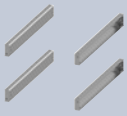












| Sealing frame | ❹ Device compartment | | ❺ Busbar connection | | ❻ Auxiliary device compartments | | ❼ Uprights |
|---|---|---|---|---|---|---|---|
| IP54 | Mounting plates | Separation | L1 - L3 | N | 8GK adaptation | Cover frames | |
| – | 8LK5002-1AA53 | 8LK3013-5AA66 | 8LK6035-4AA33 | – | 2 × 8LK3011-6AA44 | 8LK3012-0AA25 | 8LK3012-0AA23 |
| – | 8LK5002-1AA53 | 8LK3013-5AA65 | 8LK6035-4AA32 | – | 2 × 8LK3011-6AA44 | 8LK3012-0AA25 | 8LK3012-0AA23 |
| 8LK2197-6AC65 | 8LK5002-1AA53 | 8LK3013-5AA66 | 8LK6035-4AA33 | – | 2 × 8LK3011-6AA44 | 8LK3012-0AA26 | 8LK3012-0AA23 |
| 8LK2197-6AC65 | 8LK5002-1AA53 | 8LK3013-5AA65 | 8LK6035-4AA32 | – | 2 × 8LK3011-6AA44 | 8LK3012-0AA26 | 8LK3012-0AA23 |
| – | 8LK5002-1AA53 | 8LK3013-5AA66 | 8LK6035-4AA33 | 8LK6035-4AA35 | 2 × 8LK3011-6AA44 | 8LK3012-0AA25 | 8LK3012-0AA23 |
| – | 8LK5002-1AA53 | 8LK3013-5AA67 | 8LK6035-4AA32 | 8LK6035-4AA34 | 2 × 8LK3011-6AA44 | 8LK3012-0AA25 | 8LK3012-0AA23 |
| 8LK2197-6AC65 | 8LK5002-1AA53 | 8LK3013-5AA66 | 8LK6035-4AA33 | 8LK6035-4AA35 | 2 × 8LK3011-6AA44 | 8LK3012-0AA26 | 8LK3012-0AA23 |
| 8LK2197-6AC65 | 8LK5002-1AA53 | 8LK3013-5AA67 | 8LK6035-4AA32 | 8LK6035-4AA34 | 2 × 8LK3011-6AA44 | 8LK3012-0AA26 | 8LK3012-0AA23 |

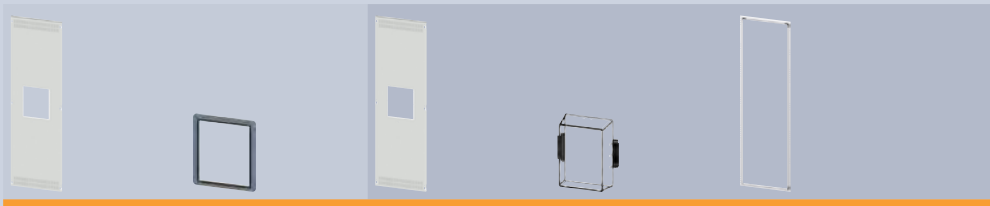


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# Section expansion

## Coupling panels, doors new



**Locking** — **Type A**



Single locking

Rotary handle:
– Double-bit
– Flat cylinder

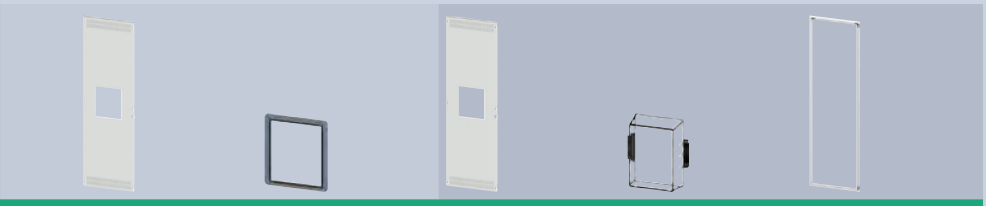
| ❶ Doors | Hinge | | Width | Double-bit IP30 | Sealing frame | Double-bit IP54 | Covers | Sealing frame |
|---|---|---|---|---|---|---|---|---|
| **Festeinbau** | | | | | | | | |
| 3-pole | Left | 1 | 600 mm | 8LK2197-6AD22 | 3WA9111-0AP01 | 8LK2197-6AD25 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| | Right | 1 | 600 mm | 8LK2197-6AD22 | 3WA9111-0AP01 | 8LK2197-6AD25 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| 4-pole | Left | 1 | 600 mm | 8LK2197-6AD22 | 3WA9111-0AP01 | 8LK2197-6AD25 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| | Right | 1 | 600 mm | 8LK2197-6AD22 | 3WA9111-0AP01 | 8LK2197-6AD25 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| **Einschubtechnik** | | | | | | | | |
| 3-pole | Left | 1 | 600 mm | 8LK2197-6AD22 | 3WA9111-0AP01 | 8LK2197-6AD25 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| | Right | 1 | 600 mm | 8LK2197-6AD22 | 3WA9111-0AP01 | 8LK2197-6AD25 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| 4-pole | Left | 1 | 600 mm | 8LK2197-6AD22 | 3WA9111-0AP01 | 8LK2197-6AD25 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| | Right | 1 | 600 mm | 8LK2197-6AD22 | 3WA9111-0AP01 | 8LK2197-6AD25 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| **❷ Hinge** | | | | | | | | |
|  | Ti-Grey | | | 3 x 8LK2000-0AH55 | – | 3 x 8LK2000-0AH55 | – | – |
| **❸ Single locking** | | | | | | | | |
|  | Handle | | | 8LK2000-0AH61 | – | 8LK2000-0AH61 | – | – |
| | Handle, lockable | | | 8LK2000-0AH58 | – | 8LK2000-0AH58 | – | |
|  | Double-bit | | | 8LK2000-0AH58 | – | 8LK2000-0AH58 | – | – |
| **❹ Central locking** | | | | | | | | |
|  | Rotary handle | | | 8LK2000-0AH57 | – | 8LK2000-0AH57 | – | – |
| | Rotary handle, double-bit | | | 8LK2000-0AH60 | – | 8LK2000-0AH60 | – | – |
| | Rotary handle, flat cylinder | | | 8LK2000-0AH62 | – | 8LK2000-0AH62 | – | – |
| | Rotary handle for profile semicylinder | | | | – | | – | – |
|  | Profile semicylinder | | | | – | | – | – |
|  | Locking rods | | | 8LK2100-0AA06 | – | 8LK2100-0AA06 | – | – |

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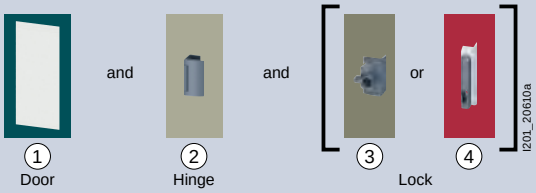
**Type B**



Rotary handle:
– Profile semicylinder

| Rotary handle IP30 | Sealing frame | Rotary handle IP54 | Covers | Sealing frame |
|---|---|---|---|---|
| | | | | |
| 8LK2197-6AD23 | 3WA9111-0AP01 | – | – | – |
| 8LK2197-6AD24 | 3WA9111-0AP01 | 8LK2197-6AD26 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| 8LK2197-6AD23 | 3WA9111-0AP01 | – | – | – |
| 8LK2197-6AD24 | 3WA9111-0AP01 | 8LK2197-6AD26 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| | | | | |
| 8LK2197-6AD23 | 3WA9111-0AP01 | – | – | – |
| 8LK2197-6AD24 | 3WA9111-0AP01 | 8LK2197-6AD26 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| 8LK2197-6AD23 | 3WA9111-0AP01 | – | – | – |
| 8LK2197-6AD24 | 3WA9111-0AP01 | 8LK2197-6AD26 | 3WA9111-0AP03 | 8LK2197-6AC64 |
| | | | | |
| 3 x 8LK2000-0AH55 | – | 3 x 8LK2000-0AH55 | – | – |
| | | | | |
| – | – | – | – | – |
| – | – | – | – | |
| – | – | – | – | – |
| | | | | |
| – | – | – | – | – |
| – | – | – | – | – |
| – | – | – | – | – |
| 8LK2000-0AH63 | – | 8LK2000-0AH63 | – | – |
| 8PQ9400-0BA26 | – | 8PQ9400-0BA26 | – | – |
| 8LK2100-0AA07 | – | 8LK2100-0AA07 | – | – |

## Ordering guide



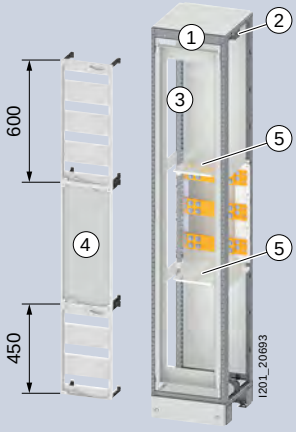

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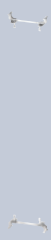
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# Section expansion

## Transformer metering section new







| Depth | Width | ❶ Cover frames | Uprights<br>Depth 600 mm | ❷ 8GK adaptation | ❸ Longitudinal stays<br>Height 1800 mm | ❹ Front covers with inspection window<br>Height 600 mm |
|---|---|---|---|---|---|---|
| 400 mm | 400 mm | 8LK3013-5AA34 | – | 8LK3013-5AA25 | 8GK4851-4KK00 | 8GK4500-4KK12 |
| 600 mm | 400 mm | 8LK3013-5AA34 | 8LK3011-8AA38 | 8LK3013-5AA25 | 8GK4851-4KK00 | 8GK4500-4KK12 |

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## Accessories

**Copper plate**



| Busbar cross-section (mm) | Article No. |
|---|---|
| 2 × 80 × 10 mm<br>2 × 100 × 10 mm | 8LK4003-3AA64 |

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| ❻ Separation<br>Compartment |
| --- |
| 2 x 8LK3013-5AA35 |
| 2 x 8LK3013-3AA36 |

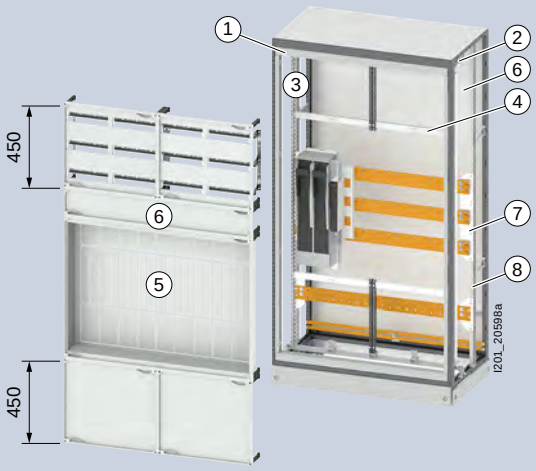


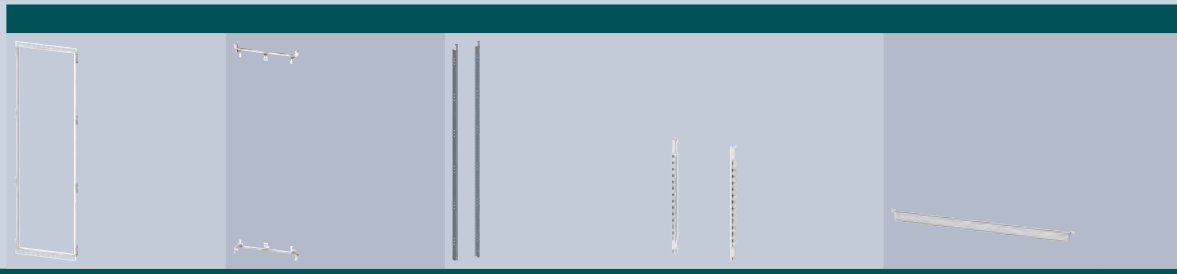
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# Section expansion

## 3NJ4 in-line design



| Depth | Width | Quantity NH1 | ❶ Cover frames | ❷ 8GK adaptation | ❸ Longitudinal stays Height 1800 mm | Height 450 mm | ❹ Crossbars |
|---|---|---|---|---|---|---|---|
| 400 mm | 600 mm | 4 | 8LK3011-5AA86 | 8LK3011-6AA32 | 8GK4853-8KK02 | – | – |
| | 850 mm | 7 | 8LK3011-5AA87 | 8LK3011-6AA33 | 8GK4853-8KK02 | – | – |
| | 1100 mm | 9 | 8LK3011-5AA88 | 8LK3011-6AA34 | 8GK4853-8KK02 | 8GK4851-3KK00 | 8GK4853-0KK40 |
| 600 mm | 600 mm | 4 | 8LK3011-5AA86 | 8LK3011-6AA32 | 8GK4853-8KK02 | – | – |
| | 850 mm | 7 | 8LK3011-5AA87 | 8LK3011-6AA33 | 8GK4853-8KK02 | – | – |
| | 1100 mm | 9 | 8LK3011-5AA88 | 8LK3011-6AA34 | 8GK4853-8KK02 | 8GK4851-3KK00 | 8GK4853-0KK40 |

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## Accessories

**NH00 installation**



| Version | Article No. |
|---|---|
| Adapter 185 mm | 3NJ4918-0DA02 |



| Version | Article No. |
|---|---|
| Covers | 3NJ4912-1DA02 |

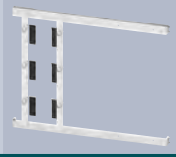
**Blanking covers for ❺**



| Version | Article No. |
|---|---|
| NH00: 50 mm | 3NJ4912-2AA00 |
| NH1-3: 100 mm | 3NJ4912-2BA00 |

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| | | | | |
|---|---|---|---|---|
|  |  |  |  |  |
| **❺ Covers** | **❻ Front cover**<br>**Height 150 mm** | **❼ Busbar supports** | **Set of supports**<br>**Transformer measurement** | **❽ Uprights** |
| 8LK5002-0AA30 | 8LK5002-2AA21 | 8LK4002-6AA38 | 8LK4002-8AA61 | – |
| 8LK5002-0AA31 | 8LK5002-2AA22 | 8LK4002-6AA38 | 8LK4002-8AA62 | – |
| 8LK5002-0AA37 | 8LK5002-2AA04 | 8LK4002-6AA38 | 8LK4002-8AA63 | – |
| 8LK5002-0AA30 | 8LK5002-2AA21 | 8LK4002-6AA38 | 8LK4002-8AA61 | 8LK3011-8AA38 |
| 8LK5002-0AA31 | 8LK5002-2AA22 | 8LK4002-6AA38 | 8LK4002-8AA62 | 8LK3011-8AA38 |
| 8LK5002-0AA37 | 8LK5002-2AA04 | 8LK4002-6AA38 | 8LK4002-8AA63 | 8LK3011-8AA38 |

**See 3NJ4 fuse switch disconnectors** from page 8/96
**See LV HRC fuse links** from page 7/36

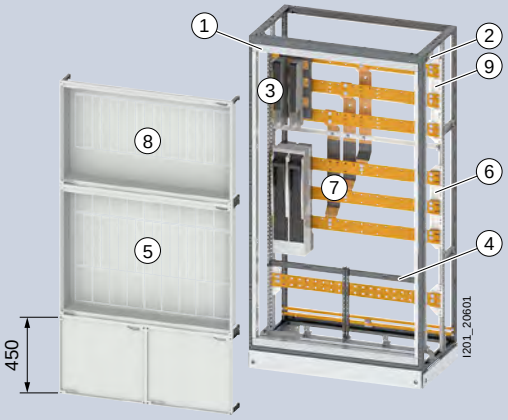


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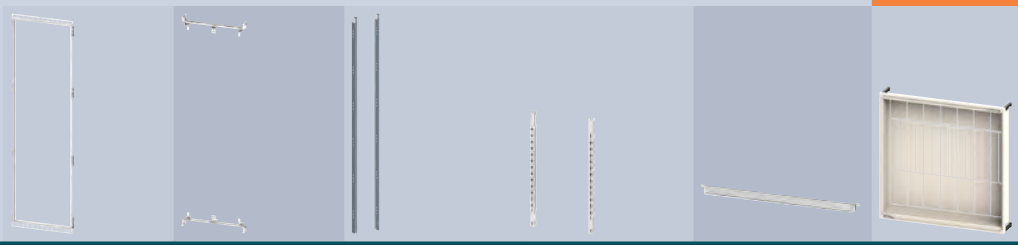
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# Section expansion

## 3NJ4 in-line design with second level




Position: Center



| Depth | Width | Quantity NH1 to ❺ | NH00 to ❽ | ❶ Cover frames | ❷ 8GK adaptation | ❸ Longitudinal stays Height 1800 mm | Height 450 mm | ❹ Crossbars | ❺ Covers |
|---|---|---|---|---|---|---|---|---|---|
| 400 mm | 600 mm | 3 | 8 | 8LK3011-5AA86 | 8LK3011-6AA32 | 8GK4853-8KK02 | – | – | 8LK5002-0AA30 |
| | 850 mm | 6 | 14 | 8LK3011-5AA87 | 8LK3011-6AA33 | 8GK4853-8KK02 | – | – | 8LK5002-0AA31 |
| | 1100 mm | 7 | 18 | 8LK3011-5AA88 | 8LK3011-6AA34 | 8GK4853-8KK02 | 8GK4851-3KK00 | 8GK4853-0KK40 | 8LK5002-0AA37 |
| 600 mm | 600 mm | 3 | 8 | 8LK3011-5AA86 | 8LK3011-6AA32 | 8GK4853-8KK02 | – | – | 8LK5002-0AA30 |
| | 850 mm | 6 | 14 | 8LK3011-5AA87 | 8LK3011-6AA33 | 8GK4853-8KK02 | – | – | 8LK5002-0AA31 |
| | 1100 mm | 7 | 18 | 8LK3011-5AA88 | 8LK3011-6AA34 | 8GK4853-8KK02 | 8GK4851-3KK00 | 8GK4853-0KK40 | 8LK5002-0AA37 |

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## Accessories

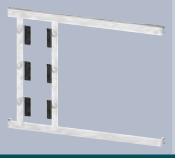
**NH00 installation**

| | Version | Article No. |
|---|---|---|
|  | Adapter 185 mm | 3NJ4918-0DA02 |
|  | Covers | 3NJ4912-1DA02 |



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| | | | | | At top | | |
|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |
| ❻ Busbar supports | Set of supports Transformer measurement | ❼ Cable duct | | | ❽ Covers | ❾ Busbar supports | ❿ Uprights |
| | | center | outside | rear | NH00 new | at top | |
| 8LK4002-6AA38 | 8LK4002-8AA61 | – | 8LK5002-0AA36 | – | 8LK5002-2AA25 | 8LK4002-8AA82 | – |
| 8LK4002-6AA38 | 8LK4002-8AA62 | – | 8LK5002-0AA34 | – | 8LK5002-2AA26 | 8LK4002-8AA83 | – |
| 8LK4002-6AA38 | 8LK4002-8AA63 | 8LK5002-0AA35 | 8LK5002-0AA36 | – | 8LK5002-2AA27 | 8LK4002-8AA84 | – |
| 8LK4002-6AA38 | 8LK4002-8AA61 | – | – | 8LK5002-2AA17 | 8LK5002-2AA25 | 8LK4002-8AA82 | 8LK3011-8AA38 |
| 8LK4002-6AA38 | 8LK4002-8AA62 | – | – | 8LK5002-2AA20 | 8LK5002-2AA26 | 8LK4002-8AA83 | 8LK3011-8AA38 |
| 8LK4002-6AA38 | 8LK4002-8AA63 | – | – | 8LK5002-2AA18 | 8LK5002-2AA27 | 8LK4002-8AA84 | 8LK3011-8AA38 |

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## Accessories

**Blanking covers**





| Installation | Version | Article No. |
|---|---|---|
| At top ❽ | NH00: 50 mm | 3NJ4912-2CA00 |
| Center ❺ | NH00: 50 mm | 3NJ4912-2AA00 |
| | NH1-3: 100 mm | 3NJ4912-2BA00 |

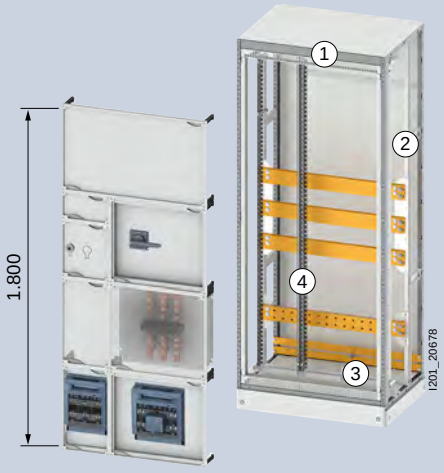
**See 3NJ4 fuse switch disconnectors 3NJ4 from page 8/96**
**See LV HRC fuse links from page 7/36**

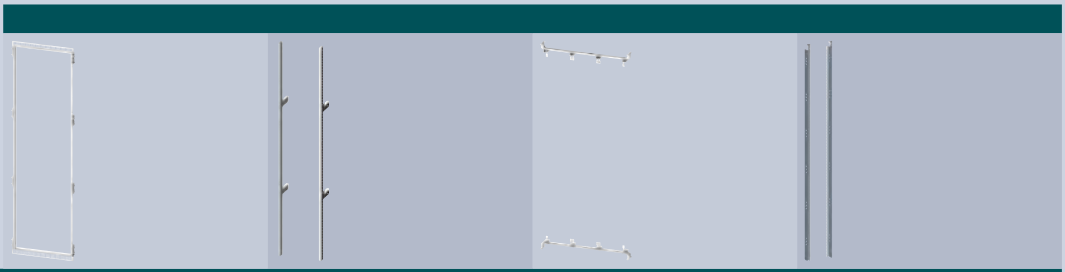
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# Section expansion

## ALPHA 8GK modular installation system



| Depth | Width | ❶ Cover frames | ❷ Uprights | ❸ 8GK adaptation | ❹ Longitudinal stays Height 1800 mm |
|---|---|---|---|---|---|
| 400 mm | 350 mm | 8LK3011-5AA85 | – | 8LK3011-6AA31 | 1 × 8GK4853-8KK02 |
| | 600 mm | 8LK3011-5AA86 | – | 8LK3011-6AA32 | 2 × 8GK4853-8KK02 |
| | 850 mm | 8LK3011-5AA87 | – | 8LK3011-6AA33 | 3 × 8GK4853-8KK02 |
| | 1100 mm | 8LK3011-5AA88 | – | 8LK3011-6AA34 | 4 × 8GK4853-8KK02 |
| 600 mm | 350 mm | 8LK3011-5AA85 | 8LK3011-8AA38 | 8LK3011-6AA31 | 1 × 8GK4853-8KK02 |
| | 600 mm | 8LK3011-5AA86 | 8LK3011-8AA38 | 8LK3011-6AA32 | 2 × 8GK4853-8KK02 |
| | 850 mm | 8LK3011-5AA87 | 8LK3011-8AA38 | 8LK3011-6AA33 | 3 × 8GK4853-8KK02 |
| | 1100 mm | 8LK3011-5AA88 | 8LK3011-8AA38 | 8LK3011-6AA34 | 4 × 8GK4853-8KK02 |

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## Accessories

**Cable clamping rail C30 × 15 mm**



- Mounting on longitudinal stays

| Width | Article No. |
|---|---|
| 250 mm | 8GK9911-0KK10 |
| 500 mm | 8GK9911-0KK20 |
| 750 mm | 8GK9911-0KK30 |
| 1000 mm | 8GK9911-0KK40 |
| 1250 mm | 8GK9911-0KK50 |

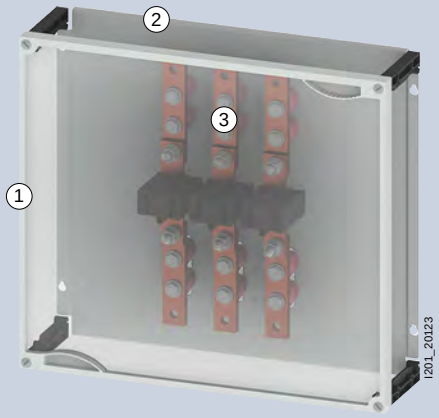
**See ALPHA 8GK assembly kits from page 15/218**

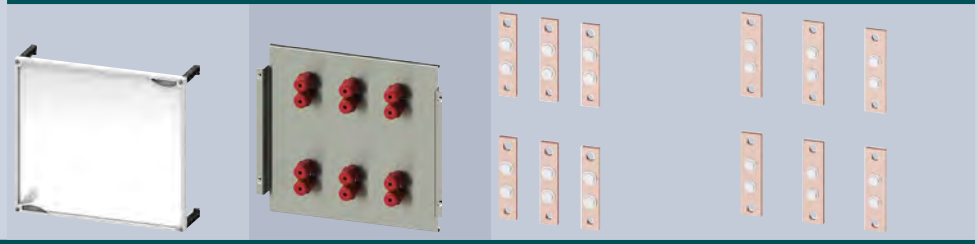


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## Transformer measurement



| Height | Width | $I_n$ | ❶ Transparent covers | ❷ Mounting plates | ❸ Connecting terminal 30 × 10 mm | 40 × 10 mm |
|---|---|---|---|---|---|---|
| 450 mm | 400 mm | 400 A | 8GK4500-3KK12 | 8LK5002-1AA55 | 8LK6035-3AA82 | 8LK6035-3AA83 |
| | 500 mm | 500 A | 8GK4500-3KK22 | 8LK5002-1AA56 | 8LK6035-3AA82 | 8LK6035-3AA83 |

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# Section expansion

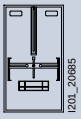
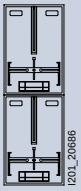
## Meter support plates new










| Counter | Terminal compartment: At top | | ❶ Terminal compartment: At top | | |
|---|---|---|---|---|---|
| | At top | At bottom | Front cover | DIN rails | Supports |
| 300 mm<br>Tariff switching device<br>  | 150 mm | 150 mm | 8GS4006-0 | 8GS4010-6 | 8GS4018-8 |
| | | 300 mm | 8GS4006-0 | 8GS4010-6 | 8GS4018-8 |
| | 300 mm | 150 mm | 8GS4006-5 | 8GS4010-6 | 8GS4018-8 |
| | | 300 mm | 8GS4006-5 | 8GS4010-6 | 8GS4018-8 |
| 450 mm<br>  | 150 mm | 150 mm | 8GS4006-0 | 8GS4010-6 | 8GS4018-8 |
| | | 300 mm | 8GS4006-0 | 8GS4010-6 | 8GS4018-8 |
| | 300 mm | 150 mm | 8GS4006-5 | 8GS4010-6 | 8GS4018-8 |
| | | 300 mm | 8GS4006-5 | 8GS4010-6 | 8GS4018-8 |
| 750 mm<br>  | 150 mm | 150 mm | 8GS4006-0 | 8GS4010-6 | 8GS4018-8 |
| | | 300 mm | 8GS4006-0 | 8GS4010-6 | 8GS4018-8 |
| | 300 mm | 150 mm | 8GS4006-5 | 8GS4010-6 | 8GS4018-8 |
| | | 300 mm | 8GS4006-5 | 8GS4010-6 | 8GS4018-8 |

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| ❷ Meter support plates | ❸ Terminal compartment: At bottom | | ❹ Seperation |
|---|---|---|---|
| | Front cover | Supports | |
| 8GS4007-7 | 8GS4006-0 | 8GS4018-8 | 2 x 8GK9302-2KK01 |
| 8GS4007-7 | 8GS4006-5 | 8GS4018-8 | 2 x 8GK9302-2KK01 |
| 8GS4007-7 | 8GS4006-0 | 8GS4018-8 | 2 x 8GK9302-2KK01 |
| 8GS4007-7 | 8GS4006-5 | 8GS4018-8 | 2 x 8GK9302-2KK01 |
| 8GS4007-4 | 8GS4006-0 | 8GS4018-8 | 2 x 8GK9302-3KK01 |
| 8GS4007-4 | 8GS4006-5 | 8GS4018-8 | 2 x 8GK9302-3KK01 |
| 8GS4007-4 | 8GS4006-0 | 8GS4018-8 | 2 x 8GK9302-3KK01 |
| 8GS4007-4 | 8GS4006-5 | 8GS4018-8 | 2 x 8GK9302-3KK01 |
| top: 8GS4007-5<br>bottom: 8GS4007-6 | 8GS4006-0 | 8GS4018-8 | 2 x 8GK9302-5KK01 |
| top: 8GS4007-5<br>bottom: 8GS4007-6 | 8GS4006-5 | 8GS4018-8 | 2 x 8GK9302-5KK01 |
| top: 8GS4007-5<br>bottom: 8GS4007-6 | 8GS4006-0 | 8GS4018-8 | 2 x 8GK9302-5KK01 |
| top: 8GS4007-5<br>bottom: 8GS4007-6 | 8GS4006-5 | 8GS4018-8 | 2 x 8GK9302-5KK01 |



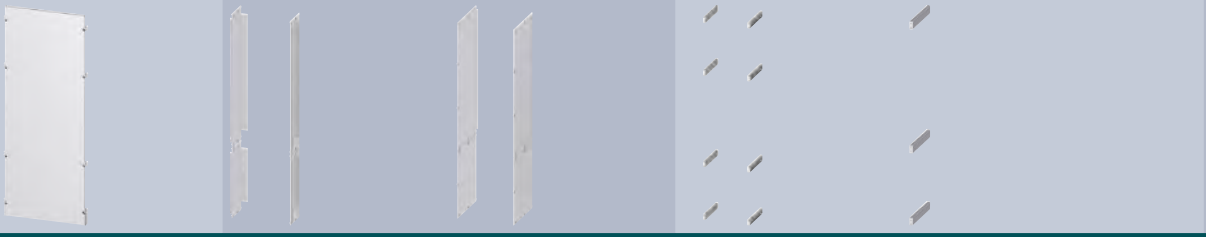
System overview, page 15/20

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# Section expansion

## Mounting plates



| Depth | Width | ❶ Mounting plates | ❷ Separation | | ❸ Uprights | |
|---|---|---|---|---|---|---|
| | | | with main busbar | without main busbar | with main busbar | without main busbar |
| 400 mm | 400 mm | 8LK3011-5AA30 | 8LK3011-5AA23 | 8LK3011-5AA35 | 8LK3011-5AA37 | 8LK3011-5AA36 |
| | 600 mm | 8LK3011-5AA31 | 8LK3011-5AA23 | 8LK3011-5AA35 | 8LK3011-5AA37 | 8LK3011-5AA36 |
| | 800 mm | 8LK3011-5AA32 | 8LK3011-5AA23 | 8LK3011-5AA35 | 8LK3011-5AA37 | 8LK3011-5AA36 |
| | 1100 mm | 8LK3011-5AA33 | 8LK3011-5AA23 | 8LK3011-5AA35 | 8LK3011-5AA37 | 8LK3011-5AA36 |
| 600 mm | 400 mm | 8LK3011-5AA30 | 8LK3011-5AA23 | 8LK3011-5AA35 | 8LK3013-5AA33 new | 8LK3013-5AA32 new |
| | 600 mm | 8LK3011-5AA31 | 8LK3011-5AA23 | 8LK3011-5AA35 | 8LK3013-5AA33 new | 8LK3013-5AA32 new |
| | 800 mm | 8LK3011-5AA32 | 8LK3011-5AA23 | 8LK3011-5AA35 | 8LK3013-5AA33 new | 8LK3013-5AA32 new |
| | 1100 mm | 8LK3011-5AA33 | 8LK3011-5AA23 | 8LK3011-5AA35 | 8LK3013-5AA33 new | 8LK3013-5AA32 new |



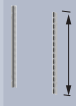


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| ❹ Cable brackets C40 × 22.5 mm | ❺ Inner door | Inner door struts |
|---|---|---|
| 8LK3001-6AA60 | – | – |
| 8LK3001-6AA61 | 8LK3011-6AA37 | 2 × 8LK2000-0AD16 |
| 8LK3001-6AA62 | 8LK3011-6AA38 | 2 × 8LK2000-0AD16 |
| 8LK3011-6AA40 | – | – |
| 8LK3001-6AA60 | – | – |
| 8LK3001-6AA61 | 8LK3011-6AA37 | 2 × 8LK2000-0AD16 |
| 8LK3001-6AA62 | 8LK3011-6AA38 | 2 × 8LK2000-0AD16 |
| 8LK3011-6AA40 | – | – |

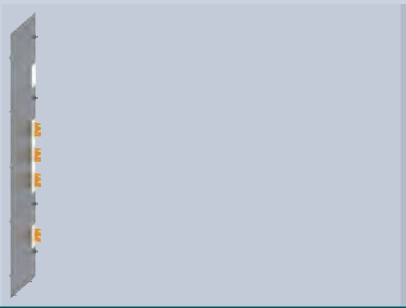


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# Internal separation new

## Barriers



| Depth | Busbar | straight | With changeover – mounting on left |
|---|---|---|---|
| 400 mm | rear | 8LK3013-5AA26 | – |
| 600 mm | rear | 8LK3013-5AA31 | – |
| | front | 8LK3013-5AA27 | – |
| 600 mm | 600 to 400 mm | – | 8LK3013-5AA28 |
| | 400 to 600 mm | – | 8LK3013-5AA30 |





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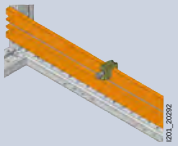



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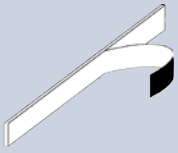

# Accessories

## Circular conductors



| Busbar thickness | Ø Cable | Scope of supply | Article No. |
|---|---|---|---|
| 5 mm | 1.5 ... 16 mm² | 100 units | 8US1921-2AA00 |
| | 1.5 ... 35 mm² | 50 units | 8US1921-2AB00 |
| | 16 ... 70 mm² | 50 units | 8US1921-2AC00 |
| | 16 ... 120 mm² | 50 units | 8US1921-2AD00 |
| 10 mm | 1.5 ... 16 mm² | 100 units | 8US1921-2BA00 |
| | 1.5 ... 35 mm² | 50 units | 8US1921-2BB00 |
| | 16 ... 70 mm² | 50 units | 8US1921-2BC00 |
| | 16 ... 120 mm² | 50 units | 8US1921-2BD00 |

## Roll material



| Application | Version | Scope of supply | Article No. |
|---|---|---|---|
| Sealing tape – base | Width 30 mm, height 0.05 mm | 1 roll = 228 m | 8LK1000-0AA78 |
| Sealing foil – base of frame | Width 19 mm | 1 roll = 50 m | 8LK2000-0AJ71 |
| Sealing tape – cable entry at top | Width 10 mm, height 4 mm | 1 roll = 15 m | 8LK2000-0AJ72 |
| Circuit breaker insulation | Width 35 mm | 1 roll = 15 m | 8LK6036-2AA14 |

## Cubicle keys



| Version | Scope of supply | Article No. |
|---|---|---|
| 3 mm double bit | 10 units | 8PQ9400-0BA12 |

## Self-tapping screws – Frame




| Type | Version | Scope of supply | Article No. |
|---|---|---|---|
| Cylinder-head screws DIN 7500-PE, ST, zinc-plated | M6 × 10 mm | 100 units | 8PQ9500-0BA34 |
| | M6 × 16 mm | 100 units | 8PQ9500-0BA32 |
| | M6 × 20 mm | 100 units | 8PQ9500-0BA31 |
| Countersunk screws DIN 7500-QE, ST, zinc-plated | M6 × 12 mm | 100 units | 8PQ9500-1BA07 |

## Mounting accessories




| Version | Length | Scope of supply | Article No. |
|---|---|---|---|
| ALPHA 8GK assembly tool for supports | | 1 unit | 8GK9910-0KK27 |
| Screwdriver insert Hexagon head: 1/4"/6,3 mm | 200 mm | 2 units | 8PQ9400-0BA10 |



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## Cable clamping rails C40 × 22.5 mm

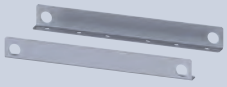


| Type | Width | Scope of supply | Article No. |
|---|---|---|---|
| Direct installation | 350 mm | 1 unit | 8LK3006-6AA46 |
| | 400 mm | 1 unit | 8LK3001-6AA60 |
| | 600 mm | 1 unit | 8LK3001-6AA61 |
| | 800 mm | 1 unit | 8LK3001-6AA62 |
| | 850 mm | 1 unit | 8LK3006-6AA45 |
| | 1100 mm | 1 unit | 8LK3011-6AA40 |



| | | | |
|---|---|---|---|
| With bracket | 350 mm | 1 unit | 8LK3011-8AA42 |
| | 400 mm | 1 unit | 8LK3011-8AA43 |
| | 600 mm | 1 unit | 8LK3011-8AA44 |
| | 800 mm | 1 unit | 8LK3011-8AA45 |
| | 850 mm | 1 unit | 8LK3011-8AA46 |
| | 1100 mm | 1 unit | 8LK3011-8AA47 |

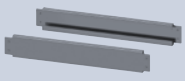
## Transport aids



| Type | Version | Scope of supply | Article No. |
|---|---|---|---|
| Lifting brackets | 350 mm | 2 units | 8LK9400-4AA14 |
| | 400 mm | 2 units | 8LK9400-4AA15 |
| | 600 mm | 2 units | 8LK9400-4AA16 |
| | 800 mm | 2 units | 8LK9400-4AA17 |
| | 850 mm | 2 units | 8LK9400-4AA18 |
| | 1100 mm | 2 units | 8LK9400-4AA21 |



| | | | |
|---|---|---|---|
| Lifting eyebolts DIN 580, C15E | M12 | 4 units | 8LK9400-3AA74 |



| | | | |
|---|---|---|---|
| Base reinforcements | 350 mm | 2 units | 8LK1000-0AA43 |
| | 400 mm | 2 units | 8LK1000-0AA11 |
| | 600 mm | 2 units | 8LK1000-0AA12 |
| | 800 mm | 2 units | 8LK1000-0AA13 |
| | 850 mm | 2 units | 8LK1000-0AA42 |
| | 1100 mm | 2 units | 8LK1011-0AA04 |

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# System overview

## SIVACON S4 power distribution boards

### Frame and enclosure




### Accessories for frame and enclosure



Hinges for covers



Locks



Mech. mounting parts



Compartment ID strips

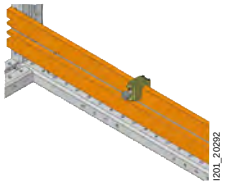
### Busbar systems




Main busbars




Vertical distribution busbars




PE bars




N and PE elevations

### Section expansion: Main busbar at top/at bottom



3WA
incoming feeder panels



3WA
coupling panels



3VA
molded case
circuit breaker design



3VA
outgoing feeder
panels
3NP1modular
installation
devices



3NJ4
outgoing feeder
panels



3NJ6
outgoing feeder
panels



Cable section



Corner sections



Mounting plates

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## Section expansion: Main busbar at rear



3WA
incoming feeder panels



3VA
outgoing feeder panels
3NP1 modular
installation devices



3WA
coupling panels



Mounting plates

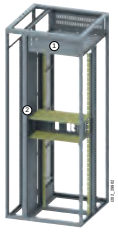
## Internal separation



**Form 1**
No internal separation



**Form 2**
Separation
**+ busbar systems**



**Form 3**
Separation
**+ busbar systems**
**+ device compartments**



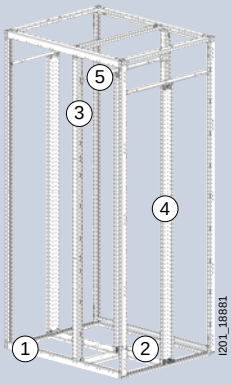
**Form 4**
Separation
**+ busbar systems**
**+ device compartments**
**+ connections**

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# Frame

## For main busbar at top, at bottom and without

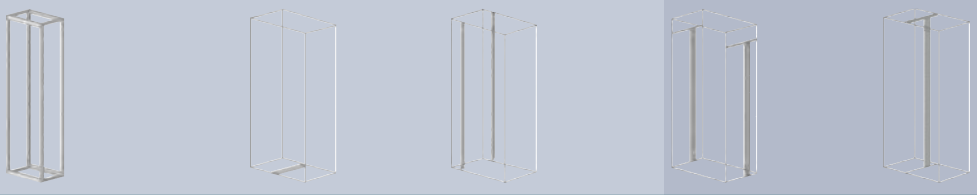



**Position of main busbar**

**At top**

**At bottom**

**Without**



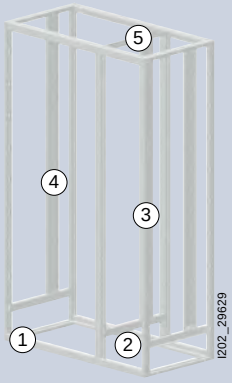
| Width | Depth | ❶ Frame | ❷ Floor plate partition crossbar | ❸ Exterior intermediate upright | ❹ Interior side upright | ❺ Section division |
|---|---|---|---|---|---|---|
| 400 mm | 400 mm | 8PQ1204-4BA01 | – | – | 8PQ3000-0BA65 | – |
| | 600 mm | 8PQ1204-6BA01 | – | – | 8PQ3000-0BA01 | – |
| | 800 mm | 8PQ1204-8BA01 | – | – | 8PQ3000-0BA02 | – |
| 600 mm | 400 mm | 8PQ1206-4BA01 | – | – | 8PQ3000-0BA65 | – |
| | 600 mm | 8PQ1206-6BA01 | – | – | 8PQ3000-0BA01 | – |
| | 800 mm | 8PQ1206-8BA01 | – | – | 8PQ3000-0BA02 | – |
| 800 mm | 400 mm | 8PQ1208-4BA01 | 8PQ3000-1BA38 | 8PQ3000-1BA43 | 8PQ3000-0BA65 | 8PQ3000-1BA31 |
| | 600 mm | 8PQ1208-6BA01 | 8PQ3000-1BA40 | 8PQ3000-1BA43 | 8PQ3000-0BA01 | 8PQ3000-1BA32 |
| | 800 mm | 8PQ1208-8BA01 | 2 × 8PQ3000-1BA38 | 8PQ3000-1BA43 | 8PQ3000-0BA02 | 8PQ3000-1BA34 |
| 1000 mm | 400 mm | 8PQ1201-4BA02 | 8PQ3000-1BA38 | 8PQ3000-1BA43 | 8PQ3000-0BA65 | 8PQ3000-1BA31 |
| | 600 mm | 8PQ1201-6BA02 | 8PQ3000-1BA40 | 8PQ3000-1BA43 | 8PQ3000-0BA01 | 8PQ3000-1BA32 |
| | 800 mm | 8PQ1201-8BA03 | 2 × 8PQ3000-1BA38 | 8PQ3000-1BA43 | 8PQ3000-0BA02 | 8PQ3000-1BA34 |
| 1200 mm | 400 mm | 8PQ1202-4BA02 | 8PQ3000-1BA38 | 8PQ3000-1BA43 | 8PQ3000-0BA65 | 8PQ3000-1BA31 |
| | 600 mm | 8PQ1202-6BA02 | 8PQ3000-1BA40 | 8PQ3000-1BA43 | 8PQ3000-0BA01 | 8PQ3000-1BA32 |
| | 800 mm | 8PQ1202-8BA02 | 2 × 8PQ3000-1BA38 | 8PQ3000-1BA43 | 8PQ3000-0BA02 | 8PQ3000-1BA34 |

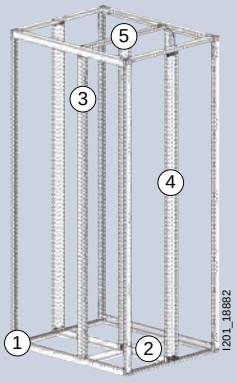




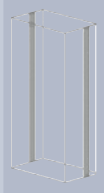
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| ❹ Interior side upright | ❺ Section division | ❹ Interior side upright | ❺ Section division |
|---|---|---|---|
| 8PQ3000-0BA10 | – | – | – |
| 8PQ3000-3BA10 | – | 8PQ3000-0BA03 | – |
| 8PQ3000-3BA11 | – | 8PQ3000-0BA03 | – |
| 8PQ3000-0BA10 | – | – | – |
| 8PQ3000-3BA10 | – | 8PQ3000-0BA03 | – |
| 8PQ3000-3BA11 | – | 8PQ3000-0BA03 | – |
| 8PQ3000-0BA10 | 8PQ3000-0BA10 | – | – |
| 8PQ3000-3BA10 | 8PQ3000-3BA47 | 8PQ3000-0BA03 | 8PQ3000-1BA36 |
| 8PQ3000-3BA11 | 8PQ3000-3BA48 | 8PQ3000-0BA03 | 8PQ3000-1BA37 |
| 8PQ3000-0BA10 | 8PQ3000-0BA10 | – | – |
| 8PQ3000-3BA10 | 8PQ3000-3BA47 | 8PQ3000-0BA03 | 8PQ3000-1BA36 |
| 8PQ3000-3BA11 | 8PQ3000-3BA48 | 8PQ3000-0BA03 | 8PQ3000-1BA37 |
| 8PQ3000-0BA10 | 8PQ3000-0BA10 | – | – |
| 8PQ3000-3BA10 | 8PQ3000-3BA47 | 8PQ3000-0BA03 | 8PQ3000-1BA36 |
| 8PQ3000-3BA11 | 8PQ3000-3BA48 | 8PQ3000-0BA03 | 8PQ3000-1BA37 |



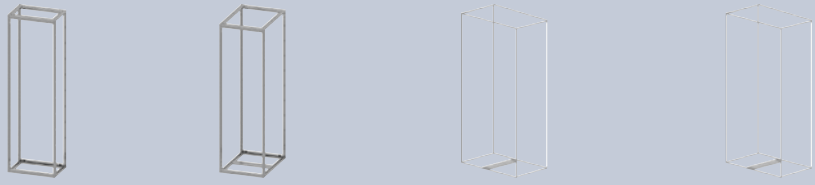
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# Frame

## For main busbar at rear

**Position of main busbar** | At rear

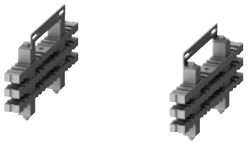


| Width | Depth | Main busbar system | ❶ Frame Front | | Rear | ❷ Floor plate partition crossbar Depth 400 mm | Depth 600 mm |
|---|---|---|---|---|---|---|---|
| 600 mm | 800 mm | | 8PQ1206-8BA01 | | – | – | – |
| | 1000 mm | | 8PQ1206-4BA01 | + | 8PQ1206-6BA01 | – | – |
| | 1200 mm | Single | 8PQ1206-4BA01 | + | 8PQ1206-8BA01 | – | – |
| | | Duplex | 8PQ1206-4BA01 | + | 8PQ1206-8BA01 | – | – |
| 800 mm | 800 mm | | 8PQ1208-8BA01 | | – | 8PQ3000-1BA38 | – |
| | 1000 mm | | 8PQ1208-4BA01 | + | 8PQ1208-6BA01 | 8PQ3000-1BA38 | 8PQ3000-1BA40 |
| | 1200 mm | Single | 8PQ1208-4BA01 | + | 8PQ1208-8BA01 | 3 × 8PQ3000-1BA38 | – |
| | | Duplex | 8PQ1208-4BA01 | + | 8PQ1208-8BA01 | 3 × 8PQ3000-1BA38 | – |
| 1000 mm | 800 mm | | 8PQ1201-8BA03 | | – | 8PQ3000-1BA38 | – |
| | 1000 mm | | 8PQ1201-4BA02 | + | 8PQ1201-6BA02 | 8PQ3000-1BA38 | 8PQ3000-1BA40 |
| | 1200 mm | Single | 8PQ1201-4BA02 | + | 8PQ1201-8BA03 | 3 × 8PQ3000-1BA38 | – |
| | | Duplex | 8PQ1201-4BA02 | + | 8PQ1201-8BA03 | 3 × 8PQ3000-1BA38 | – |

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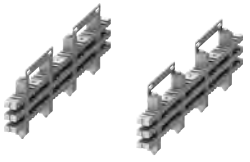
### Main busbar systems

**Single**



$I_n$ = 3200 A

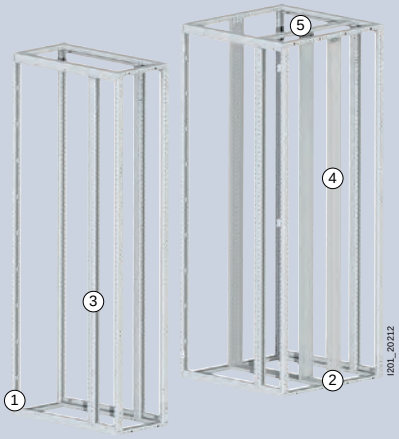
**Duplex**



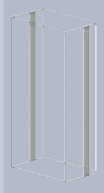
$I_n$ = 6300 A

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| ❸ Exterior intermediate upright | ❹ Interior side upright | ❺ Section division |
|---|---|---|
| – | 8PQ3000-0BA03 | – |
| – | 8PQ3000-0BA03 | – |
| – | 8PQ3000-0BA03 | – |
| – | 8PQ3000-0BA03 | – |
| 8PQ3000-1BA43 | 8PQ3000-0BA03 | 8PQ3000-1BA37 |
| 8PQ3000-1BA43 | 8PQ3000-0BA03 | 8PQ3000-1BA36 |
| 8PQ3000-1BA43 | 8PQ3000-0BA03 | 8PQ3000-1BA37 |
| 8PQ3000-1BA43 | 8PQ3000-0BA03 | 8PQ3000-1BA37 |
| 8PQ3000-1BA43 | 8PQ3000-0BA03 | 8PQ3000-1BA37 |
| 8PQ3000-1BA43 | 8PQ3000-0BA03 | 8PQ3000-1BA36 |
| 8PQ3000-1BA43 | 8PQ3000-0BA03 | 8PQ3000-1BA37 |
| 8PQ3000-1BA43 | 8PQ3000-0BA03 | 8PQ3000-1BA37 |



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# Frame

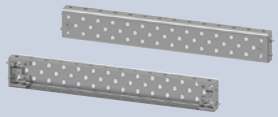
## Accessories

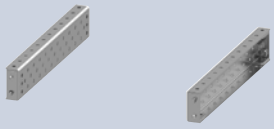
### Frame reinforcement



| Use | Scope of supply | Article No. |
|---|---|---|
| Recommended from width 1000 mm | 4 units | 8PQ9400-0BA35 |

### Crossbars

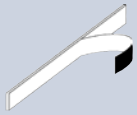




| Version | Width | Crossbar length | Scope of supply | Article No. |
|---|---|---|---|---|
| – | 400 mm | 350 mm | 2 units | 8PQ3000-0BA12 |
| | 600 mm | 550 mm | 2 units | 8PQ3000-0BA71 |
| | 800 mm | 750 mm | 2 units | 8PQ3000-0BA72 |
| | 1000 mm | 950 mm | 2 units | 8PQ3000-0BA84 |
| | 1200 mm | 1150 mm | 2 units | 8PQ3000-0BA85 |
| Without uprights | 400 mm | 300 mm | 2 units | 8PQ3000-0BA10 |
| | 600 mm | 500 mm | 2 units | 8PQ3000-1BA24 |
| | 800 mm | 700 mm | 2 units | 8PQ3000-1BA25 |
| With uprights | 600 mm | 300 mm | 2 units | 8PQ3000-0BA10 |
| | 800 mm | 300 mm | 2 units | 8PQ3000-0BA10 |

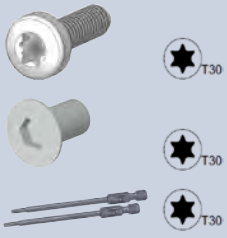
### Forming rows of frames





| Version | Scope of supply | Article No. |
|---|---|---|
| Frame connection | 6 units | 8PQ1204-4BA05 |
| Set of IP55 seals | 5.5 m | 8PQ1204-4BA04 |

### Self-tapping screws



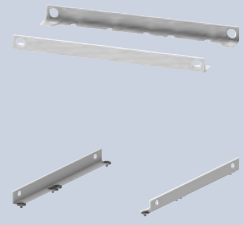

| Type | Version | Scope of supply | Article No. |
|---|---|---|---|
| Cylinder-head screws DIN 7500-PE, ST, zinc-plated | M6 × 10 mm | 100 units | 8PQ9500-0BA34 |
| | M6 × 16 mm | 100 units | 8PQ9500-0BA32 |
| | M6 × 20 mm | 100 units | 8PQ9500-0BA31 |
| Countersunk screws DIN 7500-QE, ST, zinc-plated | M6 × 12 mm | 100 units | 8PQ9500-1BA07 |
| Screwdriver insert, Hexagon head: 1/4"/6,3 mm | 200 mm | 2 units | 8PQ9400-0BA10 |



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## Lifting brackets



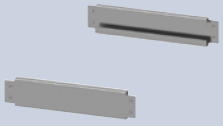
| Width | Depth | Scope of supply | Article No. |
|---|---|---|---|
| 800 mm | – | 2 units | 8PQ3000-1BA01 |
| 850 mm | – | 2 units | 8PQ3000-2BA38 |
| 1000 mm | – | 2 units | 8PQ3000-1BA02 |
| 1200 mm | – | 2 units | 8PQ3000-1BA03 |
| – | 800 mm | 2 units | 8PQ3000-1BA01 |
| | 1000 mm | 2 units | 8PQ3000-3BA70 |
| | 1200 mm | 2 units | 8PQ3000-3BA71 |

## Lifting eyebolts (Transport aids)



| Version | Application | Scope of supply | Article No. |
|---|---|---|---|
| M12, DIN 580, C15E | • Max. supported weight = 240 kg at load angle ≤ 45 °<br>• Max. section depth 800 mm | 4 units | 8PQ9400-0BA11 |

## Reinforcements for transport



| Height | Width/Depth | Article No. |
|---|---|---|
| 100 mm | 400 mm | 8PQ1014-0BA02 |
| | 600 mm | 8PQ1016-0BA02 |
| | 800 mm | 8PQ1018-0BA02 |
| | 1000 mm | 8PQ1011-1BA01 |
| | 1200 mm | 8PQ1012-2BA01 |

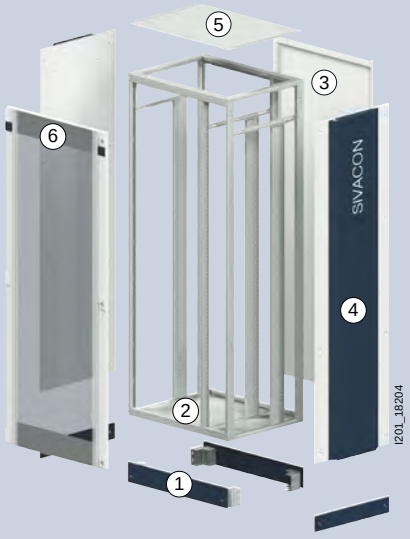


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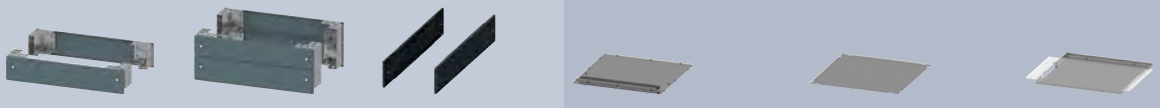
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# Enclosure

## Paneling sections, main busbar at top/at bottom




| Position of main busbar | At top | At bottom |
|---|---|---|
| | ❶ Bases | ❷ Floor plates |



| Width | Depth | Height 100 mm | 200 mm | Height 100 mm | IP40 cable entry | IP55 | IP20 |
|---|---|---|---|---|---|---|---|
| 200 mm | 400 mm | – | – | – | – | 8PQ2302-4BA04 | – |
| | 600 mm | – | – | – | – | 8PQ2302-6BA04 | – |
| | 800 mm | – | – | – | – | 2 × 8PQ2302-4BA04 | – |
| 400 mm | 400 mm | 8PQ1014-0BA01 | 8PQ1024-0BA01 | 8PQ1010-4BA01 | 8PQ2304-4BA06 | 8PQ2304-4BA05 | 8PQ2304-4BA14 |
| | 600 mm | 8PQ1014-0BA01 | 8PQ1024-0BA01 | 8PQ1010-6BA01 | 8PQ2306-4BA06 | 8PQ2306-4BA05 | 8PQ2304-6BA11 |
| | 800 mm | 8PQ1014-0BA01 | 8PQ1024-0BA01 | 8PQ1010-8BA01 | 2 × 8PQ2304-4BA06 | 2 × 8PQ2304-4BA05 | 8PQ2304-8BA05 |
| 600 mm | 400 mm | 8PQ1016-0BA01 | 8PQ1026-0BA01 | 8PQ1010-4BA01 | 8PQ2306-4BA06 | 8PQ2306-4BA05 | 8PQ2306-4BA10 |
| | 600 mm | 8PQ1016-0BA01 | 8PQ1026-0BA01 | 8PQ1010-6BA01 | 8PQ2306-6BA06 | 8PQ2306-6BA05 | 8PQ2306-6BA16 |
| | 800 mm | 8PQ1016-0BA01 | 8PQ1026-0BA01 | 8PQ1010-8BA01 | 2 × 8PQ2306-4BA06 | 2 × 8PQ2306-4BA05 | 8PQ2306-8BA05 |
| 800 mm | 400 mm | 8PQ1018-0BA01 | 8PQ1028-0BA01 | 8PQ1010-4BA01 | 8PQ2308-4BA06 | 8PQ2308-4BA05 | 8PQ2308-4BA13 |
| | 600 mm | 8PQ1018-0BA01 | 8PQ1028-0BA01 | 8PQ1010-6BA01 | 8PQ2308-6BA06 | 8PQ2308-6BA05 | 8PQ2308-6BA13 |
| | 800 mm | 8PQ1018-0BA01 | 8PQ1028-0BA01 | 8PQ1010-8BA01 | 2 × 8PQ2308-4BA06 | 2 × 8PQ2308-4BA05 | 8PQ2308-8BA10 |
| 1000 mm | 400 mm | 8PQ1011-0BA01 | 8PQ1021-0BA01 | 8PQ1010-4BA01 | – | 8PQ2301-4BA04 | 8PQ2301-4BA06 |
| | 600 mm | 8PQ1011-0BA01 | 8PQ1021-0BA01 | 8PQ1010-6BA01 | – | – | 8PQ2301-6BA05 |
| | 800 mm | 8PQ1011-0BA01 | 8PQ1021-0BA01 | 8PQ1010-8BA01 | – | 2 × 8PQ2301-4BA04 | 8PQ2301-8BA04 |
| 1200 mm | 400 mm | 8PQ1012-0BA01 | 8PQ1022-0BA01 | 8PQ1010-4BA01 | – | – | 8PQ2302-4BA05 |
| | 600 mm | 8PQ1012-0BA01 | 8PQ1022-0BA01 | 8PQ1010-6BA01 | – | – | 8PQ2302-6BA05 |
| | 800 mm | 8PQ1012-0BA01 | 8PQ1022-0BA01 | 8PQ1010-8BA01 | – | – | 8PQ2302-8BA04 |



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| ❸ Rear panels | | ❹ Side panels | | ❺ Roof plates | | | |
|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |
| IP40 | IP55 | IP55 | IP55 with design strip | IP40 | IP40 cable entry | IPX1 upgrade | IP55 |
| – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – |
| – | – | – | – | – | – | – | – |
| 8PQ2420-4BA02 | 8PQ2420-4BA01 | 8PQ2520-4BA02 | 8PQ2520-4BA01 | 8PQ2304-4BA02 | 8PQ2304-4BA03 | 8PQ2304-4BA04 | 8PQ2304-4BA01 |
| 8PQ2420-4BA02 | 8PQ2420-4BA01 | 8PQ2520-6BA02 | 8PQ2520-6BA01 | 8PQ2304-6BA02 | 8PQ2304-6BA03 | 8PQ2304-6BA04 | 8PQ2304-6BA01 |
| 8PQ2420-4BA02 | 8PQ2420-4BA01 | 8PQ2520-8BA02 | 8PQ2520-8BA01 | 8PQ2304-8BA02 | 8PQ2304-8BA03 | 8PQ2304-8BA04 | 8PQ2304-8BA01 |
| 8PQ2420-6BA02 | 8PQ2420-6BA01 | 8PQ2520-4BA02 | 8PQ2520-4BA01 | 8PQ2306-4BA02 | 8PQ2306-4BA03 | 8PQ2306-4BA04 | 8PQ2306-4BA01 |
| 8PQ2420-6BA02 | 8PQ2420-6BA01 | 8PQ2520-6BA02 | 8PQ2520-6BA01 | 8PQ2306-6BA02 | 8PQ2306-6BA03 | 8PQ2306-6BA04 | 8PQ2306-6BA01 |
| 8PQ2420-6BA02 | 8PQ2420-6BA01 | 8PQ2520-8BA02 | 8PQ2520-8BA01 | 8PQ2306-8BA02 | 8PQ2306-8BA03 | 8PQ2306-8BA04 | 8PQ2306-8BA01 |
| 8PQ2420-8BA02 | 8PQ2420-8BA01 | 8PQ2520-4BA02 | 8PQ2520-4BA01 | 8PQ2308-4BA02 | 8PQ2308-4BA03 | 8PQ2308-4BA04 | 8PQ2308-4BA01 |
| 8PQ2420-8BA02 | 8PQ2420-8BA01 | 8PQ2520-6BA02 | 8PQ2520-6BA01 | 8PQ2308-6BA02 | 8PQ2308-6BA03 | 8PQ2308-6BA04 | 8PQ2308-6BA01 |
| 8PQ2420-8BA02 | 8PQ2420-8BA01 | 8PQ2520-8BA02 | 8PQ2520-8BA01 | 8PQ2308-8BA02 | 8PQ2308-8BA03 | 8PQ2308-8BA04 | 8PQ2308-8BA01 |
| 8PQ2420-1BA02 | 8PQ2420-1BA01 | 8PQ2520-4BA02 | 8PQ2520-4BA01 | 8PQ2301-4BA02 | – | 8PQ2301-4BA03 | 8PQ2301-4BA01 |
| 8PQ2420-1BA02 | 8PQ2420-1BA01 | 8PQ2520-6BA02 | 8PQ2520-6BA01 | 8PQ2301-6BA02 | – | 8PQ2301-6BA03 | 8PQ2301-6BA01 |
| 8PQ2420-1BA02 | 8PQ2420-1BA01 | 8PQ2520-8BA02 | 8PQ2520-8BA01 | 8PQ2301-8BA02 | – | 8PQ2301-8BA03 | 8PQ2301-8BA01 |
| 8PQ2420-2BA02 | 8PQ2420-2BA01 | 8PQ2520-4BA02 | 8PQ2520-4BA01 | 8PQ2302-4BA02 | – | 8PQ2302-4BA03 | 8PQ2302-4BA01 |
| 8PQ2420-2BA02 | 8PQ2420-2BA01 | 8PQ2520-6BA02 | 8PQ2520-6BA01 | 8PQ2302-6BA02 | – | 8PQ2302-6BA03 | 8PQ2302-6BA01 |
| 8PQ2420-2BA02 | 8PQ2420-2BA01 | 8PQ2520-8BA02 | 8PQ2520-8BA01 | 8PQ2302-8BA02 | – | 8PQ2302-8BA03 | 8PQ2302-8BA01 |



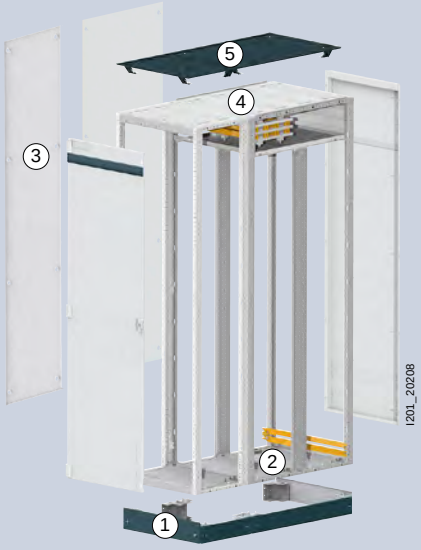
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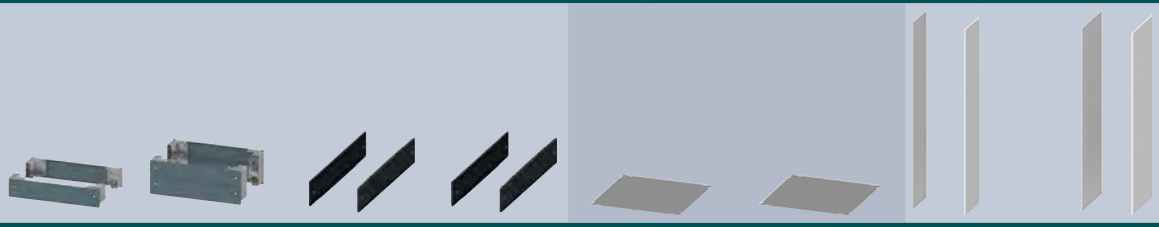
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# Enclosure

## Paneling sections, main busbar at rear

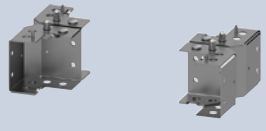



| Width | Depth | Height | | Height | | IP55 | IP55 | IP55 | IP55 |
|---|---|---|---|---|---|---|---|---|---|
| | | 100 mm | 200 mm | 100 mm | 200 mm | | | | |
| 400 mm | 800 mm | 8PQ1014-0BA01 | 8PQ1024-0BA01 | 8PQ1010-8BA01 | – | 2 × 8PQ2304-4BA05 | – | 8PQ2520-8BA02 | – |
| | 1000 mm | 8PQ1014-0BA01 | 8PQ1024-0BA01 | 8PQ1010-4BA01 | 8PQ1010-6BA01 | 8PQ2304-4BA05 + | 8PQ2306-4BA05 | 8PQ2520-4BA02 + | 8PQ2520-6BA02 |
| | 1200 mm | 8PQ1014-0BA01 | 8PQ1024-0BA01 | 8PQ1010-4BA01 | 8PQ1010-8BA01 | 3 × 8PQ2304-4BA05 | – | 8PQ2520-4BA02 + | 8PQ2520-8BA02 |
| 600 mm | 800 mm | 8PQ1016-0BA01 | 8PQ1026-0BA01 | 8PQ1010-8BA01 | – | 2 × 8PQ2306-4BA05 | – | 8PQ2520-8BA02 | – |
| | 1000 mm | 8PQ1016-0BA01 | 8PQ1026-0BA01 | 8PQ1010-4BA01 | 8PQ1010-6BA01 | 8PQ2306-4BA05 + | 8PQ2306-6BA05 | 8PQ2520-4BA02 + | 8PQ2520-6BA02 |
| | 1200 mm | 8PQ1016-0BA01 | 8PQ1026-0BA01 | 8PQ1010-4BA01 | 8PQ1010-8BA01 | 3 × 8PQ2306-4BA05 | – | 8PQ2520-4BA02 + | 8PQ2520-8BA02 |
| 800 mm | 800 mm | 8PQ1018-0BA01 | 8PQ1028-0BA01 | 8PQ1010-8BA01 | – | 2 × 8PQ2308-4BA05 | – | 8PQ2520-8BA02 | – |
| | 1000 mm | 8PQ1018-0BA01 | 8PQ1028-0BA01 | 8PQ1010-4BA01 | 8PQ1010-6BA01 | 8PQ2308-4BA05 + | 8PQ2308-6BA05 | 8PQ2520-4BA02 + | 8PQ2520-6BA02 |
| | 1200 mm | 8PQ1018-0BA01 | 8PQ1028-0BA01 | 8PQ1010-4BA01 | 8PQ1010-8BA01 | 3 × 8PQ2308-4BA05 | – | 8PQ2520-4BA02 + | 8PQ2520-8BA02 |
| 1000 mm | 800 mm | 8PQ1011-0BA01 | 8PQ1021-0BA01 | 8PQ1010-8BA01 | – | 2 × 8PQ2301-4BA04 | – | 8PQ2520-8BA02 | – |
| | 1000 mm | 8PQ1011-0BA01 | 8PQ1021-0BA01 | 8PQ1010-4BA01 | 8PQ1010-6BA01 | 8PQ2301-4BA04 + | 8PQ2301-6BA06 | 8PQ2520-4BA02 + | 8PQ2520-6BA02 |
| | 1200 mm | 8PQ1011-0BA01 | 8PQ1021-0BA01 | 8PQ1010-4BA01 | 8PQ1010-8BA01 | 3 × 8PQ2301-4BA04 | – | 8PQ2520-4BA02 + | 8PQ2520-8BA02 |
| 1200 mm | 800 mm | 8PQ1012-0BA01 | 8PQ1022-0BA01 | 8PQ1010-8BA01 | – | 4 × 8PQ2306-4BA05 | – | 8PQ2520-8BA02 | – |
| | 1000 mm | 8PQ1012-0BA01 | 8PQ1022-0BA01 | 8PQ1010-4BA01 | 8PQ1010-6BA01 | 2 × 8PQ2306-4BA05 | 2 × 8PQ2306-6BA05 | 8PQ2520-4BA02 + | 8PQ2520-6BA02 |
| | 1200 mm | 8PQ1012-0BA01 | 8PQ1022-0BA01 | 8PQ1010-4BA01 | 8PQ1010-8BA01 | 6 × 8PQ2306-4BA05 | – | 8PQ2520-4BA02 + | 8PQ2520-8BA02 |

## Accessories

**Base corner pieces for depths of 1000 mm and 1200 mm**



| Height | Article No. |
|---|---|
| 100 mm | 8PQ1010-1BA01 |
| 200 mm | 8PQ1020-1BA01 |

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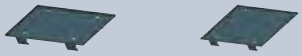
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**❹ Roof plates**



**❺ Roof add-on-plates**



| IP40 | | IP40 | IP55 | | IP55 | IP40 cable entry | | IP40 cable entry | IPX1 | | IPX1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8PQ2304-8BA02 | | – | 8PQ2304-8BA01 | | – | – | | 8PQ2304-8BA08 | 8PQ2304-8BA04 | | – |
| 8PQ2304-4BA02 | + | 8PQ2304-6BA02 | 8PQ2304-4BA01 | + | 8PQ2304-6BA01 | 8PQ2304-4BA02 | + | 8PQ2304-6BA13 | 8PQ2304-4BA15 | + | 8PQ2304-6BA12 |
| 8PQ2304-4BA02 | + | 8PQ2304-8BA02 | 8PQ2304-4BA01 | + | 8PQ2304-8BA01 | 8PQ2304-8BA08 | + | 8PQ2304-4BA16 | 8PQ2304-4BA15 | + | 8PQ2304-8BA07 |
| 8PQ2306-8BA02 | | – | 8PQ2306-8BA01 | | – | – | | 8PQ2306-8BA08 | 8PQ2306-8BA04 | | – |
| 8PQ2306-4BA02 | + | 8PQ2306-6BA02 | 8PQ2306-4BA01 | + | 8PQ2306-6BA01 | 8PQ2306-4BA02 | + | 8PQ2306-6BA18 | 8PQ2306-4BA11 | + | 8PQ2306-6BA17 |
| 8PQ2306-4BA02 | + | 8PQ2306-8BA02 | 8PQ2306-4BA01 | + | 8PQ2306-8BA01 | 8PQ2306-4BA12 | + | 8PQ2306-8BA08 | 8PQ2306-4BA11 | + | 8PQ2306-8BA07 |
| 8PQ2308-8BA02 | | – | 8PQ2308-8BA01 | | – | – | | 8PQ2308-8BA13 | 8PQ2308-8BA04 | | – |
| 8PQ2308-4BA02 | + | 8PQ2308-6BA02 | 8PQ2308-4BA01 | + | 8PQ2308-6BA01 | 8PQ2308-4BA02 | + | 8PQ2308-6BA15 | 8PQ2308-4BA14 | + | 8PQ2308-6BA14 |
| 8PQ2308-4BA02 | + | 8PQ2308-8BA02 | 8PQ2308-4BA01 | + | 8PQ2308-8BA01 | 8PQ2308-4BA15 | + | 8PQ2308-8BA13 | 8PQ2308-4BA14 | + | 8PQ2308-8BA12 |
| 8PQ2301-8BA02 | | – | 8PQ2301-8BA01 | | – | – | | 8PQ2301-8BA07 | 8PQ2301-8BA03 | | – |
| 8PQ2301-4BA02 | + | 8PQ2301-6BA02 | 8PQ2301-4BA01 | + | 8PQ2301-6BA01 | 8PQ2301-4BA02 | + | 8PQ2301-6BA08 | 8PQ2301-4BA07 | + | 8PQ2301-6BA07 |
| 8PQ2301-4BA02 | + | 8PQ2301-8BA02 | 8PQ2301-4BA01 | + | 8PQ2301-8BA01 | 8PQ2301-4BA08 | + | 8PQ2301-8BA07 | 8PQ2301-4BA07 | + | 8PQ2301-8BA06 |
| 8PQ2302-8BA02 | | – | 8PQ2302-8BA01 | | - | – | | 8PQ2302-8BA07 | 8PQ2302-8BA03 | | – |
| 8PQ2302-4BA02 | + | 8PQ2302-6BA02 | 8PQ2302-4BA01 | + | 8PQ2302-6BA01 | 8PQ2302-4BA02 | + | 8PQ2302-6BA07 | 8PQ2302-4BA06 | + | 8PQ2302-6BA06 |
| 8PQ2302-4BA02 | + | 8PQ2302-8BA02 | 8PQ2302-4BA01 | + | 8PQ2302-8BA01 | 8PQ2302-4BA07 | + | 8PQ2302-8BA07 | 8PQ2302-4BA06 | + | 8PQ2302-8BA06 |

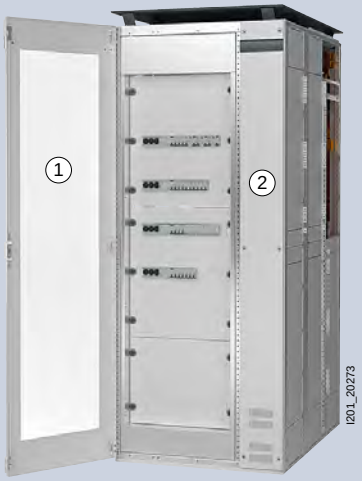


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# Enclosure

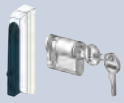
## Paneling sections




| | | Doors<br>With double-bit lock | | | For profile semicylinder | | |
|---|---|---|---|---|---|---|---|
| | |  |  |  |  |  |  |
| **Hinge** | **Width** | **IP40** | **IP55** | **IP55 glass doors** | **IP40** | **IP55** | **IP55 glass doors** |
| Left | 200 mm | – | – | – | – | – | – |
| | 400 mm | 8PQ2197-4BA08 | 8PQ2197-4BA05 | – | 8PQ2197-4BA06 | 8PQ2197-4BA03 | – |
| | 600 mm | 8PQ2197-6BA06 | 8PQ2197-6BA03 | 8PQ2197-6BA10 | 8PQ2197-6BA04 | 8PQ2197-6BA01 | 8PQ2197-6BA07 |
| | 800 mm | 8PQ2197-8BA06 | 8PQ2197-8BA03 | 8PQ2197-8BA10 | 8PQ2197-8BA04 | 8PQ2197-8BA01 | 8PQ2197-8BA07 |
| | 1000 mm | 8PQ2197-1BA06 | 8PQ2197-1BA03 | 8PQ2197-1BA10 | 8PQ2197-1BA07 | 8PQ2197-1BA04 | 8PQ2197-1BA11 |
| Right | 200 mm | – | – | – | – | – | – |
| | 400 mm | 8PQ2197-4BA11 | 8PQ2197-4BA10 | – | 8PQ2197-4BA07 | 8PQ2197-4BA04 | – |
| | 600 mm | 8PQ2197-6BA13 | 8PQ2197-6BA12 | 8PQ2197-6BA14 | 8PQ2197-6BA05 | 8PQ2197-6BA02 | 8PQ2197-6BA08 |
| | 800 mm | 8PQ2197-8BA13 | 8PQ2197-8BA12 | 8PQ2197-8BA14 | 8PQ2197-8BA05 | 8PQ2197-8BA02 | 8PQ2197-8BA08 |
| | 1000 mm | 8PQ2197-1BA18 | 8PQ2197-1BA17 | 8PQ2197-1BA20 | 8PQ2197-1BA08 | 8PQ2197-1BA05 | 8PQ2197-1BA12 |

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## Lock systems

| |  |  |  |
|---|---|---|---|
| | **Double-bit lock** | **Flat cylinder** | **Profile semicylinder** |
| **Rotary handles** | | | |
| | 8PQ9400-0BA08 | 8PQ9400-0BA07 | 8PQ9400-0BA41 + 8PQ9400-0BA26 |
| **Coupling bars** | | | |
|  | 8PQ9400-0BA27 | 8PQ9400-0BA27 | 8PQ9400-0BA28 |
| **Locking rods** | | | |
|  | 8PQ9400-0BA37 | 8PQ9400-0BA37 | 8PQ9400-0BA38 |
| **Bar guides** | | | |
|  | 8PQ9400-0BA36 | 8PQ9400-0BA36 | 8PQ9400-0BA36 |

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| Frame paneling | ❷ Outer cover | |
|---|---|---|
|  |  |  |
| **IP30** | **IP40** | **IP55** |
| – | 8PQ2197-2BA15 | 8PQ2197-2BA14 |
| – | 8PQ2197-4BA02 | 8PQ2197-4BA01 |
| 8PQ2197-6BA11 | – | – |
| 8PQ2197-8BA11 | – | – |
| – | – | – |
| – | 8PQ2197-2BA15 | 8PQ2197-2BA14 |
| – | 8PQ2197-4BA02 | 8PQ2197-4BA01 |
| 8PQ2197-6BA11 | – | – |
| 8PQ2197-8BA11 | – | – |
| – | – | – |



## Door cutouts

Double-bit lock



Flat cylinder



Profile semicylinder



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# Enclosure

## Paneling sections

### Accessories

**Cubicle keys**



| Version | Scope of supply | Article No. |
|---|---|---|
| 3 mm double bit | 10 units | 8PQ9400-0BA12 |

**Inner door struts**



| Version | Article No. |
|---|---|
| Section-high | 8PQ2197-0BA10 |

**Cubicle ID plate**



| Version | Article No. |
|---|---|
| SIVACON designed by Siemens | 8PQ9400-0BA06 |

**Door hinges**



| Version | Scope of supply | Article No. |
|---|---|---|
| Hinges | 2 units | 8PQ9400-0BA55 |



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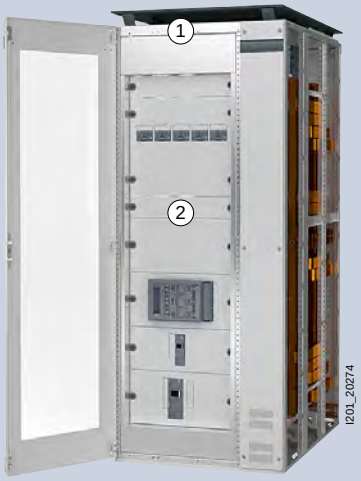


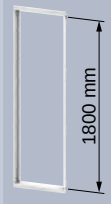

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# Enclosure

## Internal covers




| Position of main busbar | At top | | Without | |
|---|---|---|---|---|
| | ❶ Cover frames | | | |
| |   |  |   |  |
| **Width** | **Fixed** | **Swivel** | **Fixed** | **Swivel** |
| 600 mm | 8PQ2000-6BA03 | 8PQ2000-6BA02 | 8PQ2000-6BA04 | 8PQ2000-6BA01 |
| 800 mm | 8PQ2000-8BA03 | 8PQ2000-8BA02 | 8PQ2000-8BA04 | 8PQ2000-8BA01 |

❷ Covers





| Height | Width 600 mm | Width 800 mm |
|---|---|---|
| 50 mm | 8PQ2005-6BA01 | 8PQ2005-8BA01 |
| 100 mm | 8PQ2010-6BA01 | 8PQ2010-8BA01 |
| 150 mm | 8PQ2015-6BA02 | 8PQ2015-8BA02 |
| 200 mm | 8PQ2020-6BA01 | 8PQ2020-8BA01 |
| 250 mm | 8PQ2025-6BA01 | 8PQ2025-8BA01 |
| 300 mm | 8PQ2030-6BA01 | 8PQ2030-8BA01 |
| 350 mm | 8PQ2035-6BA01 | 8PQ2035-8BA01 |
| 400 mm | 8PQ2040-6BA01 | 8PQ2040-8BA01 |
| 500 mm | 8PQ2050-6BA01 | 8PQ2050-8BA01 |
| 550 mm | 8PQ2055-6BA01 | 8PQ2055-8BA01 |
| 600 mm | 8PQ2060-6BA01 | 8PQ2060-8BA01 |
| 650 mm | 8PQ2065-6BA01 | 8PQ2065-8BA01 |
| 700 mm | 8PQ2070-6BA12 | 8PQ2070-8BA03 |
| 800 mm | 8PQ2080-6BA01 | 8PQ2080-8BA01 |





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## Accessories

### Covers, ventilated



| Height | Width | Article No. |
|---|---|---|
| 100 mm | 600 mm | 8PQ2010-6BA02 |
| | 800 mm | 8PQ2010-8BA02 |

### Quick-release lock



| Version | Scope of supply | Article No. |
|---|---|---|
| SIVACON – Blue green basic | 20 units | 8PQ9400-0BA54 |

### Hinges for masking frames



| Version | Scope of supply | Article No. |
|---|---|---|
| • Hinges, incl. fixing accessories<br>• From a masking frame height of 150 mm | 1 set | 8PQ2000-0BA08 |

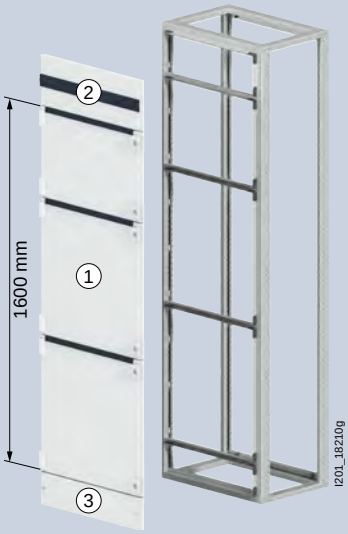


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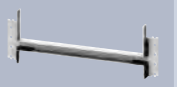

# Enclosure

## Compartment doors




### ① Device compartments



| Compartment doors | | | | Covers | |
|---|---|---|---|---|---|
| **Width** | **Height** | **IP40** | **IP55 upgrade** | **IP40** | **IP55 upgrade** |
| 400 mm | 50 mm | – | – | 8PQ2005-4BA03 | 8PQ2005-4BA01 |
| | 100 mm | – | – | 8PQ2010-4BA02 | 8PQ2010-4BA01 |
| | 150 mm | 8PQ2015-4BA04 | 8PQ2015-4BA05 | – | – |
| | 200 mm | 8PQ2020-4BA01 | 8PQ2020-4BA03 | – | – |
| | 250 mm | 8PQ2025-4BA01 | 8PQ2025-4BA02 | – | – |
| | 300 mm | 8PQ2030-4BA01 | 8PQ2030-4BA02 | – | – |
| | 350 mm | 8PQ2035-4BA01 | 8PQ2035-4BA02 | – | – |
| | 400 mm | 8PQ2040-4BA01 | 8PQ2040-4BA03 | – | – |
| | 450 mm | 8PQ2045-4BA01 | 8PQ2045-4BA02 | – | – |
| | 500 mm | 8PQ2050-4BA01 | 8PQ2050-4BA02 | – | – |
| | 550 mm | 8PQ2055-4BA11 | 8PQ2055-4BA07 | – | – |
| | 600 mm | 8PQ2060-4BA01 | 8PQ2060-4BA03 | – | – |
| | 650 mm | 8PQ2065-4BA01 | 8PQ2065-4BA02 | – | – |
| | 700 mm | 8PQ2070-4BA07 | 8PQ2070-4BA08 | – | – |
| | 750 mm | 8PQ2072-4BA01 | 8PQ2075-4BA01 | – | – |
| | 800 mm | 8PQ2080-4BA01 | 8PQ2080-4BA04 | – | – |
| 600 mm | 50 mm | – | – | 8PQ2005-6BA04 | 8PQ2005-6BA03 |
| | 100 mm | – | – | 8PQ2010-6BA04 | 8PQ2010-6BA03 |
| | 150 mm | 8PQ2015-6BA10 | 8PQ2015-6BA12 | – | – |
| | 200 mm | 8PQ2020-6BA14 | 8PQ2020-6BA15 | – | – |
| | 250 mm | 8PQ2025-6BA07 | 8PQ2025-6BA08 | – | – |
| | 300 mm | 8PQ2030-6BA10 | 8PQ2030-6BA12 | – | – |
| | 350 mm | 8PQ2035-6BA12 | 8PQ2035-6BA13 | – | – |
| | 400 mm | 8PQ2040-6BA12 | 8PQ2040-6BA13 | – | – |
| | 450 mm | 8PQ2045-6BA05 | 8PQ2045-6BA06 | – | – |
| | 500 mm | 8PQ2050-6BA03 | 8PQ2050-6BA04 | – | – |
| | 550 mm | 8PQ2055-6BA04 | 8PQ2055-6BA06 | – | – |
| | 600 mm | 8PQ2060-6BA06 | 8PQ2060-6BA07 | – | – |
| | 650 mm | 8PQ2065-6BA03 | 8PQ2065-6BA04 | – | – |
| | 700 mm | 8PQ2070-6BA03 | 8PQ2070-6BA04 | – | – |
| | 750 mm | 8PQ2075-6BA01 | 8PQ2075-6BA02 | – | – |
| | 800 mm | 8PQ2080-6BA03 | 8PQ2080-6BA04 | – | – |
| 800 mm | 50 mm | – | – | 8PQ2005-8BA04 | 8PQ2005-8BA03 |
| | 100 mm | – | – | 8PQ2010-8BA04 | 8PQ2010-8BA03 |
| | 150 mm | 8PQ2015-8BA05 | 8PQ2015-8BA07 | – | – |
| | 200 mm | 8PQ2020-8BA07 | 8PQ2020-8BA08 | – | – |
| | 250 mm | 8PQ2025-8BA04 | 8PQ2025-8BA05 | – | – |
| | 300 mm | 8PQ2030-8BA05 | 8PQ2030-8BA06 | – | – |
| | 350 mm | 8PQ2035-8BA06 | 8PQ2035-8BA07 | – | – |
| | 400 mm | 8PQ2040-8BA12 | 8PQ2040-8BA13 | – | – |
| | 450 mm | 8PQ2045-8BA03 | 8PQ2045-8BA04 | – | – |
| | 500 mm | 8PQ2050-8BA03 | 8PQ2050-8BA04 | – | – |
| | 550 mm | 8PQ2055-8BA03 | 8PQ2055-8BA06 | – | – |
| | 600 mm | 8PQ2060-8BA04 | 8PQ2060-8BA05 | – | – |
| | 650 mm | 8PQ2065-8BA03 | 8PQ2065-8BA04 | – | – |
| | 700 mm | 8PQ2070-8BA01 | 8PQ2070-8BA02 | – | – |
| | 750 mm | 8PQ2075-8BA01 | 8PQ2075-8BA02 | – | – |
| | 800 mm | 8PQ2080-8BA03 | 8PQ2080-8BA04 | – | – |

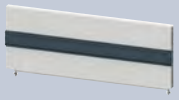
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## ② Head compartments





| Width | Height | Covers IP40 | Doors IP55 upgrade |
|---|---|---|---|
| **Main busbar at top** | | | |
| 400 mm | 225 mm | 8PQ2022-4BA01 | 8PQ2022-4BA03 |
| 600 mm | 225 mm | 8PQ2022-6BA01 | 8PQ2022-6BA02 |
| 800 mm | 225 mm | 8PQ2022-8BA01 | 8PQ2022-8BA02 |
| **Main busbar at bottom** | | | |
| 400 mm | 175 mm | 8PQ2000-4BA02 | 8PQ2022-4BA03 |
| 600 mm | 175 mm | 8PQ2000-6BA08 | 8PQ2022-6BA02 |
| 800 mm | 175 mm | 8PQ2000-8BA08 | 8PQ2022-8BA02 |

## ③ Base compartments





| Width | Height | Covers IP4X | IP55 upgrade |
|---|---|---|---|
| **Main busbar at top** | | | |
| 400 mm | 150 mm | 8PQ2015-4BA01 | 8PQ2015-4BA03 |
| 600 mm | 150 mm | 8PQ2000-6BA07 | 8PQ2015-6BA13 |
| 800 mm | 150 mm | 8PQ2000-8BA07 | 8PQ2015-8BA08 |
| **Main busbar at bottom** | | | |
| 400 mm | 200 mm | 8PQ2020-4BA04 | 8PQ2020-4BA05 |
| 600 mm | 200 mm | 8PQ2020-6BA34 | 8PQ2020-6BA35 |
| 800 mm | 200 mm | 8PQ2020-8BA17 | 8PQ2020-8BA18 |



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# Enclosure

## Compartment doors

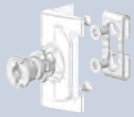
### Accessories

**Door hinges**



| Version | Scope of supply | Article No. |
|---|---|---|
| Light gray | 2 units | 8PQ9400-0BA55 |

**Locks**



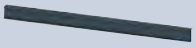
| Version | Article No. |
|---|---|
| Two-way interlocking mechanisms | 8PQ9400-0BA40 |

**Handles for compartment doors**



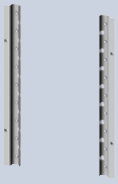
| Version | Article No. |
|---|---|
| Without lock | 8PQ9400-0BA73 |
| With flat cylinder, identical key type | 8PQ9400-0BA72 |

**Compartment ID strip for plug-in plates, H = 17 mm**



| Width | Scope of supply | Article No. |
|---|---|---|
| 400 mm | 6 units | 8PQ5000-3BA42 |
| 600 mm | 6 units | 8PQ5000-3BA43 |
| 800 mm | 6 units | 8PQ5000-3BA46 |

**Inner door struts**



| Height | Article No. |
|---|---|
| 400 mm | 8PQ2040-0BA06 |
| 550 mm | 8PQ2055-0BA05 |
| 600 mm | 8PQ2060-0BA14 |
| 700 mm | 8PQ2070-0BA02 |
| 800 mm | 8PQ2080-0BA07 |

**Cubicle keys**



| Version | Scope of supply | Article No. |
|---|---|---|
| 3 mm double bit | 10 units | 8PQ9400-0BA12 |

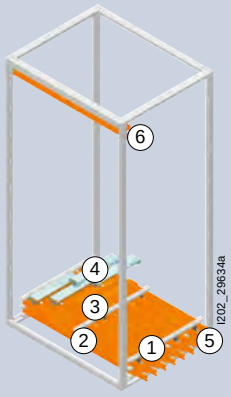


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# Busbar systems

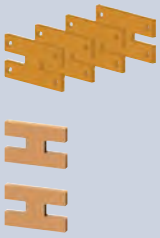
## Main busbars




| Position | ❶ Busbar supports | | ❷ Reinforcement | | ❸ Equipotential bonding | ❹ Covers | PEN grounding | Arcing fault barriers |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | 1 set = 10 units | |
| | Single $I_n$ = 3200 A | Duplex $I_n$ = 6300 A | Single $I_n$ = 3200 A | Duplex $I_n$ = 6300 A | Duplex $I_n$ = 6300 A | | | |
| Top | 8PQ4000-0BA04 | 8PQ4000-0BA60 | 8PQ4000-0BA37 | 2 × 8PQ4000-0BA37 | 8PQ4000-0BA62 | – | 8PQ4000-0BA12 | 8PQ9400-0BA21 |
| Bottom | 8PQ4000-0BA04 | 8PQ4000-0BA60 | 8PQ4000-0BA37 | 2 × 8PQ4000-0BA37 | 8PQ4000-0BA62 | 4 × 8PQ4000-1BA25 | 8PQ4000-0BA12 | 8PQ9400-0BA21 |
| Rear | 8PQ4000-0BA04 + 8PQ3000-0BA10 | 8PQ4000-0BA60 + 2 × 8PQ3000-0BA10 | 8PQ4000-0BA37 | 2 × 8PQ4000-0BA37 | – | – | 8PQ4000-2BA24 | 8PQ9400-0BA21 |

## Accessories

### Connecting lugs



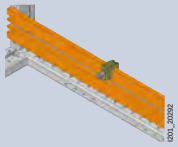
| Type | Cross-section | Article No. |
|---|---|---|
| ❺ Main busbars | 20 × 10 mm | 8PQ4000-0BA53 |
| | 30 × 10 mm | 8PQ4000-0BA54 |
| | 40 × 10 mm | 8PQ4000-0BA56 |
| | 50 × 10 mm | 8PQ4000-0BA57 |
| ❻ PE bar | 20 × 5 mm | 8PQ4000-0BA52 |
| | 30 × 5 mm | |
| | 30 × 10 mm | |
| | 40 × 5 mm | 8PQ4000-0BA67 |
| | 40 × 10 mm | |
| | 50 × 10 mm | |

### Protective cover



| Type | Article No. |
|---|---|
| • Main busbar at rear<br>• Mounting width 200 mm | 8PQ4000-3BA35 |

### Circular conductors



| Busbar thickness | Ø Cable | Scope of supply | Article No. |
|---|---|---|---|
| 5 mm | 1.5 ... 16 mm² | 100 units | 8US1921-2AA00 |
| | 1.5 ... 35 mm² | 50 units | 8US1921-2AB00 |
| | 16 ... 70 mm² | 50 units | 8US1921-2AC00 |
| | 16 ... 120 mm² | 50 units | 8US1921-2AD00 |
| 10 mm | 1.5 ... 16 mm² | 100 units | 8US1921-2BA00 |
| | 1.5 ... 35 mm² | 50 units | 8US1921-2BB00 |
| | 16 ... 70 mm² | 50 units | 8US1921-2BC00 |
| | 16 ... 120 mm² | 50 units | 8US1921-2BD00 |

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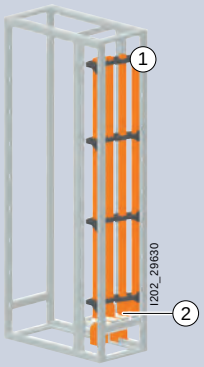
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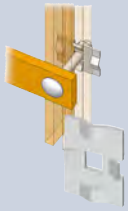


# Busbar systems

## Vertical distribution busbars, cascaded, up to $I_{cw}$ = 65 kA




| | ❶ Busbar supports | | ❷ Supports |
|---|---|---|---|
| |  | |  |
| **Position of main busbar** | **30 × 10 mm** | **40 × 10 mm** | |
| Top | 8PQ4000-0BA32 | 8PQ4000-0BA63 | – |
| Bottom | 8PQ4000-0BA32 | 8PQ4000-0BA63 | 8PQ4000-1BA23 |



## Accessories

**Connection**

| | Component | Version | Scope of supply | Article No. |
|---|---|---|---|---|
|  | Busbar clamps | M10 | 20 units | 8PQ9400-0BA02 |
|  | Saucer-head bolts | M10 × 35 mm | 50 units | 8PQ9500-0BA14 |
| | | M10 × 45 mm | 50 units | 8PQ9500-0BA16 |
| | | M10 × 55 mm | 50 units | 8PQ9500-1BA36 |
| | | M10 × 65 mm | 50 units | 8PQ9500-1BA25 |
|  | Spring washers | For M10 | 50 units | 8PQ9500-0BA60 |
|  | Hexagonal nuts | M10 | 50 units | 8PQ9500-0BA05 |

**Connecting lugs**

| | Cross-section | Position of vertical distribution busbar | Position of main busbar | Depth | Article No. |
|---|---|---|---|---|---|
|  | 30 × 10 mm | Right | Front | 400 mm | 8PQ4000-0BA45 |
| | | | | 600 mm | 8PQ4000-0BA46 |
| | | | | 800 mm | 8PQ4000-0BA46 |
| | | | Rear | 800 mm | 8PQ4000-0BA50 |
| | | Left | Front | 400 mm | 8PQ4000-0BA73 |
| | | | | 600 mm | 8PQ4000-0BA72 |
| | | | | 800 mm | 8PQ4000-0BA72 |
| | | | Rear | 800 mm | 8PQ4000-0BA70 |
|  | 40 × 10 mm | Right | Front | 400 mm | 8PQ4000-0BA47 |
| | | | | 600 mm | 8PQ4000-0BA48 |
| | | | | 800 mm | 8PQ4000-0BA48 |
| | | | Rear | 800 mm | 8PQ4000-0BA51 |
| | | Left | Front | 400 mm | 8PQ4000-0BA75 |
| | | | | 600 mm | 8PQ4000-0BA48 |
| | | | | 800 mm | 8PQ4000-0BA48 |
| | | | Rear | 800 mm | 8PQ4000-0BA71 |

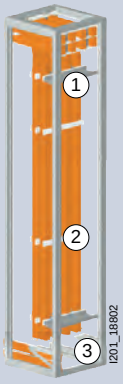
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# Vertical distribution busbars, non-cascaded, up to $I_{cw}$ = 100 kA




| | | ❶ Busbar supports | ❷ Reinforcement | ❸ Supports |
|---|---|---|---|---|
| | |  |  |  |
| **Position of main busbar** | **Width** | | | |
| At top | 200 mm | 8PQ4000-2BA25 | 8PQ4000-0BA37 | 8PQ4000-0BA78 |
| | 400 mm | 8PQ4000-2BA26 | 8PQ4000-0BA37 | 8PQ4000-0BA61 |
| At bottom | 200 mm | 8PQ4000-2BA25 | 8PQ4000-0BA37 | – |
| | 400 mm | 8PQ4000-2BA26 | 8PQ4000-0BA37 | – |
| At rear | 200 mm | 8PQ4000-2BA25 | 8PQ4000-0BA37 | 8PQ4000-0BA78 |

## Accessories

**Connecting lugs**

| | Cross-section | Position of main busbar | Depth | Article No. |
|---|---|---|---|---|
|  | 20 × 10 mm<br>30 × 10 mm | At front | 400 mm | 8PQ4000-0BA38 |
| | | | 600 mm | 8PQ4000-0BA40 |
| | | | 800 mm | 8PQ4000-0BA40 |
| | | At rear | 800 mm | 8PQ4000-0BA38 |
|  | 40 × 10 mm<br>50 × 10 mm | At front | 400 mm | 8PQ4000-0BA41 |
| | | | 600 mm | 8PQ4000-0BA42 |
| | | | 800 mm | 8PQ4000-0BA42 |
| | | At rear | 800 mm | 8PQ4000-0BA41 |

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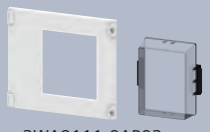
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# Section expansion

## 3WA air circuit breakers, main busbar at top




### 3 and 4-pole

| | ❶ Head compartment doors | | ❷ Compartment doors | | | |
|---|---|---|---|---|---|---|
| |  |  |  + 3WA9111-0AP01 |  + 3WA9111-0AP03 |  | |

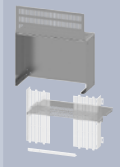
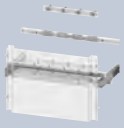
| Type of mounting | Size | Width | Depth | IP40 | IP55 upgrade | IP40 | IP55 | IP55 upgrade |
|---|---|---|---|---|---|---|---|---|
| Fixed-mounted | 1 | 600 mm | 400 mm | 8PQ2067-6BA01 | 8PQ2067-6BA02 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | 8PQ2055-6BA06 |
| | | | 600 mm | 8PQ2067-6BA01 | 8PQ2067-6BA02 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | 8PQ2055-6BA06 |
| | | | 800 mm | 8PQ2067-6BA01 | 8PQ2067-6BA02 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | 8PQ2055-6BA06 |
| | 2 | 800 mm | 600 mm | 8PQ2067-8BA01 | 8PQ2067-8BA02 | 8PQ2055-8BA08 | 8PQ2055-8BA10 | 8PQ2055-8BA06 |
| | | | 800 mm | 8PQ2067-8BA01 | 8PQ2067-8BA02 | 8PQ2055-8BA08 | 8PQ2055-8BA10 | 8PQ2055-8BA06 |
| | 3 | 1000 mm | 800 mm | 8PQ2067-1BA01 | 8PQ2067-1BA02 | 8PQ2055-1BA03 | 8PQ2055-1BA04 | 8PQ2055-1BA06 |
| Withdraw-able | 1 | 600 mm | 400 mm | 8PQ2067-6BA01 | 8PQ2067-6BA02 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | 8PQ2055-6BA06 |
| | | | 600 mm | 8PQ2067-6BA01 | 8PQ2067-6BA02 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | 8PQ2055-6BA06 |
| | | | 800 mm | 8PQ2067-6BA01 | 8PQ2067-6BA02 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | 8PQ2055-6BA06 |
| | 2 | 800 mm | 600 mm | 8PQ2067-8BA01 | 8PQ2067-8BA02 | 8PQ2055-8BA08 | 8PQ2055-8BA10 | 8PQ2055-8BA06 |
| | | | 800 mm | 8PQ2067-8BA01 | 8PQ2067-8BA02 | 8PQ2055-8BA08 | 8PQ2055-8BA10 | 8PQ2055-8BA06 |
| | 3 | 1000 mm | 800 mm | 8PQ2067-1BA01 | 8PQ2067-1BA02 | 8PQ2055-1BA03 | 8PQ2055-1BA04 | 8PQ2055-1BA06 |





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| ❸ Base compartment doors | | ❹ Mounting plates | ❺ Main busbar connection | | ❻ Separation 4b | ❼ Cable connection | Insulation |
|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |
| IP40 | IP55 upgrade | | Front | Rear | | | |
| 8PQ2075-6BA01 | 8PQ2075-6BA03 | 8PQ6000-5BA26 | 8PQ6000-6BA75 | – | 8PQ5000-4BA28 | 8PQ6000-5BA81 | – |
| 8PQ2075-6BA01 | 8PQ2075-6BA03 | 8PQ6000-5BA26 | 8PQ6000-6BA75 | – | 8PQ5000-4BA30 | 8PQ6000-5BA81 | – |
| 8PQ2075-6BA01 | 8PQ2075-6BA03 | 8PQ6000-5BA26 | 8PQ6000-6BA75 | 8PQ6001-1BA00 | 8PQ5000-4BA31 | 8PQ6000-5BA81 | – |
| 8PQ2075-8BA01 | 8PQ2075-8BA03 | 8PQ6000-5BA24 | 8PQ6000-6BA76 | – | 8PQ5000-4BA32 | 8PQ6000-5BA83 | – |
| 8PQ2075-8BA01 | 8PQ2075-8BA03 | 8PQ6000-5BA24 | 8PQ6000-6BA76 | 8PQ6001-1BA01 | 8PQ5000-4BA33 | 8PQ6000-5BA83 | – |
| 8PQ2075-1BA01 | 8PQ2075-1BA02 | 8PQ6000-5BA23 | 8PQ6000-5BA33 | – | 8PQ5000-5BA11 | 8PQ6000-5BA84 | – |
| 8PQ2075-6BA01 | 8PQ2075-6BA03 | 8PQ6000-5BA26 | 8PQ6000-6BA75 | – | 8PQ5000-4BA28 | 8PQ6000-5BA82 | 8PQ6000-7BA28 |
| 8PQ2075-6BA01 | 8PQ2075-6BA03 | 8PQ6000-5BA26 | 8PQ6000-6BA75 | – | 8PQ5000-4BA30 | 8PQ6000-5BA82 | 8PQ6000-7BA28 |
| 8PQ2075-6BA01 | 8PQ2075-6BA03 | 8PQ6000-5BA26 | 8PQ6000-6BA75 | 8PQ6001-1BA00 | 8PQ5000-4BA31 | 8PQ6000-5BA82 | 8PQ6000-7BA28 |
| 8PQ2075-8BA01 | 8PQ2075-8BA03 | 8PQ6000-5BA24 | 8PQ6000-6BA76 | – | 8PQ5000-4BA32 | 8PQ6000-5BA83 | – |
| 8PQ2075-8BA01 | 8PQ2075-8BA03 | 8PQ6000-5BA24 | 8PQ6000-6BA76 | 8PQ6001-1BA01 | 8PQ5000-4BA33 | 8PQ6000-5BA83 | – |
| 8PQ2075-1BA01 | 8PQ2075-1BA02 | 8PQ6000-5BA23 | 8PQ6000-5BA33 | – | 8PQ5000-5BA11 | 8PQ6000-5BA84 | – |



## Accessories

**Compartment ID strip for plug-in plates, H = 17 mm**



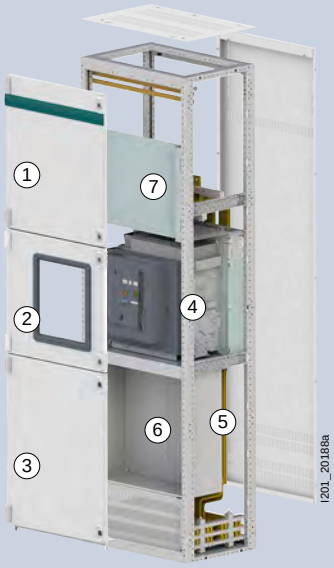
| Width | Scope of supply | Article No. |
|---|---|---|
| 600 mm | 6 units | 8PQ5000-3BA43 |
| 800 mm | 6 units | 8PQ5000-3BA46 |
| 1000 mm | 6 units | 8PQ5000-3BA47 |

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# Section expansion

## 3WA air circuit breakers, main busbar at bottom




### 3 and 4-pole

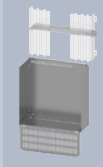
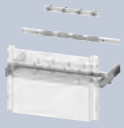
| ❶ Head compartment doors | | ❷ Compartment doors | | | | |
|---|---|---|---|---|---|---|
| | | + 3WA9111-0AP01 | | + 3WA9111-0AP03 | | |
| **Type of mounting** | **Size** | **Width** | **Depth** | **IP40** | **IP55 upgrade** | **IP40** | **IP55** | **IP55 upgrade** |
| Fixed-mounted | 1 | 600 mm | 400 mm | 8PQ2067-6BA01 | 8PQ2067-6BA02 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | 8PQ2055-6BA06 |
| | | | 600 mm | 8PQ2067-6BA01 | 8PQ2067-6BA02 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | 8PQ2055-6BA06 |
| | | | 800 mm | 8PQ2067-6BA01 | 8PQ2067-6BA02 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | 8PQ2055-6BA06 |
| | 2 | 800 mm | 600 mm | 8PQ2067-8BA01 | 8PQ2067-8BA02 | 8PQ2055-8BA08 | 8PQ2055-8BA10 | 8PQ2055-8BA06 |
| | | | 800 mm | 8PQ2067-8BA01 | 8PQ2067-8BA02 | 8PQ2055-8BA08 | 8PQ2055-8BA10 | 8PQ2055-8BA06 |
| Withdraw-able | 1 | 600 mm | 400 mm | 8PQ2067-6BA01 | 8PQ2067-6BA02 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | 8PQ2055-6BA06 |
| | | | 600 mm | 8PQ2067-6BA01 | 8PQ2067-6BA02 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | 8PQ2055-6BA06 |
| | | | 800 mm | 8PQ2067-6BA01 | 8PQ2067-6BA02 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | 8PQ2055-6BA06 |
| | 2 | 800 mm | 600 mm | 8PQ2067-8BA01 | 8PQ2067-8BA02 | 8PQ2055-8BA08 | 8PQ2055-8BA10 | 8PQ2055-8BA06 |
| | | | 800 mm | 8PQ2067-8BA01 | 8PQ2067-8BA02 | 8PQ2055-8BA08 | 8PQ2055-8BA10 | 8PQ2055-8BA06 |





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| ❸ Base compartment doors | | ❹ Mounting plates | ❺ Main busbar connection | | ❻ Separation 4b | ❼ Cable connection | Insulation |
|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |
| IP40 | IP55 upgrade | | Front | Rear | | | |
| 8PQ2075-6BA01 | 8PQ2075-6BA03 | 8PQ6000-5BA26 | 8PQ6000-6BA75 | – | 8PQ5000-4BA34 | 8PQ6000-5BA81 | – |
| 8PQ2075-6BA01 | 8PQ2075-6BA03 | 8PQ6000-5BA26 | 8PQ6000-6BA75 | – | 8PQ5000-4BA35 | 8PQ6000-5BA81 | – |
| 8PQ2075-6BA01 | 8PQ2075-6BA03 | 8PQ6000-5BA26 | 8PQ6000-6BA75 | 8PQ6001-1BA00 | 8PQ5000-4BA36 | 8PQ6000-5BA81 | – |
| 8PQ2075-8BA01 | 8PQ2075-8BA03 | 8PQ6000-5BA24 | 8PQ6000-6BA76 | – | 8PQ5000-4BA37 | 8PQ6000-5BA83 | – |
| 8PQ2075-8BA01 | 8PQ2075-8BA03 | 8PQ6000-5BA24 | 8PQ6000-6BA76 | 8PQ6001-1BA01 | 8PQ5000-4BA38 | 8PQ6000-5BA83 | – |
| 8PQ2075-6BA01 | 8PQ2075-6BA03 | 8PQ6000-5BA26 | 8PQ6000-6BA75 | – | 8PQ5000-4BA34 | 8PQ6000-5BA82 | 8PQ6000-7BA28 |
| 8PQ2075-6BA01 | 8PQ2075-6BA03 | 8PQ6000-5BA26 | 8PQ6000-6BA75 | – | 8PQ5000-4BA35 | 8PQ6000-5BA82 | 8PQ6000-7BA28 |
| 8PQ2075-6BA01 | 8PQ2075-6BA03 | 8PQ6000-5BA26 | 8PQ6000-6BA75 | 8PQ6001-1BA00 | 8PQ5000-4BA36 | 8PQ6000-5BA82 | 8PQ6000-7BA28 |
| 8PQ2075-8BA01 | 8PQ2075-8BA03 | 8PQ6000-5BA24 | 8PQ6000-6BA76 | – | 8PQ5000-4BA37 | 8PQ6000-5BA83 | – |
| 8PQ2075-8BA01 | 8PQ2075-8BA03 | 8PQ6000-5BA24 | 8PQ6000-6BA76 | 8PQ6001-1BA01 | 8PQ5000-4BA38 | 8PQ6000-5BA83 | – |



## Accessories

**Compartment ID strip for plug-in plates, H = 17 mm**



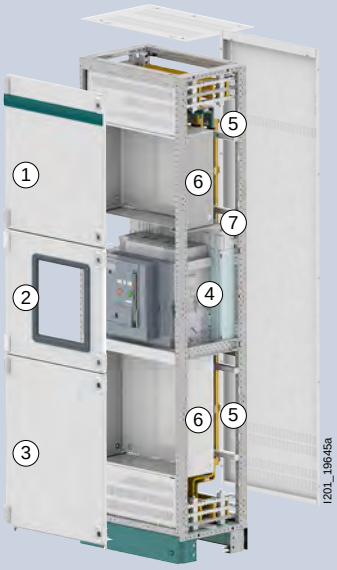
| Width | Scope of supply | Article No. |
|---|---|---|
| 600 mm | 6 units | 8PQ5000-3BA43 |
| 800 mm | 6 units | 8PQ5000-3BA46 |

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# Section expansion

## 3WA air circuit breakers, coupling




| ❶ Head compartment doors | | ❷ Compartment doors | | | | |
|---|---|---|---|---|---|---|
| | | + 3WA9111-0AP01 | | + 3WA9111-0AP03 | | |

| Type of mounting | Size | Width | Depth | IP40 | IP55 upgrade | IP4X | IP55 | IP55 upgrade |
|---|---|---|---|---|---|---|---|---|
| Fixed-mounted | 1 | 600 mm | 400 mm | 8PQ2067-6BA01 | 8PQ2067-6BA02 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | 8PQ2055-6BA06 |
| | | | 600 mm | 8PQ2067-6BA01 | 8PQ2067-6BA02 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | 8PQ2055-6BA06 |
| | | | 800 mm | 8PQ2067-6BA01 | 8PQ2067-6BA02 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | 8PQ2055-6BA06 |
| | 2 | 800 mm | 600 mm | 8PQ2067-8BA01 | 8PQ2067-8BA02 | 8PQ2055-8BA08 | 8PQ2055-8BA10 | 8PQ2055-8BA06 |
| | | | 800 mm | 8PQ2067-8BA01 | 8PQ2067-8BA02 | 8PQ2055-8BA08 | 8PQ2055-8BA10 | 8PQ2055-8BA06 |
| Withdraw-able | 1 | 600 mm | 400 mm | 8PQ2067-6BA01 | 8PQ2067-6BA02 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | 8PQ2055-6BA06 |
| | | | 600 mm | 8PQ2067-6BA01 | 8PQ2067-6BA02 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | 8PQ2055-6BA06 |
| | | | 800 mm | 8PQ2067-6BA01 | 8PQ2067-6BA02 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | 8PQ2055-6BA06 |
| | 2 | 800 mm | 600 mm | 8PQ2067-8BA01 | 8PQ2067-8BA02 | 8PQ2055-8BA08 | 8PQ2055-8BA10 | 8PQ2055-8BA06 |
| | | | 800 mm | 8PQ2067-8BA01 | 8PQ2067-8BA02 | 8PQ2055-8BA08 | 8PQ2055-8BA10 | 8PQ2055-8BA06 |





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| ❸ Base compartment doors | | ❹ Mounting plates | ❺ Main busbar connection | ❻ Separation 4b | ❼ Uprights |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
| **IP40** | **IP55 upgrade** | | | | |
| 8PQ2075-6BA01 | 8PQ2075-6BA03 | 8PQ6000-5BA26 | 2 × 8PQ6000-6BA75 | 8PQ5000-5BA12 | – |
| 8PQ2075-6BA01 | 8PQ2075-6BA03 | 8PQ6000-5BA26 | 2 × 8PQ6000-6BA75 | 8PQ5000-5BA13 | 2 × 8PQ3000-3BA50 |
| 8PQ2075-6BA01 | 8PQ2075-6BA03 | 8PQ6000-5BA26 | 2 × 8PQ6000-6BA75 | 8PQ5000-5BA14 | 2 × 8PQ3000-3BA51 |
| 8PQ2075-8BA01 | 8PQ2075-8BA03 | 8PQ6000-5BA24 | 2 × 8PQ6000-6BA76 | 8PQ5000-5BA15 | 2 × 8PQ3000-3BA50 |
| 8PQ2075-8BA01 | 8PQ2075-8BA03 | 8PQ6000-5BA24 | 2 × 8PQ6000-6BA76 | 8PQ5000-5BA16 | 2 × 8PQ3000-3BA51 |
| 8PQ2075-6BA01 | 8PQ2075-6BA03 | 8PQ6000-5BA26 | 2 × 8PQ6000-6BA75 | 8PQ5000-5BA12 | – |
| 8PQ2075-6BA01 | 8PQ2075-6BA03 | 8PQ6000-5BA26 | 2 × 8PQ6000-6BA75 | 8PQ5000-5BA13 | 2 × 8PQ3000-3BA50 |
| 8PQ2075-6BA01 | 8PQ2075-6BA03 | 8PQ6000-5BA26 | 2 × 8PQ6000-6BA75 | 8PQ5000-5BA14 | 2 × 8PQ3000-3BA51 |
| 8PQ2075-8BA01 | 8PQ2075-8BA03 | 8PQ6000-5BA24 | 2 × 8PQ6000-6BA76 | 8PQ5000-5BA15 | 2 × 8PQ3000-3BA50 |
| 8PQ2075-8BA01 | 8PQ2075-8BA03 | 8PQ6000-5BA24 | 2 × 8PQ6000-6BA76 | 8PQ5000-5BA16 | 2 × 8PQ3000-3BA51 |

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## Accessories

**Compartment ID strip for plug-in plates, H = 17 mm**



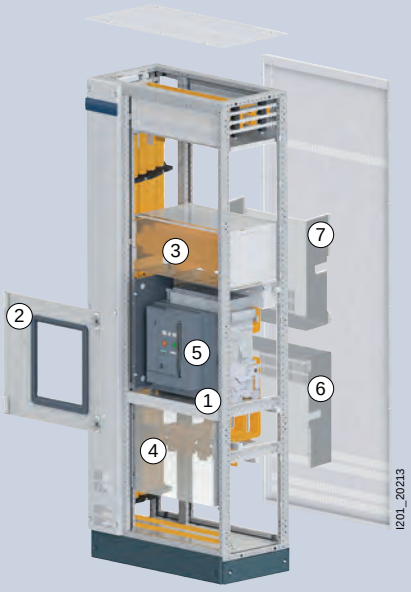
| Width | Scope of supply | Article No. |
|---|---|---|
| 600 mm | 6 units | 8PQ5000-3BA43 |
| 800 mm | 6 units | 8PQ5000-3BA46 |

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# Section expansion

## 3WA air circuit breakers, connection of section busbar systems




### Compartment doors

| ❶ Mounting plates | ❷ Compartment doors | | | | | |
|---|---|---|---|---|---|---|
| | | + 3WA9111-0AP01 | + 3WA9111-0AP03 | | | |
| **Type of mounting** | **Size** | **Width** | **Number of poles** | **$I_n$** | | **IP40** | **IP55** | **IP55 upgrade** |
| Fixed-mounted | 1 | 400 mm | 3-pole | 1600 A | 8PQ6000-5BA25 | 8PQ2055-4BA12 | – | – |
| | | | | 2000 A | 8PQ6000-5BA25 | 8PQ2055-4BA12 | – | – |
| | | 600 mm | 4-pole | 1600 A | 8PQ6000-5BA26 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | + 8PQ2055-6BA06 |
| | | | | 2000 A | 8PQ6000-5BA26 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | + 8PQ2055-6BA06 |
| Withdrawable | 1 | 400 mm | 3-pole | 1600 A | 8PQ6000-5BA25 | 8PQ2055-4BA12 | – | |
| | | | | 2000 A | 8PQ6000-5BA25 | 8PQ2055-4BA12 | – | |
| | | 600 mm | 4-pole | 1600 A | 8PQ6000-5BA26 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | + 8PQ2055-6BA06 |
| | | | | 2000 A | 8PQ6000-5BA26 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | + 8PQ2055-6BA06 |

### Covers

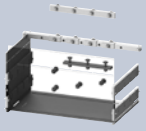
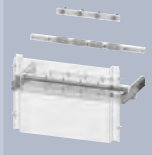
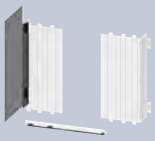
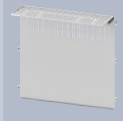
| ❶ Mounting plates | ❷ Covers | | | | | |
|---|---|---|---|---|---|---|
| | | + 3WA9111-0AP01 | | | | |
| **Type of mounting** | **Size** | **Width** | **Number of poles** | **$I_n$** | | **IP40** |
| Fixed-mounted | 1 | 600 mm | 3-pole | 1600 A | 8PQ6000-3BA31 | 8PQ2055-6BA05 |
| | | | | 2000 A | 8PQ6000-3BA31 | 8PQ2055-6BA05 |
| | | | 4-pole | 1600 A | 8PQ6000-3BA31 | 8PQ2055-6BA07 |
| | | | | 2000 A | 8PQ6000-3BA31 | 8PQ2055-6BA07 |
| | | 800 mm | 3/4-pole | 1600 A | 8PQ6000-3BA32 | 8PQ2055-8BA04 |
| | | | | 2000 A | 8PQ6000-3BA32 | 8PQ2055-8BA04 |
| Withdrawable | 1 | 600 mm | 3-pole | 1600 A | 8PQ6000-3BA31 | 8PQ2055-6BA05 |
| | | | | 2000 A | 8PQ6000-3BA31 | 8PQ2055-6BA05 |
| | | | 4-pole | 1600 A | 8PQ6000-3BA31 | 8PQ2055-6BA07 |
| | | | | 2000 A | 8PQ6000-3BA31 | 8PQ2055-6BA07 |
| | | 800 mm | 3/4-pole | 1600 A | 8PQ6000-3BA32 | 8PQ2055-8BA04 |
| | | | | 2000 A | 8PQ6000-3BA32 | 8PQ2055-8BA04 |

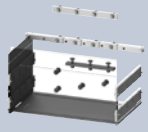
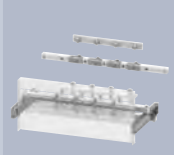
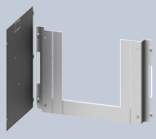
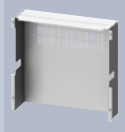
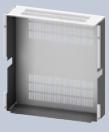
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| ❸ Section busbars | ❹ Cable connection | ❺ Device compartment | ❻ Cable connection | ❼ Section busbars |
|---|---|---|---|---|
|  |  |  |  |  |
| | | Separation 3b | Separation 4b | Separation 4b |
| 8PQ6000-5BA48 | 8PQ6000-5BA78 | 8PQ5000-3BA82 | 8PQ5000-3BA84 | 8PQ5000-3BA84 |
| 8PQ6000-7BA05 | 8PQ6000-5BA78 | 8PQ5000-3BA82 | 8PQ5000-4BA00 | 8PQ5000-3BA85 |
| 8PQ6000-5BA51 | 8PQ6000-5BA81 | 8PQ5000-3BA82 | 8PQ5000-3BA86 | 8PQ5000-3BA86 |
| 8PQ6000-7BA07 | 8PQ6000-5BA81 | 8PQ5000-3BA82 | 8PQ5000-4BA01 | 8PQ5000-3BA87 |
| 8PQ6000-5BA50 | 8PQ6000-5BA80 | 8PQ5000-3BA82 | 8PQ5000-3BA84 | 8PQ5000-3BA84 |
| 8PQ6000-7BA06 | 8PQ6000-5BA80 | 8PQ5000-3BA82 | 8PQ5000-4BA00 | 8PQ5000-3BA85 |
| 8PQ6000-5BA52 | 8PQ6000-5BA82 | 8PQ5000-3BA82 | 8PQ5000-3BA86 | 8PQ5000-3BA86 |
| 8PQ6000-7BA08 | 8PQ6000-5BA82 | 8PQ5000-3BA82 | 8PQ5000-4BA01 | 8PQ5000-3BA87 |

| ❸ Section busbars | ❹ Cable connection | ❺ Device compartment | ❻ Cable connection | ❼ Section busbars |
|---|---|---|---|---|
|  |  |  |  |  |
| | | Separation 3b | Separation 4b | Separation 4b |
| 8PQ6000-5BA45 | 8PQ6000-5BA75 | 8PQ5000-0BA08 | 8PQ5000-0BA30 | 8PQ5000-0BA14 |
| 8PQ6000-7BA03 | 8PQ6000-5BA75 | 8PQ5000-0BA08 | 8PQ5000-0BA30 | 8PQ5000-0BA14 |
| 8PQ6000-5BA45 | 8PQ6000-5BA75 | 8PQ5000-0BA08 | 8PQ5000-0BA30 | 8PQ5000-0BA14 |
| 8PQ6000-7BA03 | 8PQ6000-5BA75 | 8PQ5000-0BA08 | 8PQ5000-0BA30 | 8PQ5000-0BA14 |
| 8PQ6000-5BA46 | 8PQ6000-5BA76 | 8PQ5000-1BA65 | 8PQ5000-1BA68 | 8PQ5000-1BA67 |
| 8PQ6000-7BA04 | 8PQ6000-5BA76 | 8PQ5000-1BA65 | 8PQ5000-1BA68 | 8PQ5000-1BA67 |
| 8PQ6000-5BA45 | 8PQ6000-5BA75 | 8PQ5000-0BA07 | 8PQ5000-0BA30 | 8PQ5000-0BA14 |
| 8PQ6000-7BA03 | 8PQ6000-5BA75 | 8PQ5000-0BA07 | 8PQ5000-0BA30 | 8PQ5000-0BA14 |
| 8PQ6000-5BA45 | 8PQ6000-5BA75 | 8PQ5000-0BA07 | 8PQ5000-0BA30 | 8PQ5000-0BA14 |
| 8PQ6000-7BA03 | 8PQ6000-5BA75 | 8PQ5000-0BA07 | 8PQ5000-0BA30 | 8PQ5000-0BA14 |
| 8PQ6000-5BA46 | 8PQ6000-5BA76 | 8PQ5000-1BA66 | 8PQ5000-1BA68 | 8PQ5000-1BA67 |
| 8PQ6000-7BA04 | 8PQ6000-5BA76 | 8PQ5000-1BA66 | 8PQ5000-1BA68 | 8PQ5000-1BA67 |



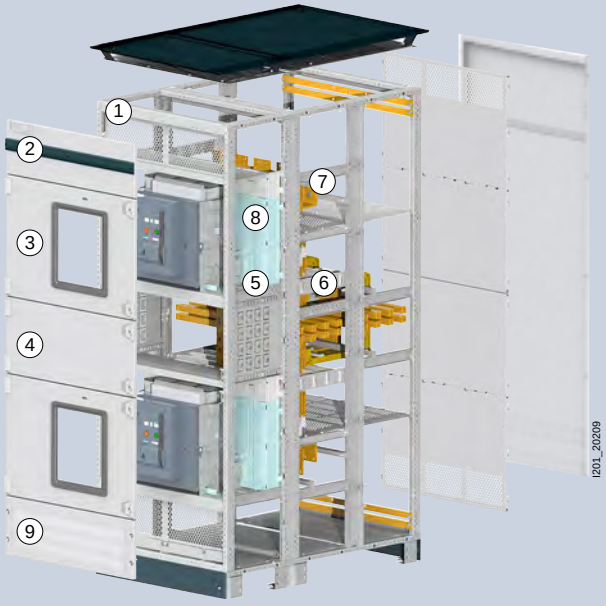
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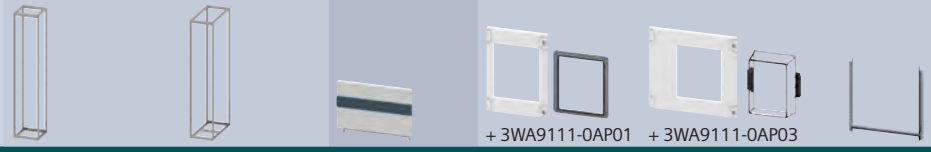
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# Section expansion

## 3WA air circuit breakers, fixed-mounted




| Size | $I_n$ | Width | Depth | Number of poles | ❶ Frames: At front | | ❶ Frames: At rear | ❷ Head compartments: Covers | ❸ Compartment doors: IP40 | ❸ Compartment doors: IP55 | | ❸ Compartment doors: IP55 upgrade |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2000 A | 400 mm | 800 mm | 3- pole | 8PQ1204-8BA01 | | – | 8PQ2025-4BA03 | 8PQ2055-4BA12 | – | | – |
| | | | 1000 mm | 3- pole | 8PQ1204-4BA01 | + | 8PQ1204-6BA01 | 8PQ2025-4BA03 | 8PQ2055-4BA12 | – | | – |
| | | | 1200 mm | 3- pole | 8PQ1204-4BA01 | + | 8PQ1204-8BA01 | 8PQ2025-4BA03 | 8PQ2055-4BA12 | – | | – |
| | | | 1200 mm duplex | 3- pole | 8PQ1204-4BA01 | + | 8PQ1204-8BA01 | 8PQ2025-4BA03 | 8PQ2055-4BA12 | – | | – |
| | | 600 mm | 800 mm | 3/4-pole | 8PQ1206-8BA01 | | – | 8PQ2025-6BA25 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | + | 8PQ2055-6BA06 |
| | | | 1000 mm | 3/4-pole | 8PQ1206-4BA01 | + | 8PQ1206-6BA01 | 8PQ2025-6BA25 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | + | 8PQ2055-6BA06 |
| | | | 1200 mm | 3/4-pole | 8PQ1206-4BA01 | + | 8PQ1206-8BA01 | 8PQ2025-6BA25 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | + | 8PQ2055-6BA06 |
| | | | 1200 mm duplex | 3/4-pole | 8PQ1206-4BA01 | + | 8PQ1206-8BA01 | 8PQ2025-6BA25 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | + | 8PQ2055-6BA06 |
| 2 | 3200 A | 800 mm | 800 mm | 3/4-pole | 8PQ1208-8BA01 | | – | 8PQ2025-8BA16 | 8PQ2055-8BA08 | 8PQ2055-8BA10 | + | 8PQ2055-8BA06 |
| | | | 1000 mm | 3/4-pole | 8PQ1208-4BA01 | + | 8PQ1208-6BA01 | 8PQ2025-8BA16 | 8PQ2055-8BA08 | 8PQ2055-8BA10 | + | 8PQ2055-8BA06 |
| | | | 1200 mm | 3/4-pole | 8PQ1208-4BA01 | + | 8PQ1208-8BA01 | 8PQ2025-8BA16 | 8PQ2055-8BA08 | 8PQ2055-8BA10 | + | 8PQ2055-8BA06 |
| | | | 1200 mm duplex | 3/4-pole | 8PQ1208-4BA01 | + | 8PQ1208-8BA01 | 8PQ2025-8BA16 | 8PQ2055-8BA08 | 8PQ2055-8BA10 | + | 8PQ2055-8BA06 |
| 3 | 4000 A | 1000 mm | 1200 mm | 3/4-pole | 8PQ1201-4BA02 | + | 8PQ1201-8BA03 | 8PQ2025-1BA01 | 8PQ2055-1BA03 | 8PQ2055-1BA04 | + | 8PQ2055-1BA06 |
| | 5000 A | 1000 mm | 1200 mm | 3/4-pole | 8PQ1201-4BA02 | + | 8PQ1201-8BA03 | 8PQ2025-1BA01 | 8PQ2055-1BA03 | 8PQ2055-1BA04 | + | 8PQ2055-1BA06 |

## Accessories

**Frame reinforcement**



| Size | Depth | Article No. |
|---|---|---|
| 3 | 1200 mm | 8PQ5000-5BA46 |

**Barrier supports**



| Size | Depth | Scope of supply | Article No. |
|---|---|---|---|
| 1, 2, 3 | 1200 mm | 1 set = 6 units | 8PQ3000-3BA67 |

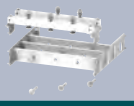
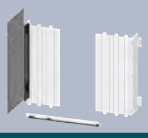
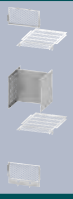
**Compartment ID strip for plug-in plates, H = 17 mm**



| Width | Scope of supply | Article No. |
|---|---|---|
| 400 mm | 6 units | 8PQ5000-3BA42 |
| 600 mm | 6 units | 8PQ5000-3BA43 |
| 800 mm | 6 units | 8PQ5000-3BA46 |
| 1000 mm | 6 units | 8PQ5000-3BA47 |

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| ❹ Auxiliary device compart-ments | ❺ Mounting plates | ❻ Main busbar connection | ❼ Cable connection | ❽ Separation | | | ❾ Base compartment covers | |
|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |  |
| Compartment doors | | | | Device compartment | Rear panels | Section | IP40 | IP55 |
| 8PQ2035-4BA01 | 8PQ6000-5BA25 | 8PQ6001-0BA65 | 8PQ6001-0BA77 | 8PQ5000-3BA82 | 8PQ5000-5BA21 | 8PQ5000-5BA30 | 8PQ2000-4BA06 | – |
| 8PQ2035-4BA01 | 8PQ6000-5BA25 | 8PQ6001-0BA65 | 8PQ6001-0BA77 | 8PQ5000-3BA82 | 8PQ5000-5BA48 | 8PQ5000-5BA30 | 8PQ2000-4BA06 | – |
| 8PQ2035-4BA01 | 8PQ6000-5BA25 | 8PQ6001-0BA65 | 8PQ6001-0BA77 | 8PQ5000-3BA82 | 8PQ5000-5BA21 | 8PQ5000-5BA30 | 8PQ2000-4BA06 | – |
| 8PQ2035-4BA01 | 8PQ6000-5BA25 | 8PQ6001-0BA65 + 8PQ6001-0BA61 | 8PQ6001-0BA77 | 8PQ5000-3BA82 | 8PQ5000-5BA21 | 8PQ5000-5BA32 | 8PQ2000-4BA06 | – |
| 8PQ2035-6BA12 | 8PQ6000-5BA26 | 8PQ6001-0BA67 | 8PQ6001-0BA78 | 8PQ5000-3BA82 | 8PQ5000-5BA22 | 8PQ5000-5BA34 | 8PQ2000-6BA13 | 8PQ2000-6BA11 |
| 8PQ2035-6BA12 | 8PQ6000-5BA26 | 8PQ6001-0BA67 | 8PQ6001-0BA78 | 8PQ5000-3BA82 | 8PQ5000-5BA50 | 8PQ5000-5BA34 | 8PQ2000-6BA13 | 8PQ2000-6BA11 |
| 8PQ2035-6BA12 | 8PQ6000-5BA26 | 8PQ6001-0BA67 | 8PQ6001-0BA78 | 8PQ5000-3BA82 | 8PQ5000-5BA22 | 8PQ5000-5BA34 | 8PQ2000-6BA13 | 8PQ2000-6BA11 |
| 8PQ2035-6BA12 | 8PQ6000-5BA26 | 8PQ6001-0BA67 + 8PQ6001-0BA62 | 8PQ6001-0BA78 | 8PQ5000-3BA82 | 8PQ5000-5BA22 | 8PQ5000-5BA36 | 8PQ2000-6BA13 | 8PQ2000-6BA11 |
| 8PQ2035-8BA06 | 8PQ6000-5BA24 | 8PQ6001-0BA72 | 8PQ6001-0BA81 | 8PQ5000-3BA81 | 8PQ5000-5BA23 | 8PQ5000-5BA38 | 8PQ2000-8BA13 | 8PQ2000-8BA11 |
| 8PQ2035-8BA06 | 8PQ6000-5BA24 | 8PQ6001-0BA72 | 8PQ6001-0BA81 | 8PQ5000-3BA81 | 8PQ5000-5BA51 | 8PQ5000-5BA38 | 8PQ2000-8BA13 | 8PQ2000-8BA11 |
| 8PQ2035-8BA06 | 8PQ6000-5BA24 | 8PQ6001-0BA72 | 8PQ6001-0BA81 | 8PQ5000-3BA81 | 8PQ5000-5BA23 | 8PQ5000-5BA38 | 8PQ2000-8BA13 | 8PQ2000-8BA11 |
| 8PQ2035-8BA06 | 8PQ6000-5BA24 | 8PQ6001-0BA72 + 8PQ6001-0BA64 | 8PQ6001-0BA81 | 8PQ5000-3BA81 | 8PQ5000-5BA23 | 8PQ5000-5BA41 | 8PQ2000-8BA13 | 8PQ2000-8BA11 |
| 8PQ2035-1BA01 | 8PQ6000-8BA70 | 8PQ6001-0BA74 | 8PQ6001-0BA82 | 8PQ5000-1BA74 | 8PQ5000-5BA24 | 8PQ5000-5BA43 | 8PQ2000-1BA04 | 8PQ2000-1BA02 |
| 8PQ2035-1BA01 | 8PQ6000-8BA70 | 8PQ6001-0BA75 | 8PQ6001-4BA18 | 8PQ5000-1BA74 | 8PQ5000-5BA24 | 8PQ5000-5BA43 | 8PQ2000-1BA04 | 8PQ2000-1BA02 |

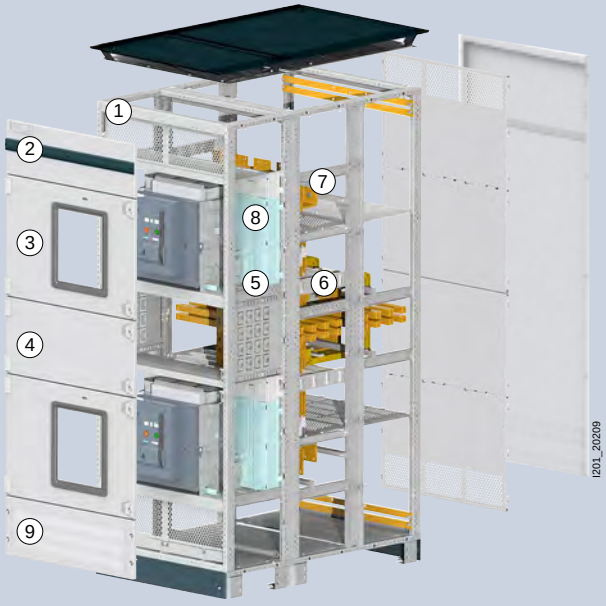


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# Section expansion

## 3WA air circuit breakers, withdrawable




| Size | $I_n$ | Width | Depth | Number of poles | ❶ Frames: At front | | ❶ Frames: At rear | ❷ Head compartments: Covers | ❸ Compartment doors: IP40 | ❸ Compartment doors: IP55 | | ❸ Compartment doors: IP55 upgrade |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | + 3WA9111-0AP01 | + 3WA9111-0AP03 | |
| 1 | 2000 A | 400 mm | 800 mm | 3-pole | 8PQ1204-8BA01 | | – | 8PQ2025-4BA03 | 8PQ2055-4BA12 | – | | – |
| | | | 1000 mm | 3-pole | 8PQ1204-4BA01 | + | 8PQ1204-6BA01 | 8PQ2025-4BA03 | 8PQ2055-4BA12 | – | | – |
| | | | 1200 mm | 3-pole | 8PQ1204-4BA01 | + | 8PQ1204-8BA01 | 8PQ2025-4BA03 | 8PQ2055-4BA12 | – | | – |
| | | | 1200 mm duplex | 3-pole | 8PQ1204-4BA01 | + | 8PQ1204-8BA01 | 8PQ2025-4BA03 | 8PQ2055-4BA12 | – | | – |
| | | 600 mm | 800 mm | 3/4-pole | 8PQ1204-4BA05 | | – | 8PQ2025-6BA25 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | + | 8PQ2055-6BA06 |
| | | | 1000 mm | 3/4-pole | 8PQ1206-4BA01 | + | 8PQ1206-6BA01 | 8PQ2025-6BA25 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | + | 8PQ2055-6BA06 |
| | | | 1200 mm | 3/4-pole | 8PQ1206-4BA01 | + | 8PQ1206-8BA01 | 8PQ2025-6BA25 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | + | 8PQ2055-6BA06 |
| | | | 1200 mm duplex | 3/4-pole | 8PQ1206-4BA01 | + | 8PQ1206-8BA01 | 8PQ2025-6BA25 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | + | 8PQ2055-6BA06 |
| 2 | 3200 A | 800 mm | 800 mm | 3/4-pole | 8PQ1204-4BA05 | | – | 8PQ2025-8BA16 | 8PQ2055-8BA08 | 8PQ2055-8BA10 | + | 8PQ2055-8BA06 |
| | | | 1000 mm | 3/4-pole | 8PQ1208-4BA01 | + | 8PQ1208-6BA01 | 8PQ2025-8BA16 | 8PQ2055-8BA08 | 8PQ2055-8BA10 | + | 8PQ2055-8BA06 |
| | | | 1200 mm | 3/4-pole | 8PQ1208-4BA01 | + | 8PQ1208-8BA01 | 8PQ2025-8BA16 | 8PQ2055-8BA08 | 8PQ2055-8BA10 | + | 8PQ2055-8BA06 |
| | | | 1200 mm duplex | 3/4-pole | 8PQ1208-4BA01 | + | 8PQ1208-8BA01 | 8PQ2025-8BA16 | 8PQ2055-8BA08 | 8PQ2055-8BA10 | + | 8PQ2055-8BA06 |
| 3 | 4000 A | 1000 mm | 1200 mm | 3/4-pole | 8PQ1201-4BA02 | + | 8PQ1201-8BA03 | 8PQ2025-1BA01 | 8PQ2055-1BA03 | 8PQ2055-1BA04 | + | 8PQ2055-1BA06 |
| | 5000 A | 1000 mm | 1200 mm | 3/4-pole | 8PQ1201-4BA02 | + | 8PQ1201-8BA03 | 8PQ2025-1BA01 | 8PQ2055-1BA03 | 8PQ2055-1BA04 | + | 8PQ2055-1BA06 |
| | 6300 A | 1000 mm | 1200 mm | 3/4-pole | 8PQ1201-4BA02 | + | 8PQ1201-8BA03 | 8PQ2025-1BA01 | 8PQ2055-1BA03 | 8PQ2055-1BA04 | + | 8PQ2055-1BA06 |

## Accessories

**Frame reinforcement**



| Size | Depth | Article No. |
|---|---|---|
| 3 | 1200 mm | 8PQ5000-5BA46 |

**Barrier supports**



| Size | Depth | Scope of supply | Article No. |
|---|---|---|---|
| 1, 2, 3 | 1200 mm | 1 set = 6 units | 8PQ3000-3BA67 |

**Compartment ID strip for plug-in plates, H = 17 mm**



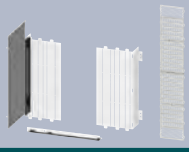
| Width | Scope of supply | Article No. |
|---|---|---|
| 400 mm | 6 units | 8PQ5000-3BA42 |
| 600 mm | 6 units | 8PQ5000-3BA43 |
| 800 mm | 6 units | 8PQ5000-3BA46 |
| 1000 mm | 6 units | 8PQ5000-3BA47 |

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| ❹ Auxiliary device compartments | ❺ Mounting plates | ❻ Main busbar connection | ❼ Cable connection | ❽ Separation | | | ❾ Base compartment covers | |
|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  | |  |  |  |
| Compartment doors | | | | Device compartment | Rear panels | Section | IP40 | IP55 |
| 8PQ2035-4BA01 | 8PQ6000-5BA25 | 8PQ6001-0BA66 | 8PQ6001-0BA77 | 8PQ5000-3BA82 | 8PQ5000-5BA21 | 8PQ5000-5BA30 | 8PQ2000-4BA06 | – |
| 8PQ2035-4BA01 | 8PQ6000-5BA25 | 8PQ6001-0BA66 | 8PQ6001-0BA77 | 8PQ5000-3BA82 | 8PQ5000-5BA48 | 8PQ5000-5BA30 | 8PQ2000-4BA06 | – |
| 8PQ2035-4BA01 | 8PQ6000-5BA25 | 8PQ6001-0BA66 | 8PQ6001-0BA77 | 8PQ5000-3BA82 | 8PQ5000-5BA21 | 8PQ5000-5BA30 | 8PQ2000-4BA06 | – |
| 8PQ2035-4BA01 | 8PQ6000-5BA25 | 8PQ6001-0BA66 + 8PQ6001-0BA61 | 8PQ6001-0BA77 | 8PQ5000-3BA82 | 8PQ5000-5BA21 | 8PQ5000-5BA32 | 8PQ2000-4BA06 | – |
| 8PQ2035-6BA12 | 8PQ6000-5BA26 | 8PQ6001-0BA68 | 8PQ6001-0BA78 | 8PQ5000-3BA82 | 8PQ5000-5BA22 | 8PQ5000-5BA34 | 8PQ2000-6BA13 | 8PQ2000-6BA11 |
| 8PQ2035-6BA12 | 8PQ6000-5BA26 | 8PQ6001-0BA68 | 8PQ6001-0BA78 | 8PQ5000-3BA82 | 8PQ5000-5BA50 | 8PQ5000-5BA34 | 8PQ2000-6BA13 | 8PQ2000-6BA11 |
| 8PQ2035-6BA12 | 8PQ6000-5BA26 | 8PQ6001-0BA68 | 8PQ6001-0BA78 | 8PQ5000-3BA82 | 8PQ5000-5BA22 | 8PQ5000-5BA34 | 8PQ2000-6BA13 | 8PQ2000-6BA11 |
| 8PQ2035-6BA12 | 8PQ6000-5BA26 | 8PQ6001-0BA68 + 8PQ6001-0BA61 | 8PQ6001-0BA78 | 8PQ5000-3BA82 | 8PQ5000-5BA22 | 8PQ5000-5BA36 | 8PQ2000-6BA13 | 8PQ2000-6BA11 |
| 8PQ2035-8BA06 | 8PQ6000-5BA24 | 8PQ6001-0BA73 | 8PQ6001-0BA81 | 8PQ5000-3BA81 | 8PQ5000-5BA23 | 8PQ5000-5BA38 | 8PQ2000-8BA13 | 8PQ2000-8BA11 |
| 8PQ2035-8BA06 | 8PQ6000-5BA24 | 8PQ6001-0BA73 | 8PQ6001-0BA81 | 8PQ5000-3BA81 | 8PQ5000-5BA51 | 8PQ5000-5BA38 | 8PQ2000-8BA13 | 8PQ2000-8BA11 |
| 8PQ2035-8BA06 | 8PQ6000-5BA24 | 8PQ6001-0BA73 | 8PQ6001-0BA81 | 8PQ5000-3BA81 | 8PQ5000-5BA23 | 8PQ5000-5BA38 | 8PQ2000-8BA13 | 8PQ2000-8BA11 |
| 8PQ2035-8BA06 | 8PQ6000-5BA24 | 8PQ6001-0BA73 + 8PQ6001-0BA61 | 8PQ6001-0BA81 | 8PQ5000-3BA81 | 8PQ5000-5BA23 | 8PQ5000-5BA41 | 8PQ2000-8BA13 | 8PQ2000-8BA11 |
| 8PQ2035-1BA01 | 8PQ6000-8BA70 | 8PQ6001-0BA74 | 8PQ6001-0BA83 | 8PQ5000-1BA74 | 8PQ5000-5BA24 | 8PQ5000-5BA43 | 8PQ2000-1BA04 | 8PQ2000-1BA02 |
| 8PQ2035-1BA01 | 8PQ6000-8BA70 | 8PQ6001-0BA75 | 8PQ6001-0BA83 | 8PQ5000-1BA74 | 8PQ5000-5BA24 | 8PQ5000-5BA43 | 8PQ2000-1BA04 | 8PQ2000-1BA02 |
| 8PQ2035-1BA01 | 8PQ6000-8BA70 | 8PQ6001-0BA76 | 8PQ6001-0BA84 | 8PQ5000-1BA74 | 8PQ5000-5BA24 | 8PQ5000-5BA43 | 8PQ2000-1BA04 | 8PQ2000-1BA02 |

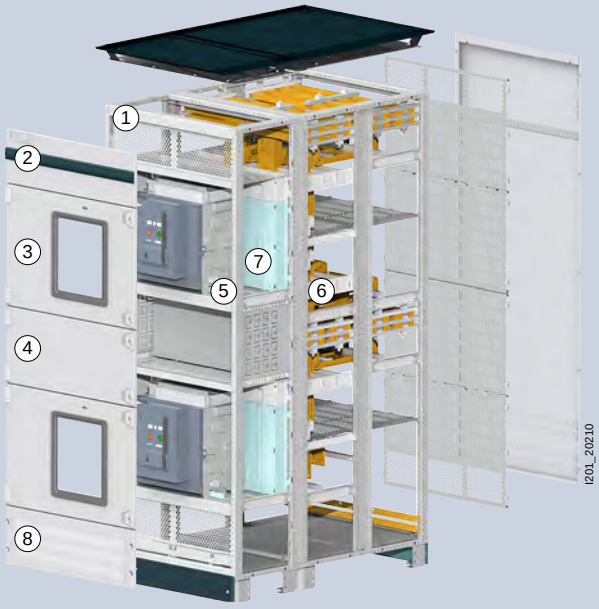


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# Section expansion

## 3WA air circuit breakers, couplings, fixed-mounted







| Size | $I_n$ | Width | Depth | Number of poles | At front | | At rear | Covers | IP40 | IP55 | | IP55 upgrade |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2000 A | 400 mm | 800 mm | 3-pole | 8PQ1204-8BA01 | | – | 8PQ2025-4BA03 | 8PQ2055-4BA12 | – | | – |
| | | | 1000 mm | 3-pole | 8PQ1204-4BA01 | + | 8PQ1204-6BA01 | 8PQ2025-4BA03 | 8PQ2055-4BA12 | – | | – |
| | | | 1200 mm | 3-pole | 8PQ1204-4BA01 | + | 8PQ1204-8BA01 | 8PQ2025-4BA03 | 8PQ2055-4BA12 | – | | – |
| | | | 1200 mm duplex | 3-pole | 8PQ1204-4BA01 | + | 8PQ1204-8BA01 | 8PQ2025-4BA03 | 8PQ2055-4BA12 | – | | – |
| | | 600 mm | 800 mm | 3/4-pole | 8PQ1206-8BA01 | | – | 8PQ2025-6BA25 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | + | 8PQ2055-6BA06 |
| | | | 1000 mm | 3/4-pole | 8PQ1206-4BA01 | + | 8PQ1206-6BA01 | 8PQ2025-6BA25 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | + | 8PQ2055-6BA06 |
| | | | 1200 mm | 3/4-pole | 8PQ1206-4BA01 | + | 8PQ1206-8BA01 | 8PQ2025-6BA25 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | + | 8PQ2055-6BA06 |
| | | | 1200 mm duplex | 3/4-pole | 8PQ1206-4BA01 | + | 8PQ1206-8BA01 | 8PQ2025-6BA25 | 8PQ2055-6BA16 | 8PQ2055-6BA17 | + | 8PQ2055-6BA06 |
| 2 | 3200 A | 800 mm | 800 mm | 3/4-pole | 8PQ1208-8BA01 | | – | 8PQ2025-8BA16 | 8PQ2055-8BA08 | 8PQ2055-8BA10 | + | 8PQ2055-8BA06 |
| | | | 1000 mm | 3/4-pole | 8PQ1208-4BA01 | + | 8PQ1208-6BA01 | 8PQ2025-8BA16 | 8PQ2055-8BA08 | 8PQ2055-8BA10 | + | 8PQ2055-8BA06 |
| | | | 1200 mm | 3/4-pole | 8PQ1208-4BA01 | + | 8PQ1208-8BA01 | 8PQ2025-8BA16 | 8PQ2055-8BA08 | 8PQ2055-8BA10 | + | 8PQ2055-8BA06 |
| | | | 1200 mm duplex | 3/4-pole | 8PQ1208-4BA01 | + | 8PQ1208-8BA01 | 8PQ2025-8BA16 | 8PQ2055-8BA08 | 8PQ2055-8BA10 | + | 8PQ2055-8BA06 |
| 3 | 4000 A | 1000 mm | 1200 mm | 3/4-pole | 8PQ1201-4BA02 | + | 8PQ1201-8BA03 | 8PQ2025-1BA01 | 8PQ2055-1BA03 | 8PQ2055-1BA04 | + | 8PQ2055-1BA06 |
| | 5000 A | 1000 mm | 1200 mm | 3/4-pole | 8PQ1201-4BA02 | + | 8PQ1201-8BA03 | 8PQ2025-1BA01 | 8PQ2055-1BA03 | 8PQ2055-1BA04 | + | 8PQ2055-1BA06 |

## Accessories

**Frame reinforcement**



| Size | Depth | Article No. |
|---|---|---|
| 3 | 1200 mm | 8PQ5000-5BA46 |

**Barrier supports**



| Size | Depth | Scope of supply | Article No. |
|---|---|---|---|
| 1, 2, 3 | 1200 mm | 1 set = 6 units | 8PQ3000-3BA67 |

**Compartment ID strip for plug-in plates, H = 17 mm**



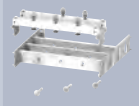
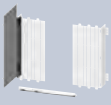
| Width | Scope of supply | Article No. |
|---|---|---|
| 400 mm | 6 units | 8PQ5000-3BA42 |
| 600 mm | 6 units | 8PQ5000-3BA43 |
| 800 mm | 6 units | 8PQ5000-3BA46 |
| 1000 mm | 6 units | 8PQ5000-3BA47 |

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| ❹ Auxiliary device compartments | ❺ Mounting plates | ❻ Main busbar connection | ❼ Separation | | | ❽ Base compartment covers | |
|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |
| **Compartment doors** | | | **Device compartment** | **Rear panels** | **Section** | **IP40** | **IP55** |
| 8PQ2035-4BA01 | 8PQ6000-5BA25 | 2 × 8PQ6001-0BA65 | 8PQ5000-3BA82 | 8PQ5000-5BA25 | 8PQ5000-5BA31 | 8PQ2000-4BA06 | – |
| 8PQ2035-4BA01 | 8PQ6000-5BA25 | 2 × 8PQ6001-0BA65 | 8PQ5000-3BA82 | 8PQ5000-5BA52 | 8PQ5000-5BA31 | 8PQ2000-4BA06 | – |
| 8PQ2035-4BA01 | 8PQ6000-5BA25 | 2 × 8PQ6001-0BA65 | 8PQ5000-3BA82 | 8PQ5000-5BA25 | 8PQ5000-5BA31 | 8PQ2000-4BA06 | – |
| 8PQ2035-4BA01 | 8PQ6000-5BA25 | 2 × 8PQ6001-0BA65 + 8PQ6001-0BA61 | 8PQ5000-3BA82 | 8PQ5000-5BA25 | 8PQ5000-5BA33 | 8PQ2000-4BA06 | – |
| 8PQ2035-6BA12 | 8PQ6000-5BA26 | 2 × 8PQ6001-0BA67 | 8PQ5000-3BA82 | 8PQ5000-5BA26 | 8PQ5000-5BA35 | 8PQ2000-6BA13 | 8PQ2000-6BA11 |
| 8PQ2035-6BA12 | 8PQ6000-5BA26 | 2 × 8PQ6001-0BA67 | 8PQ5000-3BA82 | 8PQ5000-5BA53 | 8PQ5000-5BA35 | 8PQ2000-6BA13 | 8PQ2000-6BA11 |
| 8PQ2035-6BA12 | 8PQ6000-5BA26 | 2 × 8PQ6001-0BA67 | 8PQ5000-3BA82 | 8PQ5000-5BA26 | 8PQ5000-5BA35 | 8PQ2000-6BA13 | 8PQ2000-6BA11 |
| 8PQ2035-6BA12 | 8PQ6000-5BA26 | 2 × 8PQ6001-0BA67 + 8PQ6001-0BA62 | 8PQ5000-3BA82 | 8PQ5000-5BA26 | 8PQ5000-5BA37 | 8PQ2000-6BA13 | 8PQ2000-6BA11 |
| 8PQ2035-8BA06 | 8PQ6000-5BA24 | 2 × 8PQ6001-0BA72 | 8PQ5000-3BA81 | 8PQ5000-5BA27 | 8PQ5000-5BA40 | 8PQ2000-8BA13 | 8PQ2000-8BA11 |
| 8PQ2035-8BA06 | 8PQ6000-5BA24 | 2 × 8PQ6001-0BA72 | 8PQ5000-3BA81 | 8PQ5000-5BA54 | 8PQ5000-5BA40 | 8PQ2000-8BA13 | 8PQ2000-8BA11 |
| 8PQ2035-8BA06 | 8PQ6000-5BA24 | 2 × 8PQ6001-0BA72 | 8PQ5000-3BA81 | 8PQ5000-5BA27 | 8PQ5000-5BA40 | 8PQ2000-8BA13 | 8PQ2000-8BA11 |
| 8PQ2035-8BA06 | 8PQ6000-5BA24 | 2 × 8PQ6001-0BA72 + 8PQ6001-0BA64 | 8PQ5000-3BA81 | 8PQ5000-5BA27 | 8PQ5000-5BA42 | 8PQ2000-8BA13 | 8PQ2000-8BA11 |
| 8PQ2035-1BA01 | 8PQ6000-8BA70 | 2 × 8PQ6001-0BA74 | 8PQ5000-1BA74 | 8PQ5000-5BA28 | 8PQ5000-5BA44 | 8PQ2000-1BA04 | 8PQ2000-1BA02 |
| 8PQ2035-1BA01 | 8PQ6000-8BA70 | 2 × 8PQ6001-0BA75 | 8PQ5000-1BA74 | 8PQ5000-5BA28 | 8PQ5000-5BA44 | 8PQ2000-1BA04 | 8PQ2000-1BA02 |



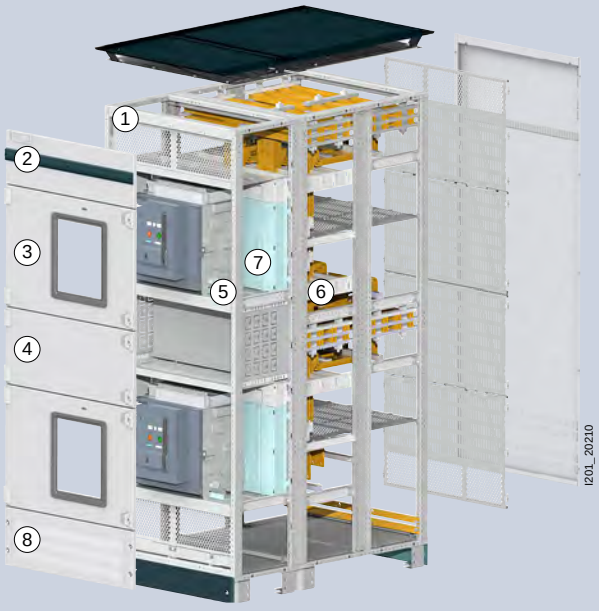
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# Section expansion

## 3WA air circuit breakers, couplings, withdrawable




| Size | $I_n$ | Width | Depth | Number of poles | ❶ Frame: At front | | ❶ Frame: At rear | ❷ Head compartments: Covers | ❸ Compartment doors: IP40 | ❸ Compartment doors: IP55 | ❸ Compartment doors: IP55 upgrade |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | + 3WA9111-0AP01 | + 3WA9111-0AP03 |
| 1 | 2000 A | 400 mm | 800 mm | 3-pole | 8PQ1204-8BA01 | | – | 8PQ2025-4BA03 | 8PQ2055-4BA12 | – | – |
| | | | 1000 mm | 3-pole | 8PQ1204-4BA01 | + | 8PQ1204-6BA01 | 8PQ2025-4BA03 | 8PQ2055-4BA12 | – | – |
| | | | 1200 mm | 3-pole | 8PQ1204-4BA01 | + | 8PQ1204-8BA01 | 8PQ2025-4BA03 | 8PQ2055-4BA12 | – | – |
| | | | 1200 mm duplex | 3-pole | 8PQ1204-4BA01 | + | 8PQ1204-8BA01 | 8PQ2025-4BA03 | 8PQ2055-4BA12 | – | – |
| | | 600 mm | 800 mm | 3/4-pole | 8PQ1206-8BA01 | | – | 8PQ2025-6BA25 | 8PQ2055-6BA16 | 8PQ2055-6BA17 + | 8PQ2055-6BA06 |
| | | | 1000 mm | 3/4-pole | 8PQ1206-4BA01 | + | 8PQ1206-6BA01 | 8PQ2025-6BA25 | 8PQ2055-6BA16 | 8PQ2055-6BA17 + | 8PQ2055-6BA06 |
| | | | 1200 mm | 3/4-pole | 8PQ1206-4BA01 | + | 8PQ1206-8BA01 | 8PQ2025-6BA25 | 8PQ2055-6BA16 | 8PQ2055-6BA17 + | 8PQ2055-6BA06 |
| | | | 1200 mm duplex | 3/4-pole | 8PQ1206-4BA01 | + | 8PQ1206-8BA01 | 8PQ2025-6BA25 | 8PQ2055-6BA16 | 8PQ2055-6BA17 + | 8PQ2055-6BA06 |
| 2 | 3200 A | 800 mm | 800 mm | 3/4-pole | 8PQ1208-8BA01 | | – | 8PQ2025-8BA16 | 8PQ2055-8BA08 | 8PQ2055-8BA10 + | 8PQ2055-8BA06 |
| | | | 1000 mm | 3/4-pole | 8PQ1208-4BA01 | + | 8PQ1208-6BA01 | 8PQ2025-8BA16 | 8PQ2055-8BA08 | 8PQ2055-8BA10 + | 8PQ2055-8BA06 |
| | | | 1200 mm | 3/4-pole | 8PQ1208-4BA01 | + | 8PQ1208-8BA01 | 8PQ2025-8BA16 | 8PQ2055-8BA08 | 8PQ2055-8BA10 + | 8PQ2055-8BA06 |
| | | | 1200 mm duplex | 3/4-pole | 8PQ1208-4BA01 | + | 8PQ1208-8BA01 | 8PQ2025-8BA16 | 8PQ2055-8BA08 | 8PQ2055-8BA10 + | 8PQ2055-8BA06 |
| 3 | 4000 A | 1000 mm | 1200 mm | 3/4-pole | 8PQ1201-4BA02 | + | 8PQ1201-8BA03 | 8PQ2025-1BA01 | 8PQ2055-1BA03 | 8PQ2055-1BA04 + | 8PQ2055-1BA06 |
| | 5000 A | 1000 mm | 1200 mm | 3/4-pole | 8PQ1201-4BA02 | + | 8PQ1201-8BA03 | 8PQ2025-1BA01 | 8PQ2055-1BA03 | 8PQ2055-1BA04 + | 8PQ2055-1BA06 |
| | 6300 A | 1000 mm | 1200 mm | 3/4-pole | 8PQ1201-4BA02 | + | 8PQ1201-8BA03 | 8PQ2025-1BA01 | 8PQ2055-1BA03 | 8PQ2055-1BA04 + | 8PQ2055-1BA06 |

## Accessories

**Frame reinforcement**



| Size | Depth | Article No. |
|---|---|---|
| 3 | 1200 mm | 8PQ5000-5BA46 |

**Barrier supports**



| Size | Depth | Scope of supply | Article No. |
|---|---|---|---|
| 1, 2, 3 | 1200 mm | 1 set = 6 units | 8PQ3000-3BA67 |

**Compartment ID strip for plug-in plates, H = 17 mm**



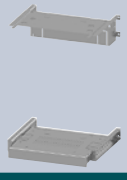
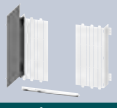
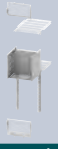
| Width | Scope of supply | Article No. |
|---|---|---|
| 400 mm | 6 units | 8PQ5000-3BA42 |
| 600 mm | 6 units | 8PQ5000-3BA43 |
| 800 mm | 6 units | 8PQ5000-3BA46 |
| 1000 mm | 6 units | 8PQ5000-3BA47 |

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| ❹ Auxiliary device compartments | ❺ Mounting plates | ❻ Main busbar connection | ❼ Separation | | | ❽ Base compartment covers | |
|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |
| **Compartment doors** | | | **Device compartment** | **Rear panels** | **Section** | **IP40** | **IP55** |
| 8PQ2035-4BA01 | 8PQ6000-5BA25 | 2 × 8PQ6001-0BA66 | 8PQ5000-3BA82 | 8PQ5000-5BA25 | 8PQ5000-5BA31 | 8PQ2000-4BA06 | – |
| 8PQ2035-4BA01 | 8PQ6000-5BA25 | 2 × 8PQ6001-0BA66 | 8PQ5000-3BA82 | 8PQ5000-5BA52 | 8PQ5000-5BA31 | 8PQ2000-4BA06 | – |
| 8PQ2035-4BA01 | 8PQ6000-5BA25 | 2 × 8PQ6001-0BA66 | 8PQ5000-3BA82 | 8PQ5000-5BA25 | 8PQ5000-5BA31 | 8PQ2000-4BA06 | – |
| 8PQ2035-4BA01 | 8PQ6000-5BA25 | 2 × 8PQ6001-0BA66 + 8PQ6001-0BA61 | 8PQ5000-3BA82 | 8PQ5000-5BA25 | 8PQ5000-5BA33 | 8PQ2000-4BA06 | – |
| 8PQ2035-6BA12 | 8PQ6000-5BA26 | 2 × 8PQ6001-0BA68 | 8PQ5000-3BA82 | 8PQ5000-5BA26 | 8PQ5000-5BA35 | 8PQ2000-6BA13 | 8PQ2000-6BA11 |
| 8PQ2035-6BA12 | 8PQ6000-5BA26 | 2 × 8PQ6001-0BA68 | 8PQ5000-3BA82 | 8PQ5000-5BA53 | 8PQ5000-5BA35 | 8PQ2000-6BA13 | 8PQ2000-6BA11 |
| 8PQ2035-6BA12 | 8PQ6000-5BA26 | 2 × 8PQ6001-0BA68 | 8PQ5000-3BA82 | 8PQ5000-5BA26 | 8PQ5000-5BA35 | 8PQ2000-6BA13 | 8PQ2000-6BA11 |
| 8PQ2035-6BA12 | 8PQ6000-5BA26 | 8PQ6001-0BA68 + 8PQ6001-0BA62 | 8PQ5000-3BA82 | 8PQ5000-5BA26 | 8PQ5000-5BA35 | 8PQ2000-6BA13 | 8PQ2000-6BA11 |
| 8PQ2035-8BA06 | 8PQ6000-5BA24 | 2 × 8PQ6001-0BA73 | 8PQ5000-3BA81 | 8PQ5000-5BA27 | 8PQ5000-5BA40 | 8PQ2000-8BA13 | 8PQ2000-8BA11 |
| 8PQ2035-8BA06 | 8PQ6000-5BA24 | 2 × 8PQ6001-0BA73 | 8PQ5000-3BA81 | 8PQ5000-5BA54 | 8PQ5000-5BA40 | 8PQ2000-8BA13 | 8PQ2000-8BA11 |
| 8PQ2035-8BA06 | 8PQ6000-5BA24 | 2 × 8PQ6001-0BA73 | 8PQ5000-3BA81 | 8PQ5000-5BA27 | 8PQ5000-5BA40 | 8PQ2000-8BA13 | 8PQ2000-8BA11 |
| 8PQ2035-8BA06 | 8PQ6000-5BA24 | 2 × 8PQ6001-0BA73 + 8PQ6001-0BA64 | 8PQ5000-3BA81 | 8PQ5000-5BA27 | 8PQ5000-5BA42 | 8PQ2000-8BA13 | 8PQ2000-8BA11 |
| 8PQ2035-1BA01 | 8PQ6000-8BA70 | 2 × 8PQ6001-0BA74 | 8PQ5000-1BA74 | 8PQ5000-5BA28 | 8PQ5000-5BA44 | 8PQ2000-1BA04 | 8PQ2000-1BA02 |
| 8PQ2035-1BA01 | 8PQ6000-8BA70 | 2 × 8PQ6001-0BA75 | 8PQ5000-1BA74 | 8PQ5000-5BA28 | 8PQ5000-5BA44 | 8PQ2000-1BA04 | 8PQ2000-1BA02 |
| 8PQ2035-1BA01 | 8PQ6000-8BA70 | 2 × 8PQ6001-0BA76 | 8PQ5000-1BA74 | 8PQ5000-5BA28 | 8PQ5000-5BA44 | 8PQ2000-1BA04 | 8PQ2000-1BA02 |



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# Section expansion

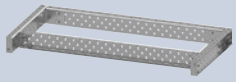
## 3WA air circuit breakers, accessories

### Busbar supports



| | Size | Width | Number of poles | Scope of supply | Article No. |
|---|---|---|---|---|---|
| | 1 | 600 mm | 4-pole | 4 units | 8PQ6000-4BA35 |
| | | 800 mm | 4-pole | 4 units | 8PQ6000-4BA37 |
| | 2 | 600 mm | 3-pole | 4 units | 8PQ6000-4BA36 |
| | | 800 mm | 4-pole | 4 units | 8PQ6000-4BA38 |
| | 3 | 1000 mm | 4-pole | 4 units | 8PQ6000-4BA40 |

### Busbar connections



| | Size | Width | Number of poles | Scope of supply | Article No. |
|---|---|---|---|---|---|
| For use with SIVACON 8PS | 1 | 600 mm | 4-pole | 1 unit | 8PQ3000-1BA70 |
| | | 800 mm | 4-pole | 1 unit | 8PQ3000-1BA71 |
| | 2 | 600 mm | 3-pole | 1 unit | 8PQ3000-1BA70 |
| | | 800 mm | 4-pole | 1 unit | 8PQ3000-1BA71 |
| | 3 | 1000 mm | 4-pole | 1 unit | 8PQ3000-1BA72 |

### Cable clamping rails



| | Size | Width | Scope of supply | Article No. |
|---|---|---|---|---|
| | 1 | 400 mm | 5 units | 8PQ3000-0BA41 |
| | | 600 mm | 5 units | 8PQ3000-0BA42 |
| | | 800 mm | 5 units | 8PQ3000-0BA43 |
| | 2 | 600 mm | 5 units | 8PQ3000-0BA42 |
| | | 800 mm | 5 units | 8PQ3000-0BA43 |
| | 3 | 1000 mm | 4 units | 8PQ3000-3BA68 |





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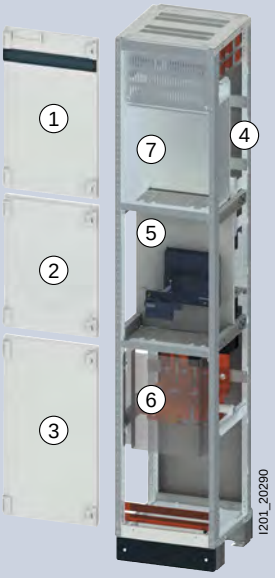



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# Section expansion

## 3VA molded case circuit breakers, 3-pole




### Width 400 mm

| Main busbars | Type | $I_n$ | Insert | ❶ Head compartment doors | ❷ Compartment doors | ❸ Base compartment doors | ❹ Main busbar connection | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | IP40 | IP40 | IP40 | Holder | Covers | Insulation Length 15 m |
| Top front | 3VA15 | 1000A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA55 | 8PQ3000-3BA82 | – |
| | 3VA25 | 1000A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA55 | 8PQ3000-3BA82 | – |
| | 3VA26 | 1250A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA58 | – | 8PQ3000-3BA81 |
| | 3VA27 new | 1600A | Withdrawable | 8PQ2067-4BA01 | 8PQ2055-4BA17 | 8PQ2072-4BA01 | 8PQ6001-5BA65 | 8PQ3000-4BA01 | – |
| Top rear | 3VA15 | 1000A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA56 | 8PQ3000-3BA82 | – |
| | 3VA25 | 1000A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA56 | 8PQ3000-3BA82 | – |
| | 3VA26 | 1250A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA60 | – | 8PQ3000-3BA81 |
| | 3VA27 new | 1600A | Withdrawable | 8PQ2067-4BA01 | 8PQ2055-4BA17 | 8PQ2072-4BA01 | 8PQ6001-5BA66 | 8PQ3000-4BA01 | – |
| Top duplex | 3VA15 | 1000A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA57 | 8PQ3000-3BA82 | – |
| | 3VA25 | 1000A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA57 | 8PQ3000-3BA82 | – |
| | 3VA26 | 1250A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA61 | – | 8PQ3000-3BA81 |
| | 3VA27 new | 1600A | Withdrawable | 8PQ2067-4BA01 | 8PQ2055-4BA17 | 8PQ2072-4BA01 | 8PQ6001-5BA67 | 8PQ3000-4BA01 | – |
| Bottom front | 3VA15 | 1000A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA55 | – | 8PQ3000-3BA81 |
| | 3VA25 | 1000A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA55 | – | 8PQ3000-3BA81 |
| | 3VA26 | 1250A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA58 | – | 8PQ3000-3BA81 |
| | 3VA27 new | 1600A | Withdrawable | 8PQ2067-4BA01 | 8PQ2055-4BA17 | 8PQ2072-4BA01 | 8PQ6001-5BA65 | 8PQ3000-4BA02 | 8PQ3000-3BA81 |
| Bottom rear | 3VA15 | 1000A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA56 | – | 8PQ3000-3BA81 |
| | 3VA25 | 1000A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA56 | – | 8PQ3000-3BA81 |
| | 3VA26 | 1250A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA60 | – | 8PQ3000-3BA81 |
| | 3VA27 new | 1600A | Withdrawable | 8PQ2067-4BA01 | 8PQ2055-4BA17 | 8PQ2072-4BA01 | 8PQ6001-5BA66 | 8PQ3000-4BA02 | 8PQ3000-3BA81 |
| Bottom duplex | 3VA15 | 1000A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA57 | – | 8PQ3000-3BA81 |
| | 3VA25 | 1000A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA57 | – | 8PQ3000-3BA81 |
| | 3VA26 | 1250A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA61 | – | 8PQ3000-3BA81 |
| | 3VA27 new | 1600A | Withdrawable | 8PQ2067-4BA01 | 8PQ2055-4BA17 | 8PQ2072-4BA01 | 8PQ6001-5BA67 | 8PQ3000-4BA02 | 8PQ3000-3BA81 |





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## Accessories





| Position | Article No. |
|---|---|
| Head compartment | 8PQ2067-4BA02 |
| Compartment doors 3VA | 8PQ2055-4BA07 |
| Base compartment | 8PQ2075-4BA02 |

| | ❺ Mounting plates | ❻ Cable connection | | ❼ Separation | | | |
|---|---|---|---|---|---|---|---|
| 1 set = 3 units |  |  |  |  |  |  |  |
| Insulation on the left | | L1 – L3 | N | Auxiliary device compartments | Compartment | Rear Depth 600 mm | Depth 800 mm |
| – | 8PQ6001-4BA26 | 8PQ6001-4BA67 | 8PQ6001-5BA81 | 8PQ5000-5BA65 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA26 | 8PQ6001-4BA67 | 8PQ6001-5BA81 | 8PQ5000-5BA65 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| 8PQ5000-5BA74 | 8PQ6001-4BA26 | 8PQ6001-4BA68 | 8PQ6001-5BA82 | 8PQ5000-5BA65 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA27 | 8PQ6001-4BA71 | 8PQ6001-5BA84 | 8PQ5000-5BA65 | 8PQ5000-5BA60 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA26 | 8PQ6001-4BA67 | 8PQ6001-5BA81 | 8PQ5000-5BA65 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA26 | 8PQ6001-4BA67 | 8PQ6001-5BA81 | 8PQ5000-5BA65 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| 8PQ5000-5BA74 | 8PQ6001-4BA26 | 8PQ6001-4BA68 | 8PQ6001-5BA82 | 8PQ5000-5BA65 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA27 | 8PQ6001-4BA71 | 8PQ6001-5BA84 | 8PQ5000-5BA65 | 8PQ5000-5BA60 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA26 | 8PQ6001-4BA67 | 8PQ6001-5BA81 | 8PQ5000-5BA65 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA26 | 8PQ6001-4BA67 | 8PQ6001-5BA81 | 8PQ5000-5BA65 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| 8PQ5000-5BA74 | 8PQ6001-4BA26 | 8PQ6001-4BA68 | 8PQ6001-5BA82 | 8PQ5000-5BA65 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA27 | 8PQ6001-4BA71 | 8PQ6001-5BA84 | 8PQ5000-5BA65 | 8PQ5000-5BA60 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA26 | 8PQ6001-4BA67 | 8PQ6001-5BA81 | 8PQ5000-5BA66 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA26 | 8PQ6001-4BA67 | 8PQ6001-5BA81 | 8PQ5000-5BA66 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| 8PQ5000-5BA74 | 8PQ6001-4BA26 | 8PQ6001-4BA68 | 8PQ6001-5BA82 | 8PQ5000-5BA66 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA27 | 8PQ6001-4BA71 | 8PQ6001-5BA84 | 8PQ5000-5BA66 | 8PQ5000-5BA60 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA26 | 8PQ6001-4BA67 | 8PQ6001-5BA81 | 8PQ5000-5BA66 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA26 | 8PQ6001-4BA67 | 8PQ6001-5BA81 | 8PQ5000-5BA66 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| 8PQ5000-5BA74 | 8PQ6001-4BA26 | 8PQ6001-4BA68 | 8PQ6001-5BA82 | 8PQ5000-5BA66 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA27 | 8PQ6001-4BA71 | 8PQ6001-5BA84 | 8PQ5000-5BA66 | 8PQ5000-5BA60 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA26 | 8PQ6001-4BA67 | 8PQ6001-5BA81 | 8PQ5000-5BA66 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA26 | 8PQ6001-4BA67 | 8PQ6001-5BA81 | 8PQ5000-5BA66 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| 8PQ5000-5BA74 | 8PQ6001-4BA26 | 8PQ6001-4BA68 | 8PQ6001-5BA82 | 8PQ5000-5BA66 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA27 | 8PQ6001-4BA71 | 8PQ6001-5BA84 | 8PQ5000-5BA66 | 8PQ5000-5BA60 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |

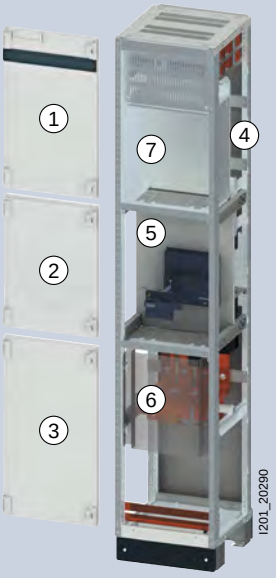


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# Section expansion

## 3VA molded case circuit breakers, 4-pole




### Width 400 mm

| Main busbars | Type | $I_n$ | Insert | ❶ Head compartment doors | ❷ Compartment doors | ❸ Base compartment doors | ❹ Main busbar connection | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | IP40 | IP40 | IP40 | Holder | Covers | Insulation Length 15 m |
| Top front | 3VA15 | 1000A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA55 | 8PQ3000-3BA82 | – |
| | 3VA25 | 1000A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA55 | 8PQ3000-3BA82 | – |
| | 3VA26 | 1250A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA58 | – | 8PQ3000-3BA81 |
| | 3VA27 new | 1600A | Withdrawable | 8PQ2067-4BA01 | 8PQ2055-4BA17 | 8PQ2072-4BA01 | 8PQ6001-5BA65 | 8PQ3000-4BA01 | – |
| Top rear | 3VA15 | 1000A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA56 | 8PQ3000-3BA82 | – |
| | 3VA25 | 1000A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA56 | 8PQ3000-3BA82 | – |
| | 3VA26 | 1250A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA60 | – | 8PQ3000-3BA81 |
| | 3VA27 new | 1600A | Withdrawable | 8PQ2067-4BA01 | 8PQ2055-4BA17 | 8PQ2072-4BA01 | 8PQ6001-5BA66 | 8PQ3000-4BA01 | – |
| Top duplex | 3VA15 | 1000A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA57 | 8PQ3000-3BA82 | – |
| | 3VA25 | 1000A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA57 | 8PQ3000-3BA82 | – |
| | 3VA26 | 1250A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA61 | – | 8PQ3000-3BA81 |
| | 3VA27 new | 1600A | Withdrawable | 8PQ2067-4BA01 | 8PQ2055-4BA17 | 8PQ2072-4BA01 | 8PQ6001-5BA67 | 8PQ3000-4BA01 | – |
| Bottom front | 3VA15 | 1000A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA55 | – | 8PQ3000-3BA81 |
| | 3VA25 | 1000A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA55 | – | 8PQ3000-3BA81 |
| | 3VA26 | 1250A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA58 | – | 8PQ3000-3BA81 |
| | 3VA27 new | 1600A | Withdrawable | 8PQ2067-4BA01 | 8PQ2055-4BA17 | 8PQ2072-4BA01 | 8PQ6001-5BA65 | 8PQ3000-4BA02 | 8PQ3000-3BA81 |
| Bottom rear | 3VA15 | 1000A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA56 | – | 8PQ3000-3BA81 |
| | 3VA25 | 1000A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA56 | – | 8PQ3000-3BA81 |
| | 3VA26 | 1250A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA60 | – | 8PQ3000-3BA81 |
| | 3VA27 new | 1600A | Withdrawable | 8PQ2067-4BA01 | 8PQ2055-4BA17 | 8PQ2072-4BA01 | 8PQ6001-5BA66 | 8PQ3000-4BA02 | 8PQ3000-3BA81 |
| Bottom duplex | 3VA15 | 1000A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA57 | – | 8PQ3000-3BA81 |
| | 3VA25 | 1000A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA57 | – | 8PQ3000-3BA81 |
| | 3VA26 | 1250A | Fixed-mounted | 8PQ2067-4BA01 | 8PQ2055-4BA15 | 8PQ2072-4BA01 | 8PQ6001-5BA61 | – | 8PQ3000-3BA81 |
| | 3VA27 new | 1600A | Withdrawable | 8PQ2067-4BA01 | 8PQ2055-4BA17 | 8PQ2072-4BA01 | 8PQ6001-5BA67 | 8PQ3000-4BA02 | 8PQ3000-3BA81 |





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## Accessories





| Position | Article No. |
|---|---|
| Head compartment | 8PQ2067-4BA02 |
| Compartment doors 3VA | 8PQ2055-4BA07 |
| Base compartment | 8PQ2075-4BA02 |

| | ❺ Mounting plates | ❻ Cable connection | ❼ Separation | | | |
|---|---|---|---|---|---|---|
| 1 set = 3 units |  |  |  |  |  |  |
| **Insulation on the left** | | **L1 – L3** | **Auxiliary device compartments** | **Compartment** | **Rear Depth 600 mm** | **Depth 800 mm** |
| – | 8PQ6001-4BA26 | 8PQ6001-4BA67 | 8PQ5000-5BA65 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA26 | 8PQ6001-4BA67 | 8PQ5000-5BA65 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| 8PQ5000-5BA74 | 8PQ6001-4BA26 | 8PQ6001-4BA68 | 8PQ5000-5BA65 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA27 | 8PQ6001-4BA71 | 8PQ5000-5BA65 | 8PQ5000-5BA60 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA26 | 8PQ6001-4BA67 | 8PQ5000-5BA65 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA26 | 8PQ6001-4BA67 | 8PQ5000-5BA65 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| 8PQ5000-5BA74 | 8PQ6001-4BA26 | 8PQ6001-4BA68 | 8PQ5000-5BA65 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA27 | 8PQ6001-4BA71 | 8PQ5000-5BA65 | 8PQ5000-5BA60 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA26 | 8PQ6001-4BA67 | 8PQ5000-5BA65 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA26 | 8PQ6001-4BA67 | 8PQ5000-5BA65 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| 8PQ5000-5BA74 | 8PQ6001-4BA26 | 8PQ6001-4BA68 | 8PQ5000-5BA65 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA27 | 8PQ6001-4BA71 | 8PQ5000-5BA65 | 8PQ5000-5BA60 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA26 | 8PQ6001-4BA67 | 8PQ5000-5BA66 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA26 | 8PQ6001-4BA67 | 8PQ5000-5BA66 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| 8PQ5000-5BA74 | 8PQ6001-4BA26 | 8PQ6001-4BA68 | 8PQ5000-5BA66 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA27 | 8PQ6001-4BA71 | 8PQ5000-5BA66 | 8PQ5000-5BA60 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA26 | 8PQ6001-4BA67 | 8PQ5000-5BA66 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA26 | 8PQ6001-4BA67 | 8PQ5000-5BA66 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| 8PQ5000-5BA74 | 8PQ6001-4BA26 | 8PQ6001-4BA68 | 8PQ5000-5BA66 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA27 | 8PQ6001-4BA71 | 8PQ5000-5BA66 | 8PQ5000-5BA60 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA26 | 8PQ6001-4BA67 | 8PQ5000-5BA66 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA26 | 8PQ6001-4BA67 | 8PQ5000-5BA66 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| 8PQ5000-5BA74 | 8PQ6001-4BA26 | 8PQ6001-4BA68 | 8PQ5000-5BA66 | 8PQ5000-6BA30 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |
| – | 8PQ6001-4BA27 | 8PQ6001-4BA71 | 8PQ5000-5BA66 | 8PQ5000-5BA60 | 8PQ5000-5BA70 | 8PQ5000-5BA71 |



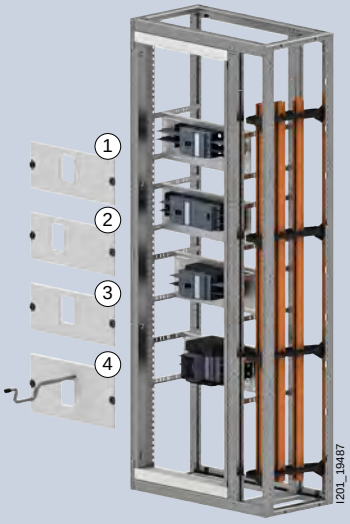
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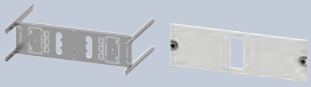


# Section expansion

## 3VA molded case circuit breakers, 3-pole




❶ Fixed-mounted version



| Type | $I_n$ | Width | Operating mechanism | | | Device holders | Covers |
|---|---|---|---|---|---|---|---|
| | | | Direct | Rotary | Motorized | | |
| 3VA10 | 100 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA01 | 8PQ2015-6BA26 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA02 | 8PQ2015-8BA11 |
| 3VA11 | 160 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA01 | 8PQ2015-6BA26 |
| | | | – | – | ■ | 8PQ6000-8BA01 | 8PQ2015-6BA26 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA02 | 8PQ2015-8BA11 |
| | | | – | – | ■ | 8PQ6000-8BA02 | 8PQ2015-8BA11 |
| 3VA12 | 250 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA03 | 8PQ2015-6BA28 |
| | | | – | – | ■ | 8PQ6000-8BA03 | 8PQ2015-6BA28 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA07 | 8PQ2020-8BA20 |
| | | | – | – | ■ | 8PQ6000-8BA07 | 8PQ2020-8BA20 |
| 3VA13 | 400 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA23 | 8PQ2020-6BA41 |
| | | | – | – | ■ | 8PQ6000-8BA23 | 8PQ2020-6BA41 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA27 | 8PQ2025-8BA14 |
| | | | – | – | ■ | 8PQ6000-8BA27 | 8PQ2025-8BA14 |
| 3VA14 | 630 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA23 | 8PQ2020-6BA41 |
| | | | – | – | ■ | 8PQ6000-8BA23 | 8PQ2020-6BA41 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA27 | 8PQ2025-8BA14 |
| | | | – | – | ■ | 8PQ6000-8BA27 | 8PQ2025-8BA14 |
| 3VA15 | 1000 A | 800 mm | ■ | – | – | 8PQ6001-4BA22 | 8PQ2045-8BA22 |
| 3VA20 | 100 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA08 | 8PQ2020-6BA38 |
| | | | – | – | ■ | 8PQ6000-8BA08 | 8PQ2020-6BA38 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA10 | 8PQ2020-8BA21 |
| | | | – | – | ■ | 8PQ6000-8BA10 | 8PQ2020-8BA21 |
| 3VA21 | 160 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA08 | 8PQ2020-6BA38 |
| | | | – | – | ■ | 8PQ6000-8BA08 | 8PQ2020-6BA38 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA10 | 8PQ2020-8BA21 |
| | | | – | – | ■ | 8PQ6000-8BA10 | 8PQ2020-8BA21 |
| 3VA22 | 250 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA08 | 8PQ2020-6BA38 |
| | | | – | – | ■ | 8PQ6000-8BA08 | 8PQ2020-6BA38 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA10 | 8PQ2020-8BA21 |
| | | | – | – | ■ | 8PQ6000-8BA10 | 8PQ2020-8BA21 |
| 3VA23 | 400 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA23 | 8PQ2020-6BA41 |
| | | | – | – | ■ | 8PQ6000-8BA23 | 8PQ2020-6BA41 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA27 | 8PQ2025-8BA14 |
| | | | – | – | ■ | 8PQ6000-8BA27 | 8PQ2025-8BA14 |
| 3VA24 | 630 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA23 | 8PQ2020-6BA41 |
| | | | – | – | ■ | 8PQ6000-8BA23 | 8PQ2020-6BA41 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA27 | 8PQ2025-8BA14 |
| | | | – | – | ■ | 8PQ6000-8BA27 | 8PQ2025-8BA14 |
| 3VA25 | 1000 A | 800 mm | ■ | – | – | 8PQ6001-4BA22 | 8PQ2045-8BA22 |
| 3VA26 | 1250 A | 800 mm | ■ | – | – | 8PQ6001-4BA22 | 8PQ2045-8BA22 |
| 3VA27 | 1600 A | 800 mm | ■ | – | – | 8PQ6001-4BA23 | 8PQ2045-8BA23 |

## Accessories

**Insulation 130 × 2 mm**

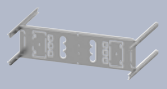


| Size | Length | Article No. |
|---|---|---|
| 3VA15<br>3VA25<br>3VA26 | 15 m | 8PQ3000-3BA81 |

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| ❷ Fixed-mounted version with RCD | | ❸ Plug-in version | | ❹ Withdrawable version [2] | |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
| **Device holders** | **Covers** | **Device holders** | **Covers** | **Device holders** | **Covers** |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| 8PQ6000-8BA01 | 8PQ2015-6BA27 | 8PQ6000-8BA01 | 8PQ2015-6BA26 | – | – |
| 8PQ6000-8BA01 | 8PQ2015-6BA27 | 8PQ6000-8BA01 | 8PQ2015-6BA26 | – | – |
| 8PQ6000-8BA02 | 8PQ2015-8BA11 | 8PQ6000-8BA02 | 8PQ2015-8BA11 | – | – |
| 8PQ6000-8BA02 | 8PQ2015-8BA11 | 8PQ6000-8BA02 | 8PQ2015-8BA11 | – | – |
| 8PQ6000-8BA03 [1] | 8PQ2015-6BA30 | 8PQ6000-8BA04 | 8PQ2015-6BA28 | 8PQ6000-8BA04 | 8PQ2025-6BA21 |
| 8PQ6000-8BA03 | 8PQ2015-6BA30 | 8PQ6000-8BA04 | 8PQ2015-6BA28 | – | – |
| 8PQ6000-8BA07 | 8PQ2020-8BA20 | 8PQ6000-8BA07 | 8PQ2020-8BA20 | 8PQ6000-8BA07 | 8PQ2025-8BA12 |
| 8PQ6000-8BA07 | 8PQ2020-8BA20 | 8PQ6000-8BA07 | 8PQ2020-8BA20 | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | 8PQ6001-1BA02 | 8PQ2025-8BA18 | 8PQ6001-1BA02 | 8PQ2030-8BA15 |
| – | – | 8PQ6001-1BA02 | 8PQ2025-8BA18 | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | 8PQ6001-1BA02 | 8PQ2025-8BA18 | 8PQ6001-1BA02 | 8PQ2030-8BA15 |
| – | – | 8PQ6001-1BA02 | 8PQ2025-8BA18 | – | – |
| – | – | – | – | – | – |
| 8PQ6000-8BA11 | 8PQ2020-6BA40 | 8PQ6000-8BA08 | 8PQ2020-6BA38 | 8PQ6000-8BA08 | 8PQ2025-6BA22 |
| 8PQ6000-8BA11 | 8PQ2020-6BA40 | 8PQ6000-8BA08 | 8PQ2020-6BA38 | – | – |
| 8PQ6000-8BA10 | 8PQ2020-8BA21 | 8PQ6000-8BA10 | 8PQ2020-8BA21 | 8PQ6000-8BA10 | 8PQ2025-8BA13 |
| 8PQ6000-8BA10 | 8PQ2020-8BA21 | 8PQ6000-8BA10 | 8PQ2020-8BA21 | – | – |
| 8PQ6000-8BA11 | 8PQ2020-6BA40 | 8PQ6000-8BA08 | 8PQ2020-6BA38 | 8PQ6000-8BA08 | 8PQ2025-6BA22 |
| 8PQ6000-8BA11 | 8PQ2020-6BA40 | 8PQ6000-8BA08 | 8PQ2020-6BA38 | – | – |
| 8PQ6000-8BA10 | 8PQ2020-8BA21 | 8PQ6000-8BA10 | 8PQ2020-8BA21 | 8PQ6000-8BA10 | 8PQ2025-8BA13 |
| 8PQ6000-8BA10 | 8PQ2020-8BA21 | 8PQ6000-8BA10 | 8PQ2020-8BA21 | – | – |
| 8PQ6000-8BA11 | 8PQ2020-6BA40 | 8PQ6000-8BA08 | 8PQ2020-6BA38 | 8PQ6000-8BA08 | 8PQ2025-6BA22 |
| 8PQ6000-8BA11 | 8PQ2020-6BA40 | 8PQ6000-8BA08 | 8PQ2020-6BA38 | – | – |
| 8PQ6000-8BA10 | 8PQ2020-8BA21 | 8PQ6000-8BA10 | 8PQ2020-8BA21 | 8PQ6000-8BA10 | 8PQ2025-8BA13 |
| 8PQ6000-8BA10 | 8PQ2020-8BA21 | 8PQ6000-8BA10 | 8PQ2020-8BA21 | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| 8PQ6000-8BA27 | 8PQ2025-8BA14 | 8PQ6001-1BA02 | 8PQ2025-8BA18 | 8PQ6001-1BA02 | 8PQ2035-8BA15 |
| 8PQ6000-8BA27 | 8PQ2025-8BA14 | 8PQ6001-1BA02 | 8PQ2025-8BA18 | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| 8PQ6000-8BA27 | 8PQ2025-8BA14 | 8PQ6001-1BA02 | 8PQ2025-8BA18 | 8PQ6001-1BA02 | 8PQ2035-8BA15 |
| 8PQ6000-8BA27 | 8PQ2025-8BA14 | 8PQ6001-1BA02 | 8PQ2025-8BA18 | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | – | – | 8PQ6001-4BA24 | 8PQ2045-8BA24 |

[1] For applications > 415 V, front mounted rotary operating mechanism or motorized operating mechanism required for compliance with creepage distances and clearances.
[2] Guide frame with direct operating mechanism only



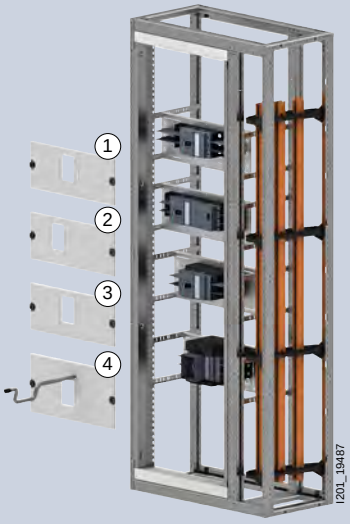
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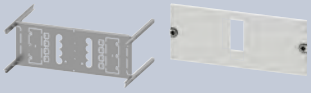


# Section expansion

## 3VA molded case circuit breakers, 4-pole




❶ Fixed-mounted version



| Type | $I_n$ | Width | Operating mechanism | | | Device holders | Covers |
|---|---|---|---|---|---|---|---|
| | | | Direct | Rotary | Motorized | | |
| 3VA10 | 100 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA01 | 8PQ2015-6BA26 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA02 | 8PQ2015-8BA11 |
| 3VA11 | 160 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA01 | 8PQ2015-6BA26 |
| | | | – | – | ■ | 8PQ6000-8BA01 | 8PQ2015-6BA26 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA02 | 8PQ2015-8BA11 |
| | | | – | – | ■ | 8PQ6000-8BA02 | 8PQ2015-8BA11 |
| 3VA12 | 250 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA05 | 8PQ2020-6BA36 |
| | | | – | – | ■ | 8PQ6000-8BA05 | 8PQ2020-6BA36 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA07 | 8PQ2020-8BA20 |
| | | | – | – | ■ | 8PQ6000-8BA07 | 8PQ2020-8BA20 |
| 3VA13 | 400 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA25 | 8PQ2025-6BA23 |
| | | | – | – | ■ | 8PQ6000-8BA25 | 8PQ2025-6BA23 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA27 | 8PQ2025-8BA14 |
| | | | – | – | ■ | 8PQ6000-8BA27 | 8PQ2025-8BA14 |
| 3VA14 | 630 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA25 | 8PQ2025-6BA23 |
| | | | – | – | ■ | 8PQ6000-8BA25 | 8PQ2025-6BA23 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA27 | 8PQ2025-8BA14 |
| | | | – | – | ■ | 8PQ6000-8BA27 | 8PQ2025-8BA14 |
| 3VA15 | 1000 A | 800 mm | ■ | – | – | 8PQ6001-4BA22 | 8PQ2045-8BA22 |
| 3VA20 | 100 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA08 | 8PQ2020-6BA38 |
| | | | – | – | ■ | 8PQ6000-8BA08 | 8PQ2020-6BA38 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA10 | 8PQ2020-8BA21 |
| | | | – | – | ■ | 8PQ6000-8BA10 | 8PQ2020-8BA21 |
| 3VA21 | 160 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA08 | 8PQ2020-6BA38 |
| | | | – | – | ■ | 8PQ6000-8BA08 | 8PQ2020-6BA38 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA10 | 8PQ2020-8BA21 |
| | | | – | – | ■ | 8PQ6000-8BA10 | 8PQ2020-8BA21 |
| 3VA22 | 250 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA08 | 8PQ2020-6BA38 |
| | | | – | – | ■ | 8PQ6000-8BA08 | 8PQ2020-6BA38 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA10 | 8PQ2020-8BA21 |
| | | | – | – | ■ | 8PQ6000-8BA10 | 8PQ2020-8BA21 |
| 3VA23 | 400 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA25 | 8PQ2025-6BA23 |
| | | | – | – | ■ | 8PQ6000-8BA25 | 8PQ2025-6BA23 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA27 | 8PQ2025-8BA14 |
| | | | – | – | ■ | 8PQ6000-8BA27 | 8PQ2025-8BA14 |
| 3VA24 | 630 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA25 | 8PQ2025-6BA23 |
| | | | – | – | ■ | 8PQ6000-8BA25 | 8PQ2025-6BA23 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA27 | 8PQ2025-8BA14 |
| | | | – | – | ■ | 8PQ6000-8BA27 | 8PQ2025-8BA14 |
| 3VA25 | 1000 A | 800 mm | ■ | – | – | 8PQ6001-4BA22 | 8PQ2045-8BA22 |
| 3VA26 | 1250 A | 800 mm | ■ | – | – | 8PQ6001-4BA22 | 8PQ2045-8BA22 |
| 3VA27 | 1600 A | 800 mm | ■ | – | – | 8PQ6001-4BA23 | 8PQ2045-8BA23 |

## Accessories

**Insulation 130 × 2 mm**

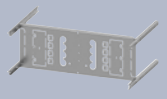
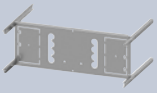
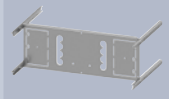


| Size | Length | Article No. |
|---|---|---|
| 3VA15<br>3VA25<br>3VA26 | 15 m | 8PQ3000-3BA81 |

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| ❷ Fixed-mounted version with RCD | | ❸ Plug-in version | | ❹ Withdrawable version [2] | |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
| **Device holders** | **Covers** | **Device holders** | **Covers** | **Device holders** | **Covers** |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| 8PQ6000-8BA01 | 8PQ2015-6BA27 | 8PQ6000-8BA01 | 8PQ2015-6BA26 | – | – |
| 8PQ6000-8BA01 | 8PQ2015-6BA27 | 8PQ6000-8BA01 | 8PQ2015-6BA26 | – | – |
| 8PQ6000-8BA02 | 8PQ2015-8BA11 | 8PQ6000-8BA02 | 8PQ2015-8BA11 | – | – |
| 8PQ6000-8BA02 | 8PQ2015-8BA11 | 8PQ6000-8BA02 | 8PQ2015-8BA11 | – | – |
| 8PQ6000-8BA05 [1] | 8PQ2020-6BA37 | 8PQ6000-8BA06 | 8PQ2020-6BA36 | 8PQ6000-8BA06 | 8PQ2030-6BA25 |
| 8PQ6000-8BA05 [1] | 8PQ2020-6BA37 | 8PQ6000-8BA06 | 8PQ2020-6BA36 | – | – |
| 8PQ6000-8BA07 | 8PQ2020-8BA20 | 8PQ6000-8BA07 | 8PQ2020-8BA20 | 8PQ6000-8BA07 | 8PQ2030-8BA12 |
| 8PQ6000-8BA07 | 8PQ2020-8BA20 | 8PQ6000-8BA07 | 8PQ2020-8BA20 | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | 8PQ6001-1BA02 | 8PQ2025-8BA18 | 8PQ6001-1BA02 | 8PQ2030-8BA15 |
| – | – | 8PQ6001-1BA02 | 8PQ2025-8BA18 | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | 8PQ6001-1BA02 | 8PQ2025-8BA18 | 8PQ6001-1BA02 | 8PQ2030-8BA15 |
| – | – | 8PQ6001-1BA02 | 8PQ2025-8BA18 | – | – |
| – | – | – | – | – | – |
| 8PQ6000-8BA11 | 8PQ2020-6BA40 | 8PQ6000-8BA08 | 8PQ2020-6BA38 | 8PQ6000-8BA08 | 8PQ2030-6BA26 |
| 8PQ6000-8BA11 | 8PQ2020-6BA40 | 8PQ6000-8BA08 | 8PQ2020-6BA38 | – | – |
| 8PQ6000-8BA10 | 8PQ2020-8BA21 | 8PQ6000-8BA10 | 8PQ2020-8BA21 | 8PQ6000-8BA10 | 8PQ2030-8BA13 |
| 8PQ6000-8BA10 | 8PQ2020-8BA21 | 8PQ6000-8BA10 | 8PQ2020-8BA21 | – | – |
| 8PQ6000-8BA11 | 8PQ2020-6BA40 | 8PQ6000-8BA08 | 8PQ2020-6BA38 | 8PQ6000-8BA08 | 8PQ2030-6BA26 |
| 8PQ6000-8BA11 | 8PQ2020-6BA40 | 8PQ6000-8BA08 | 8PQ2020-6BA38 | – | – |
| 8PQ6000-8BA10 | 8PQ2020-8BA21 | 8PQ6000-8BA10 | 8PQ2020-8BA21 | 8PQ6000-8BA10 | 8PQ2030-8BA13 |
| 8PQ6000-8BA10 | 8PQ2020-8BA21 | 8PQ6000-8BA10 | 8PQ2020-8BA21 | – | – |
| 8PQ6000-8BA11 | 8PQ2020-6BA40 | 8PQ6000-8BA08 | 8PQ2020-6BA38 | 8PQ6000-8BA08 | 8PQ2030-6BA26 |
| 8PQ6000-8BA11 | 8PQ2020-6BA40 | 8PQ6000-8BA08 | 8PQ2020-6BA38 | – | – |
| 8PQ6000-8BA10 | 8PQ2020-8BA21 | 8PQ6000-8BA10 | 8PQ2020-8BA21 | 8PQ6000-8BA10 | 8PQ2030-8BA13 |
| 8PQ6000-8BA10 | 8PQ2020-8BA21 | 8PQ6000-8BA10 | 8PQ2020-8BA21 | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| 8PQ6000-8BA27 | 8PQ2025-8BA14 | 8PQ6001-1BA02 | 8PQ2025-8BA18 | 8PQ6001-1BA02 | 8PQ2035-8BA15 |
| 8PQ6000-8BA27 | 8PQ2025-8BA14 | 8PQ6001-1BA02 | 8PQ2025-8BA18 | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| 8PQ6000-8BA27 | 8PQ2025-8BA14 | 8PQ6001-1BA02 | 8PQ2025-8BA18 | 8PQ6001-1BA02 | 8PQ2035-8BA15 |
| 8PQ6000-8BA27 | 8PQ2025-8BA14 | 8PQ6001-1BA02 | 8PQ2025-8BA18 | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | – | – | 8PQ6001-4BA24 | 8PQ2045-8BA24 |

[1] For applications > 415 V, front mounted rotary operating mechanism or motorized operating mechanism required for compliance with creepage distances and clearances.
[2] Guide frame with direct operating mechanism only



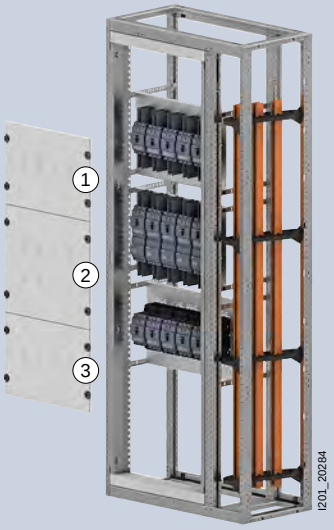
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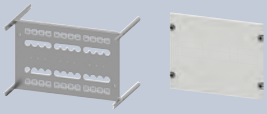


# Section expansion

## 3VA molded case circuit breakers, 3-pole




❶ Fixed-mounted version



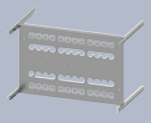
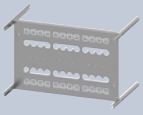
| Type | $I_n$ | Width | Operating mechanism | | | Device holders | Covers |
|---|---|---|---|---|---|---|---|
| | | | Direct | Rotary | Motorized | | |
| 3VA10 | 100 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA33 | 8PQ2035-6BA26 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA47 | 8PQ2035-8BA16 |
| 3VA11 | 160 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA33 | 8PQ2035-6BA26 |
| | | | – | – | ■ | 8PQ6000-8BA33 | 8PQ2035-6BA26 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA47 | 8PQ2035-8BA16 |
| | | | – | – | ■ | 8PQ6000-8BA47 | 8PQ2035-8BA16 |
| 3VA12 | 250 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA35 | 8PQ2040-6BA26 |
| | | | – | – | ■ | 8PQ6000-8BA35 | 8PQ2040-6BA26 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA43 | 8PQ2040-8BA23 |
| | | | – | – | ■ | 8PQ6000-8BA43 | 8PQ2040-8BA23 |
| 3VA13 | 400 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA54 | 8PQ2050-6BA11 |
| | | | – | – | ■ | 8PQ6000-8BA54 | 8PQ2050-6BA11 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA57 | 8PQ2050-8BA14 |
| | | | – | – | ■ | 8PQ6000-8BA57 | 8PQ2050-8BA14 |
| 3VA14 | 630 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA54 | 8PQ2050-6BA11 |
| | | | – | – | ■ | 8PQ6000-8BA54 | 8PQ2050-6BA11 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA57 | 8PQ2050-8BA14 |
| | | | – | – | ■ | 8PQ6000-8BA57 | 8PQ2050-8BA14 |
| 3VA20 | 100 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA37 | 8PQ2045-6BA11 |
| | | | – | – | ■ | 8PQ6000-8BA37 | 8PQ2045-6BA13 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA50 | 8PQ2045-8BA11 |
| | | | – | – | ■ | 8PQ6000-8BA50 | 8PQ2045-8BA15 |
| 3VA21 | 160 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA37 | 8PQ2045-6BA11 |
| | | | – | – | ■ | 8PQ6000-8BA37 | 8PQ2045-6BA13 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA50 | 8PQ2045-8BA11 |
| | | | – | – | ■ | 8PQ6000-8BA50 | 8PQ2045-8BA15 |
| 3VA22 | 250 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA37 | 8PQ2045-6BA11 |
| | | | – | – | ■ | 8PQ6000-8BA37 | 8PQ2045-6BA13 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA50 | 8PQ2045-8BA11 |
| | | | – | – | ■ | 8PQ6000-8BA50 | 8PQ2045-8BA15 |
| 3VA23 | 400 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA54 | 8PQ2045-6BA12 |
| | | | – | – | ■ | 8PQ6000-8BA54 | 8PQ2045-6BA12 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA57 | 8PQ2045-8BA13 |
| | | | – | – | ■ | 8PQ6000-8BA57 | 8PQ2045-8BA13 |
| 3VA24 | 630 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA54 | 8PQ2045-6BA12 |
| | | | – | – | ■ | 8PQ6000-8BA54 | 8PQ2045-6BA12 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA57 | 8PQ2045-8BA13 |
| | | | – | – | ■ | 8PQ6000-8BA57 | 8PQ2045-8BA13 |





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| ❷ Fixed-mounted version with RCD | | ❸ Plug-in version | |
|---|---|---|---|
|  |  |  |  |
| **Device holders** | **Covers** | **Device holders** | **Covers** |
| – | – | – | – |
| – | – | – | – |
| 8PQ6000-8BA33 | 8PQ2045-6BA08 | 8PQ6000-8BA33 | 8PQ2035-6BA26 |
| 8PQ6000-8BA33 | 8PQ2045-6BA08 | 8PQ6000-8BA33 | 8PQ2035-6BA26 |
| 8PQ6000-8BA47 | 8PQ2045-8BA08 | 8PQ6000-8BA47 | 8PQ2035-8BA16 |
| 8PQ6000-8BA47 | 8PQ2045-8BA08 | 8PQ6000-8BA47 | 8PQ2035-8BA16 |
| 8PQ6000-8BA35 | 8PQ2050-6BA10 | 8PQ6000-8BA36 | 8PQ2040-6BA26 |
| 8PQ6000-8BA35 | 8PQ2050-6BA10 | 8PQ6000-8BA36 | 8PQ2040-6BA26 |
| 8PQ6000-8BA43 | 8PQ2050-8BA12 | 8PQ6000-8BA44 | 8PQ2040-8BA23 |
| 8PQ6000-8BA43 | 8PQ2050-8BA12 | 8PQ6000-8BA44 | 8PQ2040-8BA23 |
| – | – | 8PQ6000-8BA56 | 8PQ2055-6BA22 |
| – | – | 8PQ6000-8BA56 | 8PQ2055-6BA22 |
| – | – | 8PQ6000-8BA60 | 8PQ2055-8BA15 |
| – | – | 8PQ6000-8BA60 | 8PQ2055-8BA15 |
| – | – | 8PQ6000-8BA56 | 8PQ2055-6BA22 |
| – | – | 8PQ6000-8BA56 | 8PQ2055-6BA22 |
| – | – | 8PQ6000-8BA60 | 8PQ2055-8BA15 |
| – | – | 8PQ6000-8BA60 | 8PQ2055-8BA15 |
| 8PQ6000-8BA37 | 8PQ2055-6BA20 | 8PQ6000-8BA38 | 8PQ2045-6BA11 |
| 8PQ6000-8BA37 | 8PQ2055-6BA21 | 8PQ6000-8BA38 | 8PQ2045-6BA13 |
| 8PQ6000-8BA50 | 8PQ2055-8BA11 | 8PQ6000-8BA51 | 8PQ2045-8BA11 |
| 8PQ6000-8BA50 | 8PQ2055-8BA13 | 8PQ6000-8BA51 | 8PQ2045-8BA15 |
| 8PQ6000-8BA37 | 8PQ2055-6BA20 | 8PQ6000-8BA38 | 8PQ2045-6BA11 |
| 8PQ6000-8BA37 | 8PQ2055-6BA21 | 8PQ6000-8BA38 | 8PQ2045-6BA13 |
| 8PQ6000-8BA50 | 8PQ2055-8BA11 | 8PQ6000-8BA51 | 8PQ2045-8BA11 |
| 8PQ6000-8BA50 | 8PQ2055-8BA13 | 8PQ6000-8BA51 | 8PQ2045-8BA15 |
| 8PQ6000-8BA37 | 8PQ2055-6BA20 | 8PQ6000-8BA38 | 8PQ2045-6BA11 |
| 8PQ6000-8BA37 | 8PQ2055-6BA21 | 8PQ6000-8BA38 | 8PQ2045-6BA13 |
| 8PQ6000-8BA50 | 8PQ2055-8BA11 | 8PQ6000-8BA51 | 8PQ2045-8BA11 |
| 8PQ6000-8BA50 | 8PQ2055-8BA13 | 8PQ6000-8BA51 | 8PQ2045-8BA15 |
| 8PQ6000-8BA55 | 8PQ2060-6BA25 | 8PQ6000-8BA56 | 8PQ2045-6BA12 |
| 8PQ6000-8BA55 | 8PQ2060-6BA25 | 8PQ6000-8BA56 | 8PQ2045-6BA12 |
| 8PQ6000-8BA58 | 8PQ2060-8BA07 | 8PQ6000-8BA60 | 8PQ2045-8BA13 |
| 8PQ6000-8BA58 | 8PQ2060-8BA07 | 8PQ6000-8BA60 | 8PQ2045-8BA13 |
| 8PQ6000-8BA55 | 8PQ2060-6BA25 | 8PQ6000-8BA56 | 8PQ2045-6BA12 |
| 8PQ6000-8BA55 | 8PQ2060-6BA25 | 8PQ6000-8BA56 | 8PQ2045-6BA12 |
| 8PQ6000-8BA58 | 8PQ2060-8BA07 | 8PQ6000-8BA60 | 8PQ2045-8BA13 |
| 8PQ6000-8BA58 | 8PQ2060-8BA07 | 8PQ6000-8BA60 | 8PQ2045-8BA13 |



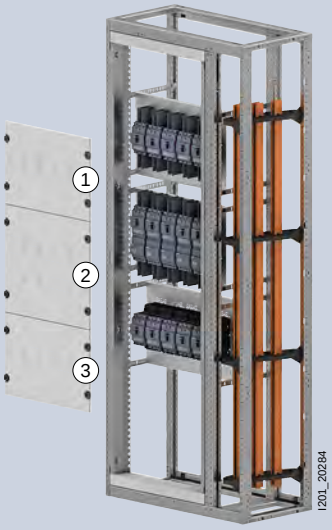
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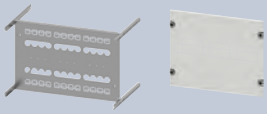


# Section expansion

## 3VA molded case circuit breakers, 4-pole




❶ Fixed-mounted version

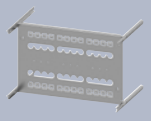
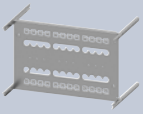


| Type | $I_n$ | Width | Operating mechanism | | | Device holders | Covers |
|---|---|---|---|---|---|---|---|
| | | | Direct | Rotary | Motorized | | |
| 3VA10 | 100 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA34 | 8PQ2035-6BA27 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA48 | 8PQ2035-8BA17 |
| 3VA11 | 160 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA34 | 8PQ2035-6BA27 |
| | | | – | – | ■ | 8PQ6000-8BA34 | 8PQ2035-6BA27 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA48 | 8PQ2035-8BA17 |
| | | | – | – | ■ | 8PQ6000-8BA48 | 8PQ2035-8BA17 |
| 3VA12 | 250 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA35 | 8PQ2040-6BA26 |
| | | | – | – | ■ | 8PQ6000-8BA35 | 8PQ2040-6BA26 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA45 | 8PQ2040-8BA24 |
| | | | – | – | ■ | 8PQ6000-8BA45 | 8PQ2040-8BA24 |
| 3VA13 | 400 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA64 | 8PQ2050-6BA12 |
| | | | – | – | ■ | 8PQ6000-8BA64 | 8PQ2050-6BA12 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA61 | 8PQ2050-8BA15 |
| | | | – | – | ■ | 8PQ6000-8BA61 | 8PQ2050-8BA15 |
| 3VA14 | 630 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA64 | 8PQ2050-6BA12 |
| | | | – | – | ■ | 8PQ6000-8BA64 | 8PQ2050-6BA12 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA61 | 8PQ2050-8BA15 |
| | | | – | – | ■ | 8PQ6000-8BA61 | 8PQ2050-8BA15 |
| 3VA20 | 100 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA37 | 8PQ2045-6BA11 |
| | | | – | – | ■ | 8PQ6000-8BA37 | 8PQ2045-6BA13 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA52 | 8PQ2045-8BA12 |
| | | | – | – | ■ | 8PQ6000-8BA52 | 8PQ2045-8BA16 |
| 3VA21 | 160 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA37 | 8PQ2045-6BA11 |
| | | | – | – | ■ | 8PQ6000-8BA37 | 8PQ2045-6BA13 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA52 | 8PQ2045-8BA12 |
| | | | – | – | ■ | 8PQ6000-8BA52 | 8PQ2045-8BA16 |
| 3VA22 | 250 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA37 | 8PQ2045-6BA11 |
| | | | – | – | ■ | 8PQ6000-8BA37 | 8PQ2045-6BA13 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA52 | 8PQ2045-8BA12 |
| | | | – | – | ■ | 8PQ6000-8BA52 | 8PQ2045-8BA16 |
| 3VA23 | 400 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA64 | 8PQ2045-6BA14 |
| | | | – | – | ■ | 8PQ6000-8BA64 | 8PQ2045-6BA14 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA61 | 8PQ2045-8BA14 |
| | | | – | – | ■ | 8PQ6000-8BA61 | 8PQ2045-8BA14 |
| 3VA24 | 630 A | 600 mm | ■ | ■ | – | 8PQ6000-8BA64 | 8PQ2045-6BA14 |
| | | | – | – | ■ | 8PQ6000-8BA64 | 8PQ2045-6BA14 |
| | | 800 mm | ■ | ■ | – | 8PQ6000-8BA61 | 8PQ2045-8BA14 |
| | | | – | – | ■ | 8PQ6000-8BA61 | 8PQ2045-8BA14 |



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| ❷ Fixed-mounted version with RCD | | ❸ Plug-in version | |
|---|---|---|---|
|  |  |  |  |
| **Device holders** | **Covers** | **Device holders** | **Covers** |
| – | – | – | – |
| – | – | – | – |
| 8PQ6000-8BA34 | 8PQ2045-6BA10 | 8PQ6000-8BA34 | 8PQ2035-6BA27 |
| 8PQ6000-8BA34 | 8PQ2045-6BA10 | 8PQ6000-8BA34 | 8PQ2035-6BA27 |
| 8PQ6000-8BA48 | 8PQ2045-8BA10 | 8PQ6000-8BA48 | 8PQ2035-8BA17 |
| 8PQ6000-8BA48 | 8PQ2045-8BA10 | 8PQ6000-8BA48 | 8PQ2035-8BA17 |
| 8PQ6000-8BA35 | 8PQ2050-6BA10 | 8PQ6000-8BA36 | 8PQ2040-6BA26 |
| 8PQ6000-8BA35 | 8PQ2050-6BA10 | 8PQ6000-8BA36 | 8PQ2040-6BA26 |
| 8PQ6000-8BA45 | 8PQ2050-8BA13 | 8PQ6000-8BA46 | 8PQ2040-8BA24 |
| 8PQ6000-8BA45 | 8PQ2050-8BA13 | 8PQ6000-8BA46 | 8PQ2040-8BA24 |
| – | – | 8PQ6000-8BA66 | 8PQ2055-6BA23 |
| – | – | 8PQ6000-8BA66 | 8PQ2055-6BA23 |
| – | – | 8PQ6000-8BA63 | 8PQ2055-8BA16 |
| – | – | 8PQ6000-8BA63 | 8PQ2055-8BA16 |
| – | – | 8PQ6000-8BA66 | 8PQ2055-6BA23 |
| – | – | 8PQ6000-8BA66 | 8PQ2055-6BA23 |
| – | – | 8PQ6000-8BA63 | 8PQ2055-8BA16 |
| – | – | 8PQ6000-8BA63 | 8PQ2055-8BA16 |
| 8PQ6000-8BA37 | 8PQ2055-6BA20 | 8PQ6000-8BA38 | 8PQ2045-6BA11 |
| 8PQ6000-8BA37 | 8PQ2055-6BA21 | 8PQ6000-8BA38 | 8PQ2045-6BA13 |
| 8PQ6000-8BA52 | 8PQ2055-8BA12 | 8PQ6000-8BA53 | 8PQ2045-8BA12 |
| 8PQ6000-8BA52 | 8PQ2055-8BA14 | 8PQ6000-8BA53 | 8PQ2045-8BA16 |
| 8PQ6000-8BA37 | 8PQ2055-6BA20 | 8PQ6000-8BA38 | 8PQ2045-6BA11 |
| 8PQ6000-8BA37 | 8PQ2055-6BA21 | 8PQ6000-8BA38 | 8PQ2045-6BA13 |
| 8PQ6000-8BA52 | 8PQ2055-8BA12 | 8PQ6000-8BA53 | 8PQ2045-8BA12 |
| 8PQ6000-8BA52 | 8PQ2055-8BA14 | 8PQ6000-8BA53 | 8PQ2045-8BA16 |
| 8PQ6000-8BA37 | 8PQ2055-6BA20 | 8PQ6000-8BA38 | 8PQ2045-6BA11 |
| 8PQ6000-8BA37 | 8PQ2055-6BA21 | 8PQ6000-8BA38 | 8PQ2045-6BA13 |
| 8PQ6000-8BA52 | 8PQ2055-8BA12 | 8PQ6000-8BA53 | 8PQ2045-8BA12 |
| 8PQ6000-8BA52 | 8PQ2055-8BA14 | 8PQ6000-8BA53 | 8PQ2045-8BA16 |
| 8PQ6000-8BA65 | 8PQ2060-6BA26 | 8PQ6000-8BA66 | 8PQ2045-6BA14 |
| 8PQ6000-8BA65 | 8PQ2060-6BA26 | 8PQ6000-8BA66 | 8PQ2045-6BA14 |
| 8PQ6000-8BA62 | 8PQ2060-8BA08 | 8PQ6000-8BA63 | 8PQ2045-8BA14 |
| 8PQ6000-8BA62 | 8PQ2060-8BA08 | 8PQ6000-8BA63 | 8PQ2045-8BA14 |
| 8PQ6000-8BA65 | 8PQ2060-6BA26 | 8PQ6000-8BA66 | 8PQ2045-6BA14 |
| 8PQ6000-8BA65 | 8PQ2060-6BA26 | 8PQ6000-8BA66 | 8PQ2045-6BA14 |
| 8PQ6000-8BA62 | 8PQ2060-8BA08 | 8PQ6000-8BA63 | 8PQ2045-8BA14 |
| 8PQ6000-8BA62 | 8PQ2060-8BA08 | 8PQ6000-8BA63 | 8PQ2045-8BA14 |

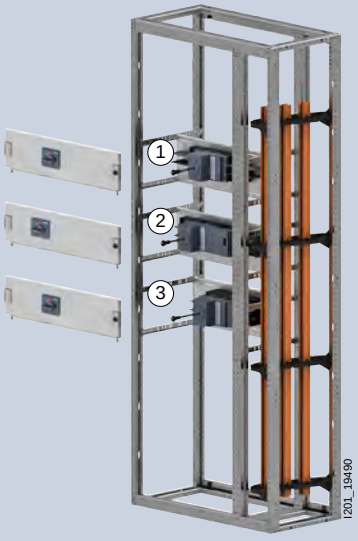


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# Section expansion

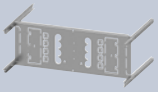
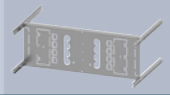
## 3VA molded case circuit breakers, compartment door




### 3-pole

| | | | ❶ Fixed-mounted | | ❷ Fixed-mounted version with RCD | |
|---|---|---|---|---|---|---|
| | | |  |  |  |  |
| **Type** | **$I_n$** | **Width** | **Device holders** | **Compartment door** | **Device holders** | **Compartment door** |
| 3VA10 | 100 A | 600 mm | 8PQ6000-8BA01 | 8PQ2015-6BA31 | – | – |
| | | 800 mm | 8PQ6000-8BA02 | 8PQ2015-8BA12 | – | – |
| 3VA11 | 160 A | 600 mm | 8PQ6000-8BA01 | 8PQ2015-6BA31 | 8PQ6000-8BA01 | 8PQ2015-6BA33 |
| | | 800 mm | 8PQ6000-8BA02 | 8PQ2015-8BA12 | 8PQ6000-8BA02 | 8PQ2015-8BA12 |
| 3VA12 | 250 A | 600 mm | 8PQ6000-8BA03 | 8PQ2015-6BA34 | 8PQ6000-8BA03 | 8PQ2015-6BA35 |
| | | 800 mm | 8PQ6000-8BA07 | 8PQ2020-8BA22 | 8PQ6000-8BA07 | 8PQ2020-8BA22 |
| 3VA13 | 400 A | 600 mm | 8PQ6000-8BA23 | 8PQ2020-6BA46 | – | – |
| | | 800 mm | 8PQ6000-8BA27 | 8PQ2025-8BA15 | – | – |
| 3VA14 | 630 A | 600 mm | 8PQ6000-8BA23 | 8PQ2020-6BA46 | – | – |
| | | 800 mm | 8PQ6000-8BA27 | 8PQ2025-8BA15 | – | – |
| 3VA15 | 1000 A | 800 mm | 8PQ6001-4BA22 | 8PQ2045-8BA20 | – | – |
| 3VA20 | 100 A | 600 mm | 8PQ6000-8BA08 | 8PQ2020-6BA44 | 8PQ6000-8BA11 | 8PQ2020-6BA45 |
| | | 800 mm | 8PQ6000-8BA10 | 8PQ2020-8BA23 | 8PQ6000-8BA10 | 8PQ2020-8BA23 |
| 3VA21 | 160 A | 600 mm | 8PQ6000-8BA08 | 8PQ2020-6BA44 | 8PQ6000-8BA11 | 8PQ2020-6BA45 |
| | | 800 mm | 8PQ6000-8BA10 | 8PQ2020-8BA23 | 8PQ6000-8BA10 | 8PQ2020-8BA23 |
| 3VA22 | 250 A | 600 mm | 8PQ6000-8BA08 | 8PQ2020-6BA44 | 8PQ6000-8BA11 | 8PQ2020-6BA45 |
| | | 800 mm | 8PQ6000-8BA10 | 8PQ2020-8BA23 | 8PQ6000-8BA10 | 8PQ2020-8BA23 |
| 3VA23 | 400 A | 600 mm | 8PQ6000-8BA23 | 8PQ2020-6BA46 | – | – |
| | | 800 mm | 8PQ6000-8BA27 | 8PQ2025-8BA15 | 8PQ6000-8BA27 | 8PQ2025-8BA15 |
| 3VA24 | 630 A | 600 mm | 8PQ6000-8BA23 | 8PQ2020-6BA46 | – | – |
| | | 800 mm | 8PQ6000-8BA27 | 8PQ2025-8BA15 | 8PQ6000-8BA27 | 8PQ2025-8BA15 |
| 3VA25 | 1000 A | 800 mm | 8PQ6001-4BA22 | 8PQ2045-8BA20 | – | – |
| 3VA26 | 1250 A | 800 mm | 8PQ6001-4BA22 | 8PQ2045-8BA20 | – | – |
| 3VA27 | 1600 A | 800 mm | 8PQ6001-4BA23 | 8PQ2045-8BA21 | – | – |

### 4-pole

| | | | ❶ Fixed-mounted | | ❷ Fixed-mounted version with RCD | |
|---|---|---|---|---|---|---|
| | | |  |  |  |  |
| **Type** | **$I_n$** | **Width** | **Device holders** | **Compartment door** | **Device holders** | **Compartment door** |
| 3VA10 | 100 A | 600 mm | 8PQ6000-8BA01 | 8PQ2015-6BA31 | – | – |
| | | 800 mm | 8PQ6000-8BA02 | 8PQ2015-8BA12 | – | – |
| 3VA11 | 160 A | 600 mm | 8PQ6000-8BA01 | 8PQ2015-6BA31 | 8PQ6000-8BA01 | 8PQ2015-6BA33 |
| | | 800 mm | 8PQ6000-8BA02 | 8PQ2015-8BA12 | 8PQ6000-8BA02 | 8PQ2015-8BA12 |
| 3VA12 | 250 A | 600 mm | 8PQ6000-8BA05 | 8PQ2020-6BA42 | 8PQ6000-8BA05 | 8PQ2020-6BA43 |
| | | 800 mm | 8PQ6000-8BA07 | 8PQ2020-8BA22 | 8PQ6000-8BA07 | 8PQ2020-8BA22 |
| 3VA13 | 400 A | 600 mm | 8PQ6000-8BA25 | 8PQ2025-6BA24 | – | – |
| | | 800 mm | 8PQ6000-8BA27 | 8PQ2025-8BA15 | – | – |
| 3VA14 | 630 A | 600 mm | 8PQ6000-8BA25 | 8PQ2025-6BA24 | – | – |
| | | 800 mm | 8PQ6000-8BA27 | 8PQ2025-8BA15 | – | – |
| 3VA15 | 1000 A | 800 mm | 8PQ6001-4BA22 | 8PQ2045-8BA20 | – | – |
| 3VA20 | 100 A | 600 mm | 8PQ6000-8BA08 | 8PQ2020-6BA44 | 8PQ6000-8BA11 | 8PQ2020-6BA45 |
| | | 800 mm | 8PQ6000-8BA10 | 8PQ2020-8BA23 | 8PQ6000-8BA10 | 8PQ2020-8BA23 |
| 3VA21 | 160 A | 600 mm | 8PQ6000-8BA08 | 8PQ2020-6BA44 | 8PQ6000-8BA11 | 8PQ2020-6BA45 |
| | | 800 mm | 8PQ6000-8BA10 | 8PQ2020-8BA23 | 8PQ6000-8BA10 | 8PQ2020-8BA23 |
| 3VA22 | 250 A | 600 mm | 8PQ6000-8BA08 | 8PQ2020-6BA44 | 8PQ6000-8BA11 | 8PQ2020-6BA45 |
| | | 800 mm | 8PQ6000-8BA10 | 8PQ2020-8BA23 | 8PQ6000-8BA10 | 8PQ2020-8BA23 |
| 3VA23 | 400 A | 600 mm | 8PQ6000-8BA25 | 8PQ2025-6BA24 | – | – |
| | | 800 mm | 8PQ6000-8BA27 | 8PQ2025-8BA15 | 8PQ6000-8BA27 | 8PQ2025-8BA15 |
| 3VA24 | 630 A | 600 mm | 8PQ6000-8BA25 | 8PQ2025-6BA24 | – | – |
| | | 800 mm | 8PQ6000-8BA27 | 8PQ2025-8BA15 | 8PQ6000-8BA27 | 8PQ2025-8BA15 |
| 3VA25 | 1000 A | 800 mm | 8PQ6001-4BA22 | 8PQ2045-8BA20 | – | – |
| 3VA26 | 1250 A | 800 mm | 8PQ6001-4BA22 | 8PQ2045-8BA20 | – | – |
| 3VA27 | 1600 A | 800 mm | 8PQ6001-4BA23 | 8PQ2045-8BA21 | – | – |

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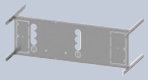
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**❸ Plug-in version**




| Device holders | Compartment door |
|---|---|
| – | – |
| – | – |
| 8PQ6000-8BA01 | 8PQ2015-6BA31 |
| 8PQ6000-8BA02 | 8PQ2015-8BA12 |
| 8PQ6000-8BA04 | 8PQ2015-6BA34 |
| 8PQ6000-8BA07 | 8PQ2020-8BA22 |
| – | – |
| 8PQ6001-1BA02 | 8PQ2025-8BA23 |
| – | – |
| 8PQ6001-1BA02 | 8PQ2025-8BA23 |
| – | – |
| 8PQ6000-8BA08 | 8PQ2020-6BA44 |
| 8PQ6000-8BA10 | 8PQ2020-8BA23 |
| 8PQ6000-8BA08 | 8PQ2020-6BA44 |
| 8PQ6000-8BA10 | 8PQ2020-8BA23 |
| 8PQ6000-8BA08 | 8PQ2020-6BA44 |
| 8PQ6000-8BA10 | 8PQ2020-8BA23 |
| – | – |
| 8PQ6001-1BA02 | 8PQ2025-8BA23 |
| – | – |
| 8PQ6001-1BA02 | 8PQ2025-8BA23 |
| – | – |
| – | – |
| – | – |

**❸ Plug-in version**




| Device holders | Compartment door |
|---|---|
| – | – |
| – | – |
| 8PQ6000-8BA01 | 8PQ2015-6BA31 |
| 8PQ6000-8BA02 | 8PQ2015-8BA12 |
| 8PQ6000-8BA06 | 8PQ2020-6BA42 |
| 8PQ6000-8BA07 | 8PQ2020-8BA22 |
| – | – |
| 8PQ6001-1BA02 | 8PQ2025-8BA23 |
| – | – |
| 8PQ6001-1BA02 | 8PQ2025-8BA23 |
| – | – |
| 8PQ6000-8BA08 | 8PQ2020-6BA44 |
| 8PQ6000-8BA10 | 8PQ2020-8BA23 |
| 8PQ6000-8BA08 | 8PQ2020-6BA44 |
| 8PQ6000-8BA10 | 8PQ2020-8BA23 |
| 8PQ6000-8BA08 | 8PQ2020-6BA44 |
| 8PQ6000-8BA10 | 8PQ2020-8BA23 |
| – | – |
| 8PQ6001-1BA02 | 8PQ2025-8BA23 |
| – | – |
| 8PQ6001-1BA02 | 8PQ2025-8BA23 |
| – | – |
| – | – |
| – | – |

## Accessories

**Compartment ID strip for plug-in plates, H = 17 mm**



| Width | Scope of supply | Article No. |
|---|---|---|
| 600 mm | 6 units | 8PQ5000-3BA43 |
| 800 mm | 6 units | 8PQ5000-3BA46 |

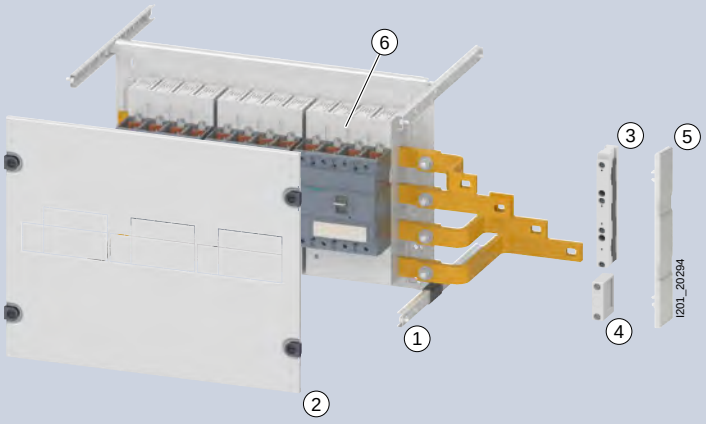


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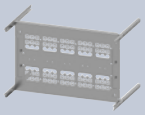
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# Section expansion

## 3VA molded case circuit breakers, 8US multiple feeders




### 3-pole




| Type | $I_n$ | Width | No. of switches/ breakers | Operating Direct | Rotary | Motorized | ❶ Device holders | ❷ Covers |
|---|---|---|---|---|---|---|---|---|
| 3VA10 | 100 A | 600 mm | 5 | ■ | ■ | – | 8PQ6000-8BA33 | 8PQ2035-6BA26 |
| | | 800 mm | 7 | ■ | ■ | – | 8PQ6000-8BA40 | 8PQ2035-8BA20 |
| 3VA11 | 160 A | 600 mm | 5 | ■ | ■ | ■ | 8PQ6000-8BA33 | 8PQ2035-6BA26 |
| | | 800 mm | 7 | ■ | ■ | ■ | 8PQ6000-8BA40 | 8PQ2035-8BA20 |
| 3VA12 | 250 A | 600 mm | 3 | ■ | ■ | ■ | 8PQ6001-5BA68 | 8PQ2040-6BA26 |
| | | 800 mm | 5 | ■ | ■ | ■ | 8PQ6001-5BA72 | 8PQ2040-8BA23 |
| 3VA20 | 100 A | 600 mm | 3 | ■ | ■ | – | 8PQ6001-5BA71 | 8PQ2045-6BA11 |
| | | | | – | – | ■ | 8PQ6001-5BA71 | 8PQ2045-6BA13 |
| | | 800 mm | 5 | ■ | ■ | – | 8PQ6001-5BA73 | 8PQ2045-8BA11 |
| | | | | – | – | ■ | 8PQ6001-5BA73 | 8PQ2045-8BA15 |
| 3VA21 | 160 A | 600 mm | 3 | ■ | ■ | – | 8PQ6001-5BA71 | 8PQ2045-6BA11 |
| | | | | – | – | ■ | 8PQ6001-5BA71 | 8PQ2045-6BA13 |
| | | 800 mm | 5 | ■ | ■ | – | 8PQ6001-5BA73 | 8PQ2045-8BA11 |
| | | | | – | – | ■ | 8PQ6001-5BA73 | 8PQ2045-8BA15 |
| 3VA22 | 250 A | 600 mm | 3 | ■ | ■ | – | 8PQ6001-5BA71 | 8PQ2045-6BA11 |
| | | | | – | – | ■ | 8PQ6001-5BA71 | 8PQ2045-6BA13 |
| | | 800 mm | 5 | ■ | ■ | – | 8PQ6001-5BA73 | 8PQ2045-8BA11 |
| | | | | – | – | ■ | 8PQ6001-5BA73 | 8PQ2045-8BA15 |

### 4-pole




| Type | $I_n$ | Width | No. of switches/ breakers | Operating Direct | Rotary | Motorized | ❶ Device holders | ❷ Covers |
|---|---|---|---|---|---|---|---|---|
| 3VA12 | 250 A | 600 mm | 3 | ■ | ■ | ■ | 8PQ6001-5BA68 | 8PQ2040-6BA26 |
| | | 800 mm | 4 | ■ | ■ | ■ | 8PQ6001-5BA72 | 8PQ2040-8BA24 |
| 3VA20 | 100 A | 600 mm | 3 | ■ | ■ | – | 8PQ6001-5BA71 | 8PQ2045-6BA11 |
| | | | | – | – | ■ | 8PQ6001-5BA71 | 8PQ2045-6BA13 |
| | | 800 mm | 4 | ■ | ■ | – | 8PQ6001-5BA73 | 8PQ2045-8BA12 |
| | | | | – | – | ■ | 8PQ6001-5BA73 | 8PQ2045-8BA16 |
| 3VA21 | 160 A | 600 mm | 3 | ■ | ■ | – | 8PQ6001-5BA71 | 8PQ2045-6BA11 |
| | | | | – | – | ■ | 8PQ6001-5BA71 | 8PQ2045-6BA13 |
| | | 800 mm | 4 | ■ | ■ | – | 8PQ6001-5BA73 | 8PQ2045-8BA12 |
| | | | | – | – | ■ | 8PQ6001-5BA73 | 8PQ2045-8BA16 |
| 3VA22 | 250 A | 600 mm | 3 | ■ | ■ | – | 8PQ6001-5BA71 | 8PQ2045-6BA11 |
| | | | | – | – | ■ | 8PQ6001-5BA71 | 8PQ2045-6BA13 |
| | | 800 mm | 4 | ■ | ■ | – | 8PQ6001-5BA73 | 8PQ2045-8BA12 |
| | | | | – | – | ■ | 8PQ6001-5BA73 | 8PQ2045-8BA16 |

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|  ❸ Busbar holders |  ❺ End cover |  ❻ 8US Adapter |
|---|---|---|
| 8US1923-3AA01 | 8US1922-1AC00 | 8US1213-4AU01 |
| 8US1923-3AA01 | 8US1922-1AC00 | 8US1213-4AU01 |
| 8US1923-3AA01 | 8US1922-1AC00 | 8US1213-4AU01 |
| 8US1923-3AA01 | 8US1922-1AC00 | 8US1213-4AU01 |
| 8US1923-3AA01 | 8US1922-1AC00 | 8US1213-4AP03 |
| 8US1923-3AA01 | 8US1922-1AC00 | 8US1213-4AP03 |
| 8US1923-3AA01 | 8US1922-1AC00 | 8US1213-4AP03 |
| 8US1923-3AA01 | 8US1922-1AC00 | 8US1213-4AP03 |
| 8US1923-3AA01 | 8US1922-1AC00 | 8US1213-4AP03 |
| 8US1923-3AA01 | 8US1922-1AC00 | 8US1213-4AP03 |
| 8US1923-3AA01 | 8US1922-1AC00 | 8US1213-4AP03 |
| 8US1923-3AA01 | 8US1922-1AC00 | 8US1213-4AP03 |
| 8US1923-3AA01 | 8US1922-1AC00 | 8US1213-4AP03 |
| 8US1923-3AA01 | 8US1922-1AC00 | 8US1213-4AP03 |
| 8US1923-3AA01 | 8US1922-1AC00 | 8US1213-4AP03 |
| 8US1923-3AA01 | 8US1922-1AC00 | 8US1213-4AP03 |
| 8US1923-3AA01 | 8US1922-1AC00 | 8US1213-4AP03 |

|  ❸ Busbar holders |  ❹ 4th pole |  ❺ End cover |  ❻ 8US Adapter |
|---|---|---|---|
| 8US1923-3AA01 | 5SH3540 | 8US1922-1AC00 | 8US1313-4AH03 |
| 8US1923-3AA01 | 5SH3540 | 8US1922-1AC00 | 8US1313-4AH03 |
| 8US1923-3AA01 | 5SH3540 | 8US1922-1AC00 | 8US1313-4AH03 |
| 8US1923-3AA01 | 5SH3540 | 8US1922-1AC00 | 8US1313-4AH03 |
| 8US1923-3AA01 | 5SH3540 | 8US1922-1AC00 | 8US1313-4AH03 |
| 8US1923-3AA01 | 5SH3540 | 8US1922-1AC00 | 8US1313-4AH03 |
| 8US1923-3AA01 | 5SH3540 | 8US1922-1AC00 | 8US1313-4AH03 |
| 8US1923-3AA01 | 5SH3540 | 8US1922-1AC00 | 8US1313-4AH03 |
| 8US1923-3AA01 | 5SH3540 | 8US1922-1AC00 | 8US1313-4AH03 |
| 8US1923-3AA01 | 5SH3540 | 8US1922-1AC00 | 8US1313-4AH03 |
| 8US1923-3AA01 | 5SH3540 | 8US1922-1AC00 | 8US1313-4AH03 |
| 8US1923-3AA01 | 5SH3540 | 8US1922-1AC00 | 8US1313-4AH03 |
| 8US1923-3AA01 | 5SH3540 | 8US1922-1AC00 | 8US1313-4AH03 |
| 8US1923-3AA01 | 5SH3540 | 8US1922-1AC00 | 8US1313-4AH03 |

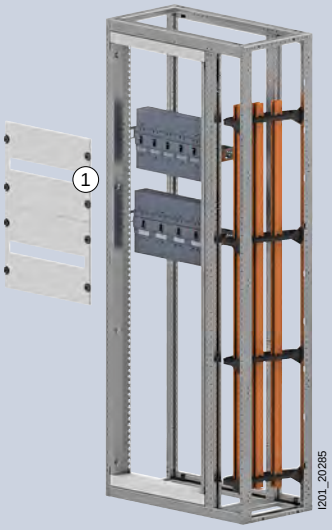


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# Section expansion

## 3VA molded case circuit breakers, DIN-rail mounting



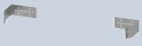

### 3-pole

| Type | $I_n$ | No. of switches/ breakers | Width | Height | Operating mechanism | | |
|---|---|---|---|---|---|---|---|
| | | | | | Direct | Rotary | Motorized |
| 3VA10 | 100 A | 5 | 600 mm | 350 mm | ■ | – | – |
| | | 8 | 800 mm | 350 mm | ■ | – | – |
| 3VA11 | 160 A | 4 | 600 mm | 350 mm | ■ | – | – |
| | | 5 | 800 mm | 350 mm | ■ | – | – |

### 4-pole

| Type | $I_n$ | No. of switches/ breakers | Width | Height | Operating mechanism | | |
|---|---|---|---|---|---|---|---|
| | | | | | Direct | Rotary | Motorized |
| 3VA10 | 100 A | 4 | 600 mm | 350 mm | ■ | – | – |
| | | 6 | 800 mm | 350 mm | ■ | – | – |
| 3VA11 | 160 A | 3 | 600 mm | 350 mm | ■ | – | – |
| | | 4 | 800 mm | 350 mm | ■ | – | – |

### Accessories

| Cable duct fastening | | |
|---|---|---|
|  | **Version** | **Article No.** |
| | Mounting brackets | 8PQ6000-0BA16 |
| **Blanking strips** | | |
|  | **Types** | **Article No.** |
| | Length 1 m | 8GK9910-0KK01 |



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| ❶ DIN-rail mounting | |
|---|---|
|  |  |
| **Device holders** | **Covers** |
| 8PQ6000-3BA36 | 8PQ2035-6BA28 |
| 8PQ6000-3BA37 | 8PQ2035-8BA18 |
| 8PQ6000-3BA36 | 8PQ2035-6BA28 |
| 8PQ6000-3BA37 | 8PQ2035-8BA18 |

| ❶ DIN-rail mounting | |
|---|---|
|  |  |
| **Device holders** | **Covers** |
| 8PQ6000-3BA36 | 8PQ2035-6BA28 |
| 8PQ6000-3BA37 | 8PQ2035-8BA18 |
| 8PQ6000-3BA36 | 8PQ2035-6BA28 |
| 8PQ6000-3BA37 | 8PQ2035-8BA18 |

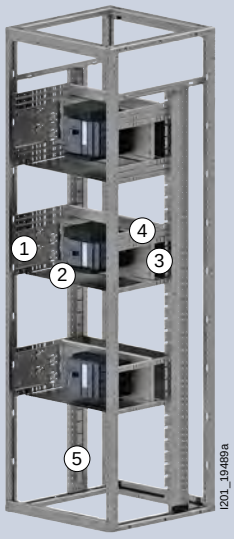


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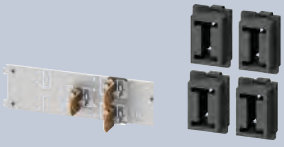

# Section expansion

## 3VA molded case circuit breakers, internal separation – front connection




### 3-pole, width 600 mm

**❶ Cable connection**



| Type | $I_n$ | Height | | Operating mechanism | | | |
|---|---|---|---|---|---|---|---|
| | | | | Direct | Rotary | Motorized | |
| 3VA10 | 100 A | 150 mm | Fixed-mounted | ■ | ■ | – | 8PQ5000-2BA28 + 8PQ5000-0BA05 |
| 3VA11 | 160 A | 150 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA28 + 8PQ5000-0BA05 |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA28 + 8PQ5000-0BA05 |
| 3VA12 | 250 A | 150 mm | Fixed-mounted | ■ | ■ | | 8PQ6000-8BA12 |
| | | | | – | – | ■ | 8PQ6000-8BA13 |
| | | | Plug-in | ■ | ■ | – | 8PQ6000-8BA13 |
| | | | | – | – | ■ | 8PQ6000-8BA12 |
| | | 250 mm | Withdrawable | ■ | – | ■ | 8PQ6000-8BA12 |
| 3VA13 | 400 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ6000-8BA20 |
| 3VA14 | 630 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ6000-8BA20 |
| 3VA20 | 100 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA30 + 8PQ5000-0BA05 |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA30 + 8PQ5000-0BA05 |
| | | 250 mm | Withdrawable | ■ | – | ■ | 8PQ5000-2BA30 |
| 3VA21 | 100 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA30 + 8PQ5000-0BA05 |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA30 + 8PQ5000-0BA05 |
| | | 250 mm | Withdrawable | ■ | – | ■ | 8PQ5000-2BA30 + 8PQ5000-0BA05 |
| 3VA22 | 250 A | 200 mm | Fixed-mounted | ■ | ■ | – | 8PQ6000-8BA16 |
| | | | | – | – | ■ | 8PQ6000-8BA17 |
| | | | Plug-in | ■ | ■ | – | 8PQ6000-8BA17 |
| | | | | – | – | ■ | 8PQ6000-8BA16 |
| | | 250 mm | Withdrawable | ■ | – | ■ | 8PQ6000-8BA16 |
| 3VA23 | 400 A | 200 mm | Fixed-mounted | ■ | ■ | – | 8PQ6000-8BA20 |
| | | | | – | – | ■ | 8PQ6000-8BA18 |
| 3VA24 | 630 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ6000-8BA20 |
| | | | | – | – | – | 8PQ6000-8BA18 |

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| | ❷ Horizontal | ❸ Rear | ❹ Increase in module height | Horizontal with increase in module height | ❺ Plug-in rails | |
|---|---|---|---|---|---|---|
| | | | | | 1600 mm | 1800 mm |
|  |  |  |  |  |  |  |
| Protective bellows | | | | | Busbar system | |
| Form 4b | | | | | Top | Rear or without |
| 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA40 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA40 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA40 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA40 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA40 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA40 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA40 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA40 | 2 × 8PQ5000-4BA60 | 2 × 8PQ5000-4BA68 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | 8PQ5000-4BA62 | 8PQ5000-4BA70 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | 8PQ5000-4BA62 | 8PQ5000-4BA70 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | 8PQ5000-4BA62 | 8PQ5000-4BA70 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |

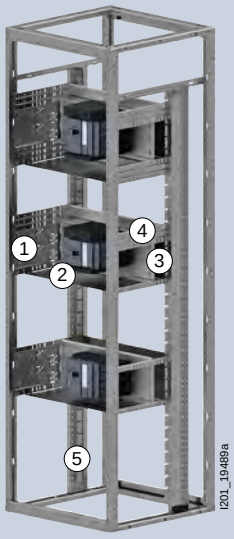


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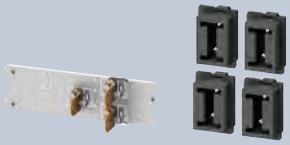

# Section expansion

## 3VA molded case circuit breakers, internal separation – front connection




### 3-pole, width 800 mm

**❶ Cable connection**



| Type | $I_n$ | Height | | Operating mechanism | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Direct | Rotary | Motorized | | |
| 3VA10 | 100 A | 150 mm | Fixed-mounted | ■ | ■ | – | 8PQ5000-2BA28 + | 8PQ5000-0BA05 |
| 3VA11 | 160 A | 150 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA28 + | 8PQ5000-0BA05 |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA28 + | 8PQ5000-0BA05 |
| 3VA12 | 250 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA30 + | 8PQ5000-0BA05 |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA30 + | 8PQ5000-0BA05 |
| | | 250 mm | Withdrawable | ■ | – | ■ | 8PQ6000-8BA14 | |
| 3VA13 | 400 A | 250 mm | Fixed-mounted | ■ | ■ | – | 8PQ6000-8BA22 | |
| | | | | – | – | ■ | 8PQ6000-8BA21 | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ6000-8BA21 | |
| | | 300 mm | Withdrawable | ■ | – | – | 8PQ6000-8BA22 | |
| 3VA14 | 630 A | 250 mm | Fixed-mounted | ■ | ■ | – | 8PQ6000-8BA22 | |
| | | | | – | – | ■ | 8PQ6000-8BA21 | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ6000-8BA21 | |
| | | 300 mm | Withdrawable | ■ | – | – | 8PQ6000-8BA22 | |
| 3VA20 | 250 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA30 + | 8PQ5000-0BA05 |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA30 + | 8PQ5000-0BA05 |
| | | 250 mm | Withdrawable | ■ | – | ■ | 8PQ5000-2BA30 + | 8PQ5000-0BA05 |
| 3VA21 | 250 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA30 + | 8PQ5000-0BA05 |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA30 + | 8PQ5000-0BA05 |
| | | 250 mm | Withdrawable | ■ | – | ■ | 8PQ5000-2BA30 + | 8PQ5000-0BA05 |
| 3VA22 | 250 A | 200 mm | Fixed-mounted | ■ | ■ | – | 8PQ6000-8BA16 | |
| | | | | – | – | ■ | 8PQ6000-8BA17 | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ6000-8BA17 | |
| | | 250 mm | Withdrawable | ■ | – | ■ | 8PQ6000-8BA16 | |
| 3VA23 | 400 A | 250 mm | Fixed-mounted | ■ | ■ | – | 8PQ6000-8BA22 | |
| | | | | – | – | ■ | 8PQ6000-8BA21 | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ6000-8BA21 | |
| | | 300 mm | Withdrawable | ■ | – | – | 8PQ6000-8BA22 | |
| 3VA24 | 630 A | 250 mm | Fixed-mounted | ■ | ■ | – | 8PQ6000-8BA22 | |
| | | | | – | – | ■ | 8PQ6000-8BA21 | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ6000-8BA21 | |
| | | 300 mm | Withdrawable | ■ | – | – | 8PQ6000-8BA22 | |



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| | ❷ Horizontal | ❸ Rear | ❹ Increase in module height | ❺ Plug-in rails | |
|---|---|---|---|---|---|
|  |  |  |  | 1600 mm  | 1800 mm  |
| **Protective bellows** | | | | **Busbar system** | |
| **Form 4b** | | | | **Top** | **Rear or without** |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | 8PQ5000-4BA61 + 8PQ5000-4BA71 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | 8PQ5000-4BA63 + 8PQ5000-4BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | 8PQ5000-4BA63 + 8PQ5000-4BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | 8PQ5000-4BA63 + 8PQ5000-4BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | 8PQ5000-4BA63 + 8PQ5000-4BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | 8PQ5000-4BA63 + 8PQ5000-4BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | 8PQ5000-4BA63 + 8PQ5000-4BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | 8PQ5000-4BA63 + 8PQ5000-4BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |



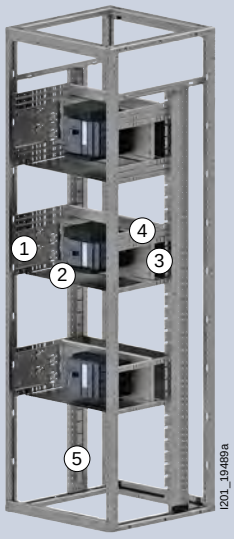
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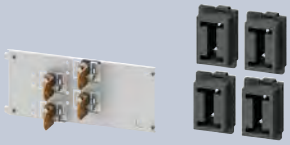
# Section expansion

## 3VA molded case circuit breakers, internal separation – front connection




### 4-pole, width 600 mm

❶ Cable connection



| Type | $I_n$ | Height | | Operating mechanism | | | Terminals | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Direct | Rotary | Motorized | | | |
| 3VA10 | 100 A | 150 mm | Fixed-mounted | ■ | ■ | – | 8PQ5000-2BA28 | + | 8PQ5000-0BA05 |
| 3VA11 | 160 A | 150 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA28 | + | 8PQ5000-0BA05 |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA28 | + | 8PQ5000-0BA05 |
| 3VA12 | 250 A | 200 mm | Fixed-mounted | ■ | ■ | – | 8PQ6000-8BA14 | | |
| | | | | – | – | ■ | 8PQ6000-8BA15 | | |
| | | | Plug-in | ■ | ■ | – | 8PQ6000-8BA15 | | |
| | | | | – | – | ■ | 8PQ6000-8BA14 | | |
| | | 300 mm | Withdrawable | ■ | – | ■ | 8PQ6000-8BA14 | | |
| 3VA13 | 400 A | 250 mm | Fixed-mounted | ■ | ■ | – | 8PQ6000-8BA22 | | |
| | | | | – | – | ■ | 8PQ6000-8BA21 | | |
| 3VA14 | 630 A | 250 mm | Fixed-mounted | ■ | ■ | – | 8PQ6000-8BA22 | | |
| | | | | – | – | ■ | 8PQ6000-8BA21 | | |
| 3VA20 | 250 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA30 | + | 8PQ5000-0BA05 |
| | | | Plug-in | ■ | ■ | – | 8PQ5000-2BA30 | + | 8PQ5000-0BA05 |
| | | | | – | – | ■ | 8PQ5000-2BA30 | + | 8PQ5000-0BA05 |
| | | 300 mm | Withdrawable | ■ | – | ■ | 8PQ5000-2BA30 | + | 8PQ5000-0BA05 |
| 3VA21 | 250 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA30 | + | 8PQ5000-0BA05 |
| | | | Plug-in | ■ | ■ | – | 8PQ5000-2BA30 | + | 8PQ5000-0BA05 |
| | | | | – | – | ■ | 8PQ5000-2BA30 | + | 8PQ5000-0BA05 |
| | | 300 mm | Withdrawable | ■ | – | ■ | 8PQ5000-2BA30 | + | 8PQ5000-0BA05 |
| 3VA22 | 250 A | 200 mm | Fixed-mounted | ■ | ■ | – | 8PQ6000-8BA16 | | |
| | | | | – | – | ■ | 8PQ6000-8BA17 | | |
| | | | Plug-in | ■ | ■ | – | 8PQ6000-8BA17 | | |
| | | | | – | – | ■ | 8PQ6000-8BA17 | | |
| | | 300 mm | Withdrawable | ■ | – | ■ | 8PQ6000-8BA17 | | |
| 3VA23 | 400 A | 250 mm | Fixed-mounted | ■ | ■ | – | 8PQ6000-8BA22 | | |
| | | | | – | – | ■ | 8PQ6000-8BA21 | | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ6000-8BA21 | | |
| 3VA24 | 630 A | 250 mm | Fixed-mounted | ■ | ■ | – | 8PQ6000-8BA22 | | |
| | | | | – | – | ■ | 8PQ6000-8BA21 | | |

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| | | ❷ Horizontal | ❸ Rear | ❹ Increase in module height | ❺ Plug-in rails | |
|---|---|---|---|---|---|---|
| | | | | | 1600 mm | 1800 mm |
| |   |  |  |  |  | |
| 4th pole | Protective bellows Form 4b | | | | Busbar system Top | Rear or without |
| | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA40 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA40 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA40 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | 2 × 8PQ5000-4BA60 + 2 × 8PQ5000-4BA68 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA42 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA42 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA42 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA42 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | 2 × 8PQ5000-4BA62 + 2 × 8PQ5000-4BA70 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | 2 × 8PQ5000-4BA62 + 2 × 8PQ5000-4BA70 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| + 8PQ5000-4BA58 | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| + 8PQ5000-4BA58 | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| + 8PQ5000-4BA58 | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| + 8PQ5000-4BA58 | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| + 8PQ5000-4BA58 | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA41 | 2 × 8PQ5000-4BA62 + 2 × 8PQ5000-4BA70 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA42 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA42 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA42 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA42 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA61 | 8PQ5000-4BA42 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |



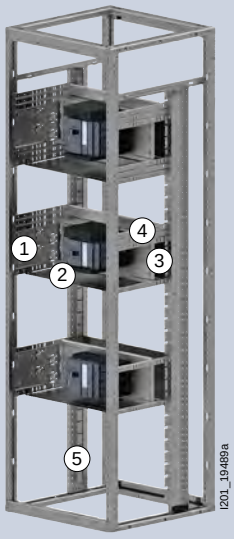
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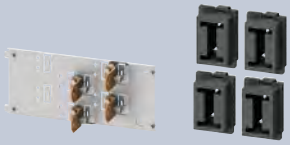
# Section expansion

## 3VA molded case circuit breakers, internal separation – front connection




### 4-pole, width 800 mm

❶ Cable connection



| Type | $I_n$ | Height | | Operating mechanism | | | Terminals | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Direct | Rotary | Motorized | | | |
| 3VA10 | 100 A | 150 mm | Fixed-mounted | ■ | ■ | – | 8PQ5000-2BA28 | + | 8PQ5000-0BA05 |
| 3VA11 | 160 A | 150 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA28 | + | 8PQ5000-0BA05 |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA28 | + | 8PQ5000-0BA05 |
| 3VA12 | 250 A | 200 mm | Fixed-mounted | ■ | ■ | – | 8PQ6000-8BA14 | | |
| | | | | – | – | ■ | 8PQ6000-8BA15 | | |
| | | | Plug-in | ■ | ■ | – | 8PQ6000-8BA15 | | |
| | | | | – | – | ■ | 8PQ6000-8BA14 | | |
| | | 300 mm | Withdrawable | ■ | – | ■ | 8PQ6000-8BA14 | | |
| 3VA13 | 400 A | 250 mm | Fixed-mounted | ■ | ■ | – | 8PQ6000-8BA22 | | |
| | | | | – | – | ■ | 8PQ6000-8BA21 | | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ6000-8BA21 | | |
| | | 300 mm | Withdrawable | ■ | – | – | 8PQ6000-8BA22 | | |
| 3VA14 | 630 A | 250 mm | Fixed-mounted | ■ | ■ | – | 8PQ6000-8BA22 | | |
| | | | | – | – | ■ | 8PQ6000-8BA21 | | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ6000-8BA21 | | |
| | | | Withdrawable | ■ | – | – | 8PQ6000-8BA22 | | |
| 3VA20 | 250 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA30 | + | 8PQ5000-0BA05 |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA30 | + | 8PQ5000-0BA05 |
| | | 300 mm | Withdrawable | ■ | – | ■ | 8PQ5000-2BA30 | + | 8PQ5000-0BA05 |
| 3VA21 | 250 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA30 | + | 8PQ5000-0BA05 |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA30 | + | 8PQ5000-0BA05 |
| | | 300 mm | Withdrawable | ■ | – | ■ | 8PQ5000-2BA30 | + | 8PQ5000-0BA05 |
| 3VA22 | 250 A | 200 mm | Fixed-mounted | ■ | ■ | – | 8PQ6000-8BA16 | | |
| | | | | – | – | ■ | 8PQ6000-8BA17 | | |
| | | | Plug-in | ■ | ■ | | 8PQ6000-8BA17 | | |
| | | | | – | – | ■ | 8PQ6000-8BA16 | | |
| | | 300 mm | Withdrawable | ■ | – | ■ | 8PQ6000-8BA16 | | |
| 3VA23 | 400 A | 250 mm | Fixed-mounted | ■ | ■ | – | 8PQ6000-8BA22 | | |
| | | | | – | – | ■ | 8PQ6000-8BA21 | | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ6000-8BA21 | | |
| 3VA24 | 630 A | 250 mm | Fixed-mounted | ■ | ■ | – | 8PQ6000-8BA22 | | |
| | | | | – | – | ■ | 8PQ6000-8BA21 | | |

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| | | ❷ Horizontal | ❸ Rear | ❹ Increase in module height | ❺ Plug-in rails | |
|---|---|---|---|---|---|---|
| | | | | | 1600 mm | 1800 mm |
| |   |  |  |   |  |  |
| 4th pole | Protective bellows Form 4b | | | | Busbar system Top | Rear or without |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | – | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | 2 × 8PQ5000-4BA61 + 2 × 8PQ5000-4BA71 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | 8PQ5000-4BA63 + 8PQ5000-4BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | 8PQ5000-4BA63 + 8PQ5000-4BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | 2 × 8PQ5000-4BA63 + 2 × 8PQ5000-4BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | 2 × 8PQ5000-4BA63 + 2 × 8PQ5000-4BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| + 8PQ5000-4BA58 | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| + 8PQ5000-4BA58 | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| + 8PQ5000-4BA58 | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| + 8PQ5000-4BA58 | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| + 8PQ5000-4BA58 | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA48 | 2 × 8PQ5000-4BA63 + 2 × 8PQ5000-4BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| | 8PQ9400-0BA71 | 8PQ5000-2BA62 | 8PQ5000-4BA50 | – | 8PQ3000-0BA82 | 8PQ3000-0BA83 |

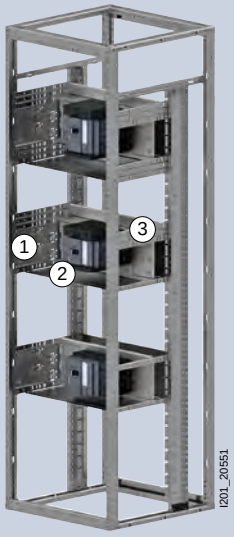


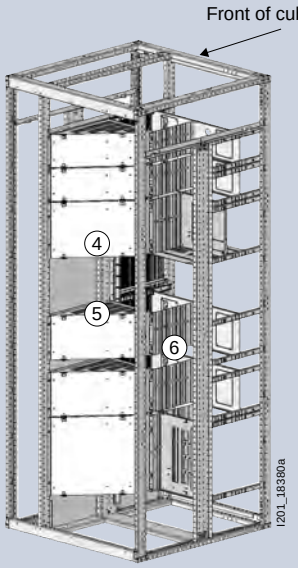
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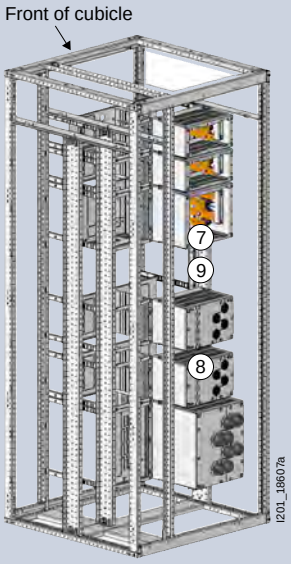
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# Section expansion

## 3VA molded case circuit breakers, internal separation – rear connection




### 3-pole, width 600 mm

| ❶ Lateral | ❷ Horizontal | ❸ Increase in module height |
|---|---|---|









| Type | $I_n$ | Height | | Operating mechanism | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Direct | Rotary | Motorized | | | |
| 3VA10 | 100 A | 150 mm | Fixed-mounted | ■ | ■ | – | 8PQ5000-2BA28 | 8PQ5000-2BA61 | – |
| 3VA11 | 160 A | 150 mm | Fixed-mounted | ■ | ■ | – | 8PQ5000-2BA28 | 8PQ5000-2BA61 | – |
| | | | Plug-in | ■ | – | – | 8PQ5000-2BA28 | 8PQ5000-2BA61 | – |
| 3VA12 | 250 A | 150 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA28 | 8PQ5000-2BA61 | – |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA28 | 8PQ5000-2BA61 | – |
| | | 250 mm | Withdrawable | ■ | – | ■ | 8PQ5000-2BA28 | 8PQ5000-2BA61 | 2 × 8PQ5000-4BA60 + 2 × 8PQ5000-4BA68 |
| 3VA13 | 400 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA31 | 8PQ5000-2BA61 | – |
| 3VA14 | 630 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA31 | 8PQ5000-2BA61 | – |
| 3VA20 | 100 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA61 | – |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA61 | – |
| | | 250 mm | Withdrawable | ■ | – | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA61 | 8PQ5000-4BA62 + 8PQ5000-4BA70 |
| 3VA21 | 160 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA61 | – |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA61 | – |
| | | 250 mm | Withdrawable | ■ | – | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA61 | 8PQ5000-4BA62 + 8PQ5000-4BA70 |
| 3VA22 | 250 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA61 | – |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA61 | – |
| | | 250 mm | Withdrawable | ■ | – | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA61 | 8PQ5000-4BA62 + 8PQ5000-4BA70 |
| 3VA23 | 400 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA31 | 8PQ5000-2BA61 | – |
| 3VA24 | 630 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA31 | 8PQ5000-2BA61 | – |

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| ❹ Vertical busbar connection | ❺ Segment covers | ❻ Support plates | ❼ Connection compartments | ❽ Cable entries | ❺ Plug-in rails | |
|---|---|---|---|---|---|---|
| | | | | | 1600 mm | 1800 mm |
| | | | | | Busbar system | |
| | | | | | Top | Rear or without |
| 8PQ5000-3BA52 | 8PQ5000-3BA63 | 8PQ5000-4BA73 | 8PQ6000-5BA13 | 8PQ5000-4BA80 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA52 | 8PQ5000-3BA63 | 8PQ5000-4BA73 | 8PQ6000-5BA13 | 8PQ5000-4BA80 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA52 | 8PQ5000-3BA63 | 8PQ5000-4BA73 | 8PQ6000-5BA13 | 8PQ5000-4BA80 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA52 | 8PQ5000-3BA63 | 8PQ5000-4BA73 | 8PQ6000-5BA15 | 8PQ5000-3BA71 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA52 | 8PQ5000-3BA63 | 8PQ5000-4BA73 | 8PQ6000-5BA15 | 8PQ5000-3BA71 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA54 | 8PQ5000-3BA63 | 8PQ5000-4BA73 | 8PQ6000-5BA15 | 8PQ5000-3BA71 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA53 | 8PQ5000-3BA63 | 8PQ5000-4BA74 | 8PQ6000-5BA18 | 8PQ5000-3BA73 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA53 | 8PQ5000-3BA63 | 8PQ5000-4BA74 | 8PQ6000-5BA18 | 8PQ5000-3BA73 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA53 | 8PQ5000-3BA63 | 8PQ5000-4BA74 | 8PQ6000-5BA14 | 8PQ5000-3BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA53 | 8PQ5000-3BA63 | 8PQ5000-4BA74 | 8PQ6000-5BA14 | 8PQ5000-3BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA54 | 8PQ5000-3BA63 | 8PQ5000-4BA74 | 8PQ6000-5BA14 | 8PQ5000-3BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA53 | 8PQ5000-3BA63 | 8PQ5000-4BA74 | 8PQ6000-5BA14 | 8PQ5000-3BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA53 | 8PQ5000-3BA63 | 8PQ5000-4BA74 | 8PQ6000-5BA14 | 8PQ5000-3BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA54 | 8PQ5000-3BA63 | 8PQ5000-4BA74 | 8PQ6000-5BA14 | 8PQ5000-3BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA53 | 8PQ5000-3BA63 | 8PQ5000-4BA74 | 8PQ6000-8BA30 | 8PQ5000-3BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA53 | 8PQ5000-3BA63 | 8PQ5000-4BA74 | 8PQ6000-8BA30 | 8PQ5000-3BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA54 | 8PQ5000-3BA63 | 8PQ5000-4BA74 | 8PQ6000-8BA30 | 8PQ5000-3BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA53 | 8PQ5000-3BA63 | 8PQ5000-4BA74 | 8PQ6000-5BA18 | 8PQ5000-3BA73 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA53 | 8PQ5000-3BA63 | 8PQ5000-4BA74 | 8PQ6000-5BA18 | 8PQ5000-3BA73 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |



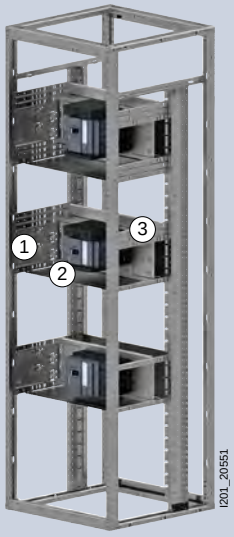
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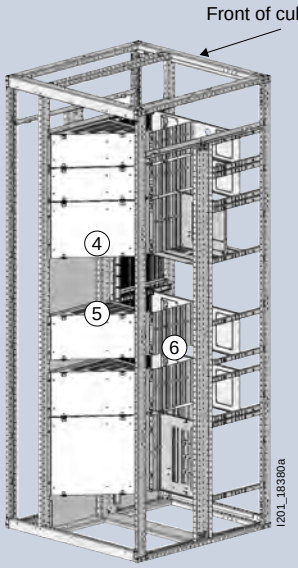
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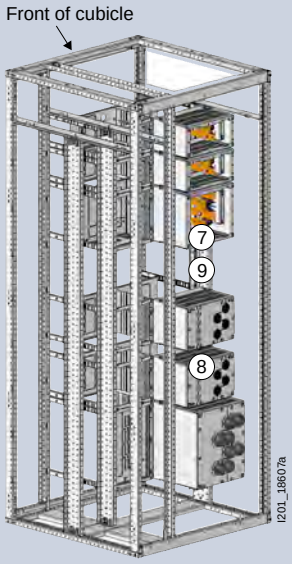


# Section expansion

## 3VA molded case circuit breakers, internal separation – rear connection




### 4-pole, width 600 mm

| | ❶ Lateral | ❷ Horizontal | ❸ Increase in module height |
|---|---|---|---|
| |  |  |   |

| Type | $I_n$ | Height | | Operating mechanism | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Direct | Rotary | Motorized | | | |
| 3VA10 | 100 A | 150 mm | Fixed-mounted | ■ | ■ | – | 8PQ5000-2BA28 | 8PQ5000-2BA61 | – |
| 3VA11 | 160 A | 150 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA28 | 8PQ5000-2BA61 | – |
| | | | Plug-in | ■ | ■ | – | 8PQ5000-2BA28 | 8PQ5000-2BA61 | – |
| 3VA12 | 250 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA61 | – |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA61 | – |
| | | 300 mm | Withdrawable | ■ | – | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA61 | 2 × 8PQ5000-4BA60 + 2 × 8PQ5000-4BA68 |
| 3VA13 | 400 A | 250 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA33 | 8PQ5000-2BA61 | – |
| 3VA14 | 630 A | 250 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA33 | 8PQ5000-2BA61 | – |
| 3VA20 | 100 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA61 | – |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA61 | – |
| | | 300 mm | Withdrawable | ■ | – | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA61 | 2 × 8PQ5000-4BA62 + 2 × 8PQ5000-4BA70 |
| 3VA21 | 160 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA61 | – |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA61 | – |
| | | 300 mm | Withdrawable | ■ | – | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA61 | 2 × 8PQ5000-4BA62 + 2 × 8PQ5000-4BA70 |
| 3VA22 | 250 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA61 | – |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA61 | – |
| | | 300 mm | Withdrawable | ■ | – | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA61 | 2 × 8PQ5000-4BA62 + 2 × 8PQ5000-4BA70 |
| 3VA23 | 400 A | 250 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA33 | 8PQ5000-2BA61 | – |
| 3VA24 | 630 A | 250 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA33 | 8PQ5000-2BA61 | – |





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| ❹ Vertical busbar connection | ❺ Segment covers | ❻ Support plates | ❼ Connection compartments | ❽ Cable entries | ❺ Plug-in rails | |
|---|---|---|---|---|---|---|
| | | | | | 1600 mm | 1800 mm |
| | | | | | Busbar system | |
| | | | | | Top | Rear or without |
| 8PQ5000-3BA52 | 8PQ5000-3BA63 | 8PQ5000-4BA73 | 8PQ6000-5BA13 | 8PQ5000-4BA80 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA52 | 8PQ5000-3BA63 | 8PQ5000-4BA73 | 8PQ6000-5BA13 | 8PQ5000-4BA80 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA52 | 8PQ5000-3BA63 | 8PQ5000-4BA73 | 8PQ6000-5BA13 | 8PQ5000-4BA80 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA53 | 8PQ5000-3BA63 | 8PQ5000-4BA74 | 8PQ6000-5BA17 | 8PQ5000-3BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA53 | 8PQ5000-3BA63 | 8PQ5000-4BA74 | 8PQ6000-5BA17 | 8PQ5000-3BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA55 | 8PQ5000-3BA63 | 8PQ5000-4BA74 | 8PQ6000-5BA17 | 8PQ5000-3BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA54 | 8PQ5000-3BA63 | 8PQ5000-4BA75 | 8PQ6000-5BA20 | 8PQ5000-3BA74 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA54 | 8PQ5000-3BA63 | 8PQ5000-4BA75 | 8PQ6000-5BA20 | 8PQ5000-3BA74 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA53 | 8PQ5000-3BA63 | 8PQ5000-4BA74 | 8PQ6000-5BA14 | 8PQ5000-3BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA53 | 8PQ5000-3BA63 | 8PQ5000-4BA74 | 8PQ6000-5BA14 | 8PQ5000-3BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA55 | 8PQ5000-3BA63 | 8PQ5000-4BA74 | 8PQ6000-5BA14 | 8PQ5000-3BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA53 | 8PQ5000-3BA63 | 8PQ5000-4BA74 | 8PQ6000-5BA14 | 8PQ5000-3BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA53 | 8PQ5000-3BA63 | 8PQ5000-4BA74 | 8PQ6000-5BA14 | 8PQ5000-3BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA55 | 8PQ5000-3BA63 | 8PQ5000-4BA74 | 8PQ6000-5BA14 | 8PQ5000-3BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA53 | 8PQ5000-3BA63 | 8PQ5000-4BA74 | 8PQ6000-5BA17 | 8PQ5000-3BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA53 | 8PQ5000-3BA63 | 8PQ5000-4BA74 | 8PQ6000-5BA17 | 8PQ5000-3BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA55 | 8PQ5000-3BA63 | 8PQ5000-4BA74 | 8PQ6000-5BA17 | 8PQ5000-3BA72 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA54 | 8PQ5000-3BA63 | 8PQ5000-4BA75 | 8PQ6000-5BA20 | 8PQ5000-3BA74 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA54 | 8PQ5000-3BA63 | 8PQ5000-4BA75 | 8PQ6000-5BA20 | 8PQ5000-3BA74 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |



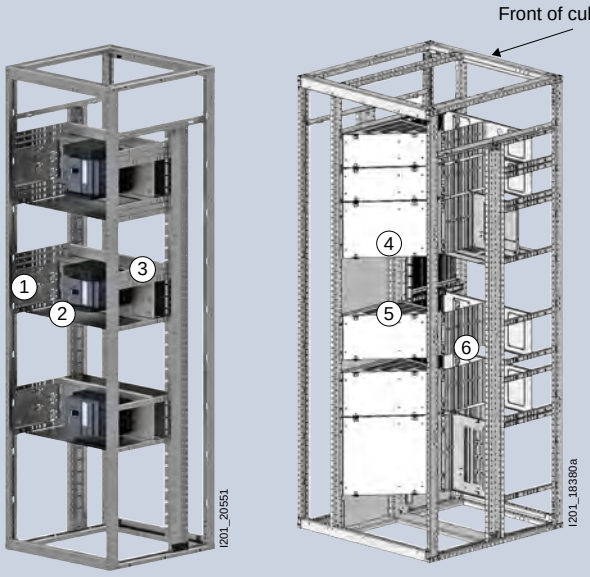
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# Section expansion

## 3VA molded case circuit breakers, internal separation – rear connection




### 3-pole, width 800 mm

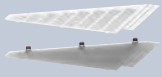
| Type | $I_n$ | Height | | Operating mechanism | | | ❶ Lateral | ❷ Horizontal | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Direct | Rotary | Motorized | | | | |
| 3VA10 | 100 A | 150 mm | Fixed-mounted | ■ | – | – | 8PQ5000-2BA28 | 8PQ5000-2BA62 | | |
| 3VA11 | 160 A | 150 mm | Fixed-mounted | ■ | – | – | 8PQ5000-2BA28 | 8PQ5000-2BA62 | | |
| | | | Plug-in | ■ | – | – | 8PQ5000-2BA28 | 8PQ5000-2BA62 | | |
| 3VA12 | 250 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA62 | | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA62 | | |
| | | 250 mm | Withdrawable | ■ | – | – | 8PQ5000-2BA30 | 8PQ5000-2BA62 | | |
| 3VA13 | 400 A | 250 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA33 | 8PQ5000-2BA62 | | |
| | | | Plug-in | ■ | – | – | 8PQ5000-2BA33 | 8PQ5000-2BA62 | | |
| | | 300 mm | Withdrawable | ■ | – | – | 8PQ5000-2BA33 | 8PQ5000-2BA62 | | |
| 3VA14 | 630 A | 250 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA33 | 8PQ5000-2BA62 | | |
| | | | Plug-in | ■ | – | – | 8PQ5000-2BA33 | 8PQ5000-2BA62 | | |
| | | 300 mm | Withdrawable | ■ | – | – | 8PQ5000-2BA33 | 8PQ5000-2BA62 | | |
| 3VA15 | 1000 A | 300 mm | Fixed-mounted | ■ | – | – | – | 8PQ5000-2BA62 | + | 8PQ5000-2BA63 |
| 3VA20 | 100 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA62 | | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA62 | | |
| | | 250 mm | Withdrawable | ■ | – | – | 8PQ5000-2BA30 | 8PQ5000-2BA62 | | |
| 3VA21 | 160 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA62 | | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA62 | | |
| | | 250 mm | Withdrawable | ■ | – | – | 8PQ5000-2BA30 | 8PQ5000-2BA62 | | |
| 3VA22 | 250 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA62 | | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA62 | | |
| | | 250 mm | Withdrawable | ■ | – | – | 8PQ5000-2BA30 | 8PQ5000-2BA62 | | |
| 3VA23 | 400 A | 250 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA33 | 8PQ5000-2BA62 | | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA33 | 8PQ5000-2BA62 | | |
| | | 300 mm | Withdrawable | ■ | – | – | 8PQ5000-2BA33 | 8PQ5000-2BA62 | | |
| 3VA24 | 630 A | 250 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA33 | 8PQ5000-2BA62 | | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA33 | 8PQ5000-2BA62 | | |
| | | 300 mm | Withdrawable | ■ | – | – | 8PQ5000-2BA33 | 8PQ5000-2BA62 | | |
| 3VA25 | 1000 A | 300 mm | Fixed-mounted | ■ | – | – | – | 8PQ5000-2BA62 | + | 8PQ5000-2BA63 |
| 3VA26 | 1250 A | 300 mm | Fixed-mounted | ■ | – | – | – | 8PQ5000-2BA62 | + | 8PQ5000-2BA63 |
| 3VA27 | 1600 A | 300 mm | Fixed-mounted | ■ | – | – | – | 8PQ5000-2BA62 | + | 8PQ5000-2BA63 |
| | | | Withdrawable | ■ | – | – | – | 8PQ5000-2BA62 | + | 8PQ5000-2BA63 |

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| ❸ Increase in module height | ❹ Vertical busbar connection | Distribution busbar | ❺ Segment covers | ❻ Support plates |
|---|---|---|---|---|
|  |  |  |  |  |
| – | 8PQ5000-3BA57 | | 8PQ5000-3BA64 | 8PQ5000-4BA76 |
| – | 8PQ5000-3BA57 | | 8PQ5000-3BA64 | 8PQ5000-4BA76 |
| – | 8PQ5000-3BA57 | | 8PQ5000-3BA64 | 8PQ5000-4BA76 |
| – | 8PQ5000-3BA58 | | 8PQ5000-3BA64 | 8PQ5000-4BA77 |
| – | 8PQ5000-3BA58 | | 8PQ5000-3BA64 | 8PQ5000-4BA77 |
| 8PQ5000-4BA61 + 8PQ5000-4BA71 | 8PQ5000-3BA58 | | 8PQ5000-3BA64 | 8PQ5000-4BA77 |
| – | 8PQ5000-3BA60 | | 8PQ5000-3BA64 | 8PQ5000-4BA78 |
| – | 8PQ5000-3BA60 | | 8PQ5000-3BA64 | 8PQ5000-4BA78 |
| 8PQ5000-4BA63 + 8PQ5000-4BA72 | 8PQ5000-3BA60 | | 8PQ5000-3BA64 | 8PQ5000-4BA78 |
| – | 8PQ5000-3BA60 | | 8PQ5000-3BA64 | 8PQ5000-4BA78 |
| – | 8PQ5000-3BA60 | | 8PQ5000-3BA64 | 8PQ5000-4BA78 |
| 8PQ5000-4BA63 + 8PQ5000-4BA72 | 8PQ5000-3BA60 | | 8PQ5000-3BA64 | 8PQ5000-4BA78 |
| – | 8PQ5000-5BA77 | + 8PQ6001-4BA64 | 8PQ5000-5BA78 | 8PQ5000-5BA75 |
| – | 8PQ5000-3BA58 | | 8PQ5000-3BA64 | 8PQ5000-4BA77 |
| – | 8PQ5000-3BA58 | | 8PQ5000-3BA64 | 8PQ5000-4BA77 |
| 8PQ5000-4BA63 + 8PQ5000-4BA72 | 8PQ5000-3BA58 | | 8PQ5000-3BA64 | 8PQ5000-4BA77 |
| – | 8PQ5000-3BA58 | | 8PQ5000-3BA64 | 8PQ5000-4BA77 |
| – | 8PQ5000-3BA58 | | 8PQ5000-3BA64 | 8PQ5000-4BA77 |
| 8PQ5000-4BA63 + 8PQ5000-4BA72 | 8PQ5000-3BA58 | | 8PQ5000-3BA64 | 8PQ5000-4BA77 |
| – | 8PQ5000-3BA58 | | 8PQ5000-3BA64 | 8PQ5000-4BA77 |
| – | 8PQ5000-3BA58 | | 8PQ5000-3BA64 | 8PQ5000-4BA77 |
| 8PQ5000-4BA63 + 8PQ5000-4BA72 | 8PQ5000-3BA58 | | 8PQ5000-3BA64 | 8PQ5000-4BA77 |
| – | 8PQ5000-3BA60 | | 8PQ5000-3BA64 | 8PQ5000-4BA78 |
| – | 8PQ5000-3BA60 | | 8PQ5000-3BA64 | 8PQ5000-4BA78 |
| 8PQ5000-4BA63 + 8PQ5000-4BA72 | 8PQ5000-3BA60 | | 8PQ5000-3BA64 | 8PQ5000-4BA78 |
| – | 8PQ5000-3BA60 | | 8PQ5000-3BA64 | 8PQ5000-4BA78 |
| – | 8PQ5000-3BA60 | | 8PQ5000-3BA64 | 8PQ5000-4BA78 |
| 8PQ5000-4BA63 + 8PQ5000-4BA72 | 8PQ5000-3BA60 | | 8PQ5000-3BA64 | 8PQ5000-4BA78 |
| – | 8PQ5000-5BA77 | + 8PQ6001-4BA64 | 8PQ5000-5BA78 | 8PQ5000-5BA75 |
| – | 8PQ5000-5BA77 | + 8PQ6001-4BA64 | 8PQ5000-5BA78 | 8PQ5000-5BA75 |
| – | 8PQ5000-5BA77 | + 8PQ6001-4BA65 | 8PQ5000-5BA78 | 8PQ5000-5BA75 |
| – | 8PQ5000-5BA77 | + 8PQ6001-4BA66 | 8PQ5000-5BA78 | 8PQ5000-5BA76 |

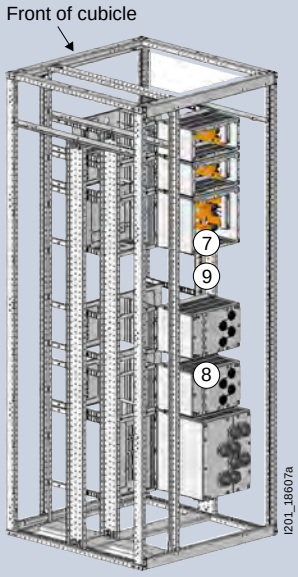


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# Section expansion

## 3VA molded case circuit breakers, internal separation – rear connection




### 3-pole, width 800 mm

**❼ Connection compartments**





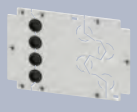
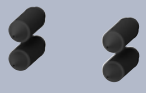
| Type | $I_n$ | Height | | Operating mechanism | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Direct | Rotary | Motorized | | | |
| 3VA10 | 100 A | 150 mm | Fixed-mounted | ■ | – | – | 8PQ6000-5BA13 | | |
| 3VA11 | 160 A | 150 mm | Fixed-mounted | ■ | – | – | 8PQ6000-5BA13 | | |
| | | | Plug-in | ■ | – | – | 8PQ6000-5BA13 | | |
| 3VA12 | 250 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ6000-5BA17 | | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ6000-5BA17 | | |
| | | 250 mm | Withdrawable | ■ | – | – | 8PQ6000-5BA17 | | |
| 3VA13 | 400 A | 250 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ6000-5BA20 | | |
| | | | Plug-in | ■ | – | – | 8PQ6000-5BA20 | | |
| | | 300 mm | Withdrawable | ■ | – | – | 8PQ6000-5BA20 | | |
| 3VA14 | 630 A | 250 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ6000-5BA20 | | |
| | | | Plug-in | ■ | – | – | 8PQ6000-5BA20 | | |
| | | 300 mm | Withdrawable | ■ | – | – | 8PQ6000-5BA20 | | |
| 3VA15 | 1000 A | 300 mm | Fixed-mounted | ■ | – | – | – | 8PQ5000-5BA80 + | 8PQ6001-4BA33 |
| 3VA20 | 100 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ6000-5BA14 | | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ6000-5BA14 | | |
| | | 250 mm | Withdrawable | ■ | – | – | 8PQ6000-5BA14 | | |
| 3VA21 | 160 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ6000-5BA14 | | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ6000-5BA14 | | |
| | | 250 mm | Withdrawable | ■ | – | – | 8PQ6000-5BA14 | | |
| 3VA22 | 250 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ6000-8BA30 | | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ6000-8BA30 | | |
| | | 250 mm | Withdrawable | ■ | – | – | 8PQ6000-8BA30 | | |
| 3VA23 | 400 A | 250 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ6000-5BA20 | | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ6000-5BA20 | | |
| | | 300 mm | Withdrawable | ■ | – | – | 8PQ6000-5BA20 | | |
| 3VA24 | 630 A | 250 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ6000-5BA20 | | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ6000-5BA20 | | |
| | | 300 mm | Withdrawable | ■ | – | – | 8PQ6000-5BA20 | | |
| 3VA25 | 1000 A | 300 mm | Fixed-mounted | ■ | – | – | – | 8PQ5000-5BA80 + | 8PQ6001-4BA33 |
| 3VA26 | 1250 A | 300 mm | Fixed-mounted | ■ | – | – | – | 8PQ5000-5BA80 + | 8PQ6001-4BA33 |
| 3VA27 | 1600 A | 300 mm | Fixed-mounted | ■ | – | – | – | 8PQ5000-5BA81 + | 8PQ6001-4BA34 |
| | | | Withdrawable | ■ | – | – | – | 8PQ5000-5BA81 + | 8PQ6001-4BA35 |

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| ❽ Cable entries | | | | ❺ Plug-in rails | |
|---|---|---|---|---|---|
| | | | | 1600 mm | 1800 mm |
|  |  |  | |  |  |
| | | | | Busbar system | |
| | | | | Top | Rear or without |
| 8PQ5000-4BA80 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-4BA80 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-4BA80 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA72 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA72 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA72 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA74 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA74 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA74 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA74 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA74 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA74 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| – | 8PQ5000-5BA82 | + | 8PQ9400-0BA71 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA72 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA72 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA72 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA72 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA72 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA72 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA72 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA72 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA72 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA72 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA74 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA74 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA74 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA74 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA74 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA74 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| – | 8PQ5000-5BA82 | + | 8PQ9400-0BA71 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| – | 8PQ5000-5BA82 | + | 8PQ9400-0BA71 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| – | 8PQ5000-5BA83 | + | 8PQ9400-0BA71 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| – | 8PQ5000-5BA83 | + | 8PQ9400-0BA71 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |

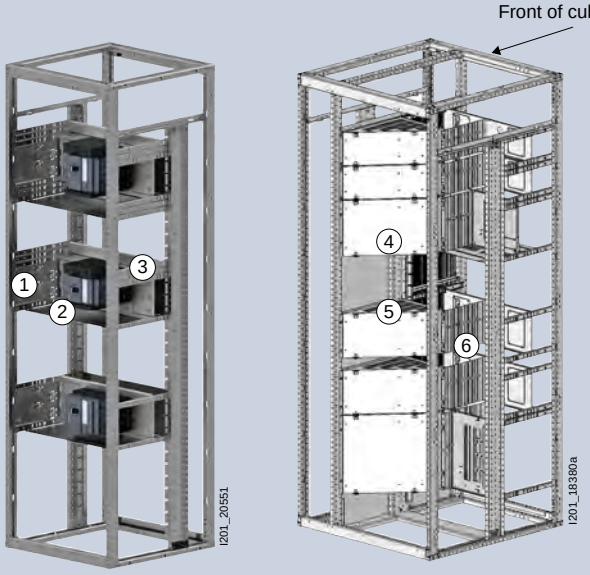


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# Section expansion

## 3VA molded case circuit breakers, internal separation – rear connection




### 4-pole, width 800 mm

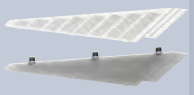
| Type | $I_n$ | Height | | Operating mechanism | | | ❶ Lateral | ❷ Horizontal | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Direct | Rotary | Motorized | | | | |
| 3VA10 | 100 A | 150 mm | Fixed-mounted | ■ | ■ | – | 8PQ5000-2BA28 | 8PQ5000-2BA62 | | |
| 3VA11 | 160 A | 150 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA28 | 8PQ5000-2BA62 | | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA28 | 8PQ5000-2BA62 | | |
| 3VA12 | 250 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA62 | | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA62 | | |
| | | 300 mm | Withdrawable | ■ | – | – | 8PQ5000-2BA30 | 8PQ5000-2BA62 | | |
| 3VA13 | 400 A | 250 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA33 | 8PQ5000-2BA62 | | |
| | | | Plug-in | ■ | – | – | 8PQ5000-2BA33 | 8PQ5000-2BA62 | | |
| | | 300 mm | Withdrawable | ■ | – | – | 8PQ5000-2BA33 | 8PQ5000-2BA62 | | |
| 3VA14 | 630 A | 250 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA33 | 8PQ5000-2BA62 | | |
| | | | Plug-in | ■ | – | – | 8PQ5000-2BA33 | 8PQ5000-2BA62 | | |
| | | 300 mm | Withdrawable | ■ | – | – | 8PQ5000-2BA33 | 8PQ5000-2BA62 | | |
| 3VA15 | 1000 A | 300 mm | Fixed-mounted | ■ | – | – | – | 8PQ5000-2BA62 | + | 8PQ5000-2BA63 |
| 3VA20 | 100 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA62 | | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA62 | | |
| | | 300 mm | Withdrawable | ■ | – | – | 8PQ5000-2BA30 | 8PQ5000-2BA62 | | |
| 3VA21 | 160 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA62 | | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA62 | | |
| | | 300 mm | Withdrawable | ■ | – | – | 8PQ5000-2BA30 | 8PQ5000-2BA62 | | |
| 3VA22 | 250 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA62 | | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA30 | 8PQ5000-2BA62 | | |
| | | 300 mm | Withdrawable | ■ | – | – | 8PQ5000-2BA30 | 8PQ5000-2BA62 | | |
| 3VA23 | 400 A | 250 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA33 | 8PQ5000-2BA62 | | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA33 | 8PQ5000-2BA62 | | |
| | | 350 mm | Withdrawable | ■ | – | – | 8PQ5000-2BA33 | 8PQ5000-2BA62 | | |
| 3VA24 | 630 A | 250 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ5000-2BA33 | 8PQ5000-2BA62 | | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ5000-2BA33 | 8PQ5000-2BA62 | | |
| | | 350 mm | Withdrawable | ■ | – | – | 8PQ5000-2BA33 | 8PQ5000-2BA62 | | |
| 3VA25 | 1000 A | 300 mm | Fixed-mounted | ■ | – | – | – | 8PQ5000-2BA62 | + | 8PQ5000-2BA63 |
| 3VA26 | 1250 A | 300 mm | Fixed-mounted | ■ | – | – | – | 8PQ5000-2BA62 | + | 8PQ5000-2BA63 |
| 3VA27 | 1600 A | 300 mm | Fixed-mounted | ■ | – | – | – | 8PQ5000-2BA62 | + | 8PQ5000-2BA63 |
| | | | Withdrawable | ■ | – | – | – | 8PQ5000-2BA62 | + | 8PQ5000-2BA63 |

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| ❸ Increase in module height | | ❹ Vertical busbar connection | Distribution busbar | ❺ Segment covers | ❻ Support plates |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
| – | | 8PQ5000-3BA57 | | 8PQ5000-3BA64 | 8PQ5000-4BA76 |
| – | | 8PQ5000-3BA57 | | 8PQ5000-3BA64 | 8PQ5000-4BA76 |
| – | | 8PQ5000-3BA57 | | 8PQ5000-3BA64 | 8PQ5000-4BA76 |
| – | | 8PQ5000-3BA58 | | 8PQ5000-3BA64 | 8PQ5000-4BA77 |
| – | | 8PQ5000-3BA58 | | 8PQ5000-3BA64 | 8PQ5000-4BA77 |
| 2 × 8PQ5000-4BA61 | + 2 × 8PQ5000-4BA71 | 8PQ5000-3BA58 | | 8PQ5000-3BA64 | 8PQ5000-4BA77 |
| – | | 8PQ5000-3BA60 | | 8PQ5000-3BA64 | 8PQ5000-4BA78 |
| – | | 8PQ5000-3BA60 | | 8PQ5000-3BA64 | 8PQ5000-4BA78 |
| 8PQ5000-4BA63 | + 8PQ5000-4BA72 | 8PQ5000-3BA60 | | 8PQ5000-3BA64 | 8PQ5000-4BA78 |
| – | | 8PQ5000-3BA60 | | 8PQ5000-3BA64 | 8PQ5000-4BA78 |
| – | | 8PQ5000-3BA60 | | 8PQ5000-3BA64 | 8PQ5000-4BA78 |
| 8PQ5000-4BA63 | + 8PQ5000-4BA72 | 8PQ5000-3BA60 | | 8PQ5000-3BA64 | 8PQ5000-4BA78 |
| – | | 8PQ5000-5BA77 | + 8PQ6001-4BA64 | 8PQ5000-5BA78 | 8PQ5000-5BA75 |
| – | | 8PQ5000-3BA58 | | 8PQ5000-3BA64 | 8PQ5000-4BA77 |
| – | | 8PQ5000-3BA58 | | 8PQ5000-3BA64 | 8PQ5000-4BA77 |
| 2 × 8PQ5000-4BA63 | + 2 × 8PQ5000-4BA72 | 8PQ5000-3BA58 | | 8PQ5000-3BA64 | 8PQ5000-4BA77 |
| – | | 8PQ5000-3BA58 | | 8PQ5000-3BA64 | 8PQ5000-4BA77 |
| – | | 8PQ5000-3BA58 | | 8PQ5000-3BA64 | 8PQ5000-4BA77 |
| 2 × 8PQ5000-4BA63 | + 2 × 8PQ5000-4BA72 | 8PQ5000-3BA58 | | 8PQ5000-3BA64 | 8PQ5000-4BA77 |
| – | | 8PQ5000-3BA58 | | 8PQ5000-3BA64 | 8PQ5000-4BA77 |
| – | | 8PQ5000-3BA58 | | 8PQ5000-3BA64 | 8PQ5000-4BA77 |
| 2 × 8PQ5000-4BA63 | + 2 × 8PQ5000-4BA72 | 8PQ5000-3BA58 | | 8PQ5000-3BA64 | 8PQ5000-4BA77 |
| – | | 8PQ5000-3BA60 | | 8PQ5000-3BA64 | 8PQ5000-4BA78 |
| – | | 8PQ5000-3BA60 | | 8PQ5000-3BA64 | 8PQ5000-4BA78 |
| 2 × 8PQ5000-4BA63 | + 2 × 8PQ5000-4BA72 | 8PQ5000-3BA60 | | 8PQ5000-3BA64 | 8PQ5000-4BA78 |
| – | | 8PQ5000-3BA60 | | 8PQ5000-3BA64 | 8PQ5000-4BA78 |
| – | | 8PQ5000-3BA60 | | 8PQ5000-3BA64 | 8PQ5000-4BA78 |
| 2 × 8PQ5000-4BA63 | + 2 × 8PQ5000-4BA72 | 8PQ5000-3BA60 | | 8PQ5000-3BA64 | 8PQ5000-4BA78 |
| – | | 8PQ5000-5BA77 | + 8PQ6001-4BA64 | 8PQ5000-5BA78 | 8PQ5000-5BA75 |
| – | | 8PQ5000-5BA77 | + 8PQ6001-4BA64 | 8PQ5000-5BA78 | 8PQ5000-5BA75 |
| – | | 8PQ5000-5BA77 | + 8PQ6001-4BA65 | 8PQ5000-5BA78 | 8PQ5000-5BA75 |
| – | | 8PQ5000-5BA77 | + 8PQ6001-4BA66 | 8PQ5000-5BA78 | 8PQ5000-5BA76 |

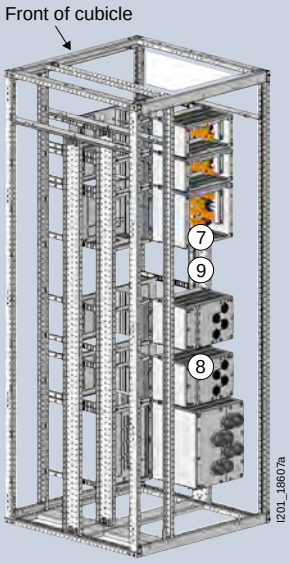


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# Section expansion

## 3VA molded case circuit breakers, internal separation – rear connection




### 4-pole, width 800 mm

**❼ Connection compartments**

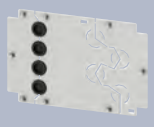
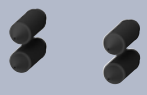


| Type | $I_n$ | Height | | Operating mechanism | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Direct | Rotary | Motorized | | |
| 3VA10 | 100 A | 150 mm | Fixed-mounted | ■ | ■ | – | 8PQ6000-5BA13 | |
| 3VA11 | 160 A | 150 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ6000-5BA13 | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ6000-5BA13 | |
| 3VA12 | 250 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ6000-5BA17 | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ6000-5BA17 | |
| | | 300 mm | Withdrawable | ■ | – | – | 8PQ6000-5BA17 | |
| 3VA13 | 400 A | 250 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ6000-5BA20 | |
| | | | Plug-in | ■ | – | – | 8PQ6000-5BA20 | |
| | | 300 mm | Withdrawable | ■ | – | – | 8PQ6000-5BA20 | |
| 3VA14 | 630 A | 250 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ6000-5BA20 | |
| | | | Plug-in | ■ | – | – | 8PQ6000-5BA20 | |
| | | 300 mm | Withdrawable | ■ | – | – | 8PQ6000-5BA20 | |
| 3VA15 | 1000 A | 300 mm | Fixed-mounted | ■ | – | – | – | 8PQ5000-5BA80 + 8PQ6001-4BA33 |
| 3VA20 | 100 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ6000-5BA14 | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ6000-5BA14 | |
| | | 300 mm | Withdrawable | ■ | – | – | 8PQ6000-5BA14 | |
| 3VA21 | 160 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ6000-5BA14 | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ6000-5BA14 | |
| | | 300 mm | Withdrawable | ■ | – | – | 8PQ6000-5BA14 | |
| 3VA22 | 250 A | 200 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ6000-5BA17 | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ6000-5BA17 | |
| | | 300 mm | Withdrawable | ■ | – | – | 8PQ6000-5BA17 | |
| 3VA23 | 400 A | 250 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ6000-5BA20 | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ6000-5BA20 | |
| | | 350 mm | Withdrawable | ■ | – | – | 8PQ6000-5BA20 | |
| 3VA24 | 630 A | 250 mm | Fixed-mounted | ■ | ■ | ■ | 8PQ6000-5BA20 | |
| | | | Plug-in | ■ | ■ | ■ | 8PQ6000-5BA20 | |
| | | 350 mm | Withdrawable | ■ | – | – | 8PQ6000-5BA20 | |
| 3VA25 | 1000 A | 300 mm | Fixed-mounted | ■ | – | – | – | 8PQ5000-5BA80 + 8PQ6001-4BA33 |
| 3VA26 | 1250 A | 300 mm | Fixed-mounted | ■ | – | – | – | 8PQ5000-5BA80 + 8PQ6001-4BA33 |
| 3VA27 | 1600 A | 300 mm | Fixed-mounted | ■ | – | – | – | 8PQ5000-5BA81 + 8PQ6001-4BA34 |
| | | | Withdrawable | ■ | – | – | – | 8PQ5000-5BA81 + 8PQ6001-4BA35 |



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| ❽ Cable entries | | | | ❺ Plug-in rails | |
|---|---|---|---|---|---|
| | | | | 1600 mm | 1800 mm |
|  |  |  | |  |  |
| | | | | Busbar system | |
| | | | | Top | Rear or without |
| 8PQ5000-4BA80 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-4BA80 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-4BA80 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA72 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA72 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA72 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA74 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA74 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA74 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA74 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA74 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA74 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| – | 8PQ5000-BA82 | + | 8PQ9400-0BA71 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA72 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA72 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA72 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA72 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA72 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA72 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA72 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA72 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA72 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA72 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA74 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA74 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA74 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA74 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA74 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| 8PQ5000-3BA74 | | | | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| – | 8PQ5000-BA82 | + | 8PQ9400-0BA71 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| – | 8PQ5000-BA82 | + | 8PQ9400-0BA71 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| – | 8PQ5000-BA83 | + | 8PQ9400-0BA71 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |
| – | 8PQ5000-BA83 | + | 8PQ9400-0BA71 | 8PQ3000-0BA82 | 8PQ3000-0BA83 |

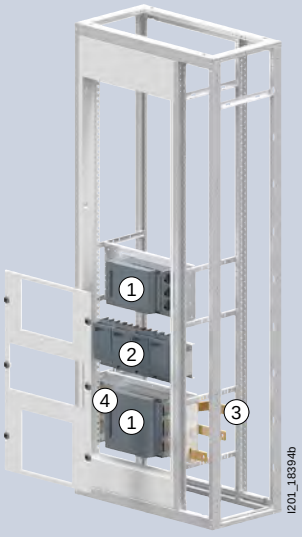


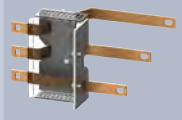
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# Section expansion

## 3NP1 fuse switch disconnectors, 3-pole




| | ❶ Horizontal | | ❸ Section busbars | ❹ Cable connection |
|---|---|---|---|---|
| |  |  |  |  |

| Switching device | Fuse | $I_n$ | Width | Device holders | Covers | | Form 3 |
|---|---|---|---|---|---|---|---|
| 3NP1143 | NH1 | 250 A | 600 mm | 8PQ6000-3BA75 | 8PQ2025-6BA16 | 8PQ6000-5BA68 | 8PQ6000-5BA72 |
| 3NP1153 | NH2 | 400 A | 600 mm | 8PQ6000-3BA75 | 8PQ2025-6BA17 | 8PQ6000-5BA70 | 8PQ6000-5BA73 |
| 3NP1163 | NH3 | 630 A | 600 mm | 8PQ6000-3BA77 | 8PQ2030-6BA22 | 8PQ6000-5BA71 | 8PQ6000-5BA74 |

**3NP1 fuse switch disconnectors** see page 8/90





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**❷ Vertical**





| Switching device | Fuse | $I_n$ | Width | No. of switches/ breakers | Device holders | Covers |
|---|---|---|---|---|---|---|
| 3NP1123 | NH000 | 160 A | 600 mm | 4 | 8PQ6000-3BA78 | 8PQ2025-6BA18 |
| | | | 800 mm | 6 | 8PQ6000-3BA82 | 8PQ2025-8BA10 |
| 3NP1133 | NH00 | 160 A | 600 mm | 4 | 8PQ6000-3BA78 | 8PQ2030-6BA23 |
| | | | 800 mm | 5 | 8PQ6000-3BA82 | 8PQ2030-8BA11 |



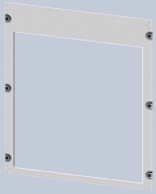
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# Section expansion

## 3NJ4 fuse switch disconnectors, 3-pole



| | | | | Device holders | Busbar supports | Covers |
|---|---|---|---|---|---|---|
| | | | |  |  |  |
| **Fuse** | **$I_n$** | **Width** | **No. of switches/breakers** | | | |
| NH00 – NH3 | 630 A | 600 mm | 4 × 100 mm | 8PQ6000-2BA48 | 2 × 3NJ5974-0AB | 8PQ2000-6BA06 |
| | | 800 mm | 6 × 100 mm | 8PQ6000-2BA48 | 2 × 3NJ5974-0AB | 8PQ2000-8BA06 |

## Accessories

**Blanking covers**



| Size | Width | Article No. |
|---|---|---|
| NH00 | 50 mm | 3NJ4912-2AA00 |
| NH1 – NH3 | 100 mm | 3NJ4912-2BA00 |

**3NJ4 fuse switch disconnectors** see page 8/96

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| Compartment doors | Separation | | | |
|---|---|---|---|---|
|  |  |  |  |  |
| | Form 3b | Horizontal | | |
| 8PQ2080-6BA10 | 8PQ5000-1BA70 | 8PQ5000-2BA61 | + 8PQ5000-2BA63 | |
| 8PQ2080-8BA05 | 8PQ5000-1BA71 | 8PQ5000-2BA62 | + 8PQ5000-2BA63 | |

## Accessories

| NH00 installation | | |
|---|---|---|
| | Version | Article No. |
|  | Adapter 185 mm | 3NJ4918-0DA02 |
|  | Covers | 3NJ4912-1DA02 |

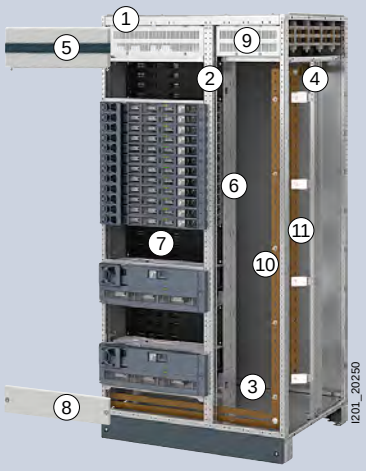


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# Section expansion

## 3NJ6 switch disconnectors with fuses, 3 and 4-pole




| | | | | | | Device compartment | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | ❶ Frames | ❷ Exterior intermediate uprights | ❸ Floor plate partition cross-bars | ❹ Uprights | ❺ Head com-partment covers | ❻ 3NJ6 device holder | ❼ Cover Distribution busbar | |
| | |  |  |  |  |  |  |  | |
| **Width** | **Depth** | | | | | | | | |
| **Device compartment 600 mm + cabling compartment 400 mm** | | | | | | | | | |
| 1000 mm | 400 mm | 8PQ1201-4BA02 | 8PQ3000-1BA43 | 1 × 8PQ3000-1BA38 | 8PQ3000-0BA65 | 8PQ2022-6BA01 | 8PQ3000-1BA48 + | 6 × 3NJ6916-4EA00 | |
| | 600 mm | 8PQ1201-6BA02 | 8PQ3000-1BA43 | 1 × 8PQ3000-1BA40 | 8PQ3000-0BA01 | 8PQ2022-6BA01 | 8PQ3000-1BA48 + | 6 × 3NJ6916-4EA00 | |
| | 800 mm | 8PQ1201-8BA03 | 8PQ3000-1BA43 | 2 × 8PQ3000-1BA38 | 8PQ3000-0BA02 | 8PQ2022-6BA01 | 8PQ3000-1BA48 + | 6 × 3NJ6916-4EA00 | |
| | 800 mm duplex | 8PQ1201-8BA03 | 8PQ3000-1BA43 | 2 × 8PQ3000-1BA38 | 8PQ3000-0BA02 | 8PQ2022-6BA01 | 8PQ3000-1BA48 + | 6 × 3NJ6916-4EA00 | |
| **Device compartment 600 mm + cabling compartment 600 mm** | | | | | | | | | |
| 1200 mm | 400 mm | 8PQ1202-4BA02 | 8PQ3000-1BA43 | 1 × 8PQ3000-1BA38 | 8PQ3000-0BA65 | 8PQ2022-6BA01 | 8PQ3000-1BA48 + | 6 × 3NJ6916-4EA00 | |
| | 600 mm | 8PQ1202-6BA02 | 8PQ3000-1BA43 | 1 × 8PQ3000-1BA40 | 8PQ3000-0BA01 | 8PQ2022-6BA01 | 8PQ3000-1BA48 + | 6 × 3NJ6916-4EA00 | |
| | 800 mm | 8PQ1202-8BA02 | 8PQ3000-1BA43 | 2 × 8PQ3000-1BA38 | 8PQ3000-0BA02 | 8PQ2022-6BA01 | 8PQ3000-1BA48 + | 6 × 3NJ6916-4EA00 | |
| | 800 mm duplex | 8PQ1202-8BA02 | 8PQ3000-1BA43 | 2 × 8PQ3000-1BA38 | 8PQ3000-0BA02 | 8PQ2022-6BA01 | 8PQ3000-1BA48 + | 6 × 3NJ6916-4EA00 | |

## Accessories

**Device compartments**



| Height | Article No. |
|---|---|
| 200 mm | 8PQ3000-1BA50 |
| 400 mm | 8PQ3000-1BA51 |

**Blanking covers**



| Height | Article No. |
|---|---|
| 50 mm | 3NJ6900-4CB00 |

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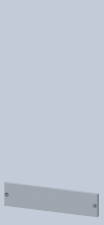
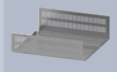


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## Technical specifications, distribution busbar

| | Rated operational current $I_e$, ventilated in A | | | | | | |
|---|---|---|---|---|---|---|---|
| **Cross-section** | 20 °C | 25 °C | 30 °C | 35 °C | 40 °C | 45 °C | 50 °C |
| 60 × 10 mm | 1680 | 1640 | 1600 | 1560 | 1520 | 1480 | 1430 |
| 80 × 10 mm | 2260 | 2210 | 2155 | 2100 | 2045 | 1985 | 1925 |

| Device compartment | | Cabling compartment | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ❽ Base compartment covers | ❾ Separation main busbar | ❾ Separation main busbar | ❿ PE elevation | ⓫ N/PEN connection | ⓬ Section doors with double-bit lock | | for profile semicylinder | |
|  |  |  |  |  |  | |  | |
| | | | | | Left | Right | Left | Right |
| 8PQ2000-6BA07 | 8PQ3000-1BA44 | 8PQ3000-0BA67 | 8PQ4000-2BA23 | 8PQ4000-2BA22 | 8PQ2197-4BA08 | 8PQ2197-4BA11 | 8PQ2197-4BA06 | 8PQ2197-4BA07 |
| 8PQ2000-6BA07 | 8PQ3000-1BA45 | 8PQ3000-0BA52 | 8PQ4000-2BA23 | 8PQ4000-2BA22 | 8PQ2197-4BA08 | 8PQ2197-4BA11 | 8PQ2197-4BA06 | 8PQ2197-4BA07 |
| 8PQ2000-6BA07 | 8PQ3000-1BA46 | 8PQ3000-0BA55 | 8PQ4000-2BA23 | 8PQ4000-2BA22 | 8PQ2197-4BA08 | 8PQ2197-4BA11 | 8PQ2197-4BA06 | 8PQ2197-4BA07 |
| 8PQ2000-6BA07 | 8PQ3000-1BA47 | 8PQ3000-0BA58 | 8PQ4000-2BA23 | 8PQ4000-2BA22 | 8PQ2197-4BA08 | 8PQ2197-4BA11 | 8PQ2197-4BA06 | 8PQ2197-4BA07 |
| 8PQ2000-6BA07 | 8PQ3000-1BA44 | 8PQ3000-0BA68 | 8PQ4000-2BA23 | 8PQ4000-2BA22 | 8PQ2197-6BA06 | 8PQ2197-6BA13 | 8PQ2197-6BA04 | 8PQ2197-6BA05 |
| 8PQ2000-6BA07 | 8PQ3000-1BA45 | 8PQ3000-0BA53 | 8PQ4000-2BA23 | 8PQ4000-2BA22 | 8PQ2197-6BA06 | 8PQ2197-6BA13 | 8PQ2197-6BA04 | 8PQ2197-6BA05 |
| 8PQ2000-6BA07 | 8PQ3000-1BA46 | 8PQ3000-0BA56 | 8PQ4000-2BA23 | 8PQ4000-2BA22 | 8PQ2197-6BA06 | 8PQ2197-6BA13 | 8PQ2197-6BA04 | 8PQ2197-6BA05 |
| 8PQ2000-6BA07 | 8PQ3000-6BA07 | 8PQ3000-0BA60 | 8PQ4000-2BA23 | 8PQ4000-2BA22 | 8PQ2197-6BA06 | 8PQ2197-6BA13 | 8PQ2197-6BA04 | 8PQ2197-6BA05 |

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### Terminal covers, form 4b





| Size | Article No. |
|---|---|
| NH00 | 3NJ6923-1DA00 |
| NH1 | 3NJ6933-1DA01 |
| NH2 – NH3 | 3NJ6943-1DA00 |
| 4th pole for all sizes | 3NJ6904-1DA00 |

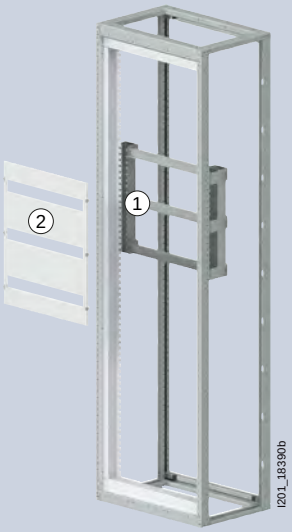
## 3NJ63 switch disconnectors with fuses see page 8/130

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# Section expansion

## Modular installation devices




### Internal covers

| Width | MW | Tier spacing | Height | ❶ Device holders | ❷ Covers |
|---|---|---|---|---|---|
| 600 mm | 1 × 24 | 150 mm | 150 mm | 1 × 8PQ6000-3BA36 | 8PQ2015-6BA07 |
| | | 200 mm | 200 mm | 1 × 8PQ6000-3BA36 | 8PQ2020-6BA12 |
| 800 mm | 1 × 35 | 150 mm | 150 mm | 1 × 8PQ6000-3BA37 | 8PQ2015-8BA03 |
| | | 200 mm | 200 mm | 1 × 8PQ6000-3BA37 | 8PQ2020-8BA05 |

| Width | MW | Tier spacing | Height | ❶ Device holders | ❷ Covers |
|---|---|---|---|---|---|
| 600 mm | 2 × 24 | 150 mm | 300 mm | 2 × 8PQ6000-3BA36 | 8PQ2030-6BA07 |
| | | 200 mm | 400 mm | 2 × 8PQ6000-3BA36 | 8PQ2040-6BA10 |
| 800 mm | 2 × 35 | 150 mm | 300 mm | 2 × 8PQ6000-3BA37 | 8PQ2030-8BA03 |
| | | 200 mm | 400 mm | 2 × 8PQ6000-3BA37 | 8PQ2040-8BA10 |

| Width | MW | Tier spacing | Height | ❶ Device holders | ❷ Covers |
|---|---|---|---|---|---|
| 600 mm | 3 × 24 | 150 mm | 450 mm | 3 × 8PQ6000-3BA36 | 8PQ2045-6BA04 |
| | | 200 mm | 600 mm | 3 × 8PQ6000-3BA36 | 8PQ2060-6BA04 |
| 800 mm | 3 × 35 | 150 mm | 450 mm | 3 × 8PQ6000-3BA37 | 8PQ2045-8BA02 |
| | | 200 mm | 600 mm | 3 × 8PQ6000-3BA37 | 8PQ2060-8BA02 |

### Compartment doors

| Width | MW | Tier spacing | Height | ❶ Device holders | ❷ Covers |
|---|---|---|---|---|---|
| 600 mm | 1 × 24 | 200 mm | 200 mm | 1 × 8PQ6000-6BA52 | 8PQ2020-6BA28 |
| 800 mm | 1 × 35 | 200 mm | 200 mm | 1 × 8PQ6000-6BA53 | 8PQ2020-8BA14 |

### Accessories

| Cable duct fastening | |
|---|---|
| Version | Article No. |
| Mounting brackets | 8PQ6000-0BA16 |

| Blanking strips | |
|---|---|
| Types | Article No. |
| Length 1 m | 8GK9910-0KK01 |

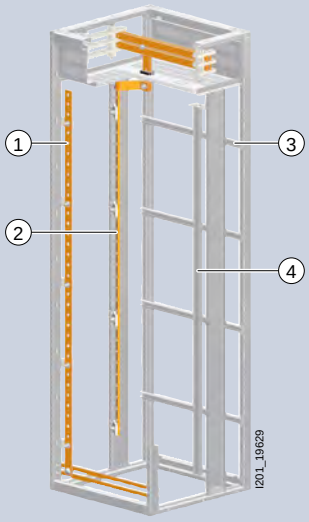
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# Cable section




## ❶ PE bars



| Version | Scope of supply | Article No. |
|---|---|---|
| Busbar supports | 5 units | 8PQ4000-2BA23 |



| Version | Scope of supply | Article No. |
|---|---|---|
| Frame connection | 6 units | 8PQ4000-0BA82 |



| Version | Scope of supply | Article No. |
|---|---|---|
| PE connection, cable | 6 units | 8PQ4000-2BA58 |



| Version | Scope of supply | Article No. |
|---|---|---|
| Spacer | 2 units | 8PQ4000-3BA01 |

## ❷ N/PEN connection



| Version | Article No. |
|---|---|
| Busbar supports and connection terminals | 8PQ4000-2BA22 |

## ❸ Cable clamping rail



| Version | Scope of supply | Article No. |
|---|---|---|
| Holders | 10 units | 8PQ3000-0BA73 |

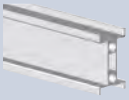


| Version | Width | Depth | Scope of supply | Article No. |
|---|---|---|---|---|
| C 30 × 15 mm | 400 mm | – | 5 units | 8PQ3000-0BA41 |
| | 600 mm | – | 5 units | 8PQ3000-0BA42 |
| | 800 mm | – | 5 units | 8PQ3000-0BA43 |
| | – | 400 mm | 5 units | 8PQ3000-0BA38 |

## ❹ DIN rail outgoing terminals



| Version | Scope of supply | Article No. |
|---|---|---|
| Universal brackets | 10 units | 8PQ9400-0BA01 |



| Version | Length | Article No. |
|---|---|---|
| DIN rail | 1600 mm | 8PQ9600-0BA01 |

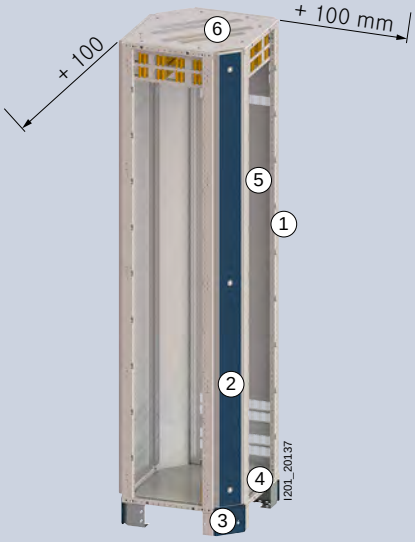


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# Section expansion

## Corner sections




| Position of main busbar | | | | At top / At bottom | | At top | |
|---|---|---|---|---|---|---|---|
| | ❶ Frames | ❷ Conversion kits | ❸ Base corner pieces | | ❹ Floor plates | Reinforcement busbar | |
| |  |  |  |  |  |  | |
| **Depth** | | | **Height** 100 mm | 200 mm | **IP55** | **IP20** | | |
| 400 mm | 8PQ1204-4BA01 + | 8PQ1200-0BA03 | 8PQ1010-0BA04 | 8PQ1024-4BA01 | 8PQ2304-4BA12 | 8PQ2300-4BA25 | – | – |
| 600 mm | 8PQ1206-6BA01 + | 8PQ1200-0BA03 | 8PQ1010-0BA05 | 8PQ1026-6BA01 | 8PQ2306-6BA12 | 8PQ2300-6BA27 | – | – |
| 800 mm | 8PQ1208-8BA01 + | 8PQ1200-0BA03 | 8PQ1018-8BA01 | 8PQ1028-8BA01 | 8PQ2308-8BA08 | 8PQ2300-8BA14 | 8PQ4000-6BA08 new | 2 x 8PQ4000-0BA37 |

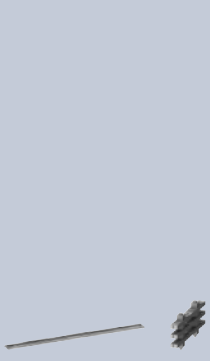
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**At bottom**

| Reinforcement busbar | | ❺ Rear panels | | ❻ Roof plates | | |
|---|---|---|---|---|---|---|
|  | |  |  |  |  |  |
| | | IP40 | IP55 | IP40 | IP55 | IPX1 |
| – | – | 2 × 8PQ2420-4BA02 | 2 × 8PQ2420-4BA01 | 8PQ2304-4BA10 | 8PQ2304-4BA08 | 8PQ2304-4BA11 |
| – | – | 2 × 8PQ2420-6BA02 | 2 × 8PQ2420-6BA01 | 8PQ2306-6BA10 | 8PQ2306-6BA08 | 8PQ2306-6BA11 |
| 8PQ4000-6BA10 new | 2 x 8PQ4000-0BA37 | 2 × 8PQ2420-8BA02 | 2 × 8PQ2420-8BA01 | 8PQ2308-8BA06 | 8PQ2308-8BA05 | 8PQ2308-8BA07 |



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# Section expansion

## Mounting plates



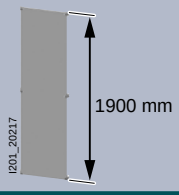
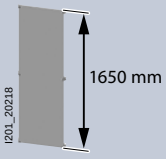

| Position of main busbar | At rear | Without |
|---|---|---|

| | ❶ Doors | | | ❷ Inner doors | |
|---|---|---|---|---|---|
| |  |  |  |  |  |
| **Degree of protection** | **Width** | **Door with double-bit lock** | **Door for profile semicylinders** | **Inner door struts** | **Inner doors** | **Inner door struts** |
| IP40 | 400 mm | 8PQ2197-4BA08 | 8PQ2197-4BA06 | 8PQ2197-0BA10 | – | – |
| | 600 mm | 8PQ2197-6BA06 | 8PQ2197-6BA04 | 8PQ2197-0BA10 | 8PQ2000-6BA05 | 2 × 8PQ2080-0BA07 |
| | 800 mm | 8PQ2197-8BA06 | 8PQ2197-8BA04 | 8PQ2197-0BA10 | 8PQ2000-8BA05 | 2 × 8PQ2080-0BA07 |
| | 1000 mm | 8PQ2197-1BA06 | 8PQ2197-1BA07 | 8PQ2197-0BA10 | 8PQ2000-1BA01 | 2 × 8PQ2080-0BA07 |
| | 1000 mm – Double doors | 8PQ2197-1BA14 | 8PQ2197-1BA16 | 8PQ2197-0BA10 | – | – |
| | 1200 mm – Double doors | 8PQ2197-2BA11 | 8PQ2197-2BA13 | 8PQ2197-0BA10 | – | – |
| IP55 | 400 mm | 8PQ2197-4BA05 | 8PQ2197-4BA03 | 8PQ2197-0BA10 | – | – |
| | 600 mm | 8PQ2197-6BA03 | 8PQ2197-6BA01 | 8PQ2197-0BA10 | 8PQ2000-6BA05 | 2 × 8PQ2080-0BA07 |
| | 800 mm | 8PQ2197-8BA03 | 8PQ2197-8BA01 | 8PQ2197-0BA10 | 8PQ2000-8BA05 | 2 × 8PQ2080-0BA07 |
| | 1000 mm | 8PQ2197-1BA03 | 8PQ2197-1BA04 | 8PQ2197-0BA10 | 8PQ2000-1BA01 | 2 × 8PQ2080-0BA07 |
| | 1000 mm – Double doors | 8PQ2197-1BA13 | 8PQ2197-1BA15 | 8PQ2197-0BA10 | – | – |
| | 1200 mm – Double doors | 8PQ2197-2BA10 | 8PQ2197-2BA12 | 8PQ2197-0BA10 | – | – |



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| | | | At top | | | |
|---|---|---|---|---|---|---|
| ❸ Mounting plates | | ❺ Uprights | ❸ Mounting plates | | ❻ Uprights | |
|  |  |  |  |  |  |  |
| **Mounting plates** | **Connecting panels** | **Depth 600 mm, 800 mm** | **Mounting plates** | **Connecting panels** | **Depth 600 mm** | **Depth 800 mm** |
| 8PQ3000-0BA32 | 8PQ3000-1BA08 | 8PQ3000-0BA03 | 8PQ3000-0BA33 | 8PQ3000-1BA10 | 8PQ3000-0BA01 | 8PQ3000-0BA02 |
| 8PQ3000-0BA34 | 8PQ3000-1BA08 | 8PQ3000-0BA03 | 8PQ3000-0BA35 | 8PQ3000-1BA10 | 8PQ3000-0BA01 | 8PQ3000-0BA02 |
| 8PQ3000-0BA36 | 8PQ3000-1BA08 | 8PQ3000-0BA03 | 8PQ3000-0BA37 | 8PQ3000-1BA10 | 8PQ3000-0BA01 | 8PQ3000-0BA02 |
| 8PQ3000-1BA04 | 8PQ3000-1BA08 | 8PQ3000-0BA03 | 8PQ3000-1BA06 | 8PQ3000-1BA10 | 8PQ3000-0BA01 | 8PQ3000-0BA02 |
| 8PQ3000-1BA04 | 8PQ3000-1BA08 | 8PQ3000-0BA03 | – | – | – | – |
| 8PQ3000-1BA05 | 8PQ3000-1BA08 | 8PQ3000-0BA03 | – | – | – | – |
| 8PQ3000-0BA32 | 8PQ3000-1BA08 | 8PQ3000-0BA03 | 8PQ3000-0BA33 | 8PQ3000-1BA10 | 8PQ3000-0BA01 | 8PQ3000-0BA02 |
| 8PQ3000-0BA34 | 8PQ3000-1BA08 | 8PQ3000-0BA03 | 8PQ3000-0BA35 | 8PQ3000-1BA10 | 8PQ3000-0BA01 | 8PQ3000-0BA02 |
| 8PQ3000-0BA36 | 8PQ3000-1BA08 | 8PQ3000-0BA03 | 8PQ3000-0BA37 | 8PQ3000-1BA10 | 8PQ3000-0BA01 | 8PQ3000-0BA02 |
| 8PQ3000-1BA04 | 8PQ3000-1BA08 | 8PQ3000-0BA03 | 8PQ3000-1BA06 | 8PQ3000-1BA10 | 8PQ3000-0BA01 | 8PQ3000-0BA02 |
| 8PQ3000-1BA04 | 8PQ3000-1BA08 | 8PQ3000-0BA03 | – | – | – | – |
| 8PQ3000-1BA05 | 8PQ3000-1BA08 | 8PQ3000-0BA03 | – | – | – | – |

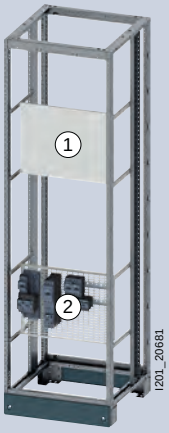


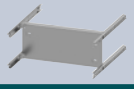
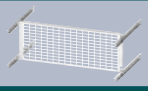
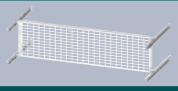
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# Section expansion

## Modular mounting plates




| | ❶ Standard | | | ❷ With holes for clamping nuts new | |
|---|---|---|---|---|---|
| |  |  |  |  |  |
| **Height** | **Width** | | | **Width** | |
| | **400 mm** | **600 mm** | **800 mm** | **600 mm** | **800 mm** |
| 150 mm | 8PQ3000-2BA60 | 8PQ3000-2BA62 | 8PQ3000-2BA64 | – | – |
| 200 mm | 8PQ3000-2BA17 | 8PQ3000-1BA56 | 8PQ3000-1BA58 | 8PQ3000-3BA83 | 8PQ3000-3BA84 |
| 250 mm | – | 8PQ3000-3BA63 | 8PQ3000-3BA64 | – | – |
| 300 mm | 8PQ3000-2BA66 | 8PQ3000-2BA51 | 8PQ3000-2BA53 | – | – |
| 400 mm | 8PQ3000-2BA18 | 8PQ3000-1BA61 | 8PQ3000-1BA63 | 8PQ3000-3BA85 | 8PQ3000-3BA86 |
| 500 mm | – | 8PQ3000-3BA76 | 8PQ3000-3BA77 | – | – |
| 550 mm | 8PQ3000-3BA65 | 8PQ3000-3BA07 | 8PQ3000-3BA08 | – | – |
| 600 mm | 8PQ3000-2BA21 | 8PQ3000-1BA65 | 8PQ3000-1BA67 | 8PQ3000-3BA87 | 8PQ3000-3BA88 |
| 700 mm | – | 8PQ3000-3BA78 | 8PQ3000-3BA80 | – | – |
| 800 mm | 8PQ3000-2BA23 | 8PQ3000-1BA26 | 8PQ3000-1BA28 | – | – |

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## Accessories

**Clamping nut**



- For the installation of closed-loop and open-loop control (SIRIUS, SIMATIC)

| Version | Scope of supply | Article No. |
|---|---|---|
| M4 | 50 units | 8PQ9400-1BA52 |
| M5 | 50 units | 8PQ9400-1BA53 |
| M6 | 50 units | 8PQ9400-1BA54 |



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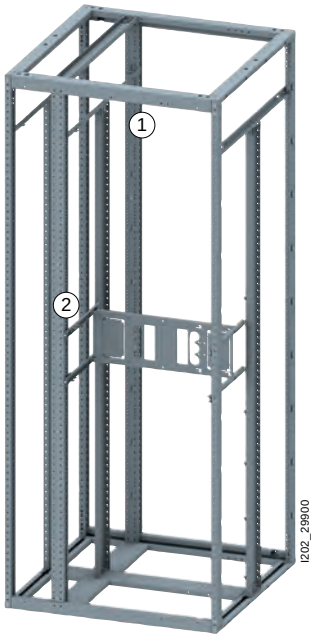
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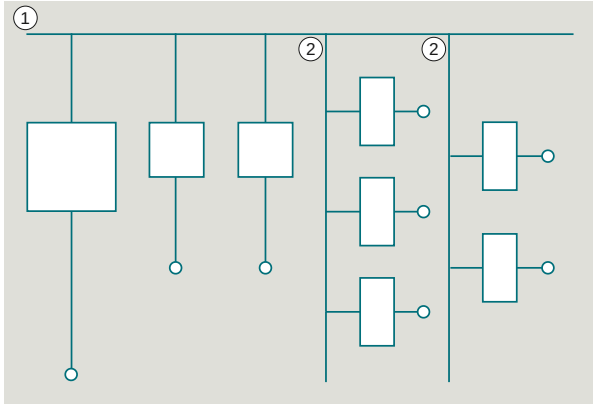

# Internal separation

## Quick selection guide

### Form 1

**No internal separation**

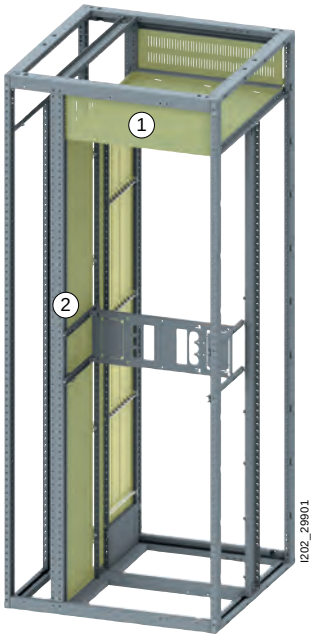


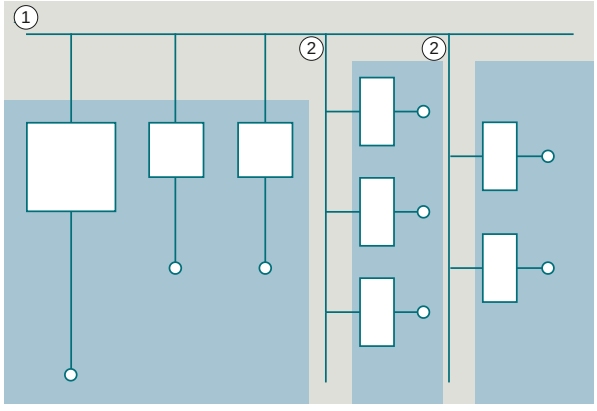




Functional unit  Connection

### Form 2b

**Separation**
+ Main busbar ①
+ Vertical busbar ②




Functional unit  Connection



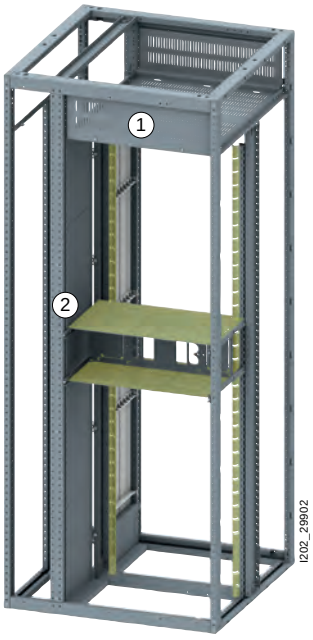
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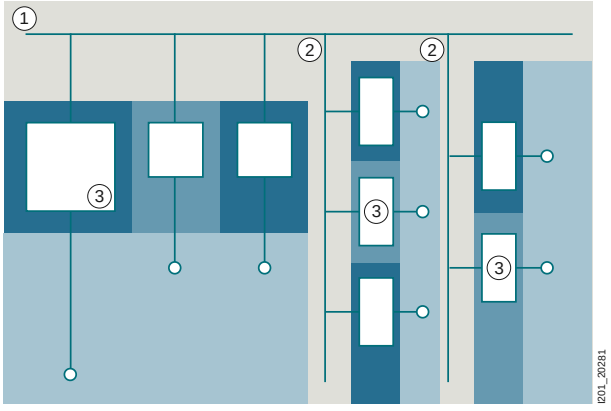
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## Form 3b

**Separation**

+ Main busbar ①
+ Vertical busbar ②
+ Device compartments (functional units) ③



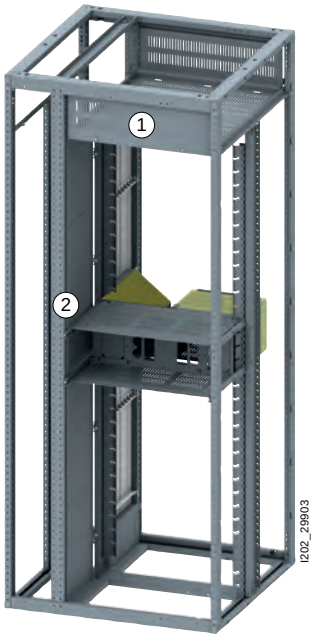



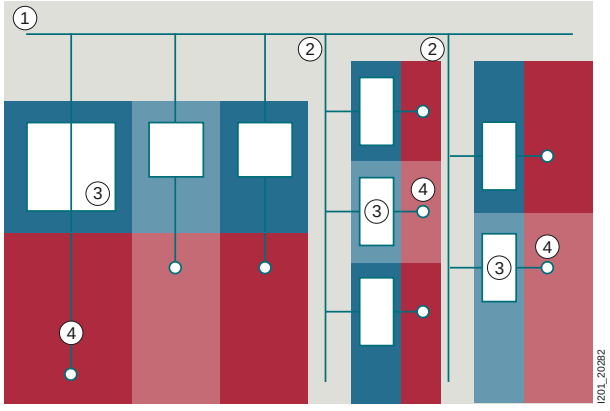

Functional unit ○ Connection

## Form 4b

**Separation**

+ Main busbar ①
+ Vertical busbar ②
+ Device compartments (functional units) ③
+ Connections ④




Functional unit ○ Connection

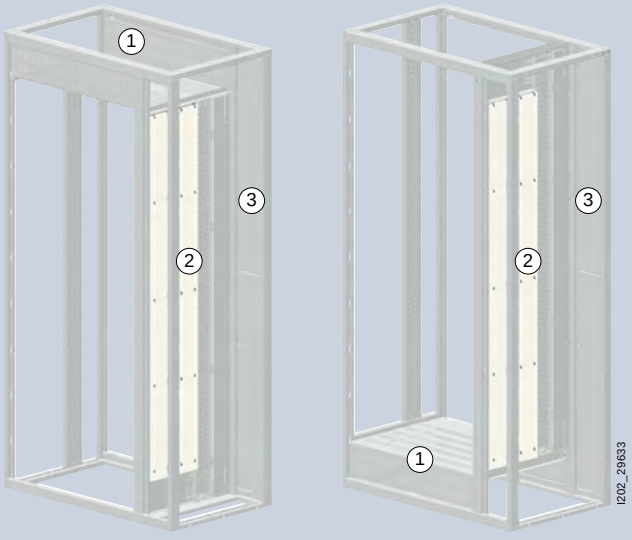
15

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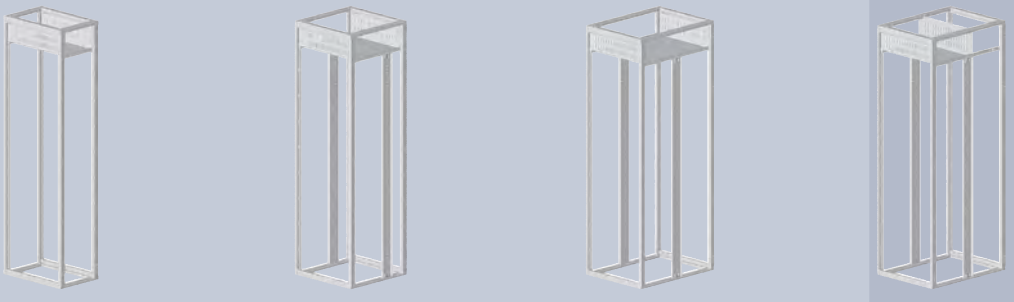

# Internal separation

## Main busbar at top/at bottom, form 2b




**Position of main busbar** | At top

**Main busbars**



| Width | Depth 400 mm | 600 mm | 800 mm | Depth 800 mm |
|---|---|---|---|---|
| 200 mm | 8PQ3000-1BA52 | 8PQ3000-1BA53 | 8PQ3000-1BA55 | 8PQ3000-1BA54 |
| 400 mm | 8PQ3000-0BA67 | 8PQ3000-0BA52 | 8PQ3000-0BA58 | 8PQ3000-0BA55 |
| 600 mm | 8PQ3000-0BA68 | 8PQ3000-0BA53 | 8PQ3000-0BA60 | 8PQ3000-0BA56 |
| 800 mm | 8PQ3000-0BA70 | 8PQ3000-0BA54 | 8PQ3000-0BA61 | 8PQ3000-0BA57 |
| 1000 mm | 8PQ3000-1BA13 | 8PQ3000-1BA14 | 8PQ3000-1BA20 | 8PQ3000-1BA17 |
| 1200 mm | 8PQ3000-1BA15 | 8PQ3000-1BA16 | 8PQ3000-1BA21 | 8PQ3000-1BA18 |





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## At bottom





| Depth | | |
|---|---|---|
| **400 mm** | **600 mm** | **800 mm** |
| 8PQ3000-3BA12 new | 8PQ3000-3BA21 new | 8PQ3000-3BA30 new |
| 8PQ3000-3BA14 | 8PQ3000-3BA23 | 8PQ3000-3BA32 |
| 8PQ3000-3BA15 | 8PQ3000-3BA24 | 8PQ3000-3BA33 |
| 8PQ3000-3BA16 | 8PQ3000-3BA25 | 8PQ3000-3BA34 |
| 8PQ3000-3BA18 | 8PQ3000-3BA27 | 8PQ3000-3BA36 |
| 8PQ3000-3BA20 | 8PQ3000-3BA28 | 8PQ3000-3BA37 |

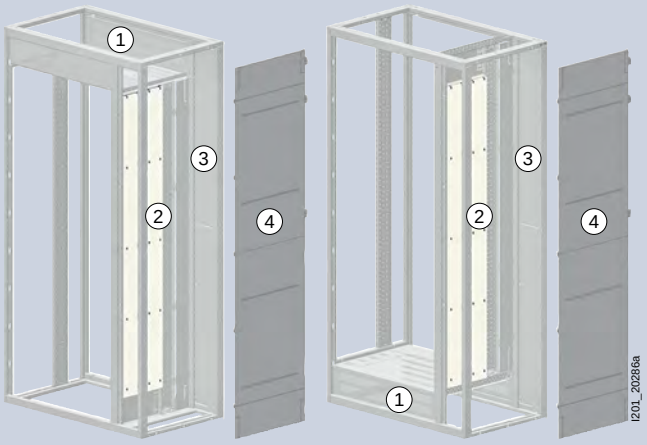


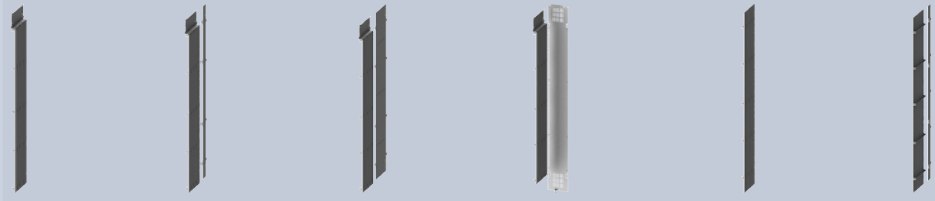
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# Internal separation

## Main busbar at top/at bottom, form 2b




| Position of main busbar | At top | | | Without | | |
|---|---|---|---|---|---|---|
| | ❷ Vertical busbar | | | | | |
| |  | | | | | |
| **Width** | **Depth** | | | **Depth** | **Depth** | |
| | **400 mm** | **600 mm** | **800 mm** | **800 mm** | **400 mm** | **600 mm** |
| 200 mm | 8PQ4000-0BA05 | 8PQ4000-0BA07 | 8PQ4000-0BA64 | 8PQ4000-0BA02 | 8PQ4000-0BA06 | 8PQ4000-0BA03 |
| 400 mm | 8PQ4000-0BA05 | 8PQ4000-0BA07 | 8PQ4000-0BA64 | 8PQ4000-0BA01 | 8PQ4000-0BA06 | 8PQ4000-0BA03 |





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| | ❸ Touch protection | ❹ Vertical partition between sections | | |
|---|---|---|---|---|
| | |  |  |  |
| | Rear | Depth | | |
| 800 mm | | 400 mm | 600 mm | 800 mm |
| 8PQ4000-0BA76 | 8PQ3000-2BA50 | 8PQ3000-0BA15 | 8PQ3000-0BA16 | 2 × 8PQ3000-0BA15 |
| 8PQ4000-0BA76 | 8PQ3000-0BA51 | 8PQ3000-0BA15 | 8PQ3000-0BA16 | 2 × 8PQ3000-0BA15 |

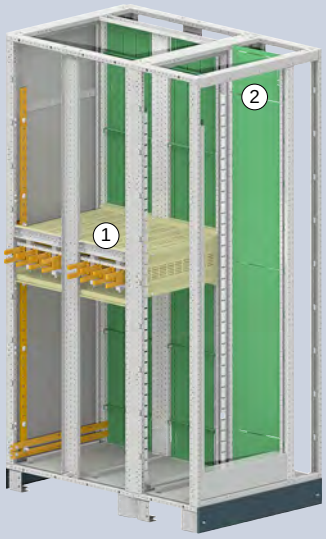


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# Internal separation

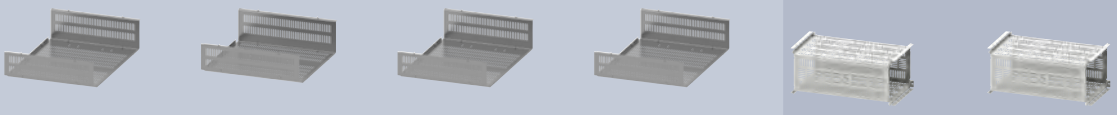
## Main busbar at rear, form 2b




**Position of main busbar**

At top | Center

**❶ Main busbar**

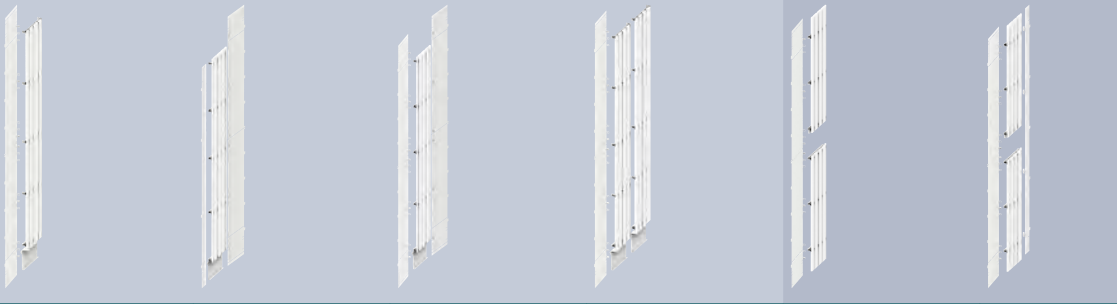


| Width | Depth | | | | Depth | |
|---|---|---|---|---|---|---|
| | 800 mm | 1000 mm | 1200 mm | 1200 mm duplex | 800 mm | 1000 mm |
| 600 mm | 8PQ3000-0BA60 | 8PQ3000-0BA53 | 8PQ3000-0BA60 | 8PQ3000-0BA60 | 8PQ3000-3BA53 | 8PQ3000-3BA53 |
| 800 mm | 8PQ3000-0BA61 | 8PQ3000-0BA54 | 8PQ3000-0BA61 | 8PQ3000-0BA61 | 8PQ3000-3BA54 | 8PQ3000-3BA54 |

**Position of vertical busbar**

At top | Center

**❷ Vertical busbar**



| Width | Depth | | | | Depth | |
|---|---|---|---|---|---|---|
| | 800 mm | 1000 mm | 1200 mm | 1200 mm duplex | 800 mm | 1000 mm |
| 200 mm | 8PQ4000-2BA51 | 8PQ4000-2BA53 | 8PQ4000-2BA55 | 8PQ4000-2BA57 | 8PQ4000-2BA60 | 8PQ4000-2BA61 |

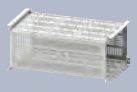
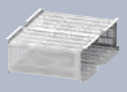
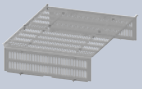
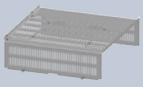
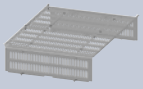
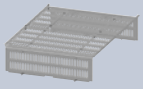
15



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**At bottom**

| Depth | | Depth | | | |
|---|---|---|---|---|---|
| 1200 mm | 1200 mm duplex | 800 mm | 1000 mm | 1200 mm | 1200 mm duplex |
| 8PQ3000-3BA53 | 8PQ3000-3BA58 | 8PQ3000-3BA33 | 8PQ3000-3BA24 | 8PQ3000-3BA33 | 8PQ3000-3BA33 |
| 8PQ3000-3BA54 | 8PQ3000-3BA60 | 8PQ3000-3BA34 | 8PQ3000-3BA25 | 8PQ3000-3BA34 | 8PQ3000-3BA34 |

**At bottom**








**Barrier supports**

1 set = 6 units



| Depth | | Depth | | | | Depth |
|---|---|---|---|---|---|---|
| 1200 mm | 1200 mm duplex | 800 mm | 1000 mm | 1200 mm | 1200 mm duplex | 1200 mm duplex |
| 8PQ4000-2BA62 | 8PQ4000-2BA56 | 8PQ4000-2BA51 | 8PQ4000-2BA53 | 8PQ4000-2BA55 | 8PQ4000-2BA57 | 8PQ3000-3BA67 |

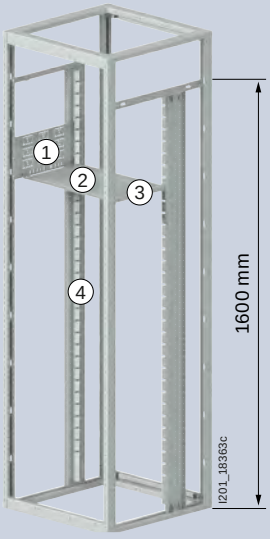


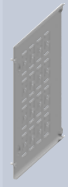
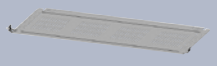
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# Internal separation

## Modular kits, form 3b



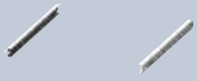
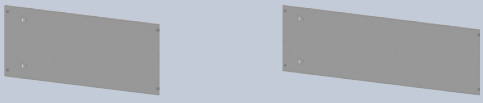

| | ❶ Lateral | ❷ Horizontal | | | |
|---|---|---|---|---|---|
| |  |  |  |  |  |
| **Height** | **Assembly kits** | **Width 400 mm** | **600 mm** | **800 mm** | **1000 mm** |
| 100 mm | 8PQ5000-2BA27 | 8PQ5000-3BA44 | 8PQ5000-2BA61 | 8PQ5000-2BA62 | 8PQ5000-5BA56 |
| 150 mm | 8PQ5000-2BA28 | 8PQ5000-3BA44 | 8PQ5000-2BA61 | 8PQ5000-2BA62 | 8PQ5000-5BA56 |
| 200 mm | 8PQ5000-2BA30 | 8PQ5000-3BA44 | 8PQ5000-2BA61 | 8PQ5000-2BA62 | 8PQ5000-5BA56 |
| 250 mm | 8PQ5000-2BA32 | 8PQ5000-3BA44 | 8PQ5000-2BA61 | 8PQ5000-2BA62 | 8PQ5000-5BA56 |
| 300 mm | 8PQ5000-2BA34 | 8PQ5000-3BA44 | 8PQ5000-2BA61 | 8PQ5000-2BA62 | 8PQ5000-5BA56 |
| 350 mm | 8PQ5000-2BA36 | 8PQ5000-3BA44 | 8PQ5000-2BA61 | 8PQ5000-2BA62 | 8PQ5000-5BA56 |
| 400 mm | 8PQ5000-2BA37 | 8PQ5000-3BA44 | 8PQ5000-2BA61 | 8PQ5000-2BA62 | 8PQ5000-5BA56 |
| 450 mm | 8PQ5000-2BA38 | 8PQ5000-3BA44 | 8PQ5000-2BA61 | 8PQ5000-2BA62 | 8PQ5000-5BA56 |
| 550 mm | 8PQ5000-2BA41 | 8PQ5000-3BA44 | 8PQ5000-2BA61 | 8PQ5000-2BA62 | 8PQ5000-5BA56 |





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| ❸ Support rails | ❹ Plug-in rails | | Rear | |
|---|---|---|---|---|
|  |  | |  | |
| **Width** | **Height**<br>**1600 mm** | **1800 mm** | **Width**<br>**600 mm** | **800 mm** |
| 8PQ5000-2BA63 | 8PQ3000-0BA82 | 8PQ3000-0BA83 | 8PQ5000-2BA52 | 8PQ5000-2BA68 |
| 8PQ5000-2BA63 | 8PQ3000-0BA82 | 8PQ3000-0BA83 | 8PQ5000-4BA40 | 8PQ5000-5BA55 |
| 8PQ5000-2BA63 | 8PQ3000-0BA82 | 8PQ3000-0BA83 | 8PQ5000-4BA41 | 8PQ5000-4BA48 |
| 8PQ5000-2BA63 | 8PQ3000-0BA82 | 8PQ3000-0BA83 | 8PQ5000-4BA42 | 8PQ5000-4BA50 |
| 8PQ5000-2BA63 | 8PQ3000-0BA82 | 8PQ3000-0BA83 | 8PQ5000-4BA43 | – |
| 8PQ5000-2BA63 | 8PQ3000-0BA82 | 8PQ3000-0BA83 | 8PQ5000-4BA44 | 8PQ5000-4BA51 |
| 8PQ5000-2BA63 | 8PQ3000-0BA82 | 8PQ3000-0BA83 | 8PQ5000-4BA45 | 8PQ5000-4BA52 |
| 8PQ5000-2BA63 | 8PQ3000-0BA82 | 8PQ3000-0BA83 | 8PQ5000-4BA46 | 8PQ5000-4BA53 |
| 8PQ5000-2BA63 | 8PQ3000-0BA82 | 8PQ3000-0BA83 | 8PQ5000-4BA47 | – |



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# Accessories

## Connecting terminals



| $I_n$ | Busbar | Scope of supply | Article No. |
|---|---|---|---|
| – | – | 4 units | 8PQ5000-0BA05 |



| | | | |
|---|---|---|---|
| 250 A | 2 × 25 × 5 mm | 2 units | 8PQ5000-0BA72 |



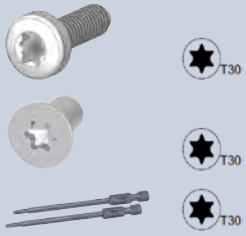
| | | | |
|---|---|---|---|
| 400 A | 30 × 10 mm | 4 units | 8PQ5000-0BA73 |
| 630 A | 40 × 10 mm | 4 units | 8PQ5000-0BA74 |

## Protective bellows



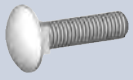
| Version | Scope of supply | Article No. |
|---|---|---|
| For connecting terminal | 4 units | 8PQ9400-0BA71 |

## Self-tapping screws – frame




| Type | Version | Scope of supply | Article No. |
|---|---|---|---|
| Cylinder-head screws<br>DIN 7500-PE, ST, zinc-plated | M6 × 10 mm | 100 units | 8PQ9500-0BA34 |
| | M6 × 16 mm | 100 units | 8PQ9500-0BA32 |
| | M6 × 20 mm | 100 units | 8PQ9500-0BA31 |
| Countersunk screws<br>DIN 7500-QE, ST, zinc-plated | M6 × 12 mm | 100 units | 8PQ9500-1BA07 |
| Screwdriver insert<br>Hexagon head: 1/4"/6.3 mm | 200 mm | 2 units | 8PQ9400-0BA10 |

## Standardized parts - electrical connections



| Type | Version | Scope of supply | Article No. |
|---|---|---|---|
| Saucer-head bolts<br>DIN 603, 8.8, zinc-plated | M10 × 35 mm | 50 units | 8PQ9500-0BA14 |
| | M10 × 45 mm | 50 units | 8PQ9500-0BA16 |
| | M10 × 55 mm | 50 units | 8PQ9500-1BA36 |
| | M10 × 65 mm | 50 units | 8PQ9500-1BA25 |



| | | | |
|---|---|---|---|
| Hexagonal nuts<br>ISO 6042, 8, zinc-plated | M10 | 50 units | 8PQ9500-0BA05 |



| | | | |
|---|---|---|---|
| Spring washers<br>DIN 6796, FSt, zinc-plated | For M10 | 50 units | 8PQ9500-0BA60 |



| | | | |
|---|---|---|---|
| Plain washers<br>ISO 7089, 140 HV, zinc-plated | For M10 | 50 units | 8PQ9500-0BA67 |



| | | | |
|---|---|---|---|
| Lock washers<br>SN 60727, FSt, zinc-plated | For M10 | 50 units | 8PQ9500-0BA50 |



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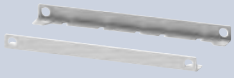
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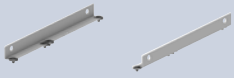

## Lifting eyebolts



| Version | Application | Scope of supply | Article No. |
|---|---|---|---|
| M12, DIN 580, C15E | • Max. supported weight = 240 kg at load angle ≤ 45 °<br>• Max. section depth 800 mm | 4 units | 8PQ9400-0BA11 |

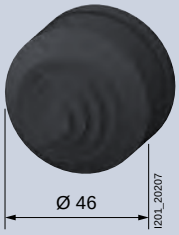
## Lifting brackets





| Width | Depth | Scope of supply | Article No. |
|---|---|---|---|
| 800 mm | – | 2 units | 8PQ3000-1BA01 |
| 850 mm | – | 2 units | 8PQ3000-2BA38 |
| 1000 mm | – | 2 units | 8PQ3000-1BA02 |
| 1200 mm | – | 2 units | 8PQ3000-1BA03 |
| – | 800 mm | 2 units | 8PQ3000-1BA01 |
| | 1000 mm | 2 units | 8PQ3000-3BA70 |
| | 1200 mm | 2 units | 8PQ3000-3BA71 |

## Cable entries




| Version | Scope of supply | Article No. |
|---|---|---|
| Ø cable = 14 ... 38 mm<br>Ø installation = 46 mm | 6 units | 8PQ9400-0BA33 |

## Other





| Version | Scope of supply | Article No. |
|---|---|---|
| Universal mounting brackets | 10 units | 8PQ9400-0BA01 |
| Cubicle ID plate – SIVACON designed by Siemens | 1 unit | BQ9400-0BA06 |

## Extended delivery options



• After prior consultation with ALPHA-support.ic@siemens.com

| Version | Description | Article No. |
|---|---|---|
| Pre-assembled solutions | Based on SIMARIS configuration<br>• In various expansion stages<br>• Mechanically with or without copper insert | 8PQ9998-0BA20-Z |
| Copper for system sections | Drawings from SIMARIS | 8PQ9998-0BA30-Z |



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# System overview

## Distribution boards, assembly kits and accessories

### ALPHA UNIVERSAL 800



### ALPHA UNIVERSAL 630



## Unequipped distribution boards



ALPHA 800

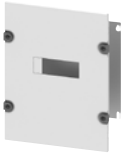


ALPHA 630



ALPHA 125

## Assembly kits



For molded case circuit breakers



For switch disconnectors



For fuse switch disconnectors



For modular installation devices



For front cover with cutout

**Note:**
You will find a detailed range of accessories with the basic units and in the Accessories section.

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## ALPHA UNIVERSAL 125



## Busbars



Cu busbars



Busbar supports

## Accessories



Bases



Crossbars



Partitions



Front covers



Locking systems

**Note:**
You will find a detailed range of accessories with the basic units and in the Accessories section.

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# Special colors for ALPHA

## Additional options

To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

**8GK.....-.....-.... -Z**

| | | Order code | | |
|---|---|---|---|---|
| **RAL 1003, signal yellow** | | C | 2 | 7 |
| **RAL 2000, yellow orange** | | C | 2 | 5 |
| **RAL 3000, flame red** | | C | 3 | 1 |
| **RAL 5005, signal blue** | | C | 2 | 3 |
| **RAL 5010, gentian blue** | | C | 2 | 4 |
| **RAL 5017, traffic blue** | | C | 2 | 2 |
| **RAL 6018, yellow green** | | C | 2 | 6 |
| **RAL 7032, pebble gray** | | C | 1 | 3 |
| **RAL 7033, cement gray** | | C | 2 | 8 |
| **RAL 7035, light gray** | Smooth | C | 1 | 1 |
| | Surface structure | C | 1 | 2 |
| **RAL 7038, agate gray** | | C | 1 | 4 |
| **RAL 9001, cream** | | C | 2 | 1 |
| **RAL 9002, gray white** | | C | 1 | 9 |
| **RAL 9003, signal white** | | C | 2 | 0 |
| **RAL 9005, jet black** | | C | 1 | 7 |
| **RAL 9010, pure white** | Smooth | C | 1 | 5 |
| | Surface structure | C | 3 | 0 |
| **RAL 9016, traffic white** | | C | 1 | 0 |

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# ALPHA 800 UNIVERSAL floor-mounted distribution boards

## Rated current 800 A

| | | | | | Unequipped distribution boards |
|---|---|---|---|---|---|
| | | | | Degree of protection | IP30/IP55 |
| | | | | |  |
| **Height** | | **Depth** | **Width** | | **Protection class I** |
| **Outside** | **Inside** | **Outside** | **Outside** | **Inside** | |
| 1850 mm | 1800 mm | 400 mm | 350 mm | 300 mm | 8GK2420-6KK14 |
| | | | 650 mm | 600 mm | 8GK2420-6KK24 |
| | | | 950 mm | 900 mm | 8GK2420-6KK34 |
| 2050 mm | 2000 mm | 400 mm | 350 mm | 300 mm | 8GK2420-7KK14 |
| | | | 650 mm | 600 mm | 8GK2420-7KK24 |
| | | | 950 mm | 900 mm | 8GK2420-7KK34 |

## Accessories

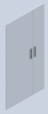
**Sheet-steel doors**

| | Types | Width | Cubicle height | Cubicle width | Unequipped distribution boards Article No. |
|---|---|---|---|---|---|
|  | Standard | – | 1800 mm | 300 mm | 8GK9515-8KK11 |
| | | | | 600 mm | 8GK9515-8KK21 |
| | | | | 900 mm | 8GK9515-8KK31 |
| | | | 2000 mm | 300 mm | 8GK9515-8KK12 |
| | | | | 600 mm | 8GK9515-8KK22 |
| | | | | 900 mm | 8GK9515-8KK32 |
| | For cabling compartment | 250 mm | 1800 mm | 900 mm | 8GK9515-8KK41 |
| | | | 2000 mm | 900 mm | 8GK9515-8KK42 |

**Transparent doors**

| | Types | Cubicle height | Cubicle width | Article No. |
|---|---|---|---|---|
|  | Standard | 1800 mm | 300 mm | 8GK9505-8KK12 |
| | | | 600 mm | 8GK9505-8KK21 |
| | | | 900 mm | 8GK9505-8KK31 |
| | | 2000 mm | 300 mm | 8GK9505-8KK10 |
| | | | 600 mm | 8GK9505-8KK22 |
| | | | 900 mm | 8GK9505-8KK32 |
|  | Giugiaro design | 1800 mm | 600 mm | 8GK9507-8KK21 |
| | | | 900 mm | 8GK9507-8KK31 |
| | | 2000 mm | 600 mm | 8GK9507-8KK22 |
| | | | 900 mm | 8GK9507-8KK32 |

**Double doors**

| | Types | Width | Cubicle height | Cubicle width | Unequipped distribution boards Article No. |
|---|---|---|---|---|---|
|  | Made of sheet steel | 600 + 250 mm | 1800 mm | 900 mm | 8GK9515-8KK21 + 8GK9515-8KK41 |
| | | | 2000 mm | 900 mm | 8GK9515-8KK22 + 8GK9515-8KK42 |
|  | Transparent door + sheet-steel door | 600 + 250 mm | 1800 mm | 900 mm | 8GK9505-8KK21 + 8GK9515-8KK41 |
| | | | 2000 mm | 900 mm | 8GK9505-8KK22 + 8GK9515-8KK42 |
|  | Transparent door in Giugiaro design + sheet-steel door | 600 + 250 mm | 1800 mm | 900 mm | 8GK9507-8KK21 + 8GK9515-8KK41 |
| | | | 2000 mm | 900 mm | 8GK9507-8KK22 + 8GK9515-8KK42 |

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## Accessories

### Vertical profile bars for cabling compartment/busbars



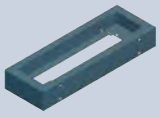
| Cubicle height | Cubicle width | Unequipped distribution boards<br>Article No. |
|---|---|---|
| 1800 mm | 300/600/900 mm | 8GK9200-8KK00 |
| 2000 mm | 300/600/900 mm | 8GK9200-8KK01 |

### Front covers for cabling compartment



| Height | Width | Cubicle height | Cubicle width | Article No. |
|---|---|---|---|---|
| 800 + 1000 mm | 250/300 mm | 1800 mm | 300 mm | 8GK9607-5KK10 + 8GK9607-7KK10 |
| | | | 900 mm | 8GK9606-5KK10 + 8GK9606-7KK10 |
| 1000 + 1000 mm | 250/300 mm | 2000 mm | 300 mm | 8GK9607-7KK10 + 8GK9607-7KK10 |
| | | | 900 mm | 8GK9606-7KK10 + 8GK9606-7KK10 |

### Bases



| Color | Height | Cubicle height | Cubicle width | Article No. |
|---|---|---|---|---|
| Blue-green | 100 mm | 1800/2000 mm | 300 mm | 8GK9906-0KK15 |
| | | | 600 mm | 8GK9906-0KK25 |
| | | | 900 mm | 8GK9906-0KK35 |

### Side panels





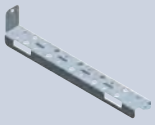
| Color | Cubicle height | Cubicle width | Article No. |
|---|---|---|---|
| RAL 7035 (pair) | 1800 mm | 300/600/900 mm | 8GK9200-8KK04 |
| | 2000 mm | 300/600/900 mm | 8GK9200-8KK05 |
| Blue-green | 1800 mm | 300/600/900 mm | 8GK9200-8KK07 |
| | 2000 mm | 300/600/900 mm | 8GK9200-8KK08 |

### Supports



| Types | Height | Article No. |
|---|---|---|
| Mounting stays (pair) | 1600 mm | 8GK6850-0KK02 |
| | 1800 mm | 8GK6850-0KK03 |
| | 2000 mm | 8GK6850-0KK04 |
| Rear universal supports | 1800 mm | 8GK6850-0KK05 |
| | 2000 mm | 8GK6850-0KK06 |

### Crossbars





| Types | Article No. |
|---|---|
| Upper crossbar | 8GK6850-0KK00 |
| Lateral crossbar | 8GK6850-0KK01 |
| Adapter for installation of assembly kits in the cabling compartment, width 250 mm (2 units) | 8GK9920-0KK01 |

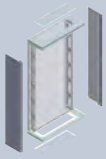
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# ALPHA 630 UNIVERSAL wall-mounted distribution boards

## Rated current 630 A

| | | | | | Flat pack | Unequipped distribution boards | Distribution boards with built-in distribution board panels |
|---|---|---|---|---|---|---|---|
| | | | | | **Degree of protection** IP43 | IP30/IP55 | IP55 |
| | | | | |  |  |  |
| **Height** | | **Depth** | **Width** | | **Protection class I** | **Protection class I** | **Protection class I** |
| **Outside** | **Inside** | **Outside** | **Outside** | **Inside** | | | |
| 450 mm | 400 mm | 250 mm | 650 mm | 600 mm | 8GK2100-0KS23 | – | – |
| 650 mm | 600 mm | 250 mm | 650 mm | 600 mm | 8GK2100-1KS23 | 8GK2124-1KK23 | – |
| 850 mm | 800 mm | 250 mm | 650 mm | 600 mm | 8GK2100-2KS23 | 8GK2124-2KK23 | 8GK9988-0KL00 |
| 1050 mm | 1000 mm | 250 mm | 650 mm | 600 mm | 8GK2100-3KS23 | 8GK2124-3KK23 | 8GK9988-0KL01 |
| | | | 950 mm | 900 mm | 8GK2100-3KL23 | 8GK2124-3KK33 | – |
| 1250 mm | 1200 mm | 250 mm | 650 mm | 600 mm | 8GK2100-4KS23 | 8GK2124-4KK23 | 8GK9988-0KL02 |
| | | | 950 mm | 900 mm | 8GK2100-4KL23 | 8GK2124-4KK33 | – |

## Accessories

| | | | | Flat Pack IP43 | Unequipped distribution boards IP55 |
|---|---|---|---|---|---|
| **Sheet-steel doors** | | | | | |
| | **Types** | **Cubicle height** | **Cubicle width** | **Article No.** | **Article No.** |
|  | Standard | 400 mm | 600 mm | 8GK9515-3KK20 | – |
| | | 600 mm | 600 mm | 8GK9515-4KK20 | 8GK9515-4KK20 |
| | | 800 mm | 600 mm | 8GK9515-5KK20 | 8GK9515-5KK23 |
| | | 1000 mm | 600 mm | 8GK9515-6KK20 | 8GK9515-6KK23 |
| | | | 900 mm | 8GK9515-6KK30 | 8GK9515-6KK33 |
| | | 1200 mm | 600 mm | 8GK9515-7KK20 | 8GK9515-7KK23 |
| | | | 900 mm | 8GK9515-7KK30 | 8GK9515-7KK33 |
| | For cabling compartment | 1000 mm | 900 mm | 8GK9515-6KK40 | 8GK9515-6KK43 |
| | | 1200 mm | 900 mm | 8GK9515-7KK40 | 8GK9515-7KK33 |
| | | | 600 + 300 mm | – | 8GK9515-7KK43 |
| **Transparent doors** | | | | | |
| | **Types** | **Cubicle height** | **Cubicle width** | **Article No.** | **Article No.** |
|  | Standard | 400 mm | 600 mm | 8GK9505-3KK20 | – |
| | | 600 mm | 600 mm | 8GK9505-4KK20 | 8GK9505-4KK20 |
| | | 800 mm | 600 mm | 8GK9505-5KK20 | 8GK9505-5KK23 |
| | | 1000 mm | 600 mm | 8GK9505-6KK20 | 8GK9505-6KK23 |
| | | | 900 mm | 8GK9505-6KK30 | 8GK9505-6KK33 |
| | | 1200 mm | 600 mm | 8GK9505-7KK20 | 8GK9505-7KK23 |
| | | | 900 mm | 8GK9505-7KK30 | 8GK9505-7KK33 |
|  | Giugiaro design | 400 mm | 600 mm | 8GK9507-2KK23 | – |
| | | 600 mm | 600 mm | 8GK9507-4KK23 | 8GK9507-4KK23 |
| | | 800 mm | 600 mm | 8GK9507-5KK23 | 8GK9507-5KK23 |
| | | 1000 mm | 600 mm | 8GK9507-7KK23 | 8GK9507-7KK23 |
| | | | 900 mm | 8GK9507-7KK33 | 8GK9507-7KK33 |
| | | 1200 mm | 600 mm | 8GK9507-8KK23 | 8GK9507-8KK23 |
| | | | 900 mm | 8GK9507-8KK33 | 8GK9507-8KK33 |

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## Accessories

### Double doors

| Types | Width | Cubicle height | Cubicle width | Flat Pack IP43<br>Article No. | Unequipped distribution boards IP55<br>Article No. |
|---|---|---|---|---|---|
| Made of sheet steel | 600 + 250 mm [1] | 1000 mm | 900 mm | 8GK9515-6KK20 + 8GK9515-6KK40 | 8GK9515-6KK23 + 8GK9515-6KK43 |
| | | 1200 mm | 900 mm | 8GK9515-7KK20 + 8GK9515-7KK40 | 8GK9515-7KK23 + 8GK9515-7KK43 |
| Transparent door + sheet-steel door | 600 + 250 mm | 1000 mm | 900 mm | 8GK9505-6KK20 + 8GK9515-6KK40 | 8GK9505-6KK23 + 8GK9515-6KK43 |
| | | 1200 mm | 900 mm | 8GK9505-7KK20 + 8GK9515-7KK40 | 8GK9505-7KK23 + 8GK9515-7KK43 |
| Transparent door in Giugiaro design + sheet-steel door | 600 + 250 mm [1] | 1600 mm | 900 mm | 8GK9507-7KK23 + 8GK9515-6KK40 | 8GK9507-7KK23 + 8GK9515-6KK43 |
| | | 1800 mm | 900 mm | 8GK9507-8KK23 + 8GK9515-7KK40 | 8GK9507-8KK23 + 8GK9515-7KK43 |

### Vertical profile bars for cabling compartment

| Cubicle height | Cubicle width | Article No. | Article No. |
|---|---|---|---|
| 1000 mm | 900 mm | 8GK9125-7KK01 | 8GK9125-7KK01 |
| 1200 mm | 900 mm | 8GK9127-8KK01 | 8GK9127-8KK01 |

### Front covers for cabling compartment

| Height | Width | Cubicle height | Cubicle width | Article No. | Article No. |
|---|---|---|---|---|---|
| 1000 mm | 250/300 mm | 1000 mm | 900 mm | 8GK9606-7KK10 | 8GK9606-7KK10 |
| 600 + 600 mm | 250/300 mm | 1200 mm | 900 mm | 8GK9606-4KK10 + 8GK9606-4KK10 | 8GK9606-4KK10 + 8GK9606-4KK10 |

### Bases

| Color | Height | Cubicle height | Cubicle width | Article No. | Article No. |
|---|---|---|---|---|---|
| Blue-green | 100 mm | 600/1200 mm | 600 mm | 8GK9906-0KK23 | 8GK9906-0KK23 |
| | | 1000/1200 mm | 900 mm | 8GK9906-0KK33 | 8GK9906-0KK33 |

### Covers for cable entry and cable duct

| Cubicle height | Cubicle width | Article No. | Article No. |
|---|---|---|---|
| 600/1200 mm | 600 mm | 8GK9920-0KK41 | 8GK9920-0KK41 |
| 1000/1200 mm | 900 mm | 8GK9920-0KK42 | 8GK9920-0KK42 |

### Side panels

| Color | Cubicle height | Cubicle width | Article No. | Article No. |
|---|---|---|---|---|
| Blue-green | 600 mm | 600 mm | – | 8GK9122-4KK01 |
| | 800 mm | 600 mm | – | 8GK9122-5KK01 |
| | 1000 mm | 600/900 mm | – | 8GK9122-6KK01 |
| | 1200 mm | 600/900 mm | – | 8GK9122-7KK01 |

[1] For distribution boards with a width of 900 mm with double door and vertical profile bar

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# ALPHA 630 UNIVERSAL floor-mounted distribution boards

## Rated current 630 A

| | | | | | Flat pack | Unequipped distribution boards | Control cabinet with built-in assembly kits for modular installation devices | With assembly kit for 3VL molded case circuit breakers |
|---|---|---|---|---|---|---|---|---|
| | | | | Degree of protection | IP43 | IP30/IP55 | IP55 | IP55 |
| | | | | |  |  |  |  |
| Height | | Depth | Width | | Protection class I | Protection class I | Protection class I | Protection class I |
| Outside | Inside | Outside | Outside | Inside | | | | |
| 1650 mm | 1600 mm | 250 mm | 350 mm | 300 mm | 8GK2300-5KL13 | 8GK2325-5KK13 | – | – |
| | | | 650 mm | 600 mm | 8GK2300-5KL23 | 8GK2325-5KK23 | – | – |
| | | | 950 mm | 900 mm | 8GK2300-5KL43 | 8GK2325-5KK43 | – | – |
| 1850 mm | 1800 mm | 250 mm | 350 mm | 300 mm | 8GK2300-6KL13 | 8GK2325-6KK13 | – | – |
| | | | 650 mm | 600 mm | 8GK2300-6KL23 | 8GK2325-6KK23 | 8GK2348-7KL00 | 8GK2348-7KL01 |
| | | | 950 mm | 900 mm | 8GK2300-6KL43 | 8GK2325-6KK43 | – | – |
| 2050 mm | 2000 mm | 250 mm | 350 mm | 300 mm | 8GK2300-7KL13 | 8GK2325-7KK13 | – | – |
| | | | 650 mm | 600 mm | 8GK2300-7KL23 | 8GK2325-7KK23 | – | – |
| | | | 950 mm | 900 mm | 8GK2300-7KL43 | 8GK2325-7KK43 | – | – |

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# ALPHA 630 UNIVERSAL floor-mounted distribution boards

## Rated current 630 A

### Accessories

**Sheet-steel doors**

| Types | Width | Cubicle height | Cubicle width | Flat Pack<br>Article No. | Unequipped distribution boards<br>Article No. |
|---|---|---|---|---|---|
| Standard | – | 1600 mm | 300 mm | 8GK9515-8KK10 | 8GK9515-8KK10 |
| | | | 600 mm | 8GK9515-8KK20 | 8GK9515-8KK20 |
| | | | 900 mm | 8GK9515-8KK30 | 8GK9515-8KK30 |
| | | 1800 mm | 300 mm | 8GK9515-8KK11 | 8GK9515-8KK11 |
| | | | 600 mm | 8GK9515-8KK21 | 8GK9515-8KK21 |
| | | | 900 mm | 8GK9515-8KK31 | 8GK9515-8KK31 |
| | | 2000 mm | 300 mm | 8GK9515-8KK12 | 8GK9515-8KK12 |
| | | | 600 mm | 8GK9515-8KK22 | 8GK9515-8KK22 |
| | | | 900 mm | 8GK9515-8KK32 | 8GK9515-8KK32 |
| For cabling compartment | 250 mm | 1600 mm | 900 mm | 8GK9515-8KK40 | 8GK9515-8KK40 |
| | | 1800 mm | 900 mm | 8GK9515-8KK41 | 8GK9515-8KK41 |
| | | 2000 mm | 900 mm | 8GK9515-8KK42 | 8GK9515-8KK42 |

**Transparent doors**

| Types | Cubicle height | Cubicle width | Article No. | Article No. |
|---|---|---|---|---|
| Standard | 1600 mm | 300 mm | 8GK9505-8KK11 | 8GK9505-8KK11 |
| | | 600 mm | 8GK9505-8KK20 | 8GK9505-8KK20 |
| | | 900 mm | 8GK9505-8KK30 | 8GK9505-8KK30 |
| | 1800 mm | 300 mm | 8GK9505-8KK12 | 8GK9505-8KK12 |
| | | 600 mm | 8GK9505-8KK21 | 8GK9505-8KK21 |
| | | 900 mm | 8GK9505-8KK31 | 8GK9505-8KK31 |
| | 2000 mm | 300 mm | 8GK9505-8KK10 | 8GK9505-8KK10 |
| | | 600 mm | 8GK9505-8KK22 | 8GK9505-8KK22 |
| | | 900 mm | 8GK9505-8KK32 | 8GK9505-8KK32 |
| Giugiaro design | 1600 mm | 600 mm | 8GK9507-8KK20 | 8GK9507-8KK20 |
| | | 900 mm | 8GK9507-8KK30 | 8GK9507-8KK30 |
| | 1800 mm | 600 mm | 8GK9507-8KK21 | 8GK9507-8KK21 |
| | | 900 mm | 8GK9507-8KK31 | 8GK9507-8KK31 |
| | 2000 mm | 600 mm | 8GK9507-8KK22 | 8GK9507-8KK22 |
| | | 900 mm | 8GK9507-8KK32 | 8GK9507-8KK32 |

**Double doors**

| Types | Width | Cubicle height | Cubicle width | Article No. | Article No. |
|---|---|---|---|---|---|
| Made of sheet steel | 600 + 250 mm | 1600 mm | 900 mm | 8GK9515-8KK20 + 8GK9515-8KK40 | 8GK9515-8KK20 + 8GK9515-8KK40 |
| | | 1800 mm | 900 mm | 8GK9515-8KK21 + 8GK9515-8KK41 | 8GK9515-8KK21 + 8GK9515-8KK41 |
| | | 2000 mm | 900 mm | 8GK9515-8KK22 + 8GK9515-8KK42 | 8GK9515-8KK22 + 8GK9515-8KK42 |
| Transparent door + sheet-steel door | 600 + 250 mm | 1600 mm | 900 mm | 8GK9505-8KK20 + 8GK9515-8KK40 | 8GK9505-8KK20 + 8GK9515-8KK40 |
| | | 1800 mm | 900 mm | 8GK9505-8KK21 + 8GK9515-8KK41 | 8GK9505-8KK21 + 8GK9515-8KK41 |
| | | 2000 mm | 900 mm | 8GK9505-8KK22 + 8GK9515-8KK42 | 8GK9505-8KK22 + 8GK9515-8KK42 |
| Transparent door in Giugiaro design + sheet-steel door | 600 + 250 mm | 1600 mm | 900 mm | 8GK9507-8KK20 + 8GK9515-8KK40 | 8GK9507-8KK20 + 8GK9515-8KK40 |
| | | 1800 mm | 900 mm | 8GK9507-8KK21 + 8GK9515-8KK41 | 8GK9507-8KK21 + 8GK9515-8KK41 |
| | | 2000 mm | 900 mm | 8GK9507-8KK22 + 8GK9515-8KK42 | 8GK9507-8KK22 + 8GK9515-8KK42 |

**Vertical profile bars for cabling compartment**

| Cubicle height | Cubicle width | Article No. | Article No. |
|---|---|---|---|
| 1600 mm | 900 mm | 8GK9125-8KK11 | 8GK9125-8KK11 |
| 1800 mm | 900 mm | 8GK9125-8KK12 | 8GK9125-8KK12 |
| 2000 mm | 900 mm | 8GK9125-8KK13 | 8GK9125-8KK13 |

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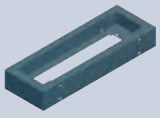

## Accessories

### Front covers for cabling compartment



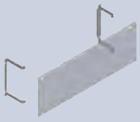
| Height | Width | Cubicle height | Cubicle width | Flat Pack<br>Article No. | Unequipped distribution boards<br>Article No. |
|---|---|---|---|---|---|
| 800 + 800 mm | 250/300 mm | 1600 mm | 300 mm | 8GK9607-5KK10 + 8GK9607-5KK10 | 8GK9607-5KK10 + 8GK9607-5KK10 |
| | | | 900 mm | 8GK9606-5KK10 + 8GK9606-5KK10 | 8GK9606-5KK10 + 8GK9606-5KK10 |
| 800 + 1000 mm | 250/300 mm | 1800 mm | 300 mm | 8GK9607-5KK10 + 8GK9607-7KK10 | 8GK9607-5KK10 + 8GK9607-7KK10 |
| | | | 900 mm | 8GK9606-5KK10 + 8GK9606-7KK10 | 8GK9606-5KK10 + 8GK9606-7KK10 |
| 1000 + 1000 mm | 250/300 mm | 2000 mm | 300 mm | 8GK9607-7KK10 + 8GK9607-7KK10 | 8GK9607-7KK10 + 8GK9607-7KK10 |
| | | | 900 mm | 8GK9606-7KK10 + 8GK9606-7KK10 | 8GK9606-7KK10 + 8GK9606-7KK10 |

### Bases



| Color | Height | Cubicle height | Cubicle width | Article No. | Article No. |
|---|---|---|---|---|---|
| Blue-green | 100 mm | 1600/2000 mm | 300 mm | 8GK9906-0KK13 | 8GK9906-0KK13 |
| | | 1600/2000 mm | 600 mm | 8GK9906-0KK23 | 8GK9906-0KK23 |
| | | 1600/2000 mm | 900 mm | 8GK9906-0KK33 | 8GK9906-0KK33 |

### Covers for cable entry and cable duct



| | Cubicle height | Cubicle width | Article No. | Article No. |
|---|---|---|---|---|
| | 1600/2000 mm | 300 mm | 8GK9920-0KK40 | 8GK9920-0KK40 |
| | 1600/2000 mm | 600 mm | 8GK9920-0KK41 | 8GK9920-0KK41 |
| | 1600/2000 mm | 900 mm | 8GK9920-0KK42 | 8GK9920-0KK42 |

### Side panels



| Color | Cubicle height | Cubicle width | Article No. | Article No. |
|---|---|---|---|---|
| RAL 7035 (pair) | 1600 mm | 300/600/900 mm | 8GK9120-8KK00 | 8GK9122-8KK03 |
| | 1800 mm | 300/600/900 mm | 8GK9120-8KK01 | 8GK9122-8KK04 |
| | 2000 mm | 300/600/900 mm | 8GK9120-8KK02 | 8GK9122-8KK05 |

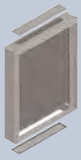


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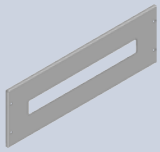

# ALPHA UNIVERSAL 125 distribution boards

## Rated current 125 A

| | | | | | | Surface-mounting distribution boards | | Flush-mounting distribution boards | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | With sheet-steel door | With transparent door | With sheet-steel door | With transparent door |
| | | | | | Degree of protection | IP43 | IP43 | IP31D | IP31D |
| | | | | | |  |  |  |  |
| Height | | Depth | Width | | Tiers | Protection class I | Protection class I | Protection class I | Protection class I |
| Outside | Inside | Outside | Outside | Inside | (MW = 18 mm) | | | | |
| 450 mm | 400 mm | 140 mm | 660 mm | 600 mm | 48 (2 × 24) | 8GK2042-0KL21 | 8GK2042-0KM21 | – | – |
| 650 mm | 600 mm | 140 mm | 660 mm | 600 mm | 72 (3 × 24) | 8GK2042-1KL21 | 8GK2042-1KM21 | – | – |
| 800 mm | 850 mm | 140 mm | 660 mm | 600 mm | 96 (4 × 24) | 8GK2042-2KL21 | 8GK2042-2KM21 | – | – |
| 1050 mm | 1000 mm | 140 mm | 660 mm | 600 mm | 120 (5 × 24) | 8GK2042-3KL21 | 8GK2042-3KM21 | – | – |
| 1250 mm | 1200 mm | 140 mm | 660 mm | 600 mm | 144 (6 × 24) | 8GK2042-4KL21 | 8GK2042-4KM21 | – | – |
| 508 mm | 400 mm | 140 mm | 718 mm | 600 mm | 48 (2 × 24) | – | – | 8GK2043-0KL21 | 8GK2043-0KM21 |
| 708 mm | 600 mm | 140 mm | 718 mm | 600 mm | 72 (3 × 24) | – | – | 8GK2043-1KL21 | 8GK2043-1KM21 |
| 908 mm | 800 mm | 140 mm | 718 mm | 600 mm | 96 (4 × 24) | – | – | 8GK2043-2KL21 | 8GK2043-2KM21 |
| 1108 mm | 1000 mm | 140 mm | 718 mm | 600 mm | 120 (5 × 24) | – | – | 8GK2043-3KL21 | 8GK2043-3KM21 |
| 1308 mm | 1200 mm | 140 mm | 718 mm | 600 mm | 144 (6 × 24) | – | – | 8GK2043-4KL21 | 8GK2043-4KM21 |

## Accessories

### Front covers



- With quick-lock screws and integrated grounding connection

| Type | Height | Width | Article No. |
|---|---|---|---|
| Closed | 50 mm | 600 mm | 8GK9620-1KK20 |
| | 100 mm | 600 mm | 8GK9621-1KK20 |
| | 150 mm | 600 mm | 8GK9622-1KK20 |
| | 200 mm | 600 mm | 8GK9623-1KK20 |
| | 400 mm | 600 mm | 8GK9622-2KK20 |
| | 600 mm | 600 mm | 8GK9622-4KK20 |
| | 800 mm | 600 mm | 8GK9622-5KK20 |
| For modular installation devices | 150 mm | 600 mm | 8GK9608-1KK22 |
| | 200 mm | 600 mm | 8GK9608-1KK20 |
| | 300 mm | 600 mm | 8GK9608-2KK22 |
| | 400 mm | 600 mm | 8GK9608-2KK20 |
| | 450 mm | 600 mm | 8GK9608-3KK22 |
| | 600 mm | 600 mm | 8GK9608-4KK20 |

### DIN rails for modular installation devices



| Width | Article No. |
|---|---|
| 600 mm | 8GK9920-0KK11 |

### Holders for cable duct



| Width | Article No. |
|---|---|
| 600 mm | 8GK9920-0KK20 |

### Grounding bars, PE



| Width | Article No. |
|---|---|
| 600 mm (20 × 5 mm²) | 8GK9920-0KK10 |

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### Hinge for front cover



| Version | Article No. |
|---|---|
| For hinged covers | 8GK9120-0KK11 |

### Hinges for masking frames



| Version | Scope of supply | Article No. |
|---|---|---|
| Hinge, incl. fixing accessories | 1 set | 8PQ2000-0BA08 |

### Rotary handles



| Version | Color | Article No. |
|---|---|---|
| Plastic | Black | 8GK9560-0KK04 |
| Lockable | Black | 8GK9560-0KK13 |

### Profile semicylinders E012



| Version | Article No. |
|---|---|
| Insert and key 8GK9560 | 8GK9560-0KK07 |

### Rotary handles for profile semicylinders



| Version | Article No. |
|---|---|
| For 40 mm profile semicylinders | 8GK9560-0KK06 |

### Quick-lock screws for ALPHA cabinets with ¼ turn



| Scope of supply | Article No. |
|---|---|
| 20 units | 8GK9562-0KK00 |

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# Assembly kits

## For 3VA molded case circuit breakers

| | | | | | | Horizontal | |
|---|---|---|---|---|---|---|---|
| | | | | | |  |  |
| **Switches/breakers** | | | | **Distribution board** | | **With RCD module** | **Without RCD module** |
| **Type** | **Rated current** | **Quantity** | **Rotary operating mechanism** | **Height outside** | **Width outside** | **Infeed side** | |
| 3VA10.. and 3VA11.. | 100 A/160 A | 1 | – | 200 mm | 600 mm | 8GK6735-2KK23 | 8GK6730-2KK23 |
| | | | | | 900 mm | 8GK6735-2KK33 | 8GK6730-2KK33 |
| | | | ■ | 200 mm | 600 mm | – | 8GK6733-2KK23 |
| | | | | | 900 mm | – | 8GK6733-2KK33 |
| 3VA12.. | 250 A | 1 | – | 200 mm | 600 mm | 8GK6736-2KK23 | 8GK6721-2KK23 |
| | | | | | 900 mm | 8GK6736-2KK33 | 8GK6721-2KK33 |
| | | | ■ | 200 mm | 600 mm | – | 8GK6734-2KK23 |
| | | | | | 900 mm | – | 8GK6734-2KK33 |
| 3VA20.. and 3VA22.. | 100 A/250 A | 1 | – | 200 mm | 600 mm | 8GK6725-2KK23 | 8GK6720-2KK23 |
| | | | | | 900 mm | 8GK6725-2KK33 | 8GK6720-2KK33 |
| | | | ■ | 200 mm | 600 mm | – | 8GK6723-2KK23 |
| | | | | | 900 mm | – | 8GK6723-2KK33 |
| 3VA23.. and 3VA24.. | 400 A/630 A | 1 | – | 400 mm | 600 mm | – | 8GK6740-4KK23 |
| | | | | | 900 mm | 8GK6745-4KK23 | 8GK6740-4KK33 |

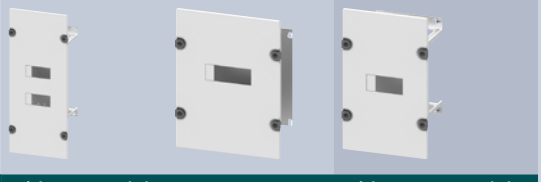




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**Vertical**



| Switches/breakers | | | | Distribution board | | With RCD module | | Without RCD module |
|---|---|---|---|---|---|---|---|---|
| Type | Rated current | Quantity | Motorized operating mechanism | Height outside | Width outside | Infeed side | At side | |
| 3VA10.. and 3VA11.. | 100 A/160 A | 1 | – | 200 mm | 300 mm | – | – | 8GK6731-2KK13 |
| | | | | 400 mm | 250 mm | – | – | 8GK6730-4KK43 |
| | | | | | 300 mm | – | 8GK6731-6KK13 | 8GK6730-4KK13 |
| | | | | 600 mm | 250 mm | 8GK6735-4KK43 | – | – |
| | | | | | 300 mm | 8GK6735-6KK13 | – | – |
| | | | ■ | 400 mm | 300 mm | – | 8GK6738-6KK13 | 8GK6734-4KK13 |
| | | | | 600 mm | 300 mm | 8GK6736-6KK13 | – | – |
| | | 3 | – | 200 mm | 600 mm | – | – | 8GK6731-2KK23 |
| | | | | 400 mm | 600 mm | – | 8GK6731-6KK23 | 8GK6730-4KK23 |
| | | | | | 900 mm | – | – | 8GK6731-6KK33 |
| | | | | 600 mm | 600 mm | 8GK6735-6KK23 | – | – |
| | | | ■ | 200 mm | 600 mm | – | – | 8GK6734-4KK23 |
| | | | | 400 mm | 600 mm | – | 8GK6737-6KK23 | – |
| | | | | | 900 mm | – | 8GK6737-6KK33 | – |
| | | | | 600 mm | 600 mm | 8GK6736-6KK23 | – | – |
| | | 5 | – | 200 mm | 900 mm | – | – | 8GK6731-2KK33 |
| | | | | 400 mm | 900 mm | – | – | 8GK6730-4KK33 |
| | | | ■ | 200 mm | 900 mm | – | – | 8GK6734-4KK33 |
| | | | | 600 mm | 900 mm | 8GK6736-6KK33 | – | – |
| 3VA12.. | 250 A | 1 | – | 400 mm | 300 mm | – | – | 8GK6721-4KK13 |
| | | | | 600 mm | 250 mm | 8GK6732-6KK13 | – | 8GK6730-6KK13 |
| | | | | | 300 mm | – | 8GK6722-6KK13 | 8GK6721-6KK13 |
| | | 3 | – | 400 mm | 600 mm | – | – | 8GK6721-4KK23 |
| | | | | 600 mm | 600 mm | – | 8GK6724-6KK23 | 8GK6721-6KK23 |
| | | | ■ | 400 mm | 600 mm | – | – | 8GK6722-6KK23 |
| | | | | 600 mm | 600 mm | – | 8GK6723-6KK23 | – |
| | | 5 | – | 400 mm | 900 mm | – | – | 8GK6721-4KK33 |
| | | | | 600 mm | 900 mm | – | 8GK6724-6KK33 | 8GK6721-6KK33 |
| | | | ■ | 400 mm | 900 mm | – | – | 8GK6722-6KK33 |
| | | | | 600 mm | 900 mm | – | 8GK6723-6KK33 | – |
| 3VA20.. and 3VA22.. | 100 A/250 A | 1 | – | 400 mm | 300 mm | – | – | 8GK6720-4KK13 |
| | | | | 600 mm | 300 mm | 8GK6725-6KK13 | – | – |
| | | 3 | – | 400 mm | 600 mm | – | – | 8GK6720-4KK23 |
| | | | | 600 mm | 600 mm | 8GK6725-6KK23 | – | – |
| | | | ■ | 400 mm | 600 mm | – | – | 8GK6724-4KK23 |
| | | 5 | – | 400 mm | 900 mm | – | – | 8GK6720-4KK33 |
| | | | | 600 mm | 900 mm | 8GK6725-6KK33 | – | – |
| | | | ■ | 400 mm | 900 mm | – | – | 8GK6724-4KK33 |
| 3VA23.. and 3VA24.. | 400 A/630 A | 1 | – | 600 mm | 300 mm | – | – | 8GK6740-6KK13 |
| | | 2 | – | 600 mm | 600 mm | 8GK6745-6KK23 | – | 8GK6740-6KK23 |
| | | 3 | – | 600 mm | 900 mm | 8GK6745-6KK33 | – | 8GK6740-6KK33 |



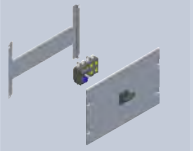
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# Assembly kits

## For 3KA7 switch disconnectors

**Vertical**



| Switches/breakers | | | Distribution board | | | |
|---|---|---|---|---|---|---|
| **Type** | **Description** | **Quantity** | **Height outside** | **Width outside** | **Depth** | |
| 3KA7 | 3KA711 size 1 max. 125 A | 1 | 200 mm | 600 mm | – | 8GK6400-2KK20 |
| | | | 400 mm | 250 mm [1] | – | 8GK6400-4KK10 |
| | | | | 300 mm [2] | – | 8GK6400-4KK11 |
| | | 3 | 200 mm | 900 mm | – | 8GK6400-2KK30 |
| | 3KA712 size 2 max. 250 A | 1 | 400 mm | 250 mm [1] | – | 8GK6401-4KK10 |
| | | | | 300 mm [2] | – | 8GK6401-4KK12 |
| | | | | 600 mm | – | 8GK6400-4KK20 |
| | | 3 | 400 mm | 900 mm | – | 8GK6400-4KK30 |
| | 3KA713 size 3 max. 400 A | 1 | 400 mm | 600 mm | – | 8GK6401-4KK20 |
| | | 3 | 400 mm | 900 mm | – | 8GK6400-4KK31 |
| 3KA7/3KL7 | 3KA7/3KL711 size 1 max. 125 A | 1 | 400 mm | 250 mm | 250 mm | 8GK6430-4KK03 |
| | | | | 300 mm | 250 mm | 8GK6430-4KK14 |
| | | 2 | 200 mm | 600 mm | 250 mm | 8GK6430-4KK24 |
| | | | | 900 mm | 250 mm | 8GK6430-4KK34 |
| | 3KA7/3KL712 size 2 max. 250 A | 1 | 400 mm | 250 mm | 400 mm | 8GK6431-4KK04 |
| | | | | 300 mm | 400 mm | 8GK6431-4KK14 |
| | | 2 | 400 mm | 600 mm | 250 mm | 8GK6431-4KK24 |
| | | | | 900 mm | 250 mm | 8GK6431-4KK34 |
| | 3KA7/3KL713 size 3 max. 400 A | 1 | 400 mm | 600 mm | 400 mm | 8GK6432-4KK24 |
| | | | | 900 mm | 400 mm | 8GK6432-4KK34 |
| | 3KA7/3KL714 size 4 max. 630 A | 1 | 400 mm | 600 mm | 400 mm | 8GK6433-4KK24 |
| | | | 400 mm | 900 mm | 400 mm | 8GK6433-4KK34 |

[1] In order to use box width 250 mm in the ALPHA 630 UNIVERSAL as a switchgear compartment, the following bars are required:
8GF9655 (height 1000 mm),
8GF9656 (height 1200 mm),
8GF9650 (height 1600 mm),
8GF9658 (height 1800 mm),
8GF9654 (height 2000 mm).
In order to use box width 250 mm in the ALPHA 800 UNIVERSAL as a switchgear compartment, you must order side supports and, for each assembly kit, a pair of crossbars 8GK9920-0KK01.

[2] In order to use cubicle width 300 mm in the ALPHA 630 UNIVERSAL as a switchgear compartment, you require the following inner supports:
8GK9126-8KK03 (height 1600 mm),
8GK9126-8KK04 (height 1800 mm),
8GK9126-8KK05 (height 2000 mm).
In order to use cubicle width 300 mm in the ALPHA 800 UNIVERSAL as a switchgear compartment, you must order the following side supports:
8GK6850-0KK02 (height 1600 mm),
8GK6850-0KK03 (height 1800 mm),
8GK6850-0KK04 (height 2000 mm).



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## For 3KF switch disconnectors with fuses

**Vertical**



| Switches/breakers | | | | Distribution board | | | |
|---|---|---|---|---|---|---|---|
| Type | Rated current | Operating mechanism in center | Door-coupling rotary operating mechanism | Height | Width | Depth | |
| 2 × 3KF1 | 80 A | ■ | – | 200 mm | 600 mm | 250 mm | 8GK6431-2KK23 |
| | | | | | 900 mm | 250 mm | 8GK6431-2KK33 |
| 2 × 3KF2 | 160 A | ■ | – | 200 mm | 600 mm | 250 mm | 8GK6432-2KK23 |
| | | | | | 900 mm | 250 mm | 8GK6432-2KK33 |
| 2 × 3KF1/3KF2 or 1 × 3KF3/3KF4 | 400 A | – | ■ | 400 mm | 600 mm | 400 mm | 8GK6431-4KK33 |
| | | | | | 900 mm | 400 mm | 8GK6432-4KK33 |

## For 3KD switch disconnectors

**Vertical**



| Switches/breakers | | | | Distribution board | | |
|---|---|---|---|---|---|---|
| Size | Rated current | Quantity | Door-coupling rotary operating mechanism | Height outside | Width outside | |
| 1/2/3 | 63 A/250 A/400 A | 1/1 | ■ | 400 mm | 250 mm | 8GK6430-4KK13 |
| 1/2/3/4 | 63 A/250 A/400 A/630 A | 2/1 | ■ | 400 mm | 600 mm | 8GK6430-4KK23 |
| 1/2/3/4 | 63 A/250 A/400 A/630 A | 2 | ■ | 400 mm | 900 mm | 8GK6430-4KK33 |

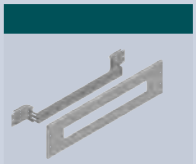


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# Assembly kits

## For modular installation devices



| Switches/breakers | | Distribution board | | |
|---|---|---|---|---|
| No. of tiers | MW | Height outside | Width outside | |
| 1 | 12 | 200 mm | 300 mm | 8GK6352-2KK13 |
| | 24 | 150 mm | 600 mm | 8GK6302-1KK23 |
| | | 200 mm | 600 mm | 8GK6352-2KK23 |
| | 36 | 150 mm | 900 mm | 8GK6302-1KK33 |
| | | 200 mm | 900 mm | 8GK6352-2KK33 |

## Accessories

**DIN rails**



| Version | Width | No. of tiers | Article No. |
|---|---|---|---|
| For mounting modular devices at various depths | 600 mm | 1 | 8GF9670 |
| | 900 mm | 1 | 8GF9671 |

**Depth adapters 9 mm**



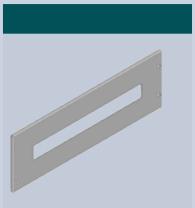
| Version | Width | No. of tiers | MW | Article No. |
|---|---|---|---|---|
| For linking 5SY and 5SJ on DIN rails, L 360 mm | 600 mm | 1 | 20 | 8GF9670-1 |



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## For front cover with cutout



| Switches/breakers | | Distribution board | | |
|---|---|---|---|---|
| No. of tiers | MW | Height outside | Width outside | |
| 1 | 24 | 150 mm | 600 mm | 8GK9608-1KK22 |
| | 24 | 200 mm | 600 mm | 8GK9608-1KK20 |
| | 36 | 150 mm | 900 mm | 8GK9608-1KK32 |
| | | 200 mm | 900 mm | 8GK9608-1KK30 |
| 2 | 48 | 300 mm | 600 mm | 8GK9608-2KK22 |
| | | 400 mm | 600 mm | 8GK9608-2KK20 |
| | 72 | 300 mm | 900 mm | 8GK9608-2KK32 |
| | | 400 mm | 900 mm | 8GK9608-2KK30 |
| | | 450 mm | 600 mm | 8GK9608-3KK22 |
| | | 600 mm | 600 mm | 8GK9608-4KK20 |
| | 108 | 600 mm | 900 mm | 8GK9608-4KK30 |

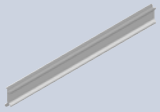
## Accessories

**DIN rails**



| Version | Width | No. of tiers | Article No. |
|---|---|---|---|
| For mounting modular devices at various depths | 600 mm | 1 | 8GF9670 |
| | 900 mm | 1 | 8GF9671 |

**Depth adapters 9 mm**



| Version | Width | No. of tiers | MW | Article No. |
|---|---|---|---|---|
| For linking 5SY and 5SJ on DIN rails, L 360 mm | 600 mm | 1 | 20 | 8GF9670-1 |

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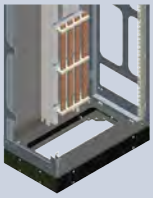
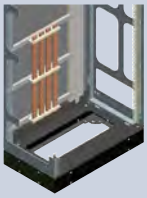
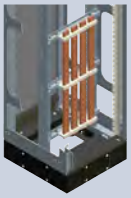
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# Busbars

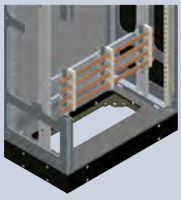
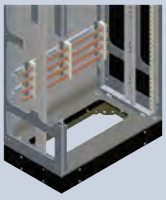
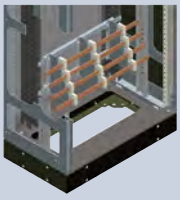
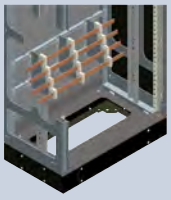
## For ALPHA 800/630 UNIVERSAL distribution boards

### Vertical installation of rear busbars (single bars only)


| Version | | Width 600/900 mm | For a spacing of 150 mm, width 600/900 mm | Recessed, width 600/900 mm | Width 300 mm | Recessed, width 300 mm |
|---|---|---|---|---|---|---|
| Busbar supports: | | 8GF5764/65 (width 600 mm) 8GF5766/67 (width 900 mm) | 8GF5762/63 | 8GF5764/65 (width 600 mm) 8GF5766/67 (width 900 mm) | 8GF5768/70 | 8GF5768/70 |
| Supplements: | Rear universal supports | 8GK6850-0KK05/06 (2 units) | 8GK6850-0KK05/06 (2 units) | 8GK6850-0KK05/06 (1 unit) | – | – |

### Horizontal busbars (single bars only)

| Version | | Front | Recessed | Front, with steps | Recessed, with steps |
|---|---|---|---|---|---|
| Busbar supports: | | 8GF5762/63 | 8GF5762/63 | 8GF5760/61 | 8GF5760/61 |
| Supplements: | Holders | 8GF9652 (width 600 mm) 8GF9653 (width 900 mm) | 8GF9652 (width 600 mm) 8GF9653 (width 900 mm) | 8GK9920-0KK35 (width 600 mm) 8GK9920-0KK36 (width 900 mm) | 8GF9652 (width 600 mm) 8GF9653 (width 900 mm) |
| | Rear universal supports | – | – | 8GK6850-0KK05/06 (2 units) | – |



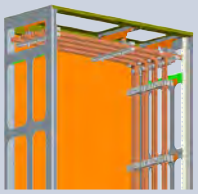


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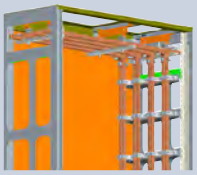

# For ALPHA 800 UNIVERSAL distribution boards

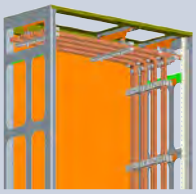
## Horizontal busbars at top (double bars only)



| Version | | |
|---|---|---|
| Busbar supports | With support plate | 8GK9750-0KK02 |
| | Without support plate | 8PQ4000-1BA12 |
| Supplements | | If there is no support 8GK9750-0KK02 mounted onto the side of the cabling compartment, you will need to order an upper crossbar 8GK6850-0KK00. |

## Vertical busbars, for sides






| Version | | Double busbar with steps | Single busbar with steps | Double busbar | Busbar |
|---|---|---|---|---|---|
| Busbar supports: | | 8GK9750-0KK01 | 8GF5760/61 | 8GK9750-0KK02 | 8GF5762/63 |
| Supplements | Lateral crossbar | 8GK6850-0KK01 | 8GK6850-0KK01 | 8GK6850-0KK01 | 8GK6850-0KK01 |

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# Busbars



| | | | ALPHA 630 | ALPHA 800 |
|---|---|---|---|---|
| **Copper busbars** | | | | |
| Busbar cross-section | Length | | Article No. | Article No. |
| 15 × 5 mm | 2000 mm | | 8GF5751 | 8GF5751 |
| | 1300 mm | | 8GF5771 | 8GF5771 |
| 20 × 5 mm | 2000 mm | | 8GF5737 | 8GF5737 |
| | 1300 mm | | 8GF5772 | 8GF5772 |
| 30 × 5 mm | 2000 mm | | 8GF5742 | 8GF5742 |
| | 1300 mm | | 8GF5773 | 8GF5773 |
| 30 × 10 mm | 2000 mm | | 8GF5752 | 8GF5752 |
| | 1300 mm | | 8GF5774 | 8GF5774 |
| **Copper grounding bars** | | | | |
| Busbar cross-section | Length | Width | Article No. | Article No. |
| 20 × 5 mm | 1300/2000 mm | 600 mm | 8GK9920-0KK10 | 8GK9920-0KK10 |
| | | 900 mm | 8GK9920-0KK13 | 8GK9920-0KK13 |



## Busbar supports



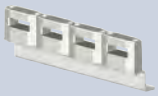
| | | | | ALPHA 630 | ALPHA 800 |
|---|---|---|---|---|---|
| **Vertical, at side/horizontal, at front, graded** | | | | | |
| Busbar cross-section | Width | Number of poles | Busbar center-to-center spacing | Article No. | Article No. |
| 15/20/30 × 5 mm | 600/900 mm | 4-pole | 50 mm | 8GF5760 | 8GF5760 |
| 30 × 10 mm | 600/900 mm | 4-pole | 50 mm | 8GF5761 | 8GF5761 |
| 15/20/30 × 10 mm | 600/900 mm | 4-pole | 50 mm | – | 8GK9750-0KK01 |
| 20/30 × 10 mm | 600/900 mm | 4-pole | 50 mm | – | 8GK9750-0KK02 |



| | | | | | |
|---|---|---|---|---|---|
| **Vertical** | | | | | |
| Busbar cross-section | Width | Number of poles | | Article No. | Article No. |
| 15/20/30 × 5 mm | 300 mm | 4-pole | 50 mm | 8GF5768 | 8GF5768 |
| 30 × 10 mm | 300 mm | 4-pole | 50 mm | 8GF5770 | 8GF5770 |



| | | | | | |
|---|---|---|---|---|---|
| **Vertical, at rear** | | | | | |
| Busbar cross-section | Width | Number of poles | | Article No. | Article No. |
| 15/20/30 × 5 mm | 600 mm | 4-pole | 50 mm | 8GF5764 | 8GF5764 |
| | 900 mm | 4-pole | 50 mm | 8GF5766 | 8GF5766 |
| 30 × 10 mm | 600 mm | 4-pole | 50 mm | 8GF5765 | 8GF5765 |
| | 900 mm | 4-pole | 50 mm | 8GF5767 | 8GF5767 |



| | | | | | |
|---|---|---|---|---|---|
| **Horizontal, at front** [1] | | | | | |
| Busbar cross-section | Width | Number of poles | | Article No. | Article No. |
| 15/20/30 × 5 mm | 300/600/900 mm | 4-pole | 50 mm | 8GF5762 | 8GF5762 |
| 30 × 10 mm | 300/600/900 mm | 4-pole | 50 mm | 8GF5763 | 8GF5763 |
| | 600/900 mm | 4-pole | 50 mm | – | 8GK9608-1KK22 |



| | | | | | |
|---|---|---|---|---|---|
| **Horizontal, at top** | | | | | |
| Busbar cross-section | | Number of poles | | Article No. | Article No. |
| 20/30 × 10 mm | 600/900 mm | 4-pole | 50 mm | – | 8GK9750-0KK02 |
| | | | | – | 8PQ4000-1BA12 |

[1] Can be mounted directly on device holders with a clearance of 525 mm (width 600 mm) and 825 mm (width 900 mm).

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## Other accessories

### Set of screws/bolts for slotted bars



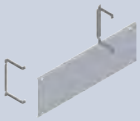
| Cross-section | Outer thread | Tightening torque | ALPHA 630 Article No. | ALPHA 800 Article No. |
|---|---|---|---|---|
| 15/20/30 × 5 mm | M6 | 8 Nm | 8GF5891 | 8GF5891 |
| 30 × 10 mm | M8 | 20 Nm | 8GF5892 | 8GF5892 |

### Crossbars for installation of support



| Version | Width | ALPHA 630 Article No. | ALPHA 800 Article No. |
|---|---|---|---|
| Für 8GF5762, 8GF5760, 8GF5763, 8GK9608-1KK22 | 600 mm | 8GF9652 | 8GF9652 |
| | 900 mm | 8GF9653 | 8GF9653 |
| Für 8GF5760 | 600 mm | 8GK9920-0KK35 | 8GK9920-0KK35 |
| | 900 mm | 8GK9920-0KK36 | 8GK9920-0KK36 |
| Für 8GK9750-0KK02 | 400 mm | – | 8GK6850-0KK00 |
| Für 8GF5760, 8GF5768, 8GF5761, 8GF5770, 8GK9750-0KK01, 8GK9750-0KK02 | 400 mm | – | 8GK6850-0KK01 |

### Transparent cover



| Version | Width | ALPHA 630 Article No. | ALPHA 800 Article No. |
|---|---|---|---|
| For horizontal busbars, at front | 600 mm | 8GK9920-0KK37 | 8GK9920-0KK37 |
| | 900 mm | 8GK9920-0KK38 | 8GK9920-0KK38 |

### Connection kit for double bars



| Version | Current | ALPHA 630 Article No. | ALPHA 800 Article No. |
|---|---|---|---|
| Connection kit for upper horizontal bars – vertical busbars | 800 A | – | 8GK9790-0KK00 |
| Connection kit for upper horizontal busbars | 800 A | – | 8GK9790-0KK01 |

### Holder for grounding bar



| ALPHA 630 Article No. | ALPHA 800 Article No. |
|---|---|
| – | 8GK9750-0KK00 |

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# Accessories

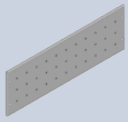
## Covers and holders

### Covers for mounting measuring instruments



| Measuring devices | Type | Height | Width | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|---|---|---|
| 72 × 72 | 2 instruments + 2 selectors | 200 mm | 600 mm | 8GK9610-1KK20 | ■ | ■ | ■ |
| | | | 900 mm | 8GK9610-1KK30 | ■ | ■ | ■ |
| | 4 instruments + 1 selector | 200 mm | 600 mm | 8GK9611-1KK20 | ■ | ■ | ■ |
| | | | 900 mm | 8GK9611-1KK30 | ■ | ■ | ■ |
| 96 × 96 | 2 instruments + 2 selectors | 200 mm | 600 mm | 8GK9612-1KK20 | ■ | ■ | ■ |
| | | | 900 mm | 8GK9612-1KK30 | ■ | ■ | ■ |
| | 4 instruments + 1 selector | 200 mm | 600 mm | 8GK9613-1KK20 | ■ | ■ | ■ |
| | | | 900 mm | 8GK9613-1KK30 | ■ | ■ | ■ |

### Covers for pushbuttons and indicator lights



| Height | Width | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|---|
| 200 mm | 600 mm | 8GK9630-1KK20 | ■ | ■ | ■ |
| | 900 mm | 8GK9631-1KK20 | ■ | ■ | ■ |

### Non-transparent covers

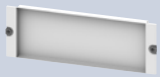


| Height | Width | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|---|
| 50 mm | 600 mm | 8GK9620-1KK20 | ■ | ■ | ■ |
| | 900 mm | 8GK9620-1KK30 | ■ | ■ | ■ |
| 100 mm | 600 mm | 8GK9621-1KK20 | ■ | ■ | ■ |
| | 900 mm | 8GK9621-1KK30 | ■ | ■ | ■ |
| 150 mm | 600 mm | 8GK9622-1KK20 | ■ | ■ | ■ |
| | 900 mm | 8GK9622-1KK30 | ■ | ■ | ■ |
| 200 mm | 300 mm | 8GK9607-1KK10 | ■ | ■ | ■ |
| | 600 mm | 8GK9623-1KK20 | ■ | ■ | ■ |
| | 900 mm | 8GK9623-1KK30 | ■ | ■ | ■ |
| 400 mm | 250 mm | 8GK9606-2KK10 | ■ | ■ | ■ |
| | 300 mm | 8GK9607-2KK10 | ■ | ■ | ■ |
| | 600 mm | 8GK9622-2KK20 | ■ | ■ | ■ |
| | 900 mm | 8GK9622-2KK30 | ■ | ■ | ■ |
| 600 mm | 250 mm | 8GK9606-4KK10 | ■ | ■ | ■ |
| | 300 mm | 8GK9607-4KK10 | ■ | ■ | ■ |
| | 600 mm | 8GK9622-4KK20 | ■ | ■ | ■ |
| | 900 mm | 8GK9622-4KK30 | ■ | ■ | ■ |
| 800 mm | 250 mm | 8GK9606-5KK10 | ■ | ■ | ■ |
| | 300 mm | 8GK9607-5KK10 | ■ | ■ | ■ |
| | 600 mm | 8GK9622-5KK20 | ■ | ■ | ■ |
| | 900 mm | 8GK9622-5KK30 | ■ | ■ | ■ |
| 1000 mm | 250 mm | 8GK9606-7KK10 | ■ | ■ | ■ |
| | 300 mm | 8GK9607-7KK10 | ■ | ■ | ■ |

### Deep-drawn covers 25 mm

| Height | Width | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|---|
| 800 mm | 600 mm | 8GK9635-5KK20 | ■ | ■ | ■ |
| | 900 mm | 8GK9635-5KK30 | ■ | ■ | ■ |
| 1000 mm | 600 mm | 8GK9636-7KK20 | ■ | ■ | ■ |
| | 900 mm | 8GK9636-7KK30 | ■ | ■ | ■ |

### Deep-drawn front covers 35 mm



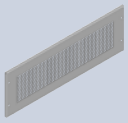
| Height | Width | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|---|
| 200 mm | 600 mm | 8GK9605-1KK20 | ■ | ■ | ■ |
| | 900 mm | 8GK9605-1KK30 | ■ | ■ | ■ |
| 400 mm | 600 mm | 8GK9605-2KK20 | ■ | ■ | ■ |
| | 900 mm | 8GK9605-2KK30 | ■ | ■ | ■ |
| 600 mm | 600 mm | 8GK9605-4KK20 | ■ | ■ | ■ |
| | 900 mm | 8GK9605-4KK30 | ■ | ■ | ■ |

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## Covers and holders



**Covers with ventilation openings IP30**

| Height | Width | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|---|
| 200 mm | 600 mm | 8GK9632-1KK20 | ■ | ■ | ■ |
| | 900 mm | 8GK9633-1KK20 | ■ | ■ | ■ |



**Holders for horizontal cable ducts/horizontal busbars (pair)**

| Width | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|
| 600 mm | 8GF9652 | ■ | ■ | ■ |
| 900 mm | 8GF9653 | ■ | ■ | ■ |



**Horizontal crossbars with steps (pair)**

| Width | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|
| 600 mm | 8GK9920-0KK35 | ■ | ■ | ■ |
| 900 mm | 8GK9920-0KK36 | ■ | ■ | ■ |



**Support rails (pair)**

- ALPHA 630 UNIVERSAL vertical/horizontal busbar support, with steps
- Vertical side terminal strip (not suitable for use in ALPHA 800 UNIVERSAL)

| Height | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|
| 1000 mm | 8GF9655 | ■ | ■ | ■ |
| 1200 mm | 8GF9656 | ■ | ■ | ■ |
| 1600 mm | 8GF9650 | ■ | ■ | ■ |
| 1800 mm | 8GF9658 | ■ | ■ | ■ |
| 2000 mm | 8GF9654 | ■ | ■ | ■ |



**Inner supports**

- For using cubicle B 300 as a switchgear compartment in ALPHA 630 UNIVERSAL (not suitable for use in ALPHA 800 UNIVERSAL)

| Height | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|
| 1600 mm | 8GK9126-8KK03 | ■ | ■ | ■ |
| 1800 mm | 8GK9126-8KK04 | ■ | ■ | ■ |
| 2000 mm | 8GK9126-8KK05 | ■ | ■ | ■ |



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# Accessories

## Mounting plates and inner separations

### Modular mounting plates



- ALPHA 800 UNIVERSAL: for mounting on side supports or on the base of the cabinet

| Height | Width | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|---|
| 200 mm | 600 mm | 8GF7155 | ■ | ■ | ■ |
| | 900 mm | 8GF7158 | ■ | ■ | ■ |
| 400 mm | 600 mm | 8GF7156 | ■ | ■ | ■ |
| | 900 mm | 8GF7160 | ■ | ■ | ■ |
| 600 mm | 600 mm | 8GF7157 | ■ | ■ | ■ |
| | 900 mm | 8GF7161 | ■ | ■ | ■ |

### Recessed modular mounting plates



- ALPHA 800 UNIVERSAL: for mounting on two rear supports or on the rear panel of the cabinet with one rear support

| Height | Width | Article No. | | | |
|---|---|---|---|---|---|
| 200 mm | 600 mm | 8GF9676 | ■ | ■ | ■ |
| | 900 mm | 8GF9680 | ■ | ■ | ■ |
| 400 mm | 600 mm | 8GF9677 | ■ | ■ | ■ |
| | 900 mm | 8GF9681 | ■ | ■ | ■ |
| 600 mm | 600 mm | 8GF9678 | ■ | ■ | ■ |
| | 900 mm | 8GF9682 | ■ | ■ | ■ |

### 2 mm mounting plates for electrotechnical use with height and width of the cabinet



- ALPHA 800 UNIVERSAL: Plates that are not as high as the cabinet can be mounted using side supports and holders 8GF9652/3

| Height | Width | Article No. | | | |
|---|---|---|---|---|---|
| 600 mm | 600 mm | 8GK9535-4KK21 | ■ | ■ | ■ |
| 800 mm | 600 mm | 8GK9535-5KK21 | ■ | ■ | ■ |
| 1000 mm | 600 mm | 8GK9536-7KK21 | ■ | ■ | ■ |
| | 900 mm | 8GK9536-7KK31 | ■ | ■ | ■ |
| 1200 mm | 600 mm | 8GK9537-8KK21 | ■ | ■ | ■ |
| | 900 mm | 8GK9537-8KK31 | ■ | ■ | ■ |
| 1600 mm | 600 mm | 8GK9535-8KK23 | ■ | ■ | ■ |
| | 900 mm | 8GK9535-8KK26 | ■ | ■ | ■ |
| 1800 mm | 600 mm | 8GK9535-8KK24 | ■ | ■ | ■ |
| | 900 mm | 8GK9535-8KK34 | ■ | ■ | ■ |
| 2000 mm | 600 mm | 8GK9535-8KK25 | ■ | ■ | ■ |
| | 900 mm | 8GK9535-8KK35 | ■ | ■ | ■ |

### Adjustable depth brackets for mounting plates



| Distribution board depth | Article No. | | | |
|---|---|---|---|---|
| 250 mm | 8GK9930-0KK03 | | ■ | |

### Partitions for ALPHA 630 UNIVERSAL





| Mounting | Height | Width | Article No. | | | |
|---|---|---|---|---|---|---|
| Horizontal | – | 250 mm | 8GK9525-0KK03 | | ■ | |
| | | 300 mm | 8GK9525-0KK13 | | ■ | |
| | | 600 mm | 8GK9525-0KK23 | | ■ | |
| | | 900 mm | 8GK9525-0KK33 | | ■ | |
| Vertical | 800 mm | – | 8GK9525-5KK03 | | ■ | |
| | 1000 mm | – | 8GK9525-6KK03 | | ■ | |
| | 1200 mm | – | 8GK9525-7KK03 | | ■ | |
| | 1600 mm | – | 8GK9525-8KK03 | | ■ | |
| | 1800 mm | – | 8GK9525-8KK13 | | ■ | |
| | 2000 mm | – | 8GK9525-8KK23 | | ■ | |

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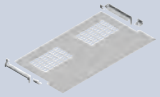


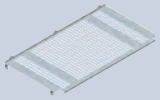
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## Mounting plates and inner separations

**Partitions for ALPHA 800 UNIVERSAL in cabinets in form 2b**

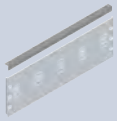






| Mounting | Height | Width | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|---|---|
| Horizontal separation between devices | – | 300 mm | 8GK9526-0KK06 | | | ■ |
| | | 600 mm | 8GK9526-0KK07 | | | ■ |
| | | 900 mm | 8GK9526-0KK08 | | | ■ |
| Horizontal separation between upper busbar compartment and devices | – | 250 mm | 8GK9527-0KK05 | | | ■ |
| | | 300 mm | 8GK9526-0KK03 | | | ■ |
| | | 600 mm | 8GK9526-0KK04 | | | ■ |
| | | 900 mm | 8GK9526-0KK05 | | | ■ |
| Vertical separation between the switchgear compartment and busbar compartment | 1600 mm | 600 mm | 8GK9526-0KK00 | | | ■ |
| | 1800 mm | 600 mm | 8GK9526-0KK01 | | | ■ |
| | 2000 mm | 600 mm | 8GK9526-0KK02 | | | ■ |

**Transparent covers**



| Width | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|
| 250 mm | 8GK9527-0KK03 | ■ | ■ | ■ |
| 300 mm | 8GK9527-0KK00 | ■ | ■ | ■ |
| 600 mm | 8GK9527-0KK01 | ■ | ■ | ■ |
| 900 mm | 8GK9527-0KK02 | ■ | ■ | ■ |

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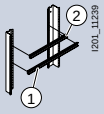
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# Accessories

## Holders for terminal strips and locking systems

### DIN rails for terminal blocks




| Type | Height | Width | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|---|---|
| Horizontal | – | 600 mm | 8GF9672 | ■ | ■ | ■ |
| | | 900 mm | 8GF9674 | ■ | ■ | ■ |
| Horizontal, recessed | – | 600 mm | 8GF9673 | ■ | ■ | ■ |
| | | 900 mm | 8GF9675 | ■ | ■ | ■ |
| Vertical with 3 mounting rails | 200 mm | 600 mm | 8GF7175 | ■ | ■ | ■ |
| | 400 mm | 600 mm | 8GF7176 | ■ | ■ | ■ |
| Vertical with 5 mounting rails | – | 900 mm | 8GF7178 | ■ | ■ | ■ |
| | 400 mm | 900 mm | 8GF7180 | ■ | ■ | ■ |

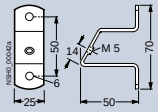
### Holder for vertical terminal strips in side compartment L = 900 mm



- ALPHA 800 UNIVERSAL: Each holder must be mounted onto a lateral crossbar

| Width | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|
| 600/900 mm | 8GF9683 | ■ | ■ | ■ |

### Mounting brackets




| Version | Width | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|---|
| For angular mounting of the terminal blocks | 600/900 mm | 8WA746 | ■ | ■ | ■ |

### Holders for DIN rails

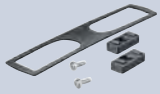
| Version | Scope of supply | Width | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|---|---|
| For mounting the terminal strip vertically in the cabling compartment | 4 units | 600/900 mm | 8GK9920-0KK28 | ■ | ■ | ■ |

### Standard locking devices for wall-mounted distribution boards



| Material | Width | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|---|
| Made of plastic, black (spare part) | 600/900 mm | 8GK9560-0KK04 | ■ | ■ | ■ |

### Seals for standard locking devices



| Degree of protection | Width | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|---|
| IP55 | 600/900 mm | 8GK9560-0KK05 | ■ | ■ | ■ |

### Rotary handle locking mechanism



- For wall-mounted distribution boards, IP43 and IP55, semicylinder insert possible for E012

| Width | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|
| 600/900 mm | 8GK9560-0KK06 | ■ | ■ | ■ |

### Profile semicylinders E012



- Insert and key

| Width | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|
| 600/900 mm | 8GK9560-0KK07 | ■ | ■ | ■ |

### Locking systems for floor-mounted distribution boards



| Type | Width | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|---|
| Espagnolette lock with pushbutton (spare part) | 600/900 mm | 8GK9561-0KK01 | ■ | ■ | ■ |
| Insert for profile semicylinder with key | 600/900 mm | 8GK9561-0KK02 | ■ | ■ | ■ |
| Profile semicylinder, 40 mm with lock E012 (for use only with espagnolette lock) | 600/900 mm | 8GK9561-0KK00 | ■ | ■ | ■ |

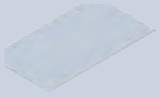
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## Further accessories

| | | | 125 | 630 | 800 |
|---|---|---|---|---|---|
| **Assembly kits for mounting flat pack cabinets for self-assembly, IP43** | | | | | |
|  | **Height** | **Article No.** | | | |
| | 400 mm | 8GK9126-3KK00 | ■ | ■ | ■ |
| | 600 mm | 8GK9126-4KK00 | ■ | ■ | ■ |
| | 800 mm | 8GK9126-5KK00 | ■ | ■ | ■ |
| | 1000 mm | 8GK9126-6KK00 | ■ | ■ | ■ |
| | 1200 mm | 8GK9126-7KK00 | ■ | ■ | ■ |
| | 1600 mm | 8GK9126-8KK00 | ■ | ■ | ■ |
| | 1800 mm | 8GK9126-8KK01 | ■ | ■ | ■ |
| | 2000 mm | 8GK9126-8KK02 | ■ | ■ | ■ |
| **Z-shaped crossbar for lifting the flat pack for self-assembly** | | | | | |
|  | **Height** | **Article No.** | | | |
| | 600 mm | 8GK9127-0KK01 | ■ | ■ | ■ |
| | 900 mm | 8GK9127-0KK02 | ■ | ■ | ■ |
| | 1200 mm | 8GK9127-0KK03 | ■ | ■ | ■ |
| | 1500 mm | 8GK9127-0KK04 | ■ | ■ | ■ |
| | 1800 mm | 8GK9127-0KK05 | ■ | ■ | ■ |
| **Z-shaped crossbar for mounting and vertical linking of wall-mounted distribution boards** | | | | | |
|  | **Height** | **Article No.** | | | |
| | 1200 mm | 8GK9920-0KK43 | ■ | ■ | ■ |
| | 1400 mm | 8GK9920-0KK44 | ■ | ■ | ■ |
| | 1600 mm | 8GK9920-0KK45 | ■ | ■ | ■ |
| | 1800 mm | 8GK9920-0KK46 | ■ | ■ | ■ |
| **Flange plates for flat pack delivery (optional)** | | | | | |
|  | **Height** | **Article No.** | | | |
| | 300 mm | 8GK9120-0KK10 | ■ | ■ | ■ |
| | 600 mm | 8GK9120-0KK20 | ■ | ■ | ■ |
| **Ventilation grilles – side panels** | | | | | |
|  | **Scope of supply** | **Article No.** | | | |
| | 4 units | 8GK9120-0KK30 | ■ | ■ | ■ |
| **Spare part hinges for doors for wall/floor-mounted distribution boards** | | | | | |
|  | **Scope of supply** | **Article No.** | | | |
| | 2 units | 8GK9920-0KK24 | ■ | ■ | ■ |
| **Hinges for front covers** | | | | | |
|  | **Scope of supply** | **Article No.** | | | |
| | 10 units | 8GK9120-0KK11 | ■ | ■ | ■ |
| **Hinges for masking frames** | | | | | |
|  | | **Article No.** | | | |
| | | 8PQ2000-0BA08 | ■ | ■ | ■ |

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# Accessories

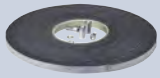
## Further accessories

**Quick-lock screws for ALPHA cabinets with ¼ turn**



| Scope of supply | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|
| 20 units | 8GK9562-0KK00 | ■ | ■ | ■ |

**Mounting kit for modular distribution boards, IP55 (incl. seal)**



| Article No. | 125 | 630 | 800 |
|---|---|---|---|
| 8GK9920-0KK31 | ■ | ■ | ■ |

**Self-tapping screws M6 × 10**



| Scope of supply | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|
| 10 units | 8GF9662 | ■ | ■ | ■ |

**Captive nuts M6**

| Scope of supply | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|
| 100 units | 8GF9643 | ■ | ■ | ■ |

**Transport eyebolts**



| Scope of supply | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|
| 4 units | 8GF9660 | ■ | ■ | ■ |

**Key for double-bit interlocking mechanism**



| Article No. | 125 | 630 | 800 |
|---|---|---|---|
| 8GD9290 | ■ | ■ | ■ |

**Siemens nameplate**

| Material | Version | Color | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|---|---|
| Aluminum | Self-adhesive | Petrol | 8GD9084 | ■ | ■ | ■ |
| Sticker, foil | Self-adhesive | Petrol | 8GF9661 | ■ | ■ | ■ |

**Circuit diagram pockets**



| Types | Depth | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|---|
| DIN A3, made of sheet steel | 10 mm | 8GK9910-0KK22 | ■ | ■ | ■ |
| DIN A4, transparent sleeve, adhered all-over | 10 mm | 8GK9910-0KK23 | ■ | ■ | ■ |
| DIN A4, made of plastic | 30 mm | 8GD9132 | ■ | ■ | ■ |
| DIN A4, large pack, made of plastic | 30 mm | 8GK9910-1KK24 | ■ | ■ | ■ |

**Blanking cover for modular installation devices**



| Version | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|
| For 12 modular widths (1 MW = 18 mm) | 8GK9910-0KK00 | ■ | ■ | ■ |

**Cover strips**



| Length | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|
| 1 m | 8GK9910-0KK01 | ■ | ■ | ■ |

**Spare brackets for flat pack assembly**

| Scope of supply | Article No. | 125 | 630 | 800 |
|---|---|---|---|---|
| 2 units | 8GK9920-0KK26 | ■ | ■ | ■ |

**Failsafe kit ALPHA**

- Self-tapping screws, captive nuts, hinges for covers, covers etc.

| Article No. | 125 | 630 | 800 |
|---|---|---|---|
| 8GK9920-0KK32 | ■ | ■ | ■ |

**Wall-mounting brackets**

| Article No. | 125 | 630 | 800 |
|---|---|---|---|
| 8GK9920-0KK33 | ■ | ■ | ■ |

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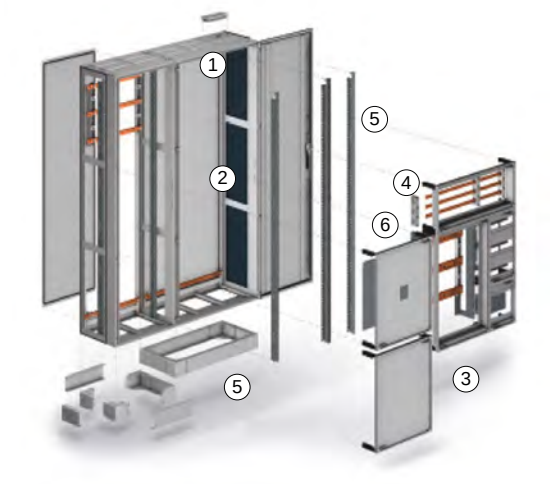

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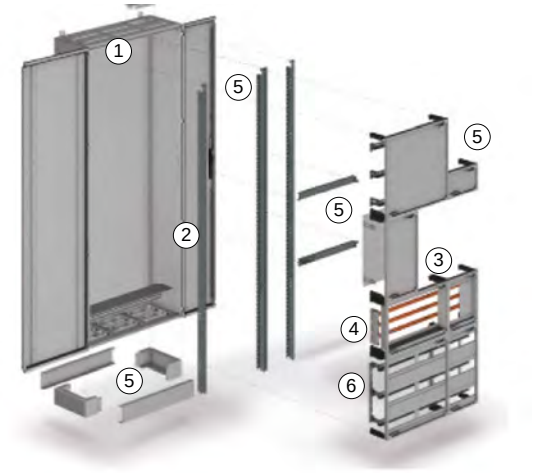

# System overview

## Distribution boards, assembly kits and accessories

### ALPHA 1250




### ALPHA 630




## ❶ Unequipped distribution boards


ALPHA 1250


ALPHA 630


ALPHA 630


ALPHA 400


ALPHA 160


ALPHA SIMBOX XL and WP

## ❷ Quick-assembly kits


ALPHA 1250/630/400


ALPHA 160

## ❸ Assembly kits


For modular installation devices


For terminal blocks


For fuse switch disconnectors


For switch disconnectors

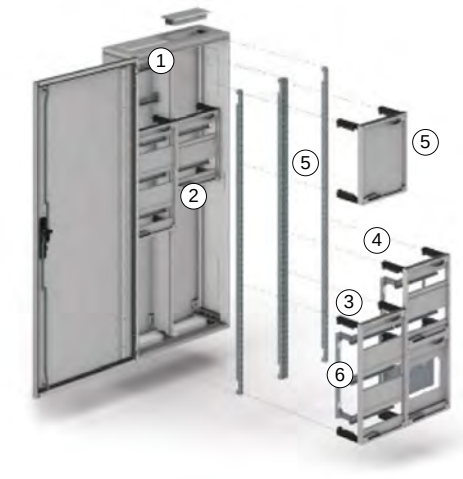

For molded case circuit breakers


For busbar-adaptable units

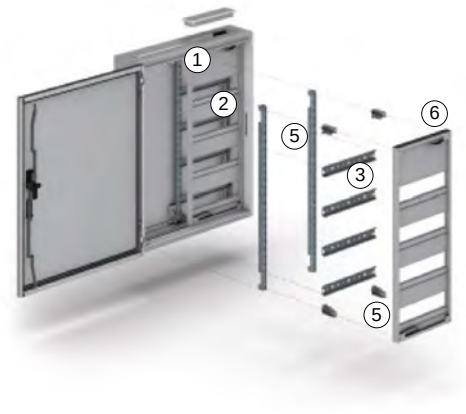
**Note:**
You will find a detailed range of accessories with the basic units and in the Accessories section.

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## ALPHA 400




## ALPHA 160



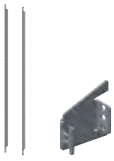

## ❹ Busbars


Cu busbars

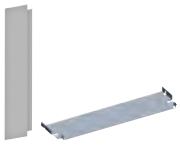

Busbar supports

## ❺ Mechanical accessories


Bases


Stays


Crossbars

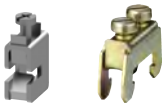

Partitions


Front covers


Locking systems

## ❻ Electrical accessories


N and PE terminals


Terminals


N/PE bars


Flanges


Cable entries


Cable holders

**Note:**
You will find a detailed range of accessories with the basic units and in the Accessories section.

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# Special colors for ALPHA

## Additional options

To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

**8GK.....-.....-.... -Z**

| | | | Order code | | |
|---|---|---|---|---|---|
| | | | | | |
| | **RAL 1003, signal yellow** | | C | 2 | 7 |
| | **RAL 2000, yellow orange** | | C | 2 | 5 |
| | **RAL 3000, flame red** | | C | 3 | 1 |
| | **RAL 5005, signal blue** | | C | 2 | 3 |
| | **RAL 5010, gentian blue** | | C | 2 | 4 |
| | **RAL 5017, traffic blue** | | C | 2 | 2 |
| | **RAL 6018, yellow green** | | C | 2 | 6 |
| | **RAL 7032, pebble gray** | | C | 1 | 3 |
| | **RAL 7033, cement gray** | | C | 2 | 8 |
| | **RAL 7035, light gray** | Smooth | C | 1 | 1 |
| | | Surface structure | C | 1 | 2 |
| | **RAL 7038, agate gray** | | C | 1 | 4 |
| | **RAL 9001, cream** | | C | 2 | 1 |
| | **RAL 9002, gray white** | | C | 1 | 9 |
| | **RAL 9003, signal white** | | C | 2 | 0 |
| | **RAL 9005, jet black** | | C | 1 | 7 |
| | **RAL 9010, pure white** | Smooth | C | 1 | 5 |
| | | Surface structure | C | 3 | 0 |
| | **RAL 9016, traffic white** | | C | 1 | 0 |

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# ALPHA 1250 floor-mounted distribution boards

## Rated current 1250 A

| | | | | | | Unequipped distribution boards | Unequipped distribution boards for isolating transformers | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | With open side panel | With open side panel | With closed side panel |
| | | | | | Degree of protection | IP55 | IP30 | IP30 |
| | | | | | |  |  |  |
| Height | | Depth | Tiers/MW | Width | | Protection class I | Protection class I | Protection class I |
| Outside | Inside | Outside | | Outside | Inside | | | |
| 1950 mm | 1800 mm | 400 mm | 12/144 | 300 mm | 250 mm | 8GK1423-8KK15 | 8GK1483-8KP15 | 8GK1483-8KN15 |
| | | | 24/288 | 550 mm | 500 mm | 8GK1423-8KK25 | 8GK1483-8KP25 | 8GK1483-8KN25 |
| | | | 36/432 | 800 mm | 750 mm | 8GK1423-8KK35 | 8GK1483-8KP35 | 8GK1483-8KN35 |
| | | | 48/576 | 1050 mm | 1000 mm | 8GK1423-8KK45 | 8GK1483-8KP45 | 8GK1483-8KN45 |
| | | | 60/720 | 1300 mm | 1250 mm | 8GK1423-8KK55 | – | – |

## Accessories

**Spare part doors**



| Height | Cubicle width | Door version | Door width | Article No. |
|---|---|---|---|---|
| 1950 mm | 300 mm | Complete | 300 mm | 8GK9513-8KK10 |
| | 550 mm | Complete | 550 mm | 8GK9513-8KK20 |
| | 800 mm | Left | 525 mm | 8GK9513-8KK30 |
| | | Right | 275 mm | 8GK9513-8KK40 |
| | 1050 mm | Left | 525 mm | 8GK9513-8KK30 |
| | | Right | 525 mm | 8GK9513-8KK50 |
| | 1300 mm | Left | 775 mm | 8GK9513-8KK60 |
| | | Right | 525 mm | 8GK9513-8KK50 |

**Side panels, modular distribution board**



| Depth | Article No. |
|---|---|
| 400 mm | 8GK9520-0KK05 |

**Assembly kits for masking frame for front cover**



- For mounting the mounting stays at the rear of the modular distribution board

| Height | Width | Article No. |
|---|---|---|
| 1800 mm | 250 mm | 8GK9913-0KK10 |
| | 500 mm | 8GK9913-0KK20 |
| | 750 mm | 8GK9913-0KK30 |
| | 1000 mm | 8GK9913-0KK40 |
| | 1250 mm | 8GK9913-0KK50 |

**Flange for cable entry, IP55** see page 15/245

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## Busbar supports



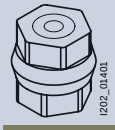
- Busbar spacing 100/185 mm

| Type | Article No. |
|---|---|
| With matching support plate for mounting on the rear panel | 8GK9720-0KK00 |
| Without support plate for mounting on the busbar (no fixing to the cabinet enclosure) | 8GK9720-0KK01 |

## PEN bar holders and N/PE busbar supports

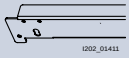
| Type | Article No. |
|---|---|
| PEN bar holder | 8GK9721-0KK00 |

## Pin insulator for N busbar




| Version | Article No. |
|---|---|
| 1P with M10 female thread and holder | 8GK9110-0KK00 |

## Crossbar N/PEN pin insulators and/or holders for PEN bars




| Width | Article No. |
|---|---|
| 250 mm | 8GK4854-0KK10 |
| 500 mm | 8GK4854-0KK20 |
| 750 mm | 8GK4854-0KK30 |
| 1000 mm | 8GK4854-0KK40 |
| 1250 mm | 8GK4854-0KK50 |

## Longitudinal stays



| Height | Depth | Article No. |
|---|---|---|
| 1800 mm | 250/320/400 mm | 8GK4853-8KK02 |



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# ALPHA 1250 marshaling boxes

## Rated current 630 A

| | Marshaling boxes |
|---|---|
| **Degree of protection** | IP55 |



| Height<br>Outside | Depth<br>Outside | Width<br>Outside | <br>Inside | Protection class I |
|---|---|---|---|---|
| 500 mm | 400 mm | 300 mm | 250 mm | 8GK1383-1KK15 |
| | | 550 mm | 500 mm | 8GK1383-1KK25 |
| | | 800 mm | 750 mm | 8GK1383-1KK35 |
| | | 1050 mm | 1000 mm | 8GK1383-1KK45 |
| | | 1300 mm | 1250 mm | 8GK1383-1KK55 |
| 650 mm | 400 mm | 300 mm | 250 mm | 8GK1383-2KK15 |
| | | 550 mm | 500 mm | 8GK1383-2KK25 |
| | | 800 mm | 750 mm | 8GK1383-2KK35 |
| | | 1050 mm | 1000 mm | 8GK1383-2KK45 |
| | | 1300 mm | 1250 mm | 8GK1383-2KK55 |





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# ALPHA 630 floor-mounted distribution boards

## Rated current 630 A

| | Unequipped distribution boards<br>Welded and riveted | |
|---|---|---|
| Degree of protection | IP44 | |
| |  | |

| Height | | Depth | Tiers/MW | Width | | Protection class I | Protection class II |
|---|---|---|---|---|---|---|---|
| Outside | Inside | Outside | | Outside | Inside | | |
| 1950 mm | 1800 mm | 210 mm | 12/144 | 300 mm | 250 mm | 8GK1322-8KA12 | 8GK1332-8KA12 |
| | | | 24/288 | 550 mm | 500 mm | 8GK1322-8KA22 | 8GK1332-8KA22 |
| | | | 36/432 | 800 mm | 750 mm | 8GK1322-8KA32 | 8GK1332-8KA32 |
| | | | 48/576 | 1050 mm | 1000 mm | 8GK1322-8KA42 | 8GK1332-8KA42 |
| | | | 60/720 | 1300 mm | 1250 mm | 8GK1322-8KA52 | 8GK1332-8KA52 |
| | | 250 mm | 12/144 | 300 mm | 250 mm | – | – |
| | | | 24/288 | 550 mm | 500 mm | – | – |
| | | | 36/432 | 800 mm | 750 mm | – | – |
| | | | 48/576 | 1050 mm | 1000 mm | – | – |
| | | | 60/720 | 1300 mm | 1250 mm | – | – |
| | | 320 mm | 12/144 | 300 mm | 250 mm | – | – |
| | | | 24/288 | 550 mm | 500 mm | – | – |
| | | | 36/432 | 800 mm | 750 mm | – | – |
| | | | 48/576 | 1050 mm | 1000 mm | – | – |
| | | | 60/720 | 1300 mm | 1250 mm | – | – |

## Accessories

**Spare part doors**



| Height | Cubicle width | Door version | Door width | Article No. |
|---|---|---|---|---|
| 1950 mm | 300 mm | Complete | 300 mm | 8GK9513-8KK10 |
| | 550 mm | Complete | 550 mm | 8GK9513-8KK20 |
| | 800 mm | Left | 525 mm | 8GK9513-8KK30 |
| | | Right | 275 mm | 8GK9513-8KK40 |
| | 1050 mm | Left | 525 mm | 8GK9513-8KK30 |
| | | Right | 525 mm | 8GK9513-8KK50 |
| | 1300 mm | Left | 775 mm | 8GK9513-8KK60 |
| | | Right | 525 mm | 8GK9513-8KK50 |

**Side panels, modular distribution board**



| Depth | Article No. |
|---|---|
| 250/320 mm | 8GK9520-0KK03 |

**Assembly kits for masking frame for front cover**



| Height | Width | Article No. |
|---|---|---|
| 1800 mm | 250 mm | 8GK9913-0KK10 |
| | 500 mm | 8GK9913-0KK20 |
| | 750 mm | 8GK9913-0KK30 |
| | 1000 mm | 8GK9913-0KK40 |
| | 1250 mm | 8GK9913-0KK50 |





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| With closed side panel | | With open side panel | Flat pack | |
|---|---|---|---|---|
| IP55 | | IP55 | IP43 | |
|  | |  |  | |
| **Protection class I** | **Protection class II** | **Protection class I** | **Protection class I** | **Protection class II** |
| – | – | – | 8GK1302-8KK12 | 8GK1312-8KK12 |
| – | – | – | 8GK1302-8KK22 | 8GK1312-8KK22 |
| – | – | – | 8GK1302-8KK32 | 8GK1312-8KK32 |
| – | – | – | 8GK1302-8KK42 | 8GK1312-8KK42 |
| – | – | – | 8GK1302-8KK52 | 8GK1312-8KK52 |
| 8GK1323-8KN13 | 8GK1333-8KN13 | 8GK1323-8KP13 | – | – |
| 8GK1323-8KN23 | 8GK1333-8KN23 | 8GK1323-8KP23 | – | – |
| 8GK1323-8KN33 | 8GK1333-8KN33 | 8GK1323-8KP33 | – | – |
| 8GK1323-8KN43 | 8GK1333-8KN43 | 8GK1323-8KP43 | – | – |
| 8GK1323-8KN53 | 8GK1333-8KN53 | 8GK1323-8KP53 | – | – |
| 8GK1323-8KN14 | 8GK1333-8KN14 | 8GK1323-8KP14 | – | – |
| 8GK1323-8KN24 | 8GK1333-8KN24 | 8GK1323-8KP24 | – | – |
| 8GK1323-8KN34 | 8GK1333-8KN34 | 8GK1323-8KP34 | – | – |
| 8GK1323-8KN44 | 8GK1333-8KN44 | 8GK1323-8KP44 | – | – |
| 8GK1323-8KN54 | 8GK1333-8KN54 | 8GK1323-8KP54 | – | – |



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# ALPHA 630 marshaling boxes

## Rated current 630 A

| | | | | Marshaling boxes | |
|---|---|---|---|---|---|
| | | | Degree of protection | IP43 | IP55 |
| | | | |  |  |
| **Height** Outside | **Depth** Outside | **Width** Outside | Inside | **Protection class I** | **Protection class I** |
| 350 mm | 210 mm [1] | 300 mm | 250 mm | 8GK1382-0KK12 | – |
| | | 550 mm | 500 mm | 8GK1382-0KK22 | – |
| | | 800 mm | 750 mm | 8GK1382-0KK32 | – |
| | | 1050 mm | 1000 mm | 8GK1382-0KK42 | – |
| | | 1300 mm | 1250 mm | 8GK1382-0KK52 | – |
| | 250 mm | 300 mm | 250 mm | – | 8GK1383-0KK13 |
| | | 550 mm | 500 mm | – | 8GK1383-0KK23 |
| | | 800 mm | 750 mm | – | 8GK1383-0KK33 |
| | | 1050 mm | 1000 mm | – | 8GK1383-0KK43 |
| | | 1300 mm | 1250 mm | – | 8GK1383-0KK53 |
| | 320 mm | 300 mm | 250 mm | – | 8GK1383-0KK14 |
| | | 550 mm | 500 mm | – | 8GK1383-0KK24 |
| | | 800 mm | 750 mm | – | 8GK1383-0KK34 |
| | | 1050 mm | 1000 mm | – | 8GK1383-0KK44 |
| | | 1300 mm | 1250 mm | – | 8GK1383-0KK54 |
| 500 mm | 250 mm | 300 mm | 250 mm | – | 8GK1383-1KK13 |
| | | 550 mm | 500 mm | – | 8GK1383-1KK23 |
| | | 800 mm | 750 mm | – | 8GK1383-1KK33 |
| | | 1050 mm | 1000 mm | – | 8GK1383-1KK43 |
| | | 1300 mm | 1250 mm | – | 8GK1383-1KK53 |
| | 320 mm | 300 mm | 250 mm | – | 8GK1383-1KK14 |
| | | 550 mm | 500 mm | – | 8GK1383-1KK24 |
| | | 800 mm | 750 mm | – | 8GK1383-1KK34 |
| | | 1050 mm | 1000 mm | – | 8GK1383-1KK44 |
| | | 1300 mm | 1250 mm | – | 8GK1383-1KK54 |
| 650 mm | 250 mm | 300 mm | 250 mm | – | 8GK1383-2KK13 |
| | | 550 mm | 500 mm | – | 8GK1383-2KK23 |
| | | 800 mm | 750 mm | – | 8GK1383-2KK33 |
| | | 1050 mm | 1000 mm | – | 8GK1383-2KK43 |
| | | 1300 mm | 1250 mm | – | 8GK1383-2KK53 |
| | 320 mm | 300 mm | 250 mm | – | 8GK1383-2KK14 |
| | | 550 mm | 500 mm | – | 8GK1383-2KK24 |
| | | 800 mm | 750 mm | – | 8GK1383-2KK34 |
| | | 1050 mm | 1000 mm | – | 8GK1383-2KK44 |
| | | 1300 mm | 1250 mm | – | 8GK1383-2KK54 |

[1] For flat pack distribution boards only



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# ALPHA 400 distribution boards

## Rated current 400 A

| | Surface-mounting distribution boards<br>Flat pack | |
|---|---|---|
| **Degree of protection** | IP43 | |
| |  | |

| Height<br>Outside | Inside | Depth<br>Outside | Tiers/MW | Width<br>Outside | Inside | Protection class I | Protection class II |
|---|---|---|---|---|---|---|---|
| 500 mm | 450 mm | 210 mm | 3/36 | 300 mm | 250 mm | – | – |
| | | | 6/72 | 550 mm | 500 mm | – | – |
| 650 mm | 600 mm | 210 mm | 4/48 | 300 mm | 250 mm | 8GK1102-2KK12 | 8GK1112-2KK12 |
| | | | 8/96 | 550 mm | 500 mm | 8GK1102-2KK22 | 8GK1112-2KK22 |
| | | | 12/144 | 800 mm | 750 mm | 8GK1102-2KK32 | 8GK1112-2KK32 |
| | | | 16/192 | 1050 mm | 1000 mm | 8GK1102-2KK42 | 8GK1112-2KK42 |
| 800 mm | 750 mm | 210 mm | 5/60 | 300 mm | 250 mm | 8GK1102-3KK12 | 8GK1112-3KK12 |
| | | | 10/120 | 550 mm | 500 mm | 8GK1102-3KK22 | 8GK1112-3KK22 |
| | | | 15/180 | 800 mm | 750 mm | 8GK1102-3KK32 | 8GK1112-3KK32 |
| | | | 20/240 | 1050 mm | 1000 mm | 8GK1102-3KK42 | 8GK1112-3KK42 |
| 950 mm | 900 mm | 210 mm | 6/72 | 300 mm | 250 mm | 8GK1102-4KK12 | 8GK1112-4KK12 |
| | | | 12/144 | 550 mm | 500 mm | 8GK1102-4KK22 | 8GK1112-4KK22 |
| | | | 18/216 | 800 mm | 750 mm | 8GK1102-4KK32 | 8GK1112-4KK32 |
| | | | 24/288 | 1050 mm | 1000 mm | 8GK1102-4KK42 | 8GK1112-4KK42 |
| | | | 30/360 | 1300 mm | 1250 mm | 8GK1102-4KK52 | 8GK1112-4KK52 |
| 1100 mm | 1050 mm | 210 mm | 7/84 | 300 mm | 250 mm | 8GK1102-5KK12 | 8GK1112-5KK12 |
| | | | 14/168 | 550 mm | 500 mm | 8GK1102-5KK22 | 8GK1112-5KK22 |
| | | | 21/252 | 800 mm | 750 mm | 8GK1102-5KK32 | 8GK1112-5KK32 |
| | | | 28/336 | 1050 mm | 1000 mm | 8GK1102-5KK42 | 8GK1112-5KK42 |
| | | | 35/420 | 1300 mm | 1250 mm | 8GK1102-5KK52 | 8GK1112-5KK52 |
| 1250 mm | 1200 mm | 210 mm | 8/96 | 300 mm | 250 mm | 8GK1102-6KK12 | 8GK1112-6KK12 |
| | | | 16/192 | 550 mm | 500 mm | 8GK1102-6KK22 | 8GK1112-6KK22 |
| | | | 24/288 | 800 mm | 750 mm | 8GK1102-6KK32 | 8GK1112-6KK32 |
| | | | 32/384 | 1050 mm | 1000 mm | 8GK1102-6KK42 | 8GK1112-6KK42 |
| | | | 40/480 | 1300 mm | 1250 mm | 8GK1102-6KK52 | 8GK1112-6KK52 |
| 1400 mm | 1350 mm | 210 mm | 9/108 | 300 mm | 250 mm | 8GK1102-7KK12 | 8GK1112-7KK12 |
| | | | 18/216 | 550 mm | 500 mm | 8GK1102-7KK22 | 8GK1112-7KK22 |
| | | | 27/324 | 800 mm | 750 mm | 8GK1102-7KK32 | 8GK1112-7KK32 |
| | | | 36/432 | 1050 mm | 1000 mm | 8GK1102-7KK42 | 8GK1112-7KK42 |
| | | | 45/540 | 1300 mm | 1250 mm | 8GK1102-7KK52 | 8GK1112-7KK52 |





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| Unequipped distribution boards | | | | Flush-mounting distribution boards Unequipped distribution boards |
|---|---|---|---|---|
| IP44 | | IP55 | | IP31 |
|  | |  | |  |
| **Protection class I** | **Protection class II** | **Protection class I** | **Protection class II** | **Protection class I** |
| 8GK1122-1KA12 | – | – | – | – |
| 8GK1122-1KA22 | – | – | – | – |
| 8GK1122-2KA12 | 8GK1132-2KA12 | – | – | – |
| 8GK1122-2KA22 | 8GK1132-2KA22 | – | – | – |
| 8GK1122-2KA32 | 8GK1132-2KA32 | – | – | – |
| 8GK1122-2KA42 | 8GK1132-2KA42 | – | – | – |
| 8GK1122-3KA12 | 8GK1132-3KA12 | – | – | – |
| 8GK1122-3KA22 | 8GK1132-3KA22 | – | – | 8GK1121-3KK22 |
| 8GK1122-3KA32 | 8GK1132-3KA32 | – | – | 8GK1121-3KK32 |
| 8GK1122-3KA42 | 8GK1132-3KA42 | – | – | – |
| 8GK1122-4KA12 | 8GK1132-4KA12 | 8GK1123-4KA12 | 8GK1133-4KA12 | – |
| 8GK1122-4KA22 | 8GK1132-4KA22 | 8GK1123-4KA22 | 8GK1133-4KA22 | 8GK1121-4KK22 |
| 8GK1122-4KA32 | 8GK1132-4KA32 | 8GK1123-4KA32 | 8GK1133-4KA32 | 8GK1121-4KK32 |
| 8GK1122-4KA42 | 8GK1132-4KA42 | 8GK1123-4KA42 | 8GK1133-4KA42 | – |
| 8GK1122-4KA52 | 8GK1132-4KA52 | 8GK1123-4KA52 | 8GK1133-4KA52 | – |
| 8GK1122-5KA12 | 8GK1132-5KA12 | 8GK1123-5KA12 | 8GK1133-5KA12 | – |
| 8GK1122-5KA22 | 8GK1132-5KA22 | 8GK1123-5KA22 | 8GK1133-5KA22 | – |
| 8GK1122-5KA32 | 8GK1132-5KA32 | 8GK1123-5KA32 | 8GK1133-5KA32 | – |
| 8GK1122-5KA42 | 8GK1132-5KA42 | 8GK1123-5KA42 | 8GK1133-5KA42 | – |
| 8GK1122-5KA52 | 8GK1132-5KA52 | 8GK1123-5KA52 | 8GK1133-5KA52 | – |
| 8GK1122-6KA12 | 8GK1132-6KA12 | 8GK1123-6KA12 | 8GK1133-6KA12 | – |
| 8GK1122-6KA22 | 8GK1132-6KA22 | 8GK1123-6KA22 | 8GK1133-6KA22 | 8GK1121-6KK22 |
| 8GK1122-6KA32 | 8GK1132-6KA32 | 8GK1123-6KA32 | 8GK1133-6KA32 | 8GK1121-6KK32 |
| 8GK1122-6KA42 | 8GK1132-6KA42 | 8GK1123-6KA42 | 8GK1133-6KA42 | – |
| 8GK1122-6KA52 | 8GK1132-6KA52 | 8GK1123-6KA52 | 8GK1133-6KA52 | – |
| 8GK1122-7KA12 | 8GK1132-7KA12 | 8GK1123-7KA12 | 8GK1133-7KA12 | – |
| 8GK1122-7KA22 | 8GK1132-7KA22 | 8GK1123-7KA22 | 8GK1133-7KA22 | 8GK1121-7KK22 |
| 8GK1122-7KA32 | 8GK1132-7KA32 | 8GK1123-7KA32 | 8GK1133-7KA32 | 8GK1121-7KK32 |
| 8GK1122-7KA42 | 8GK1132-7KA42 | 8GK1123-7KA42 | 8GK1133-7KA42 | – |
| 8GK1122-7KA52 | 8GK1132-7KA52 | 8GK1123-7KA52 | 8GK1133-7KA52 | – |



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# ALPHA 400 distribution boards

## Rated current 400 A

### Accessories

**Spare part doors**



| Height | Cubicle width | Door version | Door width | Article No. |
|---|---|---|---|---|
| 950 mm | 300 mm | Complete | 300 mm | 8GK9510-6KK10 |
| | 550 mm | Complete | 550 mm | 8GK9510-6KK20 |
| | 800 mm | Left | 525 mm | 8GK9510-6KK31 |
| | | Right | 275 mm | 8GK9510-6KK42 |
| | 1050 mm | Left | 525 mm | 8GK9510-6KK31 |
| | | Right | 525 mm | 8GK9510-6KK52 |
| | 1300 mm | Left | 775 mm | 8GK9510-6KK51 |
| | | Right | 525 mm | 8GK9510-6KK52 |
| 1100 mm | 300 mm | Complete | 300 mm | 8GK9510-7KK10 |
| | 550 mm | Complete | 550 mm | 8GK9510-7KK20 |
| | 800 mm | Left | 525 mm | 8GK9510-7KK31 |
| | | Right | 275 mm | 8GK9510-7KK32 |
| | 1050 mm | Left | 525 mm | 8GK9510-7KK31 |
| | | Right | 525 mm | 8GK9510-7KK42 |
| | 1300 mm | Left | 775 mm | 8GK9510-7KK41 |
| | | Right | 525 mm | 8GK9510-7KK42 |
| 1250 mm | 300 mm | Complete | 300 mm | 8GK9510-8KK10 |
| | 550 mm | Complete | 550 mm | 8GK9510-8KK20 |
| | 800 mm | Left | 525 mm | 8GK9510-8KK31 |
| | | Right | 275 mm | 8GK9510-8KK32 |
| | 1050 mm | Left | 525 mm | 8GK9510-8KK31 |
| | | Right | 525 mm | 8GK9510-8KK52 |
| | 1300 mm | Left | 775 mm | 8GK9510-8KK41 |
| | | Right | 525 mm | 8GK9510-8KK52 |
| 1400 mm | 300 mm | Complete | 300 mm | 8GK9510-8KK16 |
| | 550 mm | Complete | 550 mm | 8GK9510-8KK26 |
| | 800 mm | Left | 525 mm | 8GK9510-8KK37 |
| | | Right | 275 mm | 8GK9510-8KK38 |
| | 1050 mm | Left | 525 mm | 8GK9510-8KK37 |
| | | Right | 525 mm | 8GK9510-8KK58 |
| | 1300 mm | Left | 775 mm | 8GK9510-8KK47 |
| | | Right | 525 mm | 8GK9510-8KK58 |





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# ALPHA 160 distribution boards

## Rated current 160 A

**Surface-mounting distribution boards**
**Unequipped distribution boards**

**Degree of protection** IP44



| Height | | Depth | Tiers/MW | Width | | Protection class II |
|---|---|---|---|---|---|---|
| Outside | Inside | Outside | (MW = 18 mm) | Outside | Inside | |
| 500 mm | 450 mm | 140 mm | 3/36 | 300 mm | 250 mm | 8GK1032-1KK11 |
| | | | 3/72 | 550 mm | 500 mm | 8GK1032-1KK21 |
| | | | 3/108 | 800 mm | 750 mm | 8GK1032-1KK31 |
| 650 mm | 600 mm | 140 mm | 4/48 | 300 mm | 250 mm | 8GK1032-2KK11 |
| | | | 4/96 | 550 mm | 500 mm | 8GK1032-2KK21 |
| | | | 4/144 | 800 mm | 750 mm | 8GK1032-2KK31 |
| | | | 4/192 | 1050 mm | 1000 mm | 8GK1032-2KK41 |
| 800 mm | 750 mm | 140 mm | 5/60 | 300 mm | 250 mm | 8GK1032-3KK11 |
| | | | 5/120 | 550 mm | 500 mm | 8GK1032-3KK21 |
| | | | 5/180 | 800 mm | 750 mm | 8GK1032-3KK31 |
| | | | 5/240 | 1050 mm | 1000 mm | 8GK1032-3KK41 |
| 950 mm | 900 mm | 140 mm | 6/72 | 300 mm | 250 mm | 8GK1032-4KK11 |
| | | | 6/144 | 550 mm | 500 mm | 8GK1032-4KK21 |
| | | | 6/216 | 800 mm | 750 mm | 8GK1032-4KK31 |
| | | | 6/288 | 1050 mm | 1000 mm | 8GK1032-4KK41 |
| 1100 mm | 1050 mm | 140 mm | 7/84 | 300 mm | 250 mm | 8GK1032-5KK11 |
| | | | 7/168 | 550 mm | 500 mm | 8GK1032-5KK21 |
| | | | 7/252 | 800 mm | 750 mm | 8GK1032-5KK31 |
| | | | 7/336 | 1050 mm | 1000 mm | 8GK1032-5KK41 |

**Flush-mounting distribution boards**
**Unequipped distribution boards**

**Degree of protection** IP31



| Height | | Depth | Tiers/MW | Width | | Protection class II |
|---|---|---|---|---|---|---|
| Outside | Inside | Outside | (MW = 18 mm) | Outside | Inside | |
| 558 mm | 450 mm | 120 mm | 3/36 | 358 mm | 250 mm | 8GK1031-1KK10 |
| | | | 3/72 | 608 mm | 500 mm | 8GK1031-1KK20 |
| 708 mm | 600 mm | 120 mm | 4/48 | 358 mm | 250 mm | 8GK1031-2KK10 |
| | | | 4/96 | 608 mm | 500 mm | 8GK1031-2KK20 |
| | | | 4/144 | 858 mm | 750 mm | 8GK1031-2KK30 |
| 858 mm | 750 mm | 120 mm | 5/60 | 358 mm | 250 mm | 8GK1031-3KK10 |
| | | | 5/120 | 608 mm | 500 mm | 8GK1031-3KK20 |
| | | | 5/180 | 858 mm | 750 mm | 8GK1031-3KK30 |
| | | | 5/240 | 1108 mm | 1000 mm | 8GK1031-3KK40 |
| 1008 mm | 900 mm | 120 mm | 6/72 | 358 mm | 250 mm | 8GK1031-4KK10 |
| | | | 6/144 | 608 mm | 500 mm | 8GK1031-4KK20 |
| | | | 6/216 | 858 mm | 750 mm | 8GK1031-4KK30 |
| | | | 6/288 | 1108 mm | 1000 mm | 8GK1031-4KK40 |
| 1158 mm | 1050 mm | 120 mm | 7/84 | 358 mm | 250 mm | 8GK1031-5KK10 |
| | | | 7/168 | 608 mm | 500 mm | 8GK1031-5KK20 |
| | | | 7/252 | 858 mm | 750 mm | 8GK1031-5KK30 |



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**Distribution boards with built-in distribution board panels**

| Tier spacing 125 mm with N/PE plug-in terminal | Tier spacing 150 mm without N/PE plug-in terminal | Tier spacing 150 mm terminal blocks at top | Tier spacing 125 mm multimedia field |
|---|---|---|---|
| IP44 | IP44 | IP44 | IP44 |
|  |  |  |  |
| **Protection class II** | **Protection class II** | **Protection class II** | **Protection class II** |
| 8GK1052-1KK11 | 8GK1062-1KK11 | – | – |
| 8GK1052-1KK21 | 8GK1062-1KK21 | – | – |
| 8GK1052-1KK31 | 8GK1062-1KK31 | – | – |
| 8GK1052-2KK11 | 8GK1062-2KK11 | – | – |
| 8GK1052-2KK21 | 8GK1062-2KK21 | – | 8GK1072-2KK21 |
| 8GK1052-2KK31 | 8GK1062-2KK31 | – | – |
| 8GK1052-2KK41 | 8GK1062-2KK41 | – | – |
| 8GK1052-3KK11 | 8GK1062-3KK11 | 8GK1082-3KK11 | – |
| 8GK1052-3KK21 | 8GK1062-3KK21 | 8GK1082-3KK21 | – |
| 8GK1052-3KK31 | 8GK1062-3KK31 | 8GK1082-3KK31 | 8GK1072-3KK31 |
| 8GK1052-3KK41 | 8GK1062-3KK41 | 8GK1082-3KK41 | – |
| 8GK1052-4KK11 | 8GK1062-4KK11 | 8GK1082-4KK11 | – |
| 8GK1052-4KK21 | 8GK1062-4KK21 | 8GK1082-4KK21 | – |
| 8GK1052-4KK31 | 8GK1062-4KK31 | 8GK1082-4KK31 | – |
| 8GK1052-4KK41 | 8GK1062-4KK41 | 8GK1082-4KK41 | – |
| 8GK1052-5KK11 | 8GK1062-5KK11 | 8GK1082-5KK11 | – |
| 8GK1052-5KK21 | 8GK1062-5KK21 | 8GK1082-5KK21 | – |
| 8GK1052-5KK31 | 8GK1062-5KK31 | 8GK1082-5KK31 | – |
| 8GK1052-5KK41 | 8GK1062-5KK41 | 8GK1082-5KK41 | – |

**Distribution boards with built-in distribution board panels**

| Tier spacing 125 mm with N/PE plug-in terminal | Tier spacing 150 mm without N/PE plug-in terminal | Tier spacing 150 mm terminal blocks at top | Tier spacing 125 mm multimedia field |
|---|---|---|---|
| IP31 | IP31 | IP31 | IP31 |
|  |  |  |  |
| **Protection class II** | **Protection class II** | **Protection class II** | **Protection class II** |
| 8GK1051-1KK10 | 8GK1061-1KK10 | – | – |
| 8GK1051-1KK20 | 8GK1061-1KK20 | – | – |
| 8GK1051-2KK10 | 8GK1061-2KK10 | – | – |
| 8GK1051-2KK20 | 8GK1061-2KK20 | – | – |
| 8GK1051-2KK30 | 8GK1061-2KK30 | – | – |
| 8GK1051-3KK10 | 8GK1061-3KK10 | 8GK1081-3KK10 | – |
| 8GK1051-3KK20 | 8GK1061-3KK20 | 8GK1081-3KK20 | 8GK1072-3KK20 |
| 8GK1051-3KK30 | 8GK1061-3KK30 | 8GK1081-3KK30 | 8GK1072-3KK30 |
| 8GK1051-3KK40 | 8GK1061-3KK40 | 8GK1081-3KK40 | – |
| 8GK1051-4KK10 | 8GK1061-4KK10 | 8GK1081-4KK10 | – |
| 8GK1051-4KK20 | 8GK1061-4KK20 | 8GK1081-4KK20 | – |
| 8GK1051-4KK30 | 8GK1061-4KK30 | 8GK1081-4KK30 | 8GK1072-4KK30 |
| 8GK1051-4KK40 | 8GK1061-4KK40 | 8GK1081-4KK40 | – |
| 8GK1051-5KK10 | 8GK1061-5KK10 | 8GK1081-5KK10 | – |
| 8GK1051-5KK20 | 8GK1061-5KK20 | 8GK1081-5KK20 | – |
| 8GK1051-5KK30 | 8GK1061-5KK30 | 8GK1081-5KK30 | – |

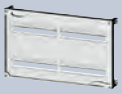
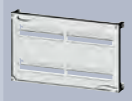


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# Assembly kits

## For modular installation devices

| | | | | ALPHA 1250/630/400 | | ALPHA 160 | |
|---|---|---|---|---|---|---|---|
| | | | Tier spacing | 125 mm | 150 mm | 125 mm | 150 mm |
| | | | |  |  |  |  |
| **No. of tiers** | **MW** | **Height Outside** | **Width Outside** | | | | |
| 1 | 12 | 150 mm | 250 mm | – | 8GK4351-1KK12 | – | 8GK4351-1KK11 |
| | 24 | 150 mm | 500 mm | – | 8GK4351-1KK22 | – | 8GK4351-1KK21 |
| | 36 | 150 mm | 750 mm | – | 8GK4351-1KK32 | – | – |
| 2 | 24 | 300 mm | 250 mm | 8GK4301-2KK12 | 8GK4351-2KK12 | 8GK4301-2KK11 | 8GK4351-2KK11 |
| | 48 | 300 mm | 500 mm | 8GK4301-2KK22 | 8GK4351-2KK22 | 8GK4301-2KK21 | 8GK4351-2KK21 |
| | 72 | 300 mm | 750 mm | – | 8GK4351-2KK32 | – | – |
| 3 | 36 | 450 mm | 250 mm | 8GK4301-3KK12 | 8GK4351-3KK12 | 8GK4301-3KK11 | 8GK4351-3KK11 |
| | 72 | 450 mm | 500 mm | 8GK4301-3KK22 | 8GK4351-3KK22 | 8GK4301-3KK21 | 8GK4351-3KK21 |
| | 108 | 450 mm | 750 mm | – | 8GK4351-3KK32 | – | – |
| 4 | 48 | 600 mm | 250 mm | 8GK4301-4KK12 | 8GK4351-4KK12 | 8GK4301-4KK11 | 8GK4351-4KK11 |
| | 96 | 600 mm | 500 mm | 8GK4301-4KK22 | 8GK4351-4KK22 | 8GK4301-4KK21 | 8GK4351-4KK21 |
| | 144 | 600 mm | 750 mm | – | 8GK4351-4KK32 | – | – |

## For terminal blocks

| | | ALPHA 1250/630/400 | | ALPHA 160 |
|---|---|---|---|---|
| | |  |  |  |
| **Height Outside** | **Width Outside** | **Horizontal** | **Vertical** | **Horizontal** |
| 150 mm | 250 mm | 8GK4401-1KK12 | – | 8GK4401-1KK11 |
| | 500 mm | – | – | 8GK4401-1KK21 |
| 300 mm | 250 mm | 8GK4401-2KK12 | 8GK4402-2KK12 | 8GK4401-2KK11 |
| | 500 mm | 8GK4401-2KK22 | 8GK4402-2KK22 | 8GK4401-2KK21 |
| | 750 mm | 8GK4401-2KK32 | 8GK4402-2KK32 | – |
| 450 mm | 250 mm | 8GK4401-3KK12 | 8GK4402-3KK12 | – |
| | 500 mm | 8GK4401-3KK22 | 8GK4402-3KK22 | – |
| | 750 mm | 8GK4401-3KK32 | 8GK4402-3KK32 | – |
| 600 mm | 250 mm | – | 8GK4402-4KK12 | – |
| | 500 mm | – | 8GK4402-4KK22 | – |
| | 750 mm | – | 8GK4402-4KK32 | – |





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## With mounting plates

| Mounting plates | | | Assembly kits | | ALPHA 1250/630/400 | ALPHA 160 |
|---|---|---|---|---|---|---|
| Height | Width | Front cover | Height outside | Width outside | | |
| 245 mm | 207.5 mm | Closed | 300 mm | 250 mm | 8GK4451-2KK12 | 8GK4451-2KK11 |
| | 457.5 mm | Closed | 300 mm | 500 mm | 8GK4451-2KK22 | – |
| | 707.5 mm | Closed | 300 mm | 750 mm | 8GK4451-2KK32 | – |
| 395 mm | 207.5 mm | Closed | 450 mm | 250 mm | 8GK4451-3KK12 | 8GK4451-3KK11 |
| | 457.5 mm | Closed | 450 mm | 500 mm | 8GK4451-3KK22 | – |
| | 707.5 mm | Closed | 450 mm | 750 mm | 8GK4451-3KK32 | – |
| 545 mm | 207.5 mm | Closed | 600 mm | 250 mm | 8GK4451-4KK12 | 8GK4451-4KK11 |
| | 457.5 mm | Closed | 600 mm | 500 mm | 8GK4451-4KK22 | – |
| | 707.5 mm | Closed | 600 mm | 750 mm | 8GK4451-4KK32 | – |

## With mounting plates, perforated

| Mounting plates | | | Assembly kits | | ALPHA 1250/630/400 |
|---|---|---|---|---|---|
| Height | Width | Front cover | Height outside | Width outside | |
| 149 mm | 245 mm | – | 150 mm | 250 mm | 8GK4452-1KK12 |
| 299 mm | 245 mm | – | 300 mm | 250 mm | 8GK4452-2KK12 |
| 449 mm | 243 mm | – | 450 mm | 250 mm | 8GK4452-3KK12 |
| 899 mm | 243 mm | – | 900 mm | 250 mm | 8GK4452-6KK12 |

## For unequipped panels

| | | ALPHA 1250/630/400 | | | ALPHA 160 |
|---|---|---|---|---|---|
| Height Outside | Width Outside | Standard | With inspection window | With deep-drawn cover 40 mm | Standard |
| 75 mm | 250 mm | 8GK4501-0KK12 | – | – | – |
| | 500 mm | 8GK4501-0KK22 | – | – | – |
| 150 mm | 250 mm | 8GK4501-1KK12 | – | – | 8GK4501-1KK11 |
| | 500 mm | 8GK4501-1KK22 | – | – | 8GK4501-1KK21 |
| | 750 mm | 8GK4501-1KK32 | – | – | – |
| 300 mm | 250 mm | 8GK4501-2KK12 | 8GK4500-2KK12 | 8GK4501-2KK13 | 8GK4501-2KK11 |
| | 500 mm | 8GK4501-2KK22 | 8GK4500-2KK22 | 8GK4501-2KK23 | 8GK4501-2KK21 |
| | 750 mm | 8GK4501-2KK32 | – | 8GK4501-2KK33 | – |
| 450 mm | 250 mm | 8GK4501-3KK12 | 8GK4500-3KK12 | 8GK4501-3KK13 | 8GK4501-3KK11 |
| | 500 mm | 8GK4501-3KK22 | 8GK4500-3KK22 | 8GK4501-3KK23 | 8GK4501-3KK21 |
| | 750 mm | 8GK4501-3KK32 | – | 8GK4501-3KK33 | – |
| 600 mm | 250 mm | 8GK4501-4KK12 | 8GK4500-4KK12 | – | 8GK4501-4KK11 |
| | 500 mm | 8GK4501-4KK22 | 8GK4500-4KK22 | – | 8GK4501-4KK21 |
| | 750 mm | 8GK4501-4KK32 | – | – | – |
| 750 mm | 250 mm | 8GK4501-5KK12 | – | – | – |
| | 500 mm | 8GK4501-5KK22 | – | – | – |
| | 750 mm | 8GK4501-5KK32 | – | – | – |



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# Assembly kits

## For 3NP1 fuse switch disconnectors

| | | | | ALPHA 1250/630/400 | |
|---|---|---|---|---|---|
| | | | |  |  |
| **LV HRC fuse Size** | **Switches/breakers Quantity** | **Distribution board Height Outside** | **Width Outside** | **Mounting on support plate** | **on busbars [1)]** |
| 00/000 | 2 | 300 mm | 250 mm | 8GK4550-2KK12 | 8GK4650-2KK12 |
| | | 450 mm | 250 mm | – | 8GK4650-3KK12 |
| | 4 | 300 mm | 500 mm | 8GK4550-2KK22 | 8GK4650-2KK22 |
| | | 450 mm | 500 mm | – | 8GK4650-3KK22 |
| 1 | 1 | 450 mm | 250 mm | 8GK4550-3KK12 | 8GK4651-3KK12 |
| | 2 | 450 mm | 500 mm | 8GK4550-3KK22 | 8GK4651-3KK22 |
| 2 | 1 | 450 mm | 250 mm | 8GK4551-3KK12 | 8GK4652-3KK12 |
| 3 | 1 | 450 mm | 500 mm | 8GK4551-3KK22 | – |

[1)] For busbar support 8GK9711-0KK03

## Accessories

**Cover 3NP1123 ... size 000**



- Required for size 000 fuse switch disconnectors

| Article No. |
|---|
| 8GK9912-0KK00 |

**Busbar supports**





| Busbar center-to-center spacing | Number of poles | Article No. |
|---|---|---|
| 60 mm | 1-pole | 8GK9710-0KK00 |
| | 2-pole | 8GK9710-0KK01 |
| | 3-pole | 8GK9711-0KK03 |
| | 4-pole | 8GK9670-0KK00 |
| 40 mm | 5-pole | 8GK9650-0KK00 |

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# For 3NJ4 fuse switch disconnectors in in-line design

| | | | | | ALPHA 1250/630/400 | |
|---|---|---|---|---|---|---|
| | | | | Busbar center-to-center spacing | 100 mm | 185 mm |
| | | | | |  |  |
| **Switches/breakers** | **Number of 3NJ4 disconnectors** | | **Distribution board** | | | **Distribution board depth min. 320 mm** |
| **Size** | **With screw fixing** | **With fixing claws** | **Height Outside** | **Width Outside** | | |
| **Assembly kits for 3NJ4 fuse switch disconnectors** | | | | | | |
| NH00 | 4 | 3 | 600 mm | 250 mm | 8GK4751-4KK13 | – |
| | 9 | 8 | 600 mm | 500 mm | 8GK4751-4KK23 | – |
| | 14 | 13 | 600 mm | 750 mm | 8GK4751-4KK33 | – |
| NH1 – NH3 | 2 | – | 750 mm | 250 mm | – | 8GK4752-5KK15 |
| | 4 | 3 | 750 mm | 500 mm | – | 8GK4752-5KK25 |
| | 7 | 6 | 750 mm | 750 mm | – | 8GK4752-5KK35 |

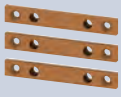
## Accessories

**Blanking covers**



| Switching device size | Busbar center-to-center spacing | Height | Width | Article No. |
|---|---|---|---|---|
| NH00 | 100 mm | 299 mm | 50 mm | 3NJ4912-2CA00 |
| NH1 – NH3 | 185 mm | 699 mm | 50 mm | 3NJ4912-2AA00 |
| | | | 100 mm | 3NJ4912-2BA00 |

**Ready-to-install copper bars**



| Switching device size | Distribution board width outside | Article No. |
|---|---|---|
| NH00 | 250 mm | 8GK9735-1KK10 |
| | 500 mm | 8GK9735-1KK20 |
| | 750 mm | 8GK9735-1KK30 |
| NH1 – NH3 | 250 mm | 8GK9735-2KK10 |
| | 500 mm | 8GK9735-2KK20 |
| | 750 mm | 8GK9735-2KK30 |

**Support plate for busbar supports**



| Switching device size | Installation | Article No. |
|---|---|---|
| NH00 | Left or right | 8GK9800-0KK06 |
| NH1 – NH3 | Left or right | 8GK9800-0KK07 |



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# Assembly kits

## For SR60 busbar-adaptable units

| | ALPHA 1250/630/400 |
|---|---|
| **Busbar center-to-center spacing** | 60 mm |



| Height<br>Outside | Width<br>Outside | |
|---|---|---|
| 300 mm | 250 mm | 8GK4801-2KK13 |
| | 500 mm | 8GK4801-2KK23 |
| | 750 mm | 8GK4801-2KK33 |
| 450 mm | 250 mm | 8GK4801-3KK13 |
| | 500 mm | 8GK4801-3KK23 |
| | 750 mm | 8GK4801-3KK33 |

### Accessories

**Supports for blanking covers**



| | Article No. |
|---|---|
| | 8US1922-2EA00 |

**Blanking covers**



| | Article No. |
|---|---|
| | 8US1922-2EB00 |

**Blanking covers**



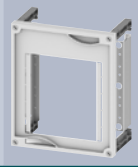
| Width | Article No. |
|---|---|
| 56 mm | 8GK9910-0KK08 |



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# For bus-mounting fuse bases, for mounting on busbar systems

| | | | | ALPHA 1250/630/400 | |
|---|---|---|---|---|---|
| | | | Busbar system | SR60, 60 mm | 8US, 60 mm |
| | | | |  |  |
| **Number of poles** | | **Height** | **Width** | | |
| **3P** | **4P** | **Outside** | **Outside** | | |
| ■ | – | 300 mm | 250 mm | 8GK4801-2KK12 | – |
| | | 450 mm | 250 mm | 8GK4801-3KK12 | – |
| | ■ | 300 mm | 250 mm | – | 8GK4800-2KK12 |
| | | | 500 mm | – | 8GK4800-2KK22 |
| | | | 750 mm | – | 8GK4800-2KK32 |

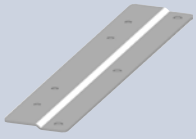
## Accessories

**Blanking covers**



| Width | Article No. |
|---|---|
| 56 mm | 8GK9910-0KK08 |

**Holding plates**



- For 4-pole busbar supports for mounting in section with height of 300 mm

| Article No. |
|---|
| 8GK9711-0KK07 |

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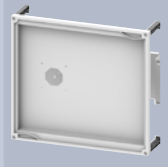
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# Assembly kits

## For 3KF switch disconnectors with fuses

| | | | | | | | ALPHA 1250/630/400 | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Operating mechanism | Front operating mechanism, center | Door-coupling rotary operating mechanism (mounted in the front cover) |
| | | | | | | |  |  |
| **Switches/breakers** | | | | **Distribution board** | | | | |
| **Size** | **Rated current** | **3P** | **4P** | **Height Outside** | **Width Outside** | **Depth Outside** | | |
| 3KF1 | 80 A | ■ | ■ | 300 mm | 250 mm | ≥ 210 mm | 8GK4722-2KK10 | – |
| 3KF2 | 160 A | ■ | ■ | 300 mm | 500 mm | ≥ 210 mm | 8GK4723-2KK10 | – |
| 3KF3 ... 3KF4 | 400 A | ■ | ■ | 300 mm | 500 mm | ≥ 320 mm | – | 8GK4722-2KK20 |

## For 3KD switch disconnectors

| | | | | | | | | ALPHA 1250/630/400 | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Operating mechanism | Direct operating mechanism | Door-coupling rotary operating mechanism (mounted in the front cover) |
| | | | | | | | |  |  |
| **Switches/breakers** | | | | | **Distribution board** | | | | |
| **Size** | **Rated current** | **Quantity** | **3P** | **4P** | **Height Outside** | **Width Outside** | **Depth Outside** | | |
| 1 | 16 ... 63 A | 2 | ■ | – | 300 mm | 250 mm | 210 mm | 8GK4720-2KK10 | – |
| 2 | 80 ... 200 A | 1 | ■ | ■ | 300 mm | 250 mm | 210 mm | 8GK4720-2KK10 | – |
| 3 | 200 ... 400 A | 1 | ■ | ■ | 300 mm | 250 mm | 210 mm | 8GK4721-2KK10 | – |
| 3 ... 4 | 200 ... 800 A | 1 | ■ | ■ | 450 mm | 500 mm | ≥ 250 mm | – | 8GK4720-3KK20 |





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## For 3KA switch disconnectors on support plate

| | | | | | | | ALPHA 1250/630/400 | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | **Operating mechanism** | Direct operating mechanism | Direct operating mechanism |
| | | | | | | |  |  |
| **Switches/breakers** | | | | | **Distribution board** | | | |
| **Size** | **Rated current** | **Quantity** | **3P** | **4P** | **Height Outside** | **Width Outside** | | |
| 3KA 50/51/52/53 | 63 A/80 A/ 125 A/160 A | 1 | ■ | – | 300 mm | 250 mm | 8GK4707-3KK17 | – |
| 3KA 55/57/58 | 250 A/400 A/ 630 A | 1 | ■ | ■ | 300 mm | 500 mm | – | 8GK4707-4KK27 |

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# Assembly kits

## For 3VL molded case circuit breakers

**ALPHA 1250/630/400**



| Switches/breakers | | | | | | Distribution board | | Standard |
|---|---|---|---|---|---|---|---|---|
| Size | Type | Rated current | Quantity | 3P | 4P | Height Outside | Width Outside | |
| 3VL1 | 3VL160X | 16 ... 160 A | 1 | ■ | ■ | 300 mm | 250 mm | 8GK4701-2KK12 |
| | | | | | | 450 mm | 250 mm | 8GK4701-3KK12 |
| 3VL2 | 3VL160 | 50 ... 160 A | 1 | ■ | ■ | 300 mm | 250 mm | 8GK4701-2KK12 |
| | | | | | | 450 mm | 250 mm | 8GK4701-3KK12 |
| 3VL3 | 3VL250 | 200 ... 250 A | 1 | ■ | ■ | 450 mm | 250 mm | 8GK4701-3KK12 |
| 3VL4 | 3VL400 | 200 ... 400 A | 1 | ■ | ■ | 600 mm | 250 mm | 8GK4702-4KK12 |
| | | | | | | 750 mm | 250 mm | – |
| 3VL5 | 3VL630 | 315 ... 630 A | 1 | ■ | – | 600 mm | 250 mm | 8GK4703-4KK13 |
| | | | 1 | ■ | ■ | 600 mm | 500 mm | 8GK4704-4KK13 |
| | | | 1 | ■ | – | 600 mm | 500 mm | – |
| | | | 1 | – | ■ | 600 mm | 500 mm | – |
| 3VL6 | 3VL800 | 800 A | 1 | ■ | – | 600 mm | 250 mm | 8GK4704-4KK15 |
| | | | 1 | ■ | ■ | 600 mm | 500 mm | 8GK4704-4KK25 |
| 3VL7 | 3VL1250 | 1000 ... 1250 A | 1 | ■ | ■ | 600 mm | 500 mm | 8GK4705-4KK25 |
| 3VL8 | 3VL1600 | 1600 A | 1 | ■ | ■ | 600 mm | 500 mm | 8GK4705-4KK25 |





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|  |  |
|---|---|
| **With RCD module mounted** | **For installation with front-operated rotary operating mechanism** |
| – | – |
| 8GK4720-3KK10 | 8GK4722-3KK10 |
| – | – |
| 8GK4721-3KK10 | 8GK4722-3KK10 |
| 8GK4721-3KK10 | 8GK4722-3KK10 |
| – | 8GK4722-4KK10 |
| 8GK4720-5KK10 | – |
| – | – |
| – | – |
| – | 8GK4723-4KK10 |
| – | 8GK4721-4KK20 |
| – | – |
| – | – |
| – | – |
| – | – |

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# Assembly kits

## For 3VA molded case circuit breakers, 3-pole and 4-pole

**ALPHA 1250/630/400**



| Switches/breakers | | | | | | Distribution board | | |
|---|---|---|---|---|---|---|---|---|
| Size | Rated current | Quantity | Direct operating mechanism | Rotary operating mechanism | Motorized operating mechanism | Height Outside | Width Outside | |
| 3VA10.., 3VA11.. | 100 ... 160 A | 1 | ■ | – | ■ | 300 mm [1] | 250 mm | 8GK4731-2KK12 [4] |
| | | | | | | 450 mm | 250 mm | 8GK4730-2KK12 [4] |
| | | | – | ■ | – | 300 mm [1] | 250 mm | 8GK4733-2KK12 |
| | | | – | – | ■ | 300 mm [1] | 250 mm | – |
| | | | | | | 450 mm | 250 mm | – |
| | | 3 | ■ | – | – | 300 mm [1] | 500 mm | 8GK4731-2KK22 |
| | | | | | | 450 mm | 500 mm | 8GK4730-2KK22 |
| | | | – | ■ | – | 300 mm [1] | 500 mm | 8GK4733-2KK22 |
| | | | – | – | ■ | 300 mm [1] | 500 mm | – |
| | | | | | | 450 mm | 500 mm | – |
| 3VA12 | 250 A | 1 | ■ | – | – | 300 mm | 250 mm | 8GK4732-2KK12 |
| | | | | | | 450 mm | 250 mm | 8GK4733-3KK10 |
| | | | – | ■ | – | 300 mm | 250 mm | 8GK4735-2KK12 |
| | | | – | – | ■ | 300 mm | 250 mm | – |
| | | | | | | 450 mm | 250 mm | – |
| | | | | | | 600 mm | 250 mm | – |
| | | 3 | ■ | – | – | 300 mm | 500 mm | 8GK4732-2KK22 |
| | | | | | | 450 mm | 500 mm | 8GK4731-3KK20 |
| | | | – | ■ | – | 300 mm | 500 mm | 8GK4735-2KK22 |
| | | | – | – | ■ | 300 mm | 500 mm | – |
| 3VA20.., 3VA22.. | 100 ... 250 A | 1 | ■ | – | – | 300 mm | 250 mm | 8GK4730-3KK10 |
| | | | – | ■ | – | 300 mm | 250 mm | 8GK4736-2KK12 |
| | | | – | – | ■ | 600 mm | 250 mm | – |
| | | 3 | ■ | – | – | 300 mm | 500 mm | 8GK4730-3KK20 |
| | | | – | ■ | – | 300 mm | 500 mm | 8GK4736-2KK22 |
| | | | – | – | ■ | 600 mm | 500 mm | – |
| 3VA23.., 3VA24.. | 400 ... 630 A | 1 | ■ | – | – | 450 mm | 250 mm | 8GK4730-4KK12 |
| | | | | | | | 500 mm | 8GK4730-4KK22 |
| | | | – | ■ | – | 450 mm | 500 mm | 8GK4733-4KK22 |
| | | | – | – | ■ | 450 mm | 250 mm | – |
| | | | | | | | 500 mm | – |
| | | | | | | 600 mm | 250 mm | – |
| | | | | | | | 500 mm | – |

[1] For insulated connection only
[2] Distribution board depth at least 250 mm
[3] Distribution board depth at least 320 mm
[4] With side mounted motorized operating mechanism

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| |  |  | |  | |
|---|---|---|---|---|---|
| | **With RCD module Infeed side** | **At side** | | **With RCD module Infeed side** | **At side** |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| 8GK4734-2KK12 [2] | – | – | – | – | – |
| – | 8GK4731-3KK12 [4] | 8GK4731-3KK10 | 8GK4734-3KK12 [2] | – | |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| 8GK4734-2KK22 [2] | – | – | – | – | – |
| – | 8GK4731-3KK22 | – | 8GK4734-3KK22 [2] | – | |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| 8GK4735-3KK10 [2] | – | – | – | – | – |
| – | – | – | – | 8GK4733-4KK10 [2] | |
| – | 8GK4732-4KK10 | – | 8GK4736-4KK12 | – | |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| 8GK4732-3KK20 [2] | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | 8GK4735-4KK12 | – | – | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | 8GK4735-4KK22 | – | 8GK4736-4KK22 [3] | – | |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| – | – | – | – | – | – |
| 8GK4734-4KK12 [3] | – | – | – | – | – |
| 8GK4734-4KK22 [3] | – | – | – | – | – |
| – | 8GK4731-4KK12 | – | – | – | – |
| – | 8GK4731-4KK22 | – | – | – | – |



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# Assembly kits

## For meter mounting without top and bottom terminal compartment

**ALPHA 630**

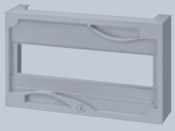


| Height<br>Outside | Width<br>Outside | |
|---|---|---|
| 450 mm | 250 mm | 8GE3713-4 |

## For meter mounting with top and bottom terminal compartment

**ALPHA ZS**

Covers



| Height | Width | Top/bottom terminal compartment |
|---|---|---|
| 150 mm | 250 mm | 8GS4006-0 |
| 300 mm | 250 mm | 8GS4006-5 |

**ALPHA ZS**

Meter support plate



| Height | Width | Position | 1 × Counter | 2 × Counter | TSG |
|---|---|---|---|---|---|
| 450 mm | 250 mm | – | 8GS4007-4 | – | – |
| 375 mm | 250 mm | Top | – | 8GS4007-5 | – |
| | | Bottom | – | 8GS4007-6 | – |
| 300 mm | 250 mm | – | – | – | 8GS4007-7 |



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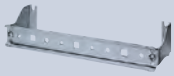

## Accessories

**Supports for front cover**



| Article No. |
|---|
| 8GS4018-8 |

**DIN rails**



| Article No. |
|---|
| 8GS4010-6 |

**Partition for meter field, lateral (only protection class 1) new**

| Article No. |
|---|
| 8GK9302-3KK01 |

**Retrofit kit for busbar supports for one panel width**



| | Article No. |
|---|---|
| For copper busbars with cross-sections 12 × 5 mm² und 12 × 10 mm² | 8GS4018-3 |

## Front covers for measuring devices

**ALPHA 1250/630/400**



| Use | Height Outside | Width Outside | Cutout dimensions | |
|---|---|---|---|---|
| 1 × measuring device 96 × 96 mm | 300 mm | 500 mm | 92 × 92 mm | 8GK4500-2KK20 |

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## For cable connections to the door

**ALPHA 1250/630/400**



| Height | Width | Diameter | |
|---|---|---|---|
| 150 mm | 250 mm | M20 | 8GK4500-1KK12 |
| | 500 mm | M20 | 8GK4500-1KK22 |

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# Quick-assembly kits

## For modular installation devices and terminal blocks

| | | | | | ALPHA 400 | |
|---|---|---|---|---|---|---|
| | | | | Tier spacing | 125 mm | |
| | | | | |  |  |
| **Height Outside** | **Width Outside** | **No. of tiers** | **Terminals** | **MW** | **With N/PE bar** | **With 2 N/PE bars** |
| **For modular installation devices** | | | | | | |
| 450 mm | 250 mm | 3 | – | 36 | 8GK4001-3KK11 | – |
| 600 mm | 250 mm | 4 | – | 48 | 8GK4001-4KK11 | – |
| | 500 mm | 8 | – | 96 | 8GK4001-4KK22 | – |
| 750 mm | 250 mm | 5 | – | 60 | 8GK4001-5KK11 | – |
| | 500 mm | 10 | – | 120 | 8GK4001-5KK22 | – |
| 900 mm | 250 mm | 6 | – | 72 | 8GK4001-6KK11 | 8GK4003-6KK11 |
| | 500 mm | 12 | – | 144 | 8GK4001-6KK22 | – |
| 1050 mm | 250 mm | 7 | – | 84 | 8GK4001-7KK11 | 8GK4003-7KK11 |
| | 500 mm | 14 | – | 168 | 8GK4001-7KK22 | – |
| 1200 mm | 250 mm | 8 | – | 96 | 8GK4001-8KK12 | 8GK4003-8KK12 |
| | 500 mm | 16 | – | 192 | 8GK4001-8KK22 | – |
| 1350 mm | 250 mm | 9 | – | 108 | 8GK4002-8KK12 | 8GK4003-8KK13 |
| | 500 mm | 18 | – | 216 | 8GK4002-8KK22 | – |
| **For modular installation devices and terminal blocks** | | | | | | |
| 900 mm | 250 mm | 2 | 4 | 48 | – | – |
| | 500 mm | 4 | 8 | 96 | – | – |
| | 750 mm | 6 | 12 | 144 | – | – |
| 1050 mm | 250 mm | 2 | 5 | 60 | – | – |
| | 500 mm | 4 | 10 | 120 | – | – |
| | 750 mm | 6 | 15 | 180 | – | – |
| 1200 mm | 250 mm | 2 | 6 | 72 | – | – |
| | 500 mm | 4 | 12 | 144 | – | – |
| | 750 mm | 6 | 18 | 216 | – | – |
| 1350 mm | 250 mm | 3 | 6 | 72 | – | – |
| | 500 mm | 6 | 12 | 144 | – | – |
| | 750 mm | 9 | 18 | 216 | – | – |





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150 mm



| Without N/PE bar |
|---|
| |
| 8GK4051-3KK11 |
| 8GK4051-4KK11 |
| – |
| 8GK4051-5KK11 |
| – |
| 8GK4051-6KK11 |
| 8GK4101-6KK22 |
| 8GK4051-7KK11 |
| 8GK4101-7KK22 |
| 8GK4101-8KK12 |
| 8GK4101-8KK22 |
| 8GK4102-8KK12 |
| 8GK4102-8KK22 |
| |
| 8GK4100-6KK12 |
| 8GK4100-6KK22 |
| 8GK4100-6KK32 |
| 8GK4100-7KK12 |
| 8GK4100-7KK22 |
| 8GK4100-7KK32 |
| 8GK4100-8KK12 |
| 8GK4100-8KK22 |
| 8GK4100-8KK32 |
| 8GK4110-8KK12 |
| 8GK4110-8KK22 |
| 8GK4110-8KK32 |



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# Busbars

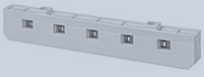
## For ALPHA 1250/630/400 distribution boards

### Cu busbars



| Cross-section | Current | Length | Article No. |
|---|---|---|---|
| 12 × 5 mm | 250 A | 250 mm | 8GK9731-0KK10 |
| | | 500 mm | 8GK9731-0KK20 |
| | | 750 mm | 8GK9731-0KK30 |
| | | 1000 mm | 8GK9731-0KK40 |
| | | 1250 mm | 8GK9731-0KK50 |
| 20 × 5 mm | 320 A | 250 mm | 8GK9733-0KK10 |
| | | 500 mm | 8GK9733-0KK20 |
| | | 750 mm | 8GK9733-0KK30 |
| | | 1000 mm | 8GK9733-0KK40 |
| | | 1250 mm | 8GK9733-0KK50 |
| 30 × 5 mm | 450 A | 250 mm | 8GK9735-0KK10 |
| | | 500 mm | 8GK9735-0KK20 |
| | | 750 mm | 8GK9735-0KK30 |
| | | 1000 mm | 8GK9735-0KK40 |
| | | 1250 mm | 8GK9735-0KK50 |
| 30 × 10 mm | 630 A | 250 mm | 8GK9736-0KK10 |
| | | 500 mm | 8GK9736-0KK20 |
| | | 750 mm | 8GK9736-0KK30 |
| | | 1000 mm | 8GK9736-0KK40 |
| | | 1250 mm | 8GK9736-0KK50 |

### Busbar supports

| Version | Use | Busbar center-to-center spacing | Article No. |
|---|---|---|---|
|  1-pole | For Cu busbars<br>12 × 5 (10) mm,<br>20 × 5 (10) mm,<br>30 × 5 (10) mm | – | 8GK9710-0KK00 |
|  2-pole | For Cu busbars<br>12 × 5 (10) mm,<br>20 × 5 (10) mm,<br>30 × 5 (10) mm | 60 mm | 8GK9710-0KK01 |
| 3-pole | For Cu busbars<br>12 × 5 (10) mm,<br>20 × 5 (10) mm,<br>30 × 5 (10) mm,<br>Bus-mounting fuse bases and 3NP4076 switch disconnectors in conjunction with assembly kits | 60 mm | 8GK9711-0KK03 |
|  4-pole | For Cu busbars<br>12 × 5 (10) mm,<br>30 × 5 (10) mm | 60 mm | 8GK9670-0KK00 |
|  5-pole | For Cu busbars<br>12 × 5 (10) mm<br>3NP fuse switch disconnectors | 40 mm | 8GK9650-0KK00 |

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# Accessories

## For ALPHA 1250/630/400/160 distribution boards

### Wall-mounting rails



- For all wall-mounted distribution boards

| Length | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|
| 250 mm | 8GK9912-0KK10 | | | ■ | ■ |
| 500 mm | 8GK9912-0KK20 | | | ■ | ■ |
| 750 mm | 8GK9912-0KK30 | | | ■ | ■ |
| 1000 mm | 8GK9912-0KK40 | | | ■ | ■ |
| 1250 mm | 8GK9912-0KK50 | | | ■ | ■ |

### Cabinet mounting lugs, flat



| Use | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|
| For mounting and fixing a distribution board directly against the wall without a clearance (1 set = 4 units) | 8GK9910-0KK36 | | ■ | ■ | ■ |
| For connecting 2 distribution boards and for mounting and fixing a distribution board directly against the wall without a clearance (8GK9910-0KK36 additionally required for the ends) 1 set = 2 units | 8GK9910-0KK37 | | ■ | ■ | ■ |

### Wall mounting lug, standard

- 1 set = 4 units

| Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|
| 8GK9920-0KK33 | ■ | ■ | ■ | ■ |

### Hollow wall set

| Use | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|
| For mounting flush-mounting distribution boards in hollow walls | 8GK9910-0KK28 | | | ■ | ■ |

### M12 transport eyebolts



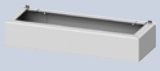
| Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|
| 8GK9918-0KK00 | ■ | ■ | ■ | ■ |

### Ventilation grilles for side panel



| Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|
| 8GK9120-0KK30 | ■ | ■ | ■ | |

### Bases for flat pack floor-mounted distribution boards



| Height outside | Depth | Width | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|---|---|
| 100 mm | 210 mm | 300 mm | 8GK9901-0KK12 | | ■ | | |
| | | 550 mm | 8GK9901-0KK22 | | ■ | | |
| | | 800 mm | 8GK9901-0KK32 | | ■ | | |
| | | 1050 mm | 8GK9901-0KK42 | | ■ | | |
| | | 1300 mm | 8GK9901-0KK52 | | ■ | | |

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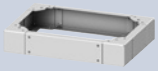
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# Accessories

## For ALPHA 1250/630/400/160 distribution boards

### Bases for pre-assembled (welded) floor-mounted distribution boards



| Height outside | Depth | Width | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|---|---|
| 100 mm | 210 mm | 300 mm | 8GK9901-0KA12 | ■ | ■ | | |
| | | 550 mm | 8GK9901-0KA22 | ■ | ■ | | |
| | | 800 mm | 8GK9901-0KA32 | ■ | ■ | | |
| | | 1050 mm | 8GK9901-0KA42 | ■ | ■ | | |
| | | 1300 mm | 8GK9901-0KA52 | ■ | ■ | | |
| | 250 mm | 300 mm | 8GK9900-0KK13 | ■ | ■ | | |
| | | 550 mm | 8GK9900-0KK23 | ■ | ■ | | |
| | | 800 mm | 8GK9900-0KK33 | ■ | ■ | | |
| | | 1050 mm | 8GK9900-0KK43 | ■ | ■ | | |
| | | 1300 mm | 8GK9900-0KK53 | ■ | ■ | | |
| | 320 mm | 300 mm | 8GK9900-0KK14 | ■ | ■ | | |
| | | 550 mm | 8GK9900-0KK24 | ■ | ■ | | |
| | | 800 mm | 8GK9900-0KK34 | ■ | ■ | | |
| | | 1050 mm | 8GK9900-0KK44 | ■ | ■ | | |
| | | 1300 mm | 8GK9900-0KK54 | ■ | ■ | | |
| | 400 mm | 300 mm | 8GK9902-0KK13 | ■ | ■ | | |
| | | 550 mm | 8GK9902-0KK23 | ■ | ■ | | |
| | | 800 mm | 8GK9902-0KK33 | ■ | ■ | | |
| | | 1050 mm | 8GK9902-0KK43 | ■ | ■ | | |
| | | 1300 mm | 8GK9902-0KK53 | ■ | ■ | | |

### Partitions, vertical

- For the visual and spatial separation of different potentials




| Cubicle depth | Height | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|---|
| 140 mm | 450 mm | 8GK9001-3KK01 | | | | ■ |
| | 600 mm | 8GK9001-4KK01 | | | | ■ |
| | 750 mm | 8GK9001-5KK01 | | | | ■ |
| | 900 mm | 8GK9001-6KK01 | | | | ■ |
| | 1050 mm | 8GK9001-7KK01 | | | | ■ |
| 210 mm | 300 mm | 8GK9301-2KK01 | | ■ | ■ | |
| | 450 mm | 8GK9301-3KK01 | | ■ | ■ | |
| | 600 mm | 8GK9101-4KK01 | | ■ | ■ | |
| | 750 mm | 8GK9101-5KK01 | | ■ | ■ | |
| | 900 mm | 8GK9101-6KK01 | | ■ | ■ | |
| | 1050 mm | 8GK9101-7KK01 | | ■ | ■ | |
| | 1200 mm | 8GK9101-8KK01 | | ■ | ■ | |
| | 1350 mm | 8GK9102-8KK01 | | ■ | ■ | |
| | 1800 mm | 8GK9520-8KK01 | | ■ | | |
| 250/320 mm | 1800 mm | 8GK9520-8KK00 | | ■ | | |
| 400 mm | 1800 mm | 8GK9521-8KK00 | ■ | | | |

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## Partitions, horizontal



- For the visual and spatial separation of different potentials

| Cubicle depth | Width | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|---|
| 140 mm | 250 mm | 8GK9002-0KK10 | | | | ■ |
| 210 mm | 250 mm | 8GK9103-0KK10 | | ■ | ■ | |
| | 500 mm | 8GK9103-0KK20 | | ■ | ■ | |
| | 750 mm | 8GK9103-0KK30 | | ■ | ■ | |
| 250/320 mm | 250 mm | 8GK9520-0KK10 | | ■ | | |
| | 500 mm | 8GK9520-0KK20 | | ■ | | |
| 400 mm | 250 mm | 8GK9520-0KK30 | ■ | | | |

## Mounting plates



| Cubicle Height | Cubicle Width | Mounting plates Height | Mounting plates Width | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|---|---|---|
| 600 mm | 250 mm | 596 mm | 243 mm | 8GK9531-4KK10 | | | ■ | |
| | 500 mm | 596 mm | 493 mm | 8GK9531-4KK20 | | | ■ | |
| 750 mm | 250 mm | 685 mm | 243 mm | 8GK9531-5KK10 | | | ■ | |
| | 500 mm | 685 mm | 493 mm | 8GK9531-5KK20 | | | ■ | |
| 900 mm | 250 mm | 835 mm | 243 mm | 8GK9531-6KK10 | | | ■ | |
| | 500 mm | 835 mm | 493 mm | 8GK9531-6KK20 | | | ■ | |
| 1050 mm | 250 mm | 985 mm | 243 mm | 8GK9531-7KK10 | | | ■ | |
| | 500 mm | 985 mm | 493 mm | 8GK9531-7KK20 | | | ■ | |
| 1200 mm | 250 mm | 1135 mm | 243 mm | 8GK9531-8KK10 | | | ■ | |
| | 500 mm | 1135 mm | 493 mm | 8GK9531-8KK20 | | | ■ | |
| 1350 mm | 250 mm | 1285 mm | 243 mm | 8GK9532-8KK10 | | | ■ | |
| | 500 mm | 1285 mm | 493 mm | 8GK9532-8KK20 | | | ■ | |
| 1800 mm | 250 mm | 1680 mm | 242 mm | 8GK9533-0KK10 | ■ | ■ | | |
| | 500 mm | 1680 mm | 492 mm | 8GK9533-0KK20 | ■ | ■ | | |
| | 750 mm | 1680 mm | 742 mm | 8GK9533-0KK30 | ■ | ■ | | |
| | 1000 mm | 1680 mm | 992 mm | 8GK9533-0KK40 | ■ | ■ | | |
| | 1250 mm | 1680 mm | 1242 mm | 8GK9533-0KK50 | ■ | ■ | | |

## Mounting plates for telecommunication units

- Made of perforated steel plate
- With insert nuts and quick-locking technology

| Cubicle Height | Cubicle Width | Mounting plates Height | Mounting plates Width | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|---|---|---|
| 900 mm | 250 mm | 835 mm | 243 mm | 8GS4016-1 | | | ■ | |
| 1050 mm | 250 mm | 985 mm | 243 mm | 8GS4016-2 | | | ■ | |
| 1200 mm | 250 mm | 1135 mm | 243 mm | 8GS4016-3 | | | ■ | |
| 1350 mm | 250 mm | 1285 mm | 243 mm | 8GS4016-4 | | | ■ | |

## Longitudinal stays



- In order to mount the assembly kits in unequipped distribution boards, 2 longitudinal stays are required for each assembly kit width
- 1 set = 2 stays

| Cubicle depth | Length | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|---|
| 210 mm | 300 mm | 8GK4855-2KK02 | | ■ | | |
| | 450 mm | 8GK4851-3KK00 | | | | ■ |
| | 600 mm | 8GK4851-4KK00 | | | ■ | ■ |
| | 750 mm | 8GK4851-5KK00 | | | ■ | ■ |
| | 900 mm | 8GK4851-6KK00 | | | ■ | ■ |
| | 1050 mm | 8GK4851-7KK00 | | | ■ | ■ |
| | 1200 mm | 8GK4851-8KK00 | | | ■ | |
| | 1350 mm | 8GK4852-8KK00 | | | ■ | |
| | 1800 mm | 8GK4853-8KK00 | | ■ | | |
| 250 mm, 320 mm, 400 mm | 1800 mm | 8GK4853-8KK02 | ■ | ■ | | |

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# Accessories

## For ALPHA 1250/630/400/160 distribution boards

### Stay supports



- For depth of 210 mm when mounting stays are to be shifted forward by 55 mm
- Necessary whenever DIN rails are mounted directly on the stays

| Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|
| 8GK9910-0KK38 | | | ■ | |

### Universal brackets



| Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|
| 8GK9910-0KK05 | ■ | ■ | | |

### Connection kits for longitudinal stays



| Depth | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|
| 250/320 mm | 8GK9910-0KK32 | ■ | ■ | ■ | |

### Crossbars



| Width | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|
| 500 mm | 8GK4853-0KK20 | ■ | ■ | ■ | |
| 750 mm | 8GK4853-0KK30 | ■ | ■ | ■ | |

### Front cover, closed



- Minimum order quantity = 10 units

| Height | Width | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|---|
| 75 mm | 250 mm | 8GK9601-0KK10 | ■ | ■ | ■ | ■ |
| 150 mm | 250 mm | 8GK9601-1KK10 | ■ | ■ | ■ | ■ |
| | 500 mm | 8GK9601-1KK20 | ■ | ■ | ■ | ■ |
| | 750 mm | 8GK9601-1KK30 | ■ | ■ | ■ | ■ |
| 300 mm | 250 mm | 8GK9601-2KK10 | ■ | ■ | ■ | ■ |
| | 500 mm | 8GK9601-2KK20 | ■ | ■ | ■ | ■ |
| | 750 mm | 8GK9601-2KK30 | ■ | ■ | ■ | ■ |
| 450 mm | 250 mm | 8GK9601-3KK10 | ■ | ■ | ■ | ■ |
| | 500 mm | 8GK9601-3KK20 | ■ | ■ | ■ | ■ |
| | 750 mm | 8GK9601-3KK30 | ■ | ■ | ■ | ■ |
| 600 mm | 250 mm | 8GK9601-4KK10 | ■ | ■ | ■ | ■ |
| | 500 mm | 8GK9601-4KK20 | ■ | ■ | ■ | ■ |
| | 750 mm | 8GK9601-4KK30 | ■ | ■ | ■ | ■ |

### Front cover with cutout



- Minimum order quantity = 10 units

| Tier spacing | Height | Width | Tiers | MW | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|---|---|---|---|
| 150 mm | 150 mm | 250 mm | 1 | 12 | 8GK9601-1KK11 | ■ | ■ | ■ | ■ |
| | | 500 mm | 1 | 24 | 8GK9601-1KK21 | ■ | ■ | ■ | ■ |
| | | 750 mm | 1 | 36 | 8GK9601-1KK31 | ■ | ■ | ■ | ■ |
| | 300 mm | 250 mm | 2 | 24 | 8GK9601-2KK11 | ■ | ■ | ■ | ■ |
| | | 500 mm | 2 | 48 | 8GK9601-2KK21 | ■ | ■ | ■ | ■ |
| | | 750 mm | 2 | 72 | 8GK9601-2KK31 | ■ | ■ | ■ | ■ |
| | 450 mm | 250 mm | 3 | 36 | 8GK9601-3KK11 | ■ | ■ | ■ | ■ |
| | | 500 mm | 3 | 72 | 8GK9601-3KK21 | ■ | ■ | ■ | ■ |
| | | 750 mm | 3 | 108 | 8GK9601-3KK31 | ■ | ■ | ■ | ■ |
| | 600 mm | 250 mm | 4 | 48 | 8GK9601-4KK11 | ■ | ■ | ■ | ■ |
| | | 500 mm | 4 | 96 | 8GK9601-4KK21 | ■ | ■ | ■ | ■ |
| | | 750 mm | 4 | 144 | 8GK9601-4KK31 | ■ | ■ | ■ | ■ |

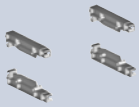




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## Supports for front cover



- Plastic

| Version | Length | Mounting | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|---|---|
| Spare part | 117 mm | Standard | 8GK9910-0KK30 | ■ | ■ | ■ | |
| | 54 mm | Standard | 8GK9910-0KK20 | | | | ■ |
| Large pack | 117 mm | For 15 mm DIN rail directly onto the DIN-rail holder | 8GK9910-0KK31 | ■ | ■ | ■ | |
| | 61.5 mm | For 15 mm DIN rail directly onto the stays | 8GK9910-0KK24 | ■ | ■ | ■ | |

## Assembly tool for supports



- For short and long version
- With ergonomic handle

| Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|
| 8GK9910-0KK27 | ■ | ■ | ■ | ■ |

## Support extensions



| Length | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|
| 7.5 mm | 8GK9911-0KK03 | ■ | ■ | ■ | ■ |

## Quick-lock screws for front cover



| Material | Color | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|---|
| Plastic | RAL 7035 (light gray) | 8GK9910-0KK26 | ■ | ■ | ■ | ■ |

## Spare part door hinges



- For wall/floor-mounted distribution boards
- 1 set = 2 units

| Version | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|
| Door hinges prior to 2019 (1 piece) | 8GK9920-0KK24 | ■ | ■ | ■ | ■ |



| Door hinges from 2019 onwards (2 pieces) | 8GK9920-1KK24 | ■ | ■ | ■ | ■ |
|---|---|---|---|---|---|

## Circuit diagram pockets

| Version | Format | Depth | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|---|---|
| Sheet steel | DIN A3 | 10 mm | 8GK9910-0KK22 | ■ | ■ | ■ | ■ |
| Transparent sleeve, adhered all-over | DIN A4 | | 8GK9910-0KK23 | ■ | ■ | ■ | ■ |
| Plastic | DIN A4 | 30 mm | 8GD9132 | ■ | ■ | ■ | ■ |
| Plastic, large pack | DIN A4 | 30 mm | 8GK9910-1KK24 | ■ | ■ | ■ | ■ |

## Siemens nameplate

| Material | Version | Color | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|---|---|
| Aluminum | Self-adhesive | Petrol | 8GD9084 | ■ | ■ | ■ | ■ |
| Sticker | Self-adhesive | Petrol | 8GF9661 | ■ | ■ | ■ | ■ |



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# Accessories

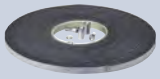
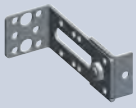
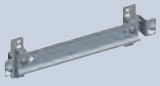
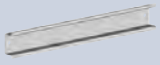
## For ALPHA 1250/630/400/160 distribution boards

| | | | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|---|
| **IP44/IP55 locking systems for wall-mounted distribution boards** | | | | | | |
| | **Version** | **Article No.** | | | | |
|  | Standard locking device with rotary handle | 8GK9560-0KK04 | | | ■ | ■ |
|  | Retrofit kit for standard locking device with degree of protection IP44 | 8GK9560-0KK05 | | | ■ | ■ |
|  | Rotary handle locking device for profile cylinders (E012 or Senat tumbler) | 8GK9560-0KK06 | | | ■ | ■ |
|  | Rotary handle, lockable, incl. E012 lock and two keys | 8GK9560-0KK13 | | | ■ | ■ |
|  | Rotary handle incl. double-bit interlocking mechanism | 8GK9561-0KK04 | | | ■ | ■ |
| **Locking systems for floor-mounted distribution boards** | | | | | | |
| | **Version** | **Article No.** | | | | |
|  | Rotary handle, recessable, with pushbutton technique | 8GK9561-0KK01 | ■ | ■ | | |
|  | Lock insert for installation of profile semicylinder | 8GK9561-0KK02 | ■ | ■ | | |
| **Profile semicylinder for locks** | | | | | | |
| | **Use** / **Version** | **Article No.** | | | | |
|  | Wall-mounted distribution boards — With E012 lock and two keys | 8GK9560-0KK07 | | | ■ | ■ |
|  | With Senat tumbler and two keys | 8GK9560-0KK08 | | | ■ | ■ |
|  | With 3-mm pin as double-bit lock | 8GK9560-0KK10 | | | ■ | ■ |
|  | Floor-mounted distribution boards — With E012 lock and two keys | 8GK9561-0KK00 | ■ | ■ | | |
|  | With Senat tumbler and two keys | 8GK9560-0KK03 | ■ | ■ | | |

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| | | | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|---|
| **Spare keys** | | | | | | |
|  | **Version** | **Article No.** | | | | |
| | For double-bit interlocking mechanism | 8GD9290 | ■ | ■ | | |
| | For E012 lock | 8GF9390-2 | ■ | ■ | ■ | ■ |
| **Connecting kits for distribution boards, IP44/IP55** | | | | | | |
|  | • For side-by-side mounting of enclosures<br>• Comprising: screws, washers, nuts and 5 m roll of sealing strip | | | | | |
| | **Article No.** | | | | | |
| | | 8GK9920-0KK31 | | ■ | ■ | |
| | | 8GK9920-0KK50 | ■ | | | |
| **Extra-deep brackets** | | | | | | |
|  | • For recessed installation of DIN rails | | | | | |
| | **Article No.** | | | | | |
| | | 8GK9910-0KK34 | ■ | ■ | ■ | |
| **Extra-deep brackets, depth-adjustable** | | | | | | |
|  | **Article No.** | | | | | |
| | | 8GK9911-0KK01 | ■ | ■ | ■ | |
| **Drop-down brackets, universal** | | | | | | |
|  | **Article No.** | | | | | |
| | | 8GK9911-0KK02 | ■ | ■ | ■ | |
| **DIN rails, lowered** | | | | | | |
|  | **Width** | **Article No.** | | | | |
| | 250 mm | 8GK9910-0KK35 | ■ | ■ | ■ | |
| | 500 mm | 8GK9910-0KK40 | ■ | ■ | ■ | |
| | 750 mm | 8GK9910-0KK41 | ■ | ■ | ■ | |
| **15 mm DIN rails** | | | | | | |
|  | **Width** | **Article No.** | | | | |
| | 250 mm | 8GK9910-1KK10 | ■ | ■ | | |
| | 500 mm | 8GK9910-1KK20 | ■ | ■ | | |
| | 750 mm | 8GK9910-1KK30 | ■ | ■ | | |
| | 1000 mm | 8GK9910-1KK40 | ■ | ■ | | |
| | 1250 mm | 8GK9910-1KK50 | ■ | ■ | | |
| **DIN-rail holders for 15 mm DIN rail** | | | | | | |
| | • Comprising a left and a right holder | | | | | |
| | **Version** | **Type** | **Article No.** | | | |
|  | Long | For 1 DIN rail | 8GK9910-1KK81 | ■ | ■ | ■ |
|  | | For 2 DIN rails | 8GK9910-1KK83 | ■ | ■ | ■ |
|  | | For 3 DIN rails | 8GK9910-1KK84 | ■ | ■ | ■ |
|  | | For 4 DIN rails | 8GK9910-1KK85 | ■ | ■ | ■ |

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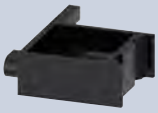
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# Accessories

## For ALPHA 1250/630/400/160 distribution boards

### Iso supports



- For insulated DIN-rail assembly

| Type | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|
| 4 mm | 8GK9911-0KK07 | ■ | ■ | ■ | ■ |
| 31.5 mm | 8GK9911-0KK05 | ■ | ■ | ■ | |
| 55.5 mm | 8GK9911-0KK06 | ■ | ■ | ■ | |

### Torx-slotted screws M5 × 10, self-tapping



- Large pack: 500 units

| Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|
| 8GK9911-0KK00 | ■ | ■ | ■ | ■ |

### Crossbars for mounting vertical busbar systems



| Width | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|
| 250 mm | 8GK9911-1KK00 | ■ | ■ | ■ | |
| 500 mm | 8GK9911-1KK01 | ■ | ■ | ■ | |
| 750 mm | 8GK9911-1KK02 | ■ | ■ | ■ | |

### Blanking strips



| Type | Color | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|---|
| For 12 MW (1 MW = 18 mm) | RAL 7035 (light gray) | 8GK9910-0KK00 | ■ | ■ | ■ | ■ |
| Length 1 m w/o pressure-relief joint, to cut to length | RAL 7035 (light gray) | 8GK9910-0KK01 | ■ | ■ | ■ | ■ |

### Blanking plugs

| Diameter | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|
| 16 mm | 8GK9910-0KK06 | ■ | ■ | ■ | ■ |
| 10 mm | 8GK9910-0KK07 | ■ | ■ | ■ | ■ |

### N terminals



- For snap-on mounting onto the DIN rail
- For distributing the neutral conductor when using several RCCBs
- 2 × screw terminal, conductor cross-section max. 16 mm²
- 14 × plug-in terminal, conductor cross-section max. 4 mm²

| Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|
| 8GS4034-1 | ■ | ■ | ■ | ■ |

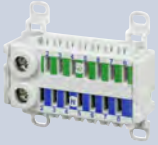
### PE terminals



- For snap-on mounting onto the DIN rail
- 2 × screw terminal, conductor cross-section max. 16 mm²
- 14 × plug-in terminal, conductor cross-section max. 4 mm²

| Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|
| 8GS4034-2 | ■ | ■ | ■ | ■ |

### N/PE terminals



- For snap-on mounting onto the DIN rail
- For distributing the neutral conductor when using several RCCBs
- 1 × screw terminal, conductor cross-section max. 16 mm², per PE and N potential
- 7 × plug-in terminal, conductor cross-section max. 4 mm², per PE and N potential

| Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|
| 8GS4034-3 | ■ | ■ | ■ | ■ |

### N/N terminals



- For snap-on mounting onto the DIN rail
- For distributing the neutral conductor when using several RCCBs
- 1 × screw terminal, conductor cross-section max. 16 mm², per PE and N potential
- 7 × plug-in terminal, conductor cross-section max. 4 mm², per PE and N potential

| Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|
| 8GS4034-4 | ■ | ■ | ■ | ■ |



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| | | | | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|---|---|
| **Terminals for circular conductors** | | | | | | | |
| | **Busbar thickness** | **Conductor cross-section** | **Article No.** | | | | |
|  | 5 mm | 1.5 ... 16 mm² | 8US1921-2AA00 | ■ | ■ | ■ | |
|  | | 1.5 ... 35 mm² | 8US1921-2AB00 | ■ | ■ | ■ | |
|  | | 16 ... 70 mm² | 8US1921-2AC00 | ■ | ■ | ■ | |
|  | | 16 ... 120 mm² | 8US1921-2AD00 | ■ | ■ | ■ | |
| **Terminals for circular conductors** | | | | | | | |
| | **Busbar thickness** | **Conductor cross-section** | **Article No.** | | | | |
|  | 10 mm | 1.5 ... 16 mm² | 8US1921-2BA00 | ■ | ■ | ■ | |
|  | | 1.5 ... 35 mm² | 8US1921-2BB00 | ■ | ■ | ■ | |
|  | | 16 ... 70 mm² | 8US1921-2BC00 | ■ | ■ | ■ | |
|  | | 16 ... 120 mm² | 8US1921-2BD00 | ■ | ■ | ■ | |
| **Terminals with bases made of glass-fiber reinforced polyester resin** | | | | | | | |
| | **Incoming cables** | | **Outgoing cables** | | | **Article No.** | |
| | **Quantity** | **Cross-section** | **Quantity** | **Cross-section** | | | |
|  | 1 | 6 ... 70 mm² | 1 | 6 ... 70 mm² | 8JK401 | ■ | ■ | ■ | |
|  | | 50 ... 240 mm² | 1 | 50 ... 240 mm² | 8JK4061 | ■ | ■ | ■ | |
|  | 2 | 50 ... 240 mm² | 2 | 50 ... 185 mm² | 8JK406 | ■ | ■ | ■ | |

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# Accessories

## For ALPHA 1250/630/400/160 distribution boards

### Incoming and outgoing terminal for busbars

| Busbar Dimensions | Busbar Quantity | Conductor cross-section | Description | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|---|---|---|
| 20 × 8 mm | 1 or 2 | 50 ... 240 mm² | 1 conductor per clamping point | 8JK3171 | ■ | ■ | ■ | |
| | | | 2 conductors per clamping point | 8JK3172 | ■ | ■ | ■ | |

### N/PE bars as plug-in terminals



- For mounting on longitudinal stays at a 30° inclination

| Type | Connections | Article No. | | | | |
|---|---|---|---|---|---|---|
| PE bar | 6 screw connections 2.5 ... 16 mm² and 21 screw connections 1.5 ... 4 mm² | 8GK9910-0KK11 | | | | ■ |
| PE + N bar | PE bar: 6 screw connections 2.5 ... 16 mm² and 21 screw connections 1.5 ... 4 mm²<br>N bar: 2 screw connections 2.5 ... 16 mm² and 10 screw connections 1.5 ... 4 mm² | 8GK9910-0KK12 | | | | ■ |

### Cable clamping rail



- For strain relief
- C profile 30 × 15 mm

| Width | Article No. | | | | |
|---|---|---|---|---|---|
| 250 mm | 8GK9911-0KK10 | ■ | ■ | ■ | |
| 500 mm | 8GK9911-0KK20 | ■ | ■ | ■ | |
| 750 mm | 8GK9911-0KK30 | ■ | ■ | ■ | |
| 1000 mm | 8GK9911-0KK40 | ■ | ■ | ■ | |
| 1250 mm | 8GK9911-0KK50 | ■ | ■ | ■ | |

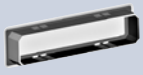
### Cable holders

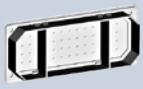




| Use | Version | Article No. | | | | |
|---|---|---|---|---|---|---|
| For DIN rail | Height 45 mm, width 40 mm | 8GK9910-0KK80 | ■ | ■ | ■ | |
| For mounting in 5-mm hole | Clip with cable tie | 8GK9910-0KK81 | ■ | ■ | ■ | |

### Cable flange for cable entry (version only for flat pack)







| Type | Degree of protection | Cable routing | Article No. | | | | |
|---|---|---|---|---|---|---|---|
| 1-component flange | IP44 | Bottom | 8GK9100-0KK00 | ■ | ■ | ■ | |
| 2-component flange | | Top/bottom | 8GK9000-0KK02 | | | | ■ |
| 2-component flange | IP55 | Top/bottom | 8GK9100-0KK01 | ■ | ■ | ■ | |
| Bushing flange | | Busbar system | 8GK9100-0KK10 | ■ | ■ | ■ | |

### Cable flange for cable entry– only protection class I (version only for flat pack)







| Version | Degree of protection | Cable diameter | Article No. | | | | |
|---|---|---|---|---|---|---|---|
| Blank flange | IP44 | | 8GK9100-0KK02 | ■ | ■ | ■ | |
| | IP55 | | 8GK9100-0KK03 | ■ | ■ | ■ | |
| Flange, incl. 1 cable support sleeve | IP55 | 14 ... 65 mm | 8GK9100-0KK05 | ■ | ■ | ■ | |
| Flange, incl. 2 cable support sleeves | IP55 | 14 ... 65 mm | 8GK9100-0KK06 | ■ | ■ | ■ | |

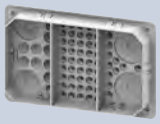
15



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## Flange for cable entry, IP55



| Type | Cable diameter | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|---|
| 2-component flange | 58 × 5 ... 10 mm/2 × 16 ... 35 mm<br>8 × 11 ... 16 mm/2 × 15 ... 45 mm | 8GK9101-0KK00 | ■ [1] | ■ | ■ | |
| 2-component flange, pack of 10 | 58 × 5 ... 10 mm/2 × 16 ... 35 mm<br>8 × 11 ... 16 mm/2 × 15 ... 45 mm | 8GK9101-0KK01 | ■ [1] | ■ | ■ | |
| Sheet steel closed, 214 mm × 136 mm | | 8GK9101-0KK02 | ■ | ■ | ■ | |
| Sheet steel incl. 1 cable support sleeve 8HC6900 | 14 ... 65 mm | 8GK9101-0KK05 | ■ | ■ | ■ | |
| Sheet steel incl. 2 cable support sleeves 8HC6900 | 14 ... 65 mm | 8GK9101-0KK06 | ■ | ■ | ■ | |

## Rubber cable entries





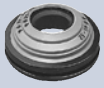




- For inserting in 38 mm diameter knockouts (= Pg29)
- Degree of protection IP65

| Quantity | Cable diameter | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|---|
| 1 | 12 ... 29 mm | 8HP1805 | ■ | ■ | ■ | ■ |
| 2 | 6 ... 15 mm | 8HP1806 | ■ | ■ | ■ | ■ |
| 3 | 4 ... 12.5 mm | 8HP1807 | ■ | ■ | ■ | ■ |
| 4 | 4 ... 12 mm | 8HP1808 | ■ | ■ | ■ | ■ |

## Cable entries for cable entry plate



| Cable diameter | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|
| 14 ... 65 mm | 8HC6900 | ■ | ■ | ■ | ■ |

## Breathers, PG 16



- For distribution boards in an outdoor climate to avoid condensate
- Degree of protection IP54

| | Article No. | 1250 | 630 | 400 | 160 |
|---|---|---|---|---|---|
| | 8HE8541 | ■ | ■ | ■ | ■ |

[1] Roof plate only



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# System overview

## Small distribution boards ALPHA

### SIMBOX XL



### SIMBOX WP



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## ALPHA SIMBOX XL



Flush-mounting and hollow-wall distribution boards



Surface-mounting distribution boards



Multimedia distribution boards

## Accessories



Terminal strips



RCCB terminals



Door locking kit



Mounting aid for flush mounting

## ALPHA SIMBOX WP



Surface-mounting distribution boards

## Accessories



Covers



N/PE terminal strips



Inner partitions



Safety cylinder locks

**Note:**
You will find a detailed range of accessories with the basic units.

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# ALPHA SIMBOX XL small distribution boards

## Flush-mounting and hollow-wall distribution boards, rated current up to 63 A

| | | Complete supply | Project supply |
|---|---|---|---|
| Degree of protection | | IP30 | IP30 |
| | |  |  |

| Dimensions | | | Type | Protection class II | Protection class II | |
|---|---|---|---|---|---|---|
| Width | Depth | Height | | | Wall-recessed box | Expansion package |
| **Flush-mounting distribution boards** | | | | | | |
| 365 mm | 98 mm | 400 mm | 1-tier | 8GB5012-1KM | 8GB5212-1KM01 | 8GB5212-3KM01 |
| | | 525 mm | 2-tier | 8GB5024-1KM | 8GB5224-1KM01 | 8GB5224-3KM01 |
| | | 650 mm | 3-tier | 8GB5036-1KM | 8GB5236-1KM01 | 8GB5236-3KM01 |
| | | 775 mm | 4-tier | 8GB5048-1KM | 8GB5248-1KM01 | 8GB5248-3KM01 |
| | | 900 mm new | 5-tier | 8GB5060-4KM | – | – |
| **Hollow-wall distribution boards** | | | | | | |
| 323 mm | 88 mm | 360 mm | 1-tier | 8GB5012-4KM | 8GB5212-2KM01 | 8GB5212-4KM01 |
| | | 485 mm | 2-tier | 8GB5024-4KM | 8GB5224-2KM01 | 8GB5224-4KM01 |
| | | 610 mm | 3-tier | 8GB5036-4KM | 8GB5236-2KM01 | 8GB5236-4KM01 |
| | | 735 mm | 4-tier | 8GB5048-4KM | 8GB5248-2KM01 | 8GB5248-4KM01 |
| | | 900 mm | 5-tier | 8GB5060-4KM | – | – |

## Accessories

**Terminal strips with plug-in terminals**



| Type | Potential 1 | Potential 2 | Article No. |
|---|---|---|---|
| N/PE | N = 3 × 25 + 14 × 4 mm² | PE = 3 × 25 + 14 × 14 mm² | 8GB5016-5KM |
| N/N | N1 = 3 × 25 + 14 × 4 mm² | N2 = 3 × 25 + 14 × 14 mm² | 8GB5017-5KM |
| N | N = 6 × 25 + 28 × 4 mm² | | 8GB5020-5KM |
| PE | PE = 6 × 16 + 28 × 5 mm² | | 8GB5021-5KM |

**Terminal strips with screw terminals**



| Type | Potential 1 | Potential 2 | Article No. |
|---|---|---|---|
| N/PE | N = 3 × 16 + 14 × 10 mm² | PE = 3 × 16 + 14 × 10 mm² | 8GB5008-5KM |
| N/N | N1 = 3 × 16 + 14 × 10 mm² | N2 = 3 × 16 + 14 × 10 mm² | 8GB5015-5KM |
| N | N = 6 × 16 + 28 × 10 mm² | | 8GB5010-5KM |
| PE | PE = 6 × 16 + 28 × 10 mm² | | 8GB5011-5KM |

**RCCB terminals**



| Use | Potential | Article No. |
|---|---|---|
| For distributing the neutral conductor to two RCCBs | N = 3 × 16 + 2 × 10 mm² | 8GB5005-5KM |

**Door locking kit**



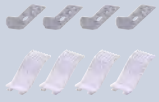
| Use | Feature | Article No. |
|---|---|---|
| For snapping into door handle | With two keys | 8GB5006-5KM |

**Blanking strips**



| Width | Feature | Color | Article No. |
|---|---|---|---|
| 12 MW | Increased flame protection up to 850 °C | White | 8GB4683 |

**Mounting aid for flush mounting**



| Use | Article No. |
|---|---|
| For flush-mounting and hollow-wall distribution boards | 8GB5013-5KM |



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# Surface-mounting distribution boards, rated current up to 63 A

| | | | | Distribution boards without door | Metal doors, white | Plastic doors, white |
|---|---|---|---|---|---|---|
| | | | Degree of protection | IP30 | IP30 | IP30 |
| | | | |  |  |  |
| External dimensions | | | Type | Protection class II | Protection class II | Protection class II |
| Width | Depth | Height | | | | |
| Surface-mounting distribution boards | | | | | | |
| 305 mm | 99 mm | 250 mm | 1-tier | 8GB5012-0KM | 8GB5001-5KM | 8GB5001-5KM01 |
| | | 375 mm | 2-tier | 8GB5024-0KM | 8GB5002-5KM | 8GB5002-5KM01 |
| | | 515 mm | 3-tier | 8GB5036-0KM | 8GB5003-5KM | 8GB5003-5KM01 |
| | | 640 mm | 4-tier | 8GB5048-0KM | 8GB5004-5KM | 8GB5004-5KM01 |

## Accessories

**Terminal strips with plug-in terminals**



| Type | Potential 1 | Potential 2 | Article No. |
|---|---|---|---|
| N/PE | N = 3 × 25 + 14 × 4 mm² | PE = 3 × 25 + 14 × 14 mm² | 8GB5016-5KM |
| N/N | N1 = 3 × 25 + 14 × 4 mm² | N2 = 3 × 25 + 14 × 14 mm² | 8GB5017-5KM |
| N | N = 6 × 25 + 28 × 4 mm² | | 8GB5020-5KM |
| PE | PE = 6 × 16 + 28 × 5 mm² | | 8GB5021-5KM |

**Terminal strips with screw terminals**



| Type | Potential 1 | Potential 2 | Article No. |
|---|---|---|---|
| N/PE | N = 3 × 16 + 14 × 10 mm² | PE = 3 × 16 + 14 × 10 mm² | 8GB5008-5KM |
| N/N | N1 = 3 × 16 + 14 × 10 mm² | N2 = 3 × 16 + 14 × 10 mm² | 8GB5015-5KM |
| N | N = 6 × 16 + 28 × 10 mm² | | 8GB5010-5KM |
| PE | PE = 6 × 16 + 28 × 10 mm² | | 8GB5011-5KM |

**RCCB terminals**



| Use | Potential | Article No. |
|---|---|---|
| For distributing the neutral conductor to two RCCBs | N = 3 × 16 + 2 × 10 mm² | 8GB5005-5KM |

**Door locking kit**



| Use | Feature | Article No. |
|---|---|---|
| For snapping into door handle | With two keys | 8GB5006-5KM |

**Blanking strips**



| Width | Feature | Color | Article No. |
|---|---|---|---|
| 12 MW | Increased flame protection up to 850 °C | White | 8GB4683 |

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# ALPHA SIMBOX XL small distribution boards

## Multimedia distribution boards, rated current up to 63 A

| | Multimedia distribution boards |
|---|---|
| Degree of protection | IP30 |



| Recess dimensions | | | Type | Protection class II |
|---|---|---|---|---|
| Width | Depth | Height | | |
| **Flush-mounting and hollow-wall distribution boards** | | | | |
| 364 mm | 98 mm | 650 mm | 3-tier | 8GB5036-3KM01 |
| | | 775 mm | 4-tier | 8GB5048-3KM01 |
| | | 900 mm new | 5-tier | 8GB5060-3KM01 |
| **Surface-mounting distribution boards** | | | | |
| 323 mm | 88 mm | 605 mm | 3-tier | 8GB5036-3KM00 |
| | | 730 mm | 4-tier | 8GB5048-3KM00 |

## Accessories

| Connecting lugs | |
|---|---|
| Use | Article No. |
| For installing several distribution boards in a row, vertically or horizontally | 8GB5025-5KM |

| Distribution board connector set for hollow-wall mounting new | |
|---|---|
| Typ | Article No. |
| 3-tier | 8GB5054-0 |
| 4-tier | 8GB5054-1 |
| 5-tier | 8GB5054-2 |

| Door handle SIMBOX XL new | |
|---|---|
| | Article No. |
| | 8GB5054-3 |

| Door hinges SIMBOX XL new | |
|---|---|
| | Article No. |
| | 8GB5054-4 |

| Hollow-wall mounting set new | |
|---|---|
| | Article No. |
| | 8GB5054-5 |



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# ALPHA SIMBOX WP small distribution boards

## Surface-mounting distribution boards, rated current up to 63 A

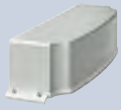
| | Unequipped surface-mounting distribution boards |
|---|---|
| **Degree of protection** | IP65 |



| Type | External dimensions | | | Protection class II |
|---|---|---|---|---|
| | Height | Width | Depth | |
| **Surface-mounting distribution boards (order N/PE terminal strip separately)** | | | | |
| 1-tier | 210 mm | 143 mm | 100 mm | 8GB1371-0 |
| | | 215 mm | 100 mm | 8GB1371-1 |
| | 260 mm | 298 mm | 140 mm | 8GB1371-2 |
| | 285 mm | 410 mm | 140 mm | 8GB1371-3 |
| 2-tier | 420 mm | 298 mm | 140 mm | 8GB1372-2 |
| | 463 mm | 410 mm | 140 mm | 8GB1372-3 |
| 3-tier | 655 mm | 410 mm | 140 mm | 8GB1373-3 |
| 4-tier | 878 mm | 410 mm | 160 mm | 8GB1374-3 |

## Accessories

### Covers



- For connection of conduit and cable duct entries
- Snap-on mounting

| MW | Article No. |
|---|---|
| 12 | 8GB2051-0 |
| 18 | 8GB2051-1 |

### N/PE terminal strips



- For snapping onto device holder

| MW | Potential 1 | Potential 2 | Article No. |
|---|---|---|---|
| 8 | N = 1 × 25 + 7 × 10 mm² | PE = 1 × 25 + 7 × 10 mm² | 8GB2052-0 |
| 12 | N = 3 × 25 + 10 × 10 mm² | PE = 3 × 25 + 10 × 10 mm² | 8GB2052-1 |
| 18 | N = 5 × 25 + 14 × 10 mm² | PE = 5 × 25 + 14 × 10 mm² | 8GB2052-2 |

### Inner partitions, horizontal



| MW | Article No. |
|---|---|
| 12 | 8GB2053-0 |
| 18 | 8GB2053-1 |

### Front covers

| MW | Article No. |
|---|---|
| 12 | 8GB2054-0 |
| 18 | 8GB2054-1 |

### Safety cylinder locks



| Material | Scope of supply | Article No. |
|---|---|---|
| Metal | With key | 8GB2055-0 |

### Blanking strips



| Type | Color | Article No. |
|---|---|---|
| For 12 MW (1 MW = 18 mm) | RAL 7035 (light gray) | 8GK9910-0KK00 |

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## Power distribution in the age of digitalization

Take advantage of the benefits of digitalization at every step of the project with the SIVACON 8PS busbar trunking systems – from planning to installation on up to operation.

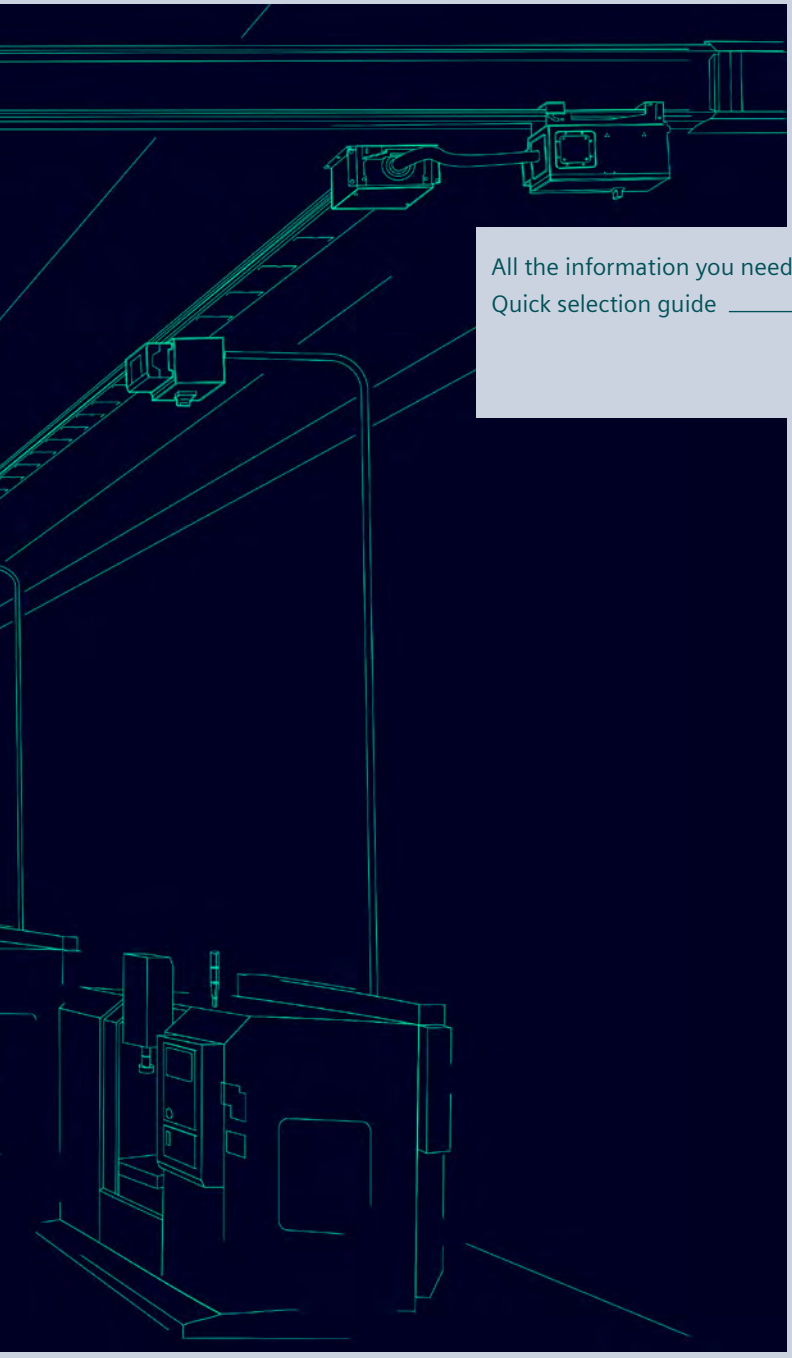
SIMARIS software tools provide efficient support for your planning: among other advantages, you can configure the SIVACON 8PS busbars with SIMARIS busbarplan. A digital twin of the busbar runs is created from the BIM data. The BusbarCheck app assists you during installation.

Energy data and power with plug-and-work: Our innovative powerline technology makes this possible for SIVACON 8PS busbar trunking systems – efficient and reliable.
Energy data is simply transferred to the automation and energy management systems, as well as to cloud-based systems (IoT). Data and electricity travel the same path via the conductor circuits and phases of the BD2, LD, LData and LI busbar trunking systems.

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# Busbar Trunking Systems



All the information you need 16/2
Quick selection guide 16/4
SIVACON 8PS busbar trunking systems 16/4
Planning and installation tools 16/6

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# A multitude of additional information ...

## Information + ordering

### All the important things at a glance

For information about busbar trunking systems, please visit our website **www.siemens.com/sivacon-8PS**

### Your product in detail

The SiePortal platform (knowledge base) provides comprehensive information **www.siemens.com/lowvoltage/product-support**

- Brochure
  - Energy and data successfully put on track **(109747761)**
- Catalog
  - LV 70 · 2023 – SIVACON 8PS busbar trunking systems – BD01, BD2 up to 1250 A **(109744546)**

The relevant tender specifications can be found at **www.siemens.com/tenderspecifications**

Use our conversion tool for quick and easy conversion to Siemens products **www.siemens.com/conversion-tool**

### Siemens YouTube channel

- Power distribution – SIVACON (general) **sie.ag/6wacV9**

### Everything you need for your order

Refer to SiePortal to find an overview of your products (product catalog)

- SIVACON 8PS **sie.ag/2lXpCT1**
- Planning the power distribution system **sie.ag/2m3oFbS**

Direct forwarding to the individual products in SiePortal by clicking on the article number in the catalog or entering this web address incl. article number **www.siemens.com/product_catalog_SIEP?Article No.**

Order support for SIVACON 8PS – BD01 and BD2 **www.siemens.com/LV70**

### Configurators

Configure your SIVACON 8PS BD01 or BD2 busbar trunking system in **SiePortal**



### The fast track to the experts

## Contact persons in your region

We offer a comprehensive portfolio of services. You can find your local contacts at **www.siemens.com/sivacon8PS-contact**

You will find further information on services at **www.siemens.com/service-offers**

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at **www.siemens.com/support-request**

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# … can be found in our online services

## Commissioning + operation

### SIMARIS planning tools

The SIMARIS planning tools effectively assist you in your planning process. Project-specific IFC data (Building Information Modeling) for cross-package planning is also possible.
www.siemens.com/simaris

### Your product in detail

The SiePortal platform (knowledge base) provides detailed technical information
www.siemens.com/lowvoltage/product-support

- Operating instructions
- Certificates

Online Support app available for download from the App Store and Play Store

You will find further information at
www.siemens.com/support-app

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
www.siemens.com/cax

### Manuals

Manuals can be found in SiePortal at
www.siemens.com/lowvoltage/manuals

- Planning Manual
  - Planning with SIVACON 8PS (109478425)

### Face-to-face or online training

Our training courses can be found at
www.power-academy.siemens.com

### Technical overview – Busbar trunking systems

#### The fast way to get you to our online services

This page provides you with comprehensive information and links on busbar trunking systems
www.siemens.com/lowvoltage/product-support (109769090)

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# SIVACON 8PS busbar trunking systems





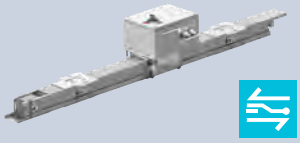
| Busbar trunking systems | BD01 | BD2 |
|---|---|---|
| **Basic data** | | |
| System description | Flexible power supply in workshops and production plants for skilled trades and businesses and commercial enterprises | The universal solution for high power levels in a small space, especially in offices and in industrial transfer lines |
| Typical applications | • Workshops and production plants<br>• Supermarkets<br>• Data centers<br>• High-rise buildings<br>• Trade fair buildings<br>• Automotive industry<br>• Marine applications<br>• eMobility | • Workshops and production plants<br>• Production industry<br>• Do-it-yourself centers<br>• Data centers<br>• High-rise buildings<br>• Foodstuffs industry<br>• Trade fair buildings<br>• Hospitals<br>• Automotive industry<br>• Marine applications<br>• eMobility |
| **Technical specifications** | | |
| Rated insulation voltage $U_i$ | 400 V AC | 690 V AC |
| Rated operational voltage $U_e$ | 400 V AC | 690 V AC |
| Degree of protection | IP54, IP55 | IP54, IP55 |
| Rated current $I_{nA}$ | 40 ... 160 A | 160 ... 1250 A |
| Rated peak withstand current $I_{pk}$ | Up to 15.3 kA | Up to 90 kA |
| Rated short-time withstand current $I_{cw}$ (1 s) | Up to 2.5 kA | Up to 34 kA |
| Number of conductors | 5 (PE = enclosure) | 5 |
| Connection technology | Connecting flange with built-in expansion compensation | With built-in expansion compensation, bolt-type terminal |
| **Outgoing feeders and junctions** | | |
| Tap-off point | On one side every 0.5 or 1 m | On one side every 0.5 m, on two sides offset every 0.25 m |
| Tap-off unit | Up to 63 A | Up to 550 A |
| **Material** | | |
| Conductors | Aluminum or copper | Aluminum or copper |
| Enclosures (trunking unit, feeder unit) | Sheet steel, tin-coated and powder-coated | Sheet steel, tin-coated and powder-coated |
| **Communication** | | |
| Data transmission | data line | powerline, data line |
| **Certificates** | | |
| | • DNV GL<br>• Environmental Product Declaration (EPD) | • DNV GL<br>• Environmental Product Declaration (EPD) |

[1] IP66 for pure energy transfer runs without outgoing feeders.

Data transfer with powerline technology

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## LD

The proven high-current busbar for industry and special applications

- Automotive industry
- Production industry
- Foodstuffs industry
- Trade fair buildings
- Wind power plants
- Semiconductor production
- Marine applications
- eMobility
- DC applications

1000 V AC
1000 V AC
IP34, IP54
1100 ... 5000 A
Up to 286 kA
Up to 116 kA
4 or 5
Bolt-type terminal connection with hook and bolt connection

On one side every 1 m
Up to 1250 A

Aluminum or copper
Sheet steel, tin-coated and powder-coated

powerline, data line

- DNV GL
- Environmental Product Declaration (EPD)



## LData

Efficient and reliable power supply for today and tomorrow's data centers

- Data centers

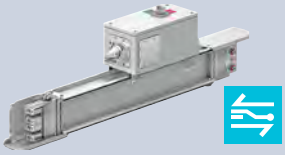
600 V AC
600 V AC
Trunking units: IP21
Tap-off units: IP21, IP41
1000 ... 2500 A
Min. 84 kA
Min. 40 kA
5
Direct hook and bolt connection (LD technology)

Can be plugged in anywhere along the system
Up to 250 A

Aluminum
Sheet steel, tin-coated and powder-coated

powerline, data line

–



## LI

An integrated solution for safe and efficient infrastructure power supply – for example in multi-story buildings and industrial applications

- High-rise buildings
- Data centers
- Production industry
- Chemicals industry
- Airports
- Trade fair buildings
- Hospitals
- Do-it-yourself centers
- Shopping malls
- Supermarkets
- eMobility

1000 V AC
1000 V AC
IP55, IP66 [1)]
800 ... 6300 A
Up to 330 kA
Up to 150 kA
4 ... 6 (incl. 200% N or add. clean earth)
Hook and bolt connection with shear nut

Up to 3 for every 3 m (per side)
Up to 1250 A

Aluminum or copper
Aluminum, powder-coated

powerline, data line

- SEISMIC Qualification Certificate (earthquake test)
- Environmental Product Declaration (EPD)



## LR

The reliable busbar for a high degree of protection in harsh environments, for example for networking of building sections outdoors or for power supply in tunnels

- Chemicals industry
- Oil and gas
- Tunnels and subways
- Outdoor applications
- Marine applications

1000 V AC
1000 V AC
IP68
400 ... 6300 A
Up to 275 kA
Up to 125 kA
4 or 5
Bolt terminal block

On one side every 1 m
On request

Aluminum or copper
Epoxy resin

–

- DNV GL
- SEISMIC Qualification Certificate (earthquake test)
- ATEX
- Product Environmental Profile (PEP)

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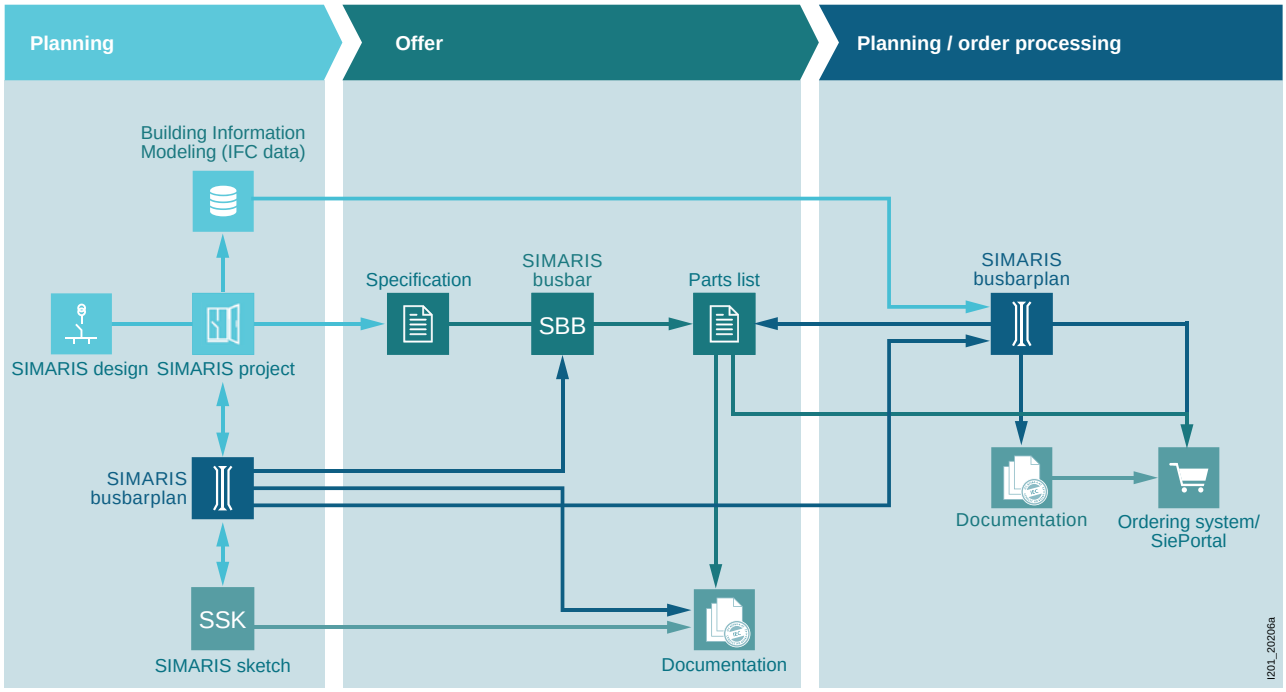
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# Planning and installation tools

## For planning, visualization and installation of busbar trunking systems

### From planning to commissioning



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## SIMARIS design

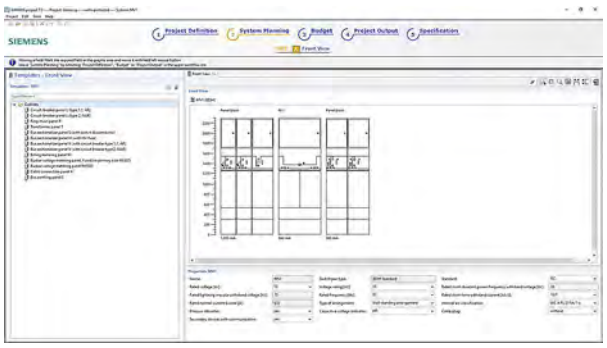


SIMARIS design is a planning tool for fast and efficient grid calculation and dimensioning of electrical power distribution for special-purpose and industrial buildings.

- Dimensioning of electrical networks on the basis of real products according to acknowledged rules of technology and the applicable standards (VDE, IEC)
- Automatic selection of the appropriate components from the stored product database

SIMARIS design forms part of SIMARIS Suite.
Free download of the SIMARIS Suite and further information at: **www.siemens.com/simarisdesign**

## SIMARIS project



SIMARIS project is a planning tool used to quickly determine the necessary space requirements and the budget for electrical energy distribution for special-purpose and industrial buildings and for automatic generation of specifications.

- Import into projects created with SIMARIS design
- Export of 3D data in IFC 4.x format for BIM (Building Information Modeling)

SIMARIS project forms part of SIMARIS Suite.
Free download of the SIMARIS Suite and further information at: **www.siemens.com/simarisproject**

## SIMARIS Toolbox (online)



The SIMARIS Toolbox is a platform for provision of online tools for assisting electrical installation planners. It includes, for example:

- EMC Busbar (tool for calculating magnetic field strength in the vicinity of SIVACON 8PS busbar trunking systems)

SIMARIS Toolbox forms part of SIMARIS Suite.
Free download of the SIMARIS Suite and further information at: **www.siemens.com/simaristoolbox**

## SIMARIS busbarplan



The SIMARIS busbarplan planning tool supports BIM-compliant 3D configuration of SIVACON 8PS busbar trunking systems.

- Plugin based on the BIM Autodesk REVIT software
- Version for planners and for Siemens project engineers

SIMARIS busbarplan forms part of SIMARIS Suite.
Free download of the SIMARIS Suite and further information at: **www.siemens.com/simarisbusbarplan**

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# Planning and installation tools

## For planning, visualization and installation of busbar trunking systems

### BusbarCheck app




BusbarCheck is an installation app to use for easy and high-quality installation and documentation.

- Interface to SIMARIS busbarplan
- Detailed explanation of all steps
- Written record and proper documentation for better and easier evaluation of the installation
- Can be used by all installation companies and SIVACON 8PS busbar trunking installations in Germany and another 23 European countries

Free download from:
**App Store** and **Play Store**

### SIMARIS sketch



The new SIMARIS sketch is a software tool for quick and easy planning and visualization of busbar trunking systems.

- Simple creation of busbar routing and building structures in 3D
- Interface to SIMARIS busbarplan and rejection in IFC format possible
- Creation of order parts lists for the BD01 and BD2 systems

SIMARIS sketch forms part of SIMARIS Suite.
Free download of the SIMARIS Suite and further information at: **www.siemens.com/simarissketch**

### IFC data



BIM simplifies the planning process. While the simple exchange of relevant building data between the planners and the facility manager ensures high quality and reduces costs, the digital twin for power distribution fits in seamlessly with the overall structure – for efficient planning, performance and maintenance.

**www.siemens.com/bim-eplanning**

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## Equipped for all applications

Maximum flexibility and minimum space requirement – these are the key prerequisites for high-performance switchgear and control cabinets in industrial environments. Switchgear cabinet manufacturers have to respond increasingly rapidly to their efficiency-conscious customers' requirements. Simplified configuration, planning and implementation bring you additional competitive advantages. The SIVACON 8MF1 system cubicles were rigorously designed to meet the increased demands placed on control cabinet construction.

The SIVACON 8MF1 modular system enables custom-tailored solutions to be configured for virtually all industrial sectors and applications. Whether fully assembled, adapted according to your specifications, or developed individually, the system cubicles support the individual creation of added value in control cabinet construction. With SIVACON 8MF1, you can also be sure of absolute compliance with relevant standards: The switchgear enclosures meet all currently applicable standards and regulations. Special versions, and control cabinets with various special certifications and specific approvals, as well as variants adapted to specific sectors, can be individually developed.

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# System Cubicles, System Lighting and System Air-Conditioning




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# A multitude of additional information ...

## Information + ordering

### All the important things at a glance

For information about system cubicles, system lighting and system air-conditioning, please visit our website
**www.siemens.com/sivacon-8mf**

### Your product in detail

The SiePortal platform (knowledge base) provides comprehensive information
**www.siemens.com/lowvoltage/product-support**

- Brochure
  – SIVACON 8MF1 system cubicles –
  As versatile as your requirements **(109744677)**

The relevant tender specifications can be found at
**www.siemens.com/tenderspecifications**

Use our conversion tool for quick and easy conversion to Siemens products **www.siemens.com/conversion-tool**

### Everything you need for your order

Refer to SiePortal to find an overview of your products (product catalog)

- System cubicles **sie.ag/339cQB9**

Direct forwarding to the individual products in SiePortal by clicking on the article number in the catalog or entering this web address incl. article number
**www.siemens.com/product_catalog_SIEP?Article No.**

### Configurators

The configurator reduces the time and effort required in the planning and ordering process, and allows for individual adaptations. Configure your SIVACON 8MF1 system cubicle at
**www.siemens.com/lowvoltage/8mf1-configurator**

The following are additionally available for your configured SIVACON 8MF1 system cubicle:

- Parts lists
- 2D data
- 3D data



### The fast track to the experts

## Contact persons in your region

We offer a comprehensive portfolio of services.
You can find your local contacts at
**www.siemens.com/lowvoltage/systems/contact**

You will find further information on services at
**www.siemens.com/service-offers**

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at
**www.siemens.com/support-request**

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# … can be found in our online services

## Commissioning + operation

### SIMARIS therm

The SIMARIS therm calculation tool helps you to easily and precisely dimension the heat dissipation of your control panels, simply by entering the ambient air temperature and selecting the relevant devices in the panel. If necessary, you can immediately select the necessary cooling devices and air conditioners. You can also define the necessary heating power for anti-condensation heating
**www.siemens.com/simaristherm**

### Ihr Produkt im Detail

The SiePortal platform (knowledge base) provides detailed technical information
**www.siemens.com/lowvoltage/product-support**

- Operating instructions
- Certificates

Online Support app available for download from the **App Store** and **Play Store**
You will find further information at
**www.siemens.com/support-app**

Provision of 3D data (step and u3d data formats)

- SiePortal (product catalog)
  **www.siemens.com/lowvoltage/product-catalog**
- Image database
  **www.siemens.com/lowvoltage/picturedb**

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
**www.siemens.com/cax**

### Technical overview – System cubicles, system lighting and system air-conditioning

#### The fast way to get you to our online services

This page provides you with comprehensive information and links on system cubicles, system lighting and system air-conditioning
**www.siemens.com/lowvoltage/product-support (109769091)**

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# System overview

## System cubicles, system lighting and system air-conditioning

**For a complete and valid configuration of your system cubicle, please use our online configurator at www.siemens.com/lowvoltage/8mf1-configurator**

### SIVACON 8MF1 basic cubicles


Basic cubicles, IP40

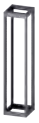

Basic cubicles, IP55


Ventilated cubicles, IP20


Data cubicles, IP40


Earthquake-resistant cubicles, IP40

### SIVACON 8MF1 configurable enclosures – Frames


Standard frames


Corner frames

### Frame accessories


Bases


Separators


Trim strips


Transport eyebolts


Transport brackets


Cubicle suites

### SIVACON 8MF1 configurable enclosures – Enclosures


Doors


Ventilated doors


Glass doors


Door halves


Compartment doors


Side walls/ rear walls


Rooves


Floors

### Enclosure accessories


Roof trays


Covers


Grilles


Strips


Hinges


Rotary handles


Door position switches


Door stays

**Note:**
You will find a detailed range of accessories with the basic units and in the Accessories section.

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## SIVACON 8MF1 configurable enclosures – Interior installation


Mounting panels


Mounting plates


Partitions


Shelves


Busbars

## Interior installation accessories


Brackets


Groundings


Grounding screws

## SIVACON 8MF1 configurable enclosures – 19-inch expansion


Swing frames


Fixed-mounted

## 19-inch expansion accessories


Covers


Universal supports


Device panels

## SIVACON 8MF/8MR system lighting – LED lights


With motion detector


With On/Off switch


Without switching function

## LED lights accessories


Cables, plugs and sockets

## SIVACON 8MF/8MR system lighting – Slimline lights


With motion detector and socket


With On/Off switch and socket

## SIVACON 8MR system air-conditioning


Filters and filter fans


Air conditioners/ cooling devices


Heat exchangers


Heater units


Fan heaters


Thermostats, hygrostats, hygrotherms

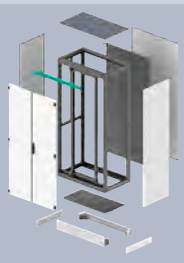
**Note:**
You will find a detailed range of accessories with the basic units and in the Accessories section.

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# System overview

## SIVACON 8MF1 system cubicles





| | | Standard types | Individual types |
|---|---|---|---|
| **Available dimensions** | | | |
| Height | mm | 1800 \| 2000 \| 2200 | Special dimensions available on request (max. 2400 mm) |
| Width | mm | 400 \| 600 \| 800 \| 900 \| 1000 \| 1200 | Special dimensions available on request (max. 1600 mm) |
| Depth | mm | 400 \| 500 \| 600 \| 800 \| 1000 | Special dimensions available on request (max. 1200 mm) |
| **Approvals** | | | |
| Standards | | IEC 62208 | IEC 62208 |
| **Protection** | | | |
| Degree of protection | | IP20 \| IP40 \| IP55 \| Shock resistance IK09 \| Glass doors IK08 | IP20 \| IP21 \| IP40 \| IP41 \| IP42 \| IP55 \| Shock resistance IK09 \| Glass doors IK08 |
| Protection class | | I | I |
| **Enclosure** | | | |
| Material | | Sheet steel | Sheet steel |
| Surface | | Zinc-plated \| Powder-coated | Zinc-plated \| Powder-coated |
| Color | | RAL 7035 (light gray) | All RAL colors available, other color palettes available on request |
| Corrosivity category acc. to EN ISO 12944-2 | | C3 medium, paint thickness 100 µm (±25 µm) | Up to C5-M very high (marine), paint thickness 150 µm (±25 µm) |
| **Material thickness** | | | |
| Frame | | 2.5 mm | 2.5 mm |
| Enclosure (without doors) | | 1.5 mm | ≤ 2.5 mm |
| Mounting panels | | 2.5 mm | ≤ 3.0 mm |
| Mounting plates | | 2.0 mm | ≤ 3.0 mm |
| Doors | | 1.5 mm | ≤ 2.0 mm |
| **EMC attenuation** | | | |
| EMC attenuation | | www.siemens.com/lowvoltage/product-support | www.siemens.com/lowvoltage/product-support |
| **Installable module heights (HU = 1 3/4" = 44.45 mm)** | | | |
| | | 19" fixed-mounted | 19" swing frame | |
| Height 1800 mm | | 36 HU | 34 HU | On request |
| Height 2000 mm | | 41 HU | 38 HU | On request |
| Height 2200 mm | | 45 HU | 43 HU | On request |

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# Quick selection guide

## Two installation types



### Stand-alone installation
- With side panels
  (lockable in the case of data cubicles)



### Suite installation
- Without side panels

## Four versions



### Basic version
- IP40 or IP55



### Ventilated cubicles
- IP20
- Door and roof with ventilation fins



### Data cubicles
- IP40
- Glass door at front
- Section door at rear
- Roof with cable entry
- 19" fixed-mounted



### Earthquake-resistant version
- IP40
- Increased stability

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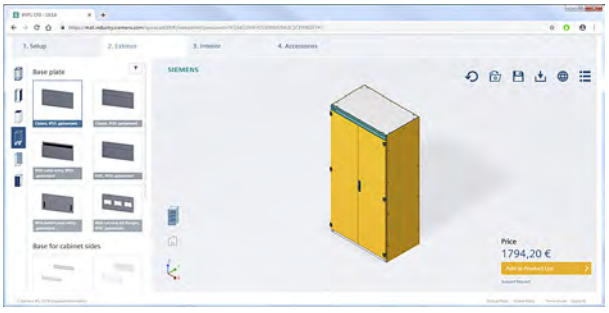

# Online configurator highlights

## www.siemens.com/lowvoltage/8mf1-configurator

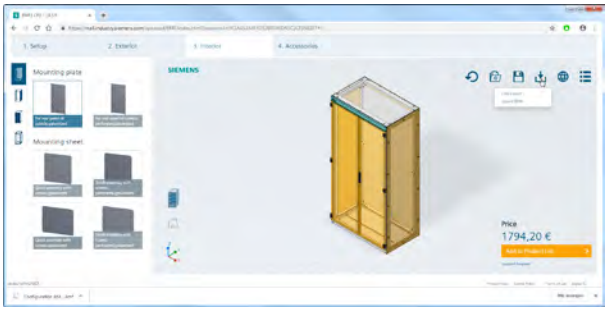
### Graphical configuration directly on the 3D model



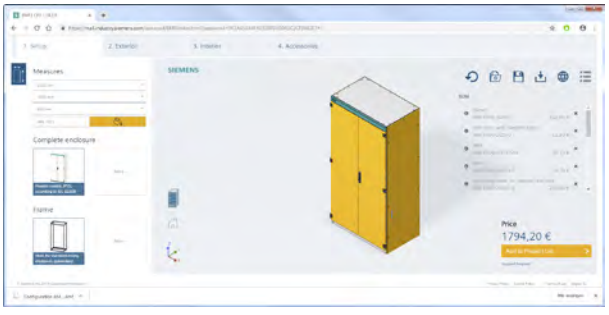

### Customization of the control cabinet with cutouts and color




### Exporting of parts lists and 3D and 2D data




### Dynamic and interactive parts lists






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# Structure of the article numbers

**The structure shown below is intended as an overview of each position and its meaning.**
**For a complete and valid configuration of your system cubicle, please use our online configurator at**
**www.siemens.com/lowvoltage/8mf1-configurator**

| 8MF1 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|
| | | | | 3 | | | |
| **Height** | | | | | | | |
| 1800 mm | 8 | | | | | | |
| 2000 mm | 0 | | | | | | |
| 2200 mm | 2 | | | | | | |
| **Width** | | | | | | | |
| 400 mm | | 4 | | | | | |
| 600 mm | | 6 | | | | | |
| 800 mm | | 8 | | | | | |
| 900 mm | | 9 | | | | | |
| 1000 mm | | 0 | | | | | |
| 1200 mm | | 2 | | | | | |
| **Depth** | | | | | | | |
| 400 mm | | | 4 | | | | |
| 500 mm | | | 5 | | | | |
| 600 mm | | | 6 | | | | |
| 800 mm | | | 8 | | | | |
| 1000 mm | | | 0 | | | | |
| **Version** | | | | | | | |
| Basic | | | | | B | | |
| Ventilated | | | | | V | | |
| Data | | | | | D | | |
| Earthquake-resistant | | | | | E | | |
| **Installation** | | | | | | | |
| Stand-alone | | | | | | S | |
| Side by side | | | | | | R | |
| **Degree of protection** | | | | | | | |
| Basic cubicles, data cubicles | | | | | | | |
| IP40 | | | | | | | 4 |
| IP55 | | | | | | | 5 |
| Ventilated cubicles | | | | | | | |
| IP20 | | | | | | | 4 |
| Earthquake-resistant cubicles | | | | | | | |
| IP40 | | | | | | | 5 |



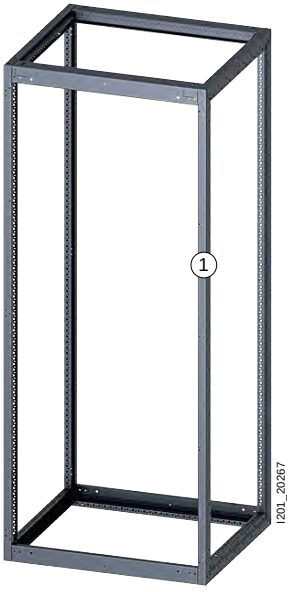
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# Quick selection guide

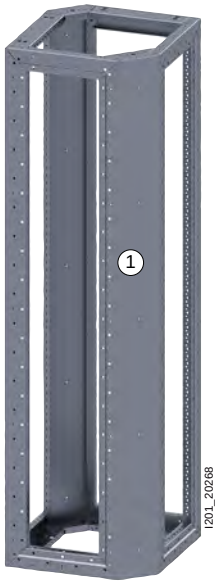
## Frame

### For standard enclosure



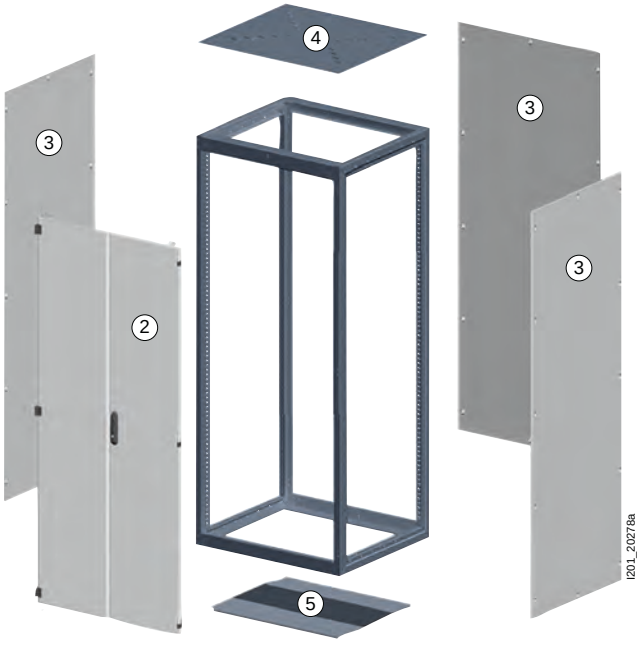

① Frame

### For corner enclosure




① Frame

## Enclosure



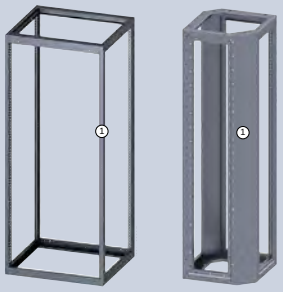

② Door, door half, compartment door
③ Side panels, rear panel
④ Roof
⑤ Floor



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# ① Frame



**The structure shown below is intended as an overview of each position and its meaning.**
**For a complete and valid configuration of your system cubicle, please use our online configurator at**
**www.siemens.com/lowvoltage/8mf1-configurator**

## For standard enclosure

| 8MF1 | | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 3 | G | S | | 0 |
| **Height** | 1800 mm | 8 | | | | | | | |
| | 2000 mm | 0 | | | | | | | |
| | 2200 mm | 2 | | | | | | | |
| **Width** | 400 mm | | 4 | | | | | | |
| | 600 mm | | 6 | | | | | | |
| | 800 mm | | 8 | | | | | | |
| | 900 mm | | 9 | | | | | | |
| | 1000 mm | | 0 | | | | | | |
| | 1200 mm | | 2 | | | | | | |
| **Depth** | 400 mm | | | 4 | | | | | |
| | 500 mm | | | 5 | | | | | |
| | 600 mm | | | 6 | | | | | |
| | 800 mm | | | 8 | | | | | |
| | 1000 mm | | | 0 | | | | | |
| **Material, surface** | Zinc-plated | | | | | | | 3 | |
| | Powder-coated, RAL 7035 | | | | | | | 4 | |

## For corner enclosure

| 8MF1 | | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2 | G | E | | 0 |
| **Height** | 1800 mm | 8 | | | | | | | |
| | 2000 mm | 0 | | | | | | | |
| | 2200 mm | 2 | | | | | | | |
| **Width** | 400 mm | | 4 | | | | | | |
| | 600 mm | | 6 | | | | | | |
| | 800 mm | | 8 | | | | | | |
| | 1000 mm | | 0 | | | | | | |
| **Depth** | 400 mm | | | 5 | | | | | |
| | 600 mm | | | 7 | | | | | |
| | 800 mm | | | 0 | | | | | |
| | 1000 mm | | | 1 | | | | | |
| **Material, surface** | Zinc-plated | | | | | | | 3 | |

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# ① Frame

## Accessories

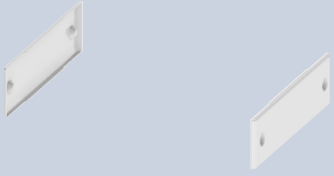
**The structure shown below is intended as an overview of each position and its meaning.
For a complete and valid configuration of your system cubicle, please use our online configurator at
www.siemens.com/lowvoltage/8mf1-configurator**

### Base



| 8MF1 | | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|
| | | | | 0 | 2 | | |
| **Height** | 100 mm | 0 | | | | | |
| | 200 mm | 2 | | | | | |
| **Width** | 400 mm | | 4 | | | | |
| | 600 mm | | 6 | | | | |
| | 800 mm | | 8 | | | | |
| | 900 mm | | 9 | | | | |
| | 1000 mm | | 0 | | | | |
| | 1200 mm | | 2 | | | | |
| **Version** | Base for cubicles with door at the front and the rear | | | | | C | R |
| | Base and feet for cubicles with door at the front | | | | | C | S |
| | Base for corner cubicle | | | | | E | S |

### Base cover



| 8MF1 | | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|
| | | | 0 | | 2 | C | |
| **Height** | 100 mm | 0 | | | | | |
| | 200 mm | 2 | | | | | |
| **Depth** | 400 mm | | | 4 | | | |
| | 500 mm | | | 5 | | | |
| | 600 mm | | | 6 | | | |
| | 800 mm | | | 8 | | | |
| | 1000 mm | | | 0 | | | |
| **Version** | Base covers for cubicle sides | | | | | | T |



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**The structure shown below is intended as an overview of each position and its meaning.**
**For a complete and valid configuration of your system cubicle, please use our online configurator at**
**www.siemens.com/lowvoltage/8mf1-configurator**

## Trim strip



| 8MF1 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|
| | 0 | | 0 | 2 | C | D | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Width** | 400 mm | 4 | | | | | |
| | 600 mm | 6 | | | | | |
| | 800 mm | 8 | | | | | |
| | 900 mm | 9 | | | | | |
| | 1000 mm | 0 | | | | | |
| | 1200 mm | 2 | | | | | |
| **Version** | Trim strip petrol | | Without Siemens logo, above the door | Without cutout | | 0 | 0 |
| | | | With Siemens logo, left, above the door | Without cutout | | 1 | 0 |
| | | | With Siemens logo, right, above the door | With cutout, left | | 1 | 6 |
| | | | With Siemens logo, left, above the door | With cutout, right | | 1 | 7 |
| | Trim strip RAL 7035 | | Without Siemens logo, below the door | Without cutout | | 0 | 8 |

## Separator

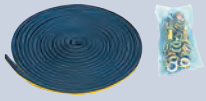
**Separator for vertical division of the enclosure**



| Height | Article No. |
|---|---|
| 1800 mm | 8MF1165-2AT30 |
| 2000 mm | 8MF1185-2AT30 |
| 2200 mm | 8MF1205-2AT30 |

## Mounting accessories

**Accessories for cubicle suites**



| Version | Degree of protection | Article No. |
|---|---|---|
| Screw set | IP40 | 8MF1000-2CA |
| Sealing strip | IP40 to IP55 | 8MF1000-2CB |
| Side-by-side installation kit | IP40 EMC (IP55 not available) | 8MF1000-2CE |

**Kit for stabilization of corner connections**



| Scope of supply | Article No. |
|---|---|
| 8 units | 8MF1000-2HF |

## Transport accessories

**Transport eyebolts**



| Load bearing capacity | Article No. |
|---|---|
| Up to 500 kg | 8MF1000-2CK |

**Transport brackets**



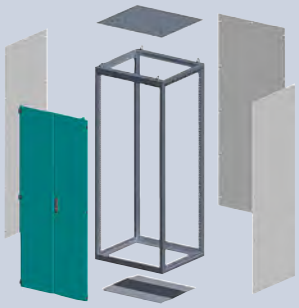
| Width | Article No. |
|---|---|
| 400 mm | 8MF1040-2CW |
| 600 mm | 8MF1060-2CW |
| 800 mm | 8MF1080-2CW |
| 900 mm | 8MF1090-2CW |
| 1000 mm | 8MF1000-2CW |
| 1200 mm | 8MF1020-2CW |



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# ② Door, door halves, compartment door



## Door, door halves

**The structure shown below is intended as an overview of each position and its meaning.**
**For a complete and valid configuration of your system cubicle, please use our online configurator at**
**www.siemens.com/lowvoltage/8mf1-configurator**

| | | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **8MF1** | | | | 0 | 2 | U | T | | | | | | |
| **Height** | 1800 mm | 8 | | | | | | | | | | | |
| | 2000 mm | 0 | | | | | | | | | | | |
| | 2200 mm | 2 | | | | | | | | | | | |
| **Width** | 300 mm | | 3 | | | | | | | | | | |
| | 400 mm | | 4 | | | | | | | | | | |
| | 450 mm | | 7 | | | | | | | | | | |
| | 500 mm | | 5 | | | | | | | | | | |
| | 600 mm | | 6 | | | | | | | | | | |
| | 800 mm | | 8 | | | | | | | | | | |
| | 900 mm | | 9 | | | | | | | | | | |
| | 1000 mm | | 0 | | | | | | | | | | |
| | 1200 mm | | 2 | | | | | | | | | | |
| **Door type** | Door/inner door | | | | | | | 1 | | | | | |
| | Door halves (only available with hinging on the left) | | | | | | | 2 | | | | | |
| **Hinge position** | Left | | | | | | | | 5 | | | | |
| | Right | | | | | | | | 4 | | | | |
| **Door version** | IP20 | With ventilation openings | | | Foamed seal | | | | | 1 | B | A | 2 |
| | IP40 | Closed | | | EMC seal | | | | | 0 | C | A | 1 |
| | | With ventilation slits | | | Foamed seal | | | | | 2 | B | A | 2 |
| | IP55 | Closed | | | Foamed seal | | | | | 0 | B | A | 2 |
| | | With inspection window<br>*Strips for door reinforcement cannot be mounted* | | | Foamed seal | | | | | 0 | B | E | 2 |
| | IPxx | With cutout 292 × 292 mm (up to IP55) for filter fan | | | Foamed seal | | | | | 3 | B | A | 2 |
| | – | Inner door, closed (up to 800 mm wide) | | | Without seal | | | | | 4 | B | A | 2 |



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# Compartment door

**The structure shown below is intended as an overview of each position and its meaning.**
**For a complete and valid configuration of your system cubicle, please use our online configurator at**
**www.siemens.com/lowvoltage/8mf1-configurator**

| | | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **8MF1** | | | | 0 | 2 | U | T | 3 | 4 | 0 | B | A | 2 |
| **Compartment height** | 300 mm | 3 | | | | | | | | | | | |
| | 400 mm | 4 | | | | | | | | | | | |
| | 500 mm | 5 | | | | | | | | | | | |
| | 600 mm | 6 | | | | | | | | | | | |
| | 700 mm | 7 | | | | | | | | | | | |
| | 800 mm | 8 | | | | | | | | | | | |
| | 900 mm | 9 | | | | | | | | | | | |
| | 1000 mm | 0 | | | | | | | | | | | |
| | 1100 mm | 1 | | | | | | | | | | | |
| | 1200 mm | 2 | | | | | | | | | | | |
| **Width** | 600 mm | | 6 | | | | | | | | | | |
| | 800 mm | | 8 | | | | | | | | | | |

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# ② Door, door halves, compartment door

## Accessories

### Door shelves



- Multi-purpose door bars required for mounting
- Shelf: RAL 7035

| For door width | Mounting location | | | Article No. |
|---|---|---|---|---|
| | Door | Door halves | Compartment door | |
| 600 mm | ■ | ■ | – | 8MF1060-2VP |
| 800 mm | ■ | ■ | – | 8MF1080-2VP |

### Grilles



- To upgrade degree of protection from IP2x to IP4x
- Surface: zinc-plated

| Width | Mounting location | | | Article No. |
|---|---|---|---|---|
| | Door | Door halves | Compartment door | |
| 300 mm | ■ | ■ | – | 8MF1030-2HM |
| 400 mm | ■ | ■ | – | 8MF1040-2HM |
| 450 mm | ■ | ■ | – | 8MF1070-2HM |
| 500 mm | ■ | ■ | – | 8MF1050-2HM |
| 600 mm | ■ | ■ | – | 8MF1060-2HM |
| 800 mm | ■ | ■ | – | 8MF1080-2HM |
| 900 mm | ■ | ■ | – | 8MF1090-2HM |

### Strips



- For door reinforcement
- Surface: zinc-plated
- Cannot be used for glass doors

| Height | Mounting location | | | Article No. |
|---|---|---|---|---|
| | Door | Door halves | Compartment door | |
| 1800 mm | ■ | ■ | – | 8MF1008-2VM |
| 2000 mm | ■ | ■ | – | 8MF1000-2VM |
| 2200 mm | ■ | ■ | – | 8MF1002-2VM |

### Door position switches



| Version | | | | Article No. |
|---|---|---|---|---|
| 1 NO + 1 NC (incl. 3SE5232-0HC05) | ■ | ■ | ■ | 8MF1000-2VL |
| 1 NO + 2 NC (incl. 3SE5232-0LC05) | ■ | ■ | ■ | 8MF1000-2VR |

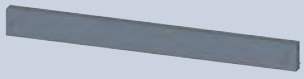
### Circuit diagram pockets



- Cannot be used for glass doors

| Version | Mounting location | | | Article No. |
|---|---|---|---|---|
| | Door | Door halves | Compartment door | |
| Plastic | ■ | ■ | – | 8MF1000-2VK |
| Steel, zinc-plated | ■ | ■ | – | 8MF1000-2VU |

### Limit plates



For a number n of compartment doors, n–1 limit plates are additionally required.
Please order separately.

| Width | Mounting location | | | Article No. |
|---|---|---|---|---|
| | Door | Door halves | Compartment door | |
| 600 mm | – | – | ■ | 8MF1060-2AK14-0 |
| 800 mm | – | – | ■ | 8MF1080-2AK14-0 |

### Door stays



- With variable opening angle: 90°, 120° and 150°
- Surface: zinc-plated

| | Mounting location | | | Article No. |
|---|---|---|---|---|
| | Door | Door halves | Compartment door | |
| | ■ | ■ | – | 8MF1000-2VG |



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**Rotary handles**



| Version | Mounting location | | | Article No. |
|---|---|---|---|---|
| | Door | Door halves | Compartment door | |
| With button insert and eye for padlock (Lock not included in 8MF portfolio) | ■ | – | – | 8MF1000-2VN |

**Rotary handle inserts**

- Not suitable for door halves











| Version | Mounting location | | | Article No. |
|---|---|---|---|---|
| | Door | Door halves | Compartment door | |
| Double-bit key 3 mm | ■ | – | – | 8MF1000-2VA |
| Square key 8 mm | ■ | – | – | 8MF1000-2VC |
| Triangular key 8 mm | ■ | – | – | 8MF1000-2VD |
| Daimler | ■ | – | – | 8MF1000-2VE |
| Cylinder lock | ■ | – | – | 8MF1000-2VF |

## Spare part door

**Hinge sets**



| Version | Mounting location | | | Article No. |
|---|---|---|---|---|
| | Door | Door halves | Compartment door | |
| For left-hand hinge (1 set = 3 units) | ■ | ■ | ■ | 8MF1000-2VT |
| For right-hand hinge (1 set = 3 units) | ■ | ■ | ■ | 8MF1000-2VW |

**Rotary handles**



| Version | Mounting location | | | Article No. |
|---|---|---|---|---|
| | Door | Door halves | Compartment door | |
| With button insert | ■ | – | – | 8MF1000-2VP |

**Grounding cables for doors**



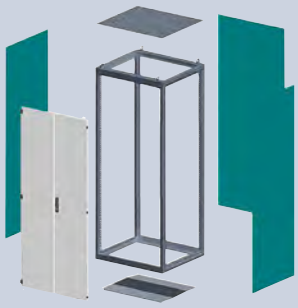
| Cable cross-section | Mounting location | | | Article No. |
|---|---|---|---|---|
| | Door | Door halves | Compartment door | |
| 6 mm² | ■ | ■ | ■ | 8MF1010-2HD3 |

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# ③ Side/rear walls and partition



**The structure shown below is intended as an overview of each position and its meaning.**
**For a complete and valid configuration of your system cubicle, please use our online configurator at**
**www.siemens.com/lowvoltage/8mf1-configurator**

| 8MF1 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 2 | U | W | | | | |

| | | | | 5 | 6 | 7 | 11 | 12 | 13 | 14 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Height** | | | 1800 mm | 8 | | | | | | |
| | | | 2000 mm | 0 | | | | | | |
| | | | 2200 mm | 2 | | | | | | |
| **Width** | | | 300 mm | | 3 | | | | | |
| | | | 400 mm | | 4 | | | | | |
| | | | 450 mm | | 7 | | | | | |
| | | | 500 mm | | 5 | | | | | |
| | | | 600 mm | | 6 | | | | | |
| | | | 800 mm | | 8 | | | | | |
| | | | 900 mm | | 9 | | | | | |
| | | | 1000 mm/ *No selection available for partitions* | | 0 | | | | | |
| | | | 1200 mm | | 2 | | | | | |
| **Depth** | | | No value | | | 0 | | | | |
| | | | 400 mm | | | 4 | | | | |
| | | | 500 mm | | | 5 | | | | |
| | | | 600 mm | | | 6 | | | | |
| | | | 800 mm | | | 8 | | | | |
| | | | 1000 mm/*No selection available for side panels* | | | 0 | | | | |
| **Side wall/ rear wall** | IP40 | Closed | Without seal | | | | 6 | 0 | 1 | C |
| | | | EMC seal | | | | 6 | 2 | 1 | B |
| | | Flat | | | | | 6 | 3 | 1 | C |
| | IP55 | Closed | Foamed seal | | | | 6 | 1 | 1 | C |
| **Partition** | | Closed | Without seal | | | | 7 | 0 | 3 | C |

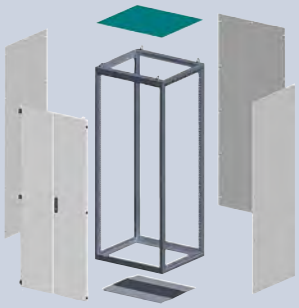
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# ④ Roof



**The structure shown below is intended as an overview of each position and its meaning.**
**For a complete and valid configuration of your system cubicle, please use our online configurator at**
**www.siemens.com/lowvoltage/8mf1-configurator**

## For standard systems

| 8MF1 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | | | 2 | U | D | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Width** | 400 mm | | | | | 4 | | | | | |
| | 600 mm | | | | | 6 | | | | | |
| | 800 mm | | | | | 8 | | | | | |
| | 900 mm | | | | | 9 | | | | | |
| | 1000 mm | | | | | 0 | | | | | |
| | 1200 mm | | | | | 2 | | | | | |
| **Depth** | 400 mm | | | | | | 4 | | | | |
| | 500 mm | | | | | | 5 | | | | |
| | 600 mm | | | | | | 6 | | | | |
| | 800 mm | | | | | | 8 | | | | |
| | 1000 mm | | | | | | 0 | | | | |
| **Version** | IP20 | Perforated | Without seal | | | | | 2 | 0 | 0 | A |
| | IP40 | Closed | Without seal | | | | | 1 | 0 | 0 | A |
| | | | EMC seal | | | | | 1 | 2 | 0 | A |
| | | With ventilation fins | Without seal | | | | | 3 | 0 | 0 | A |
| | IP55 | Closed | Foamed seal | | | | | 1 | 1 | 0 | A |

## For corner enclosure

| 8MF1 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | | 2 | U | E | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Width/depth** | 400/400 mm | | | | | | 4 | | | | |
| | 600/600 mm | | | | | | 6 | | | | |
| | 800/800 mm | | | | | | 8 | | | | |
| | 1000/1000 mm | | | | | | 0 | | | | |
| **Version** | For corner cubicle | IP20 | With ventilation openings | | | | | 2 | 0 | 0 | A |
| | | IP40 | Closed | | | | | 1 | 0 | 0 | A |
| | | | With ventilation openings | | | | | 3 | 0 | 0 | A |
| | | IP55 | Closed | | | | | 1 | 1 | 0 | A |

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# Accessories

## Roof trays

**Roof trays for increasing the degree of protection, IPX1**



| Width | Depth | Article No. |
|---|---|---|
| 400 mm | 400 mm | 8MF1044-2VH |
| | 500 mm | 8MF1045-2VH |
| | 600 mm | 8MF1046-2VH |
| | 800 mm | 8MF1048-2VH |
| | 1000 mm | 8MF1040-2VH |
| 600 mm | 400 mm | 8MF1064-2VH |
| | 500 mm | 8MF1065-2VH |
| | 600 mm | 8MF1066-2VH |
| | 800 mm | 8MF1068-2VH |
| | 1000 mm | 8MF1060-2VH |
| 800 mm | 400 mm | 8MF1084-2VH |
| | 500 mm | 8MF1085-2VH |
| | 600 mm | 8MF1086-2VH |
| | 800 mm | 8MF1088-2VH |
| | 1000 mm | 8MF1080-2VH |
| 900 mm | 400 mm | 8MF1094-2VH |
| | 500 mm | 8MF1095-2VH |
| | 600 mm | 8MF1096-2VH |
| | 800 mm | 8MF1098-2VH |
| | 1000 mm | 8MF1090-2VH |
| 1000 mm | 400 mm | 8MF1004-2VH |
| | 500 mm | 8MF1005-2VH |
| | 600 mm | 8MF1006-2VH |
| | 800 mm | 8MF1008-2VH |
| | 1000 mm | 8MF1000-2VH |
| 1200 mm | 400 mm | 8MF1024-2VH |
| | 500 mm | 8MF1025-2VH |
| | 600 mm | 8MF1026-2VH |
| | 800 mm | 8MF1028-2VH |
| | 1000 mm | 8MF1020-2VH |

## Roof tray rims

**Roof tray rims for cubicle side, IPX1**



Each cubicle or cubicle group with a roof tray requires two roof tray rims.
(1 set = 2 units)

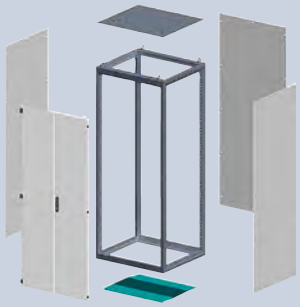
| Depth | Article No. |
|---|---|
| 400 mm | 8MF1004-2VB |
| 500 mm | 8MF1005-2VB |
| 600 mm | 8MF1006-2VB |
| 800 mm | 8MF1008-2VB |
| 1000 mm | 8MF1000-2VB |



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# ⑤ Floor



**The structure shown below is intended as an overview of each position and its meaning.**
**For a complete and valid configuration of your system cubicle, please use our online configurator at**
**www.siemens.com/lowvoltage/8mf1-configurator**

## For standard enclosure

| 8MF1 | | | | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 0 | | | 2 | U | B | | | |
| **Width** | | 400 mm | | | 4 | | | | | | | |
| | | 600 mm | | | 6 | | | | | | | |
| | | 800 mm | | | 8 | | | | | | | |
| | | 900 mm | | | 9 | | | | | | | |
| | | 1000 mm | | | 0 | | | | | | | |
| | | 1200 mm | | | 2 | | | | | | | |
| **Depth** | | 400 mm | | | | 4 | | | | | | |
| | | 500 mm | | | | 5 | | | | | | |
| | | 600 mm | | | | 6 | | | | | | |
| | | 800 mm | | | | 8 | | | | | | |
| | | 1000 mm | | | | 0 | | | | | | |
| **Version** | IP30 | Closed, divided | | | | | | | | 2 | 2 | 0 |
| | IP40 | Closed | EMC seal | | | | | | | 4 | 2 | 0 |
| | IP55 | Closed | Seal | | | | | | | 1 | 2 | 0 |
| | IPxx | With cable entry, rear [1] | | | | | | | | 3 | 2 | 0 |
| | | With cable entry, lateral and rear [2] | | | | | | | | 5 | 1 | 2 |
| | | With cut-outs for flanges | | | | | | | | 5 | 2 | 0 |

[1] Version available from depth ≥ 600 mm, max. opening area at rear = 87 mm (without foam rubber)
[2] Version available from width ≥ 600 mm and depth ≥ 600 mm, max. opening area at rear = 87 mm and at side = 100 mm (without foam rubber)

## For corner enclosure

| 8MF1 | | | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0 | 0 | | 2 | U | E | | 1 | 0 |
| **Depth** | 400 mm | | | | 4 | | | | | | |
| | 600 mm | | | | 6 | | | | | | |
| | 800 mm | | | | 8 | | | | | | |
| | 1000 mm | | | | 0 | | | | | | |
| **Degree of protection** | IP40 | | | | | | | | 2 | | |
| | IP55 | | | | | | | | 1 | | |



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# Mounting panels



**The structure shown below is intended as an overview of each position and its meaning.**
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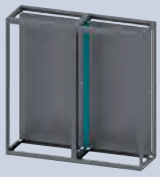
## For mounting plate at rear, depth adjustable [1)]

| | | 8MF1 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0 | 2 | A | L | | 3 | 0 |
| **Cubicle height** | 1800 mm | | 8 | | | | | | | | |
| | 2000 mm | | 0 | | | | | | | | |
| | 2200 mm | | 2 | | | | | | | | |
| **Cubicle width** | 400 mm | | | 4 | | | | | | | |
| | 600 mm | | | 6 | | | | | | | |
| | 800 mm | | | 8 | | | | | | | |
| | 900 mm | | | 9 | | | | | | | |
| | 1000 mm | | | 0 | | | | | | | |
| | 1200 mm | | | 2 | | | | | | | |
| **Version** | Non-perforated | | | | | | | | 0 | | |
| | Perforated | | | | | | | | 1 | | |

[1)] Center mounting only possible when mounted at rear or in conjunction with mounting rail (50), if the mounting plate is installed offset in the depth direction

## Accessories

**Mounting panel adapters**



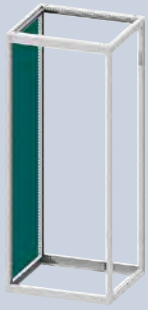
- For connecting side-by-side mounting panels
- Surface: zinc-plated

| Height | Article No. |
|---|---|
| 1800 mm | 8MF1800-2CH |
| 2000 mm | 8MF1000-2CH |
| 2200 mm | 8MF1200-2CH |



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**The structure shown below is intended as an overview of each position and its meaning.**
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## For side mounting plate

| | | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|
| **8MF1** | | | 0 | | 2 | A | K | | 3 | 0 |
| **Cubicle height** | 1800 mm | 8 | | | | | | | | |
| | 2000 mm | 0 | | | | | | | | |
| | 2200 mm | 2 | | | | | | | | |
| **Depth** | 400 mm | | | 4 | | | | | | |
| | 500 mm | | | 5 | | | | | | |
| | 600 mm | | | 6 | | | | | | |
| | 800 mm | | | 8 | | | | | | |
| | 1000 mm | | | 0 | | | | | | |
| **Version** | Non-perforated | | | | | | | 0 | | |
| | Perforated | | | | | | | 1 | | |

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# Mounting plates



**The structure shown below is intended as an overview of each position and its meaning.**
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**www.siemens.com/lowvoltage/8mf1-configurator**

| | | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|
| **8MF1** | | | | 0 | 2 | A | | | | 0 |
| **Height** | 100 mm | 1 | | | | | | | | |
| | 200 mm | 2 | | | | | | | | |
| | 300 mm | 3 | | | | | | | | |
| | 400 mm | 4 | | | | | | | | |
| | 600 mm | 6 | | | | | | | | |
| | 800 mm | 8 | | | | | | | | |
| **Width** | 400 mm | | 4 | | | | | | | |
| | 600 mm | | 6 | | | | | | | |
| | 800 mm | | 8 | | | | | | | |
| | 900 mm | | 9 | | | | | | | |
| | 1000 mm | | 0 | | | | | | | |
| | 1200 mm | | 2 | | | | | | | |
| **Installation location** | Fixed with zinc die-cast parts between the bars of the frame or mounting rails (50) | | | | | | M | | | |
| | Fixed directly to the frame or mounting rails (50) | | | | | | A | | | |
| **Version** | Non-perforated | | | | | | | 0 | | |
| | Perforated | | | | | | | 1 | | |
| **Material** | 2.0 mm sheet steel | | | | | | | | 2 | |

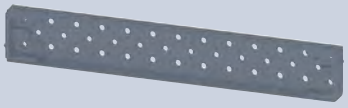


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# Mounting rails

## Mounting rails (50)



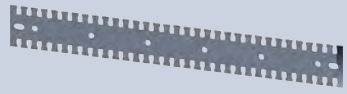
| Length | Version | Article No. |
|---|---|---|
| 250 mm | Suitable for cubicle depth 400 mm | 8MF1025-2AS30 |
| 325 mm | Suitable for cubicle width 400 mm | 8MF1032-2AS30 |
| 350 mm | Suitable for cubicle depth 500 mm | 8MF1035-2AS30 |
| 425 mm | – | 8MF1042-2AS30 |
| 450 mm | Suitable for cubicle depth 600 mm | 8MF1045-2AS30 |
| 525 mm | Suitable for cubicle width 600 mm | 8MF1052-2AS30 |
| 550 mm | – | 8MF1055-2AS30 |
| 625 mm | – | 8MF1062-2AS30 |
| 650 mm | Suitable for cubicle depth 800 mm | 8MF1065-2AS30 |
| 725 mm | Suitable for cubicle width 800 mm | 8MF1072-2AS30 |
| 750 mm | – | 8MF1075-2AS30 |
| 825 mm | Suitable for cubicle width 900 mm | 8MF1082-2AS30 |
| 850 mm | Suitable for cubicle depth 1000 mm | 8MF1085-2AS30 |
| 925 mm | Suitable for cubicle width 1000 mm | 8MF1092-2AS30 |
| 1050 mm | – | 8MF1105-2AS30 |
| 1125 mm | Suitable for cubicle width 1200 mm | 8MF1112-2AS30 |
| 1250 mm | – | 8MF1125-2AS30 |
| 1350 mm | – | 8MF1135-2AS30 |
| 1450 mm | – | 8MF1145-2AS30 |
| 1550 mm | – | 8MF1155-2AS30 |
| 1650 mm | Suitable for cubicle height 1800 mm | 8MF1165-2AS30 |
| 1750 mm | – | 8MF1175-2AS30 |
| 1850 mm | Suitable for cubicle height 2000 mm | 8MF1185-2AS30 |
| 1950 mm | – | 8MF1195-2AS30 |
| 2050 mm | Suitable for cubicle height 2200 mm | 8MF1205-2AS30 |
| 2150 mm | – | 8MF1215-2AS30 |
| 2250 mm | – | 8MF1225-2AS30 |

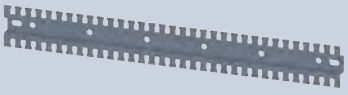
## Mounting rails (25)



| Version | | Length | Article No. |
|---|---|---|---|
| Suitable for cubicle width | 600 mm | 566 mm | 8MF1056-2AS30 |
| | 1000 mm | 966 mm | 8MF1096-2AS30 |
| | 1200 mm | 1166 mm | 8MF1006-2AS30 |
| Suitable for door width | 300 mm | 166 mm | 8MF1016-2AS30 |
| | 400 mm | 266 mm | 8MF1026-2AS30 |
| | 450 mm | 316 mm | 8MF1031-2AS30 |
| | 500 mm | 366 mm | 8MF1036-2AS30 |
| | 600 mm | 466 mm | 8MF1046-2AS30 |
| | 800 mm | 666 mm | 8MF1066-2AS30 |
| | 900 mm | 766 mm | 8MF1076-2AS30 |
| | 1000 mm | 866 mm | 8MF1086-2AS30 |

## Mounting rails, serrated





| Version | Article No. |
|---|---|
| Flat | 8MF1060-2HC13-0 |
| | 8MF1080-2HC13-0 |
| | 8MF1090-2HC13-0 |
| | 8MF1000-2HC13-0 |
| | 8MF1020-2HC13-0 |
| U-shape | 8MF1060-2HC03-0 |
| | 8MF1080-2HC03-0 |
| | 8MF1090-2HC03-0 |
| | 8MF1000-2HC03-0 |
| | 8MF1020-2HC03-0 |

## Mounting rails, heavy duty



- Can be installed in the cubicle depth and width (the length corresponds to the appropriate cubicle dimension)

| Length | Article No. |
|---|---|
| 600 mm | 8MF1060-2AH60 |
| 800 mm | 8MF1080-2AH60 |
| 900 mm | 8MF1090-2AH60 |
| 1000 mm | 8MF1000-2AH60 |
| 1200 mm | 8MF1020-2AH60 |

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# General accessories interior installation

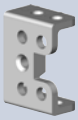
## Telescopic rails



- For withdrawable shelves

| For cubicle depth | Article No. |
|---|---|
| 400 mm and 600 mm | 8MF1003-2HF |
| 800 mm and 1000 mm | 8MF1006-2HF |

## Mounting brackets



- For mounting expansion elements

| Article No. |
|---|
| 8MF1000-2CP |

## Earthquake assembly kits







| For stabilization of | Article No. |
|---|---|
| Corner connections | 8MF1000-2HA |
| Intermediate panel | 8MF1000-2HW |
| 19" fixed-mounted | 8MF1000-2HE |

## Grounding plates



- For fixing to the frame (although fixing points for ground connection are already provided on the frame)

| Article No. |
|---|
| 8MF1000-2HK |

## Grounding bars



| Version | Width | Article No. |
|---|---|---|
| 30 × 10 mm² | 600 mm | 8MF1060-2HD2 |
| | 800 mm | 8MF1080-2HD2 |
| | 900 mm | 8MF1090-2HD2 |
| | 1000 mm | 8MF1000-2HD2 |
| | 1200 mm | 8MF1020-2HD2 |
| 30 × 5 mm² | 600 mm | 8MF1060-2HD1 |
| | 800 mm | 8MF1080-2HD1 |
| | 900 mm | 8MF1090-2HD1 |
| | 1000 mm | 8MF1000-2HD1 |
| | 1200 mm | 8MF1020-2HD1 |

## Grounding screws



| Thread | Article No. |
|---|---|
| M12 | 8MF1000-2HB |

## Grounding straps



| Cross-section | Length | Perforation | Article No. |
|---|---|---|---|
| 16 mm² | 300 mm | 6.5 mm on both sides | 8MF1000-2HK1 |
| 16 mm² | 300 mm | 6.5 mm and 8.5 mm | 8MF1000-2HK2 |

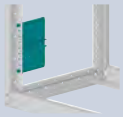
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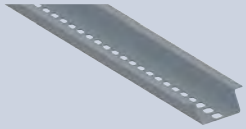

## Universal sheets



- Incl. DIN rail; e.g. for mounting a heater unit

| Article No. |
|---|
| 8MF1000-2HG |

## DIN rails



- For mounting modular installation devices

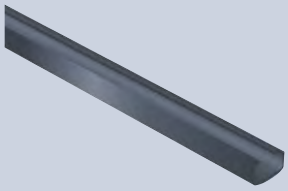
| Height | Article No. |
|---|---|
| 7.5 mm | 8MF1500-2HS |
| 15 mm | 8MF1100-2HS |

## Insulated supports



| Thread | Dimensions | Article No. |
|---|---|---|
| M8 | D 40 × 50 mm | 8MF1000-2VY |

## Cable clamping rails



| Height | Width | Depth | Article No. |
|---|---|---|---|
| 30 mm | 600 mm | – | 8MF1360-2HH |
| | 800 mm | – | 8MF1380-2HH |
| | 900 mm | – | 8MF1390-2HH |
| | 1000 mm | – | 8MF1310-2HH |
| | 1200 mm | – | 8MF1320-2HH |
| | – | 400 mm | 8MF1304-2HH |
| | | 600 mm | 8MF1306-2HH |
| | | 800 mm | 8MF1308-2HH |
| | | 1000 mm | 8MF1301-2HH |
| 40 mm | 600 mm | – | 8MF1460-2HH |
| | 800 mm | – | 8MF1480-2HH |
| | 900 mm | – | 8MF1490-2HH |
| | 1000 mm | – | 8MF1410-2HH |
| | 1200 mm | – | 8MF1420-2HH |
| | – | 400 mm | 8MF1404-2HH |
| | | 600 mm | 8MF1406-2HH |
| | | 800 mm | 8MF1408-2HH |
| | | 1000 mm | 8MF1401-2HH |
| 50 mm | 600 mm | – | 8MF1560-2HH |
| | 800 mm | – | 8MF1580-2HH |
| | 900 mm | – | 8MF1590-2HH |
| | 1000 mm | – | 8MF1510-2HH |
| | 1200 mm | – | 8MF1520-2HH |
| | – | 400 mm | 8MF1504-2HH |
| | | 600 mm | 8MF1506-2HH |
| | | 800 mm | 8MF1508-2HH |
| | | 1000 mm | 8MF1501-2HH |

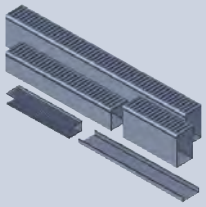


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# General accessories interior installation

## Cable ducts



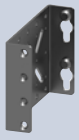
| Version | Color | Height | Width | Article No. |
|---|---|---|---|---|
| Halogen-free | RAL 7035 | 37.5 mm | 25 mm | 8MF1120-2HL7 |
| | | 50 mm | 25 mm | 8MF1220-2HL7 |
| | | | 37.5 mm | 8MF1240-2HL7 |
| | | | 50 mm | 8MF1250-2HL7 |
| | | | 75 mm | 8MF1260-2HL7 |
| | | 75 mm | 50 mm | 8MF1350-2HL7 |
| | | | 75 mm | 8MF1360-2HL7 |
| | | | 100 mm | 8MF1370-2HL7 |
| | | | 125 mm | 8MF1380-2HL7 |
| | | 100 mm | 75 mm | 8MF1460-2HL7 |
| Standard | RAL 7030 | 37.5 mm | 25 mm | 8MF1120-2HL6 |
| | | 50 mm | 25 mm | 8MF1220-2HL6 |
| | | | 37.5 mm | 8MF1240-2HL6 |
| | | | 50 mm | 8MF1250-2HL6 |
| | | | 75 mm | 8MF1260-2HL6 |
| | | 75 mm | 50 mm | 8MF1350-2HL6 |
| | | | 75 mm | 8MF1360-2HL6 |
| | | | 100 mm | 8MF1370-2HL6 |
| | | | 125 mm | 8MF1380-2HL6 |
| | | 100 mm | 75 mm | 8MF1460-2HL6 |

## Edge protection



| Dimensions | Length | Article No. |
|---|---|---|
| 9.5 × 6.5 mm | 5 m | 8MF1000-2CD |

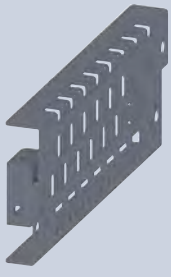
## Mounting plates





| Dimensions | Version | Article No. |
|---|---|---|
| 122 × 91 mm | Standard | 8MF1000-2HH |
| 122 × 92 mm | With DIN rail | 8MF1000-2HH1 |

## Buses for improving EMC



| Installation in | Width | Depth | Article No. |
|---|---|---|---|
| Cubicle width | 400 mm | – | 8MF1040-2HN |
| | 600 mm | – | 8MF1060-2HN |
| | 800 mm | – | 8MF1080-2HN |
| | 900 mm | – | 8MF1090-2HN |
| | 1000 mm | – | 8MF1000-2HN |
| | 1200 mm | – | 8MF1020-2HN |
| Cubicle depth | – | 400 mm | 8MF1004-2HN |
| | | 600 mm | 8MF1006-2HN |
| | | 800 mm | 8MF1008-2HN |
| | | 1000 mm | 8MF1001-2HN |



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**Brackets**



- For variable mounting of cable clamping rails

| Article No. |
|---|
| 8MF1000-2HH5 |

**Toothed bars**



- For installation on mounting rail

| Length | Article No. |
|---|---|
| 100 mm | 8MF1000-2HC |

**Contact washers**



- Size 6

| Scope of supply | Article No. |
|---|---|
| 100 units | 8MF1000-2VJ |

**Screws**



- M6 × 12

| Scope of supply | Article No. |
|---|---|
| 100 units | 8MF1000-2VS |

**Adapters for wiring systems**



| Version | Article No. |
|---|---|
| For Lütze wiring system | 8MF1000-2HL |
| For Promet wiring system | 8MF1000-2HP |

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# 19-inch expansion

## Cubicle frames



- For the installation of 19" devices, screwed
- In combination with 2 mounting rails, heavy duty in cubicle width (order mounting rail separately, see page 17/27)
- For cubicle width ≧ 600 mm

| Surface | Height | For mounting height | Article No. |
|---|---|---|---|
| Zinc-plated | 400 mm | 7 HU | 8MF1100-2AN30 |
| | 600 mm | 12 HU | 8MF1200-2AN30 |
| | 800 mm | 16 HU | 8MF1300-2AN30 |
| | 1000 mm | 21 HU | 8MF1400-2AN30 |
| | 1200 mm | 25 HU | 8MF1500-2AN30 |
| | 1400 mm | 30 HU | 8MF1600-2AN30 |
| | 1800 mm | 36 HU | 8MF1700-2AN30 |
| | 2000 mm | 41 HU | 8MF1800-2AN30 |
| | 2200 mm | 45 HU | 8MF1900-2AN30 |

## Swing frames



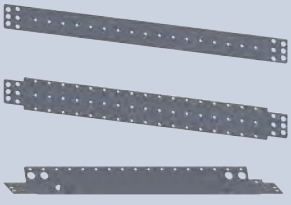
- For the installation of 19" devices, screwed
- Left-hand/right-hand hinge
- In combination with 2 mounting rails, heavy duty in cubicle width (order mounting rail separately)
- For cubicle width ≧800 mm

| Version | Surface | Height | For mounting height | Article No. |
|---|---|---|---|---|
| Screwed [1] | Zinc-plated | 1800 mm | 34 HU | 8MF1800-2AR02-4 |
| | | 2000 mm | 38 HU | 8MF1000-2AR02-4 |
| | | 2200 mm | 43 HU | 8MF1200-2AR02-4 |
| | Powder-coated | 1800 mm | 34 HU | 8MF1800-2AR02-3 |
| | | 2000 mm | 38 HU | 8MF1000-2AR02-3 |
| | | 2200 mm | 43 HU | 8MF1200-2AR02-3 |
| Welded [2] | Powder-coated | 1800 mm | 34 HU | 8MF1800-2AR02-2 |
| | | 2000 mm | 38 HU | 8MF1000-2AR02-2 |
| | | 2200 mm | 43 HU | 8MF1200-2AR02-2 |

[1] Interlocking with 3 mm double-bit key
[2] Spring interlocking at top and bottom

## Accessories

### Universal supports



| Version | For mounting height | Article No. |
|---|---|---|
| For cable channel, DIN rail and C rail | 1 HU | 8MF1000-2HH2 |
| | 2 HU | 8MF1000-2HH3 |
| For cable channel, DIN rail, C rail and lamp | | 8MF1000-2HH4 |

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## Covers



| Version | Surface | For mounting height | Article No. |
|---|---|---|---|
| Closed | RAL 7035 | 1 HU | 8MF1000-2AB01 |
| | | 2 HU | 8MF1000-2AB02 |
| | | 3 HU | 8MF1000-2AB03 |
| | | 4 HU | 8MF1000-2AB04 |
| | | 5 HU | 8MF1000-2AB05 |
| | | 6 HU | 8MF1000-2AB06 |
| | | 7 HU | 8MF1000-2AB07 |



| | | | |
|---|---|---|---|
| With ventilation openings | RAL 7035 | 2 HU | 8MF1000-2AB32 |
| | | 3 HU | 8MF1000-2AB33 |



| | | | |
|---|---|---|---|
| For modular installation devices, for 24 modular widths | RAL 7035 | 3 HU | 8MF1000-2AB31 |

## Frames



| Version | Surface | For mounting height | Article No. |
|---|---|---|---|
| For mounting test switches, 19" | RAL 7035 | 7 HU | 8MF1000-2AB30 |

## Covers for frames



| Version | Surface | Article No. |
|---|---|---|
| For mounting 7XP 1/6 standard devices | RAL 7035 | 8MF1000-2AB34 |



| | | |
|---|---|---|
| For mounting 7XP 2/6 standard devices | RAL 7035 | 8MF1000-2AB35 |



| | | |
|---|---|---|
| For mounting 7XP 3/6 standard devices | RAL 7035 | 8MF1000-2AB36 |

## Shelves

- For 19" frame



| Version | Surface | For mounting height | Depth | Article No. |
|---|---|---|---|---|
| Non-adjustable | Zinc-plated | 3 HU | 230 mm | 8MF1000-2AB12 |
| | | | 400 mm | 8MF1000-2AB14 |



| | | | | |
|---|---|---|---|---|
| Withdrawable | RAL 7035 | 1 HU | | 8MF1000-2HF12 |

## Slide rails



| Version | Depth | Article No. |
|---|---|---|
| For 19" fixed-mounted (double mounting at front and rear) | 400 mm | 8MF1004-2HG12 |
| | 600 mm | 8MF1006-2HG12 |
| | 800 mm | 8MF1008-2HG12 |
| | 1000 mm | 8MF1000-2HG12 |



| | | |
|---|---|---|
| For 19" fixed-mounted and for 19" swing frame | | 8MF1000-2HS12 |

## Device panels



| Version | Surface | Height | Width | Article No. |
|---|---|---|---|---|
| For 24 modular widths | Zinc-plated | 1800 mm | 100 mm | 8MF1810-2AB00 |
| | | | 150 mm | 8MF1850-2AB00 |
| | | | 200 mm | 8MF1820-2AB00 |
| | | 2000 mm | 100 mm | 8MF1010-2AB00 |
| | | | 150 mm | 8MF1050-2AB00 |
| | | | 200 mm | 8MF1020-2AB00 |
| | | 2200 mm | 100 mm | 8MF1210-2AB00 |
| | | | 150 mm | 8MF1250-2AB00 |
| | | | 200 mm | 8MF1220-2AB00 |



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# Quick selection guide

## Standard LED lights

The LED lights offer optimum lighting conditions for installation and maintenance. The LED technology is energy-efficient and maintenance-free. The connection is established via a 2-pin plug with lock. Through-wiring is possible.

| | Magnetic fixing<br>Easy installation at any point on the steel cubicle | Screw fixing<br>Fixed installation in the case of impact loads or high vibration levels | Clip fixing<br>The lamp is snapped into the clip bracket and can be turned in both directions |
|---|---|---|---|
| **With motion detector**<br>The lights switch on when the door is opened, enabling work in the cubicle to be started immediately |  |  |  |
| **With On/Off switch**<br>Particularly suitable for operation in cubicles and enclosures with a high density of built-in electrical/electronic components |  |  |  |

## Ecoline LED lights

The Ecoline LED lights do not differ from the standard LED lights in terms of luminosity and mounting system. The connection is made via a 2-pole clamping terminal.

| | Magnetic fixing<br>Easy installation at any point on the steel cubicle | Screw fixing<br>Fixed installation in the case of impact loads or high vibration levels | Clip fixing<br>The lamp is snapped into the clip bracket and can be turned in both directions |
|---|---|---|---|
| **With motion detector**<br>The lights switch on when the door is opened, enabling work in the cubicle to be started immediately |  |  |  |
| **With On/Off switch**<br>Particularly suitable for operation in cubicles and enclosures with a high density of built-in electrical/electronic components |  |  |  |
| **Without switching function**<br>Prepared for the use of an external switch |  |  |  |

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# Slimline lights

The Slimline lights are an alternative with an energy-saving lamp and are available as a version with an integrated socket.

| | Screw fixing | Magnetic fixing |
|---|---|---|
| **With motion detector and socket**<br>The lights switch on when the door is opened, enabling work in the cubicle to be started immediately |  |  |
| **With On/Off switch and socket**<br>Particularly suitable for operation in cubicles and enclosures with a high density of built-in electrical/electronic components |  |  |



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# LED lights

## Standard

**Magnetic fixing**



| Version | Voltage | Standard | Article No. |
|---|---|---|---|
| With motion detector | 100 ... 240 V AC, 50/60 Hz | VDE | 8MR2200-0A |
| | 24 ... 48 V DC | VDE | 8MR2201-0A |
| With On/Off switch | 100 ... 240 V AC, 50/60 Hz | VDE, UL | 8MR2200-1A |
| | 24 ... 48 V DC | VDE, UL | 8MR2201-1A |

**Screw fixing**



| Version | Voltage | Standard | Article No. |
|---|---|---|---|
| With motion detector | 100 ... 240 V AC, 50/60 Hz | VDE | 8MR2200-0B |
| | 24 ... 48 V DC | VDE | 8MR2201-0B |
| With On/Off switch | 100 ... 240 V AC, 50/60 Hz | VDE, UL | 8MR2200-1B |
| | 24 ... 48 V DC | VDE, UL | 8MR2201-1B |

**Clip fixing**



| Version | Voltage | Standard | Article No. |
|---|---|---|---|
| With motion detector | 100 ... 240 V AC, 50/60 Hz | VDE | 8MR2200-0C |
| | 24 ... 48 V DC | VDE | 8MR2201-0C |
| With On/Off switch | 100 ... 240 V AC, 50/60 Hz | VDE | 8MR2200-1C |
| | 24 ... 48 V DC | VDE | 8MR2201-1C |

## Accessories

### Cables

**Connecting cables with socket and open end**



- For connection of an LED light (switch side)
- Length 2 m

| Version | Cross-section | Standard | Article No. |
|---|---|---|---|
| AC connecting cable | 2 × 1.5 mm² | VDE | 8MR2210-1B |
| | AWG 16 | VDE, UL | 8MR2210-2B |
| DC connecting cable | 2 × 1.5 mm² | VDE | 8MR2210-3B |
| | AWG 16 | VDE, UL | 8MR2210-4B |

**Extension cables with socket and plug**



- For looping through to another LED light
- Length 1 m

| Version | Cross-section | Standard | Article No. |
|---|---|---|---|
| AC plastic-sheathed cable | 2 × 1.5 mm² | VDE | 8MR2210-1C |
| | AWG 16 | VDE, UL | 8MR2210-2C |
| DC plastic-sheathed cable | 2 × 1.5 mm² | VDE | 8MR2210-3C |
| | AWG 16 | VDE, UL | 8MR2210-4C |

### Individual plugs or sockets for self-assembly of cables

**For connection of an LED light (switch side)**



| Version | Application | Standard | Color | Article No. |
|---|---|---|---|---|
| AC socket | For input side | VDE | White | 8MR2210-1A |
| DC socket | For input side | VDE | Blue | 8MR2210-3A |

**For looping through to another LED light**



| Version | Application | Standard | Color | Article No. |
|---|---|---|---|---|
| AC connector | For output side | VDE | White | 8MR2210-2A |
| DC connector | For output side | VDE | Blue | 8MR2210-4A |

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# Ecoline

## Magnetic fixing



| Version | Voltage | | Article No. |
|---|---|---|---|
| With motion detector | AC 100 ... 240 V, 50/60 Hz | 90 ... 110 V DC | 8MR2303-0A |
| | 24 ... 48 V DC | | 8MR2301-0A |
| With On/Off switch | AC 100 ... 240 V, 50/60 Hz | 90 ... 110 V DC | 8MR2303-1A |
| | 24 ... 48 V DC | | 8MR2301-1A |
| Without switching function | AC 100 ... 240 V, 50/60 Hz | 90 ... 110 V DC | 8MR2303-3A |
| | 24 ... 48 V DC | | 8MR2301-3A |

## Screw fixing



| Version | Voltage | | Article No. |
|---|---|---|---|
| With motion detector | 100 ... 240 V, 50/60 Hz AC | 90 ... 110 V DC | 8MR2303-0B |
| | 24 ... 48 V DC | | 8MR2301-0B |
| With On/Off switch | 100 ... 240 V, 50/60 Hz AC | 90 ... 110 V DC | 8MR2303-1B |
| | 24 ... 48 V DC | | 8MR2301-1B |
| Without switching function | 100 ... 240 V, 50/60 Hz AC | 90 ... 110 V DC | 8MR2303-3B |
| | 24 ... 48 V DC | | 8MR2301-3B |

## Clip fixing



| Version | Voltage | | Article No. |
|---|---|---|---|
| With motion detector | 100 ... 240 V, 50/60 Hz AC | 90 ... 110 V DC | 8MR2303-0C |
| | 24 ... 48 V DC | | 8MR2301-0C |
| With On/Off switch | 100 ... 240 V, 50/60 Hz AC | 90 ... 110 V DC | 8MR2303-1C |
| | 24 ... 48 V DC | | 8MR2301-1C |
| Without switching function | 100 ... 240 V, 50/60 Hz AC | 90 ... 110 V DC | 8MR2303-3C |
| | 24 ... 48 V DC | | 8MR2301-3C |



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# Slimline lights

**Magnetic fixing (approx. 30 N)**



| Version | Voltage | Standard | Article No. |
|---|---|---|---|
| With motion detector and socket | 230 V AC, 50/60 Hz | VDE | 8MF5910-1C |
| With On/Off switch and socket | 230 V AC, 50/60 Hz | VDE | 8MF5900-1C |

**Screw fixing**



| Version | Voltage | Standard | Article No. |
|---|---|---|---|
| With motion detector and socket | 230 V AC, 50/60 Hz | VDE | 8MF5910-1A |
| Slimline lights with On/Off switch and socket | 230 V AC, 50/60 Hz | VDE | 8MF5900-1A |



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# Quick selection guide

## Solutions to provide protection against heat

### Cooling devices



### Heat exchangers



### Filter fans/outlet fans



### Thermostats



## Solutions to provide protection against cold

### Heater units



### Fan heaters



### Thermostats



## Solutions to provide protection against corrosion and condensation

### Heater units/ fan heaters



### Filter fans/outlet filters



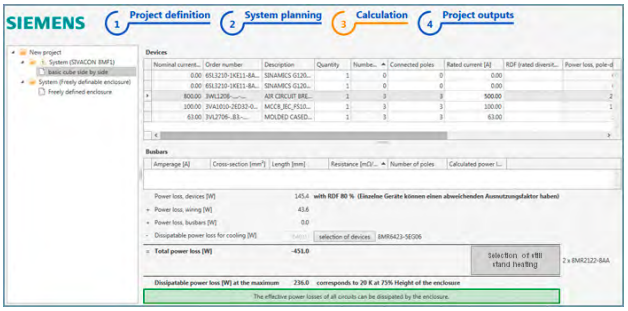
### Thermostats



### Hygrostats/ hygrotherms



## SIMARIS therm




The SIMARIS therm calculation tool helps you to easily and precisely dimension the heat dissipation of your control panels, simply by selecting the relevant devices in the panel. If necessary, you can immediately select the necessary cooling devices and air conditioners. You can also define the heating power that may be required for anti-condensation heating.

For a free download and further information, visit:
www.siemens.com/simaristherm



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# Filter fans and outlet filters

## Filter fans

| | Cutout | Voltage | Input rating at 50 Hz | Standard | Color | Degree of protection IP54 Air current, free-blowing at 50 Hz | Degree of protection IP54 Article No. | Degree of protection IP55 Air current, free-blowing at 50 Hz | Degree of protection IP55 Article No. |
|---|---|---|---|---|---|---|---|---|---|
|  | **Filter fans with EC technology** | | | | | | | | |
| | 125 × 125 mm | 115 V AC, 50/60 Hz | 4.4 W | VDE | RAL 7035 | 62 m³/h | 8MR6411-5LE25 | | – |
| | | 230 V AC, 50/60 Hz | 4.4 W | VDE | RAL 7035 | 62 m³/h | 8MR6423-5LE25 | | – |
| | 177 × 177 mm | 115 V AC, 50/60 Hz | 4.4 W | VDE | RAL 7035 | 120 m³/h | 8MR6411-5LE30 | | – |
| | | 230 V AC, 50/60 Hz | 4.4 W | VDE | RAL 7035 | 120 m³/h | 8MR6423-5LE30 | | – |
|  | **Standard filter fans** | | | | | | | | |
| | 92 × 92 mm | 115 V AC, 50/60 Hz | 12 W | VDE | RAL 7035 | 25 m³/h | 8MR6411-5LV10 | | – |
| | | 230 V AC, 50/60 Hz | 12 W | VDE, UL | RAL 7032 | 25 m³/h | 8MR6423-2LV10 | | – |
| | | | | VDE, UL | RAL 7035 | 25 m³/h | 8MR6423-5LV10 | | – |
| | | 24 V DC | 2.2 W | VDE | RAL 7035 | 25 m³/h | 8MR6402-5LV10 | | – |
| | 125 × 125 mm | 115 V AC, 50/60 Hz | 20 W | VDE, UL | RAL 7035 | 63 m³/h | 8MR6411-5LV25 | 58 m³/h | 8MR6511-5LV25 |
| | | 230 V AC, 50/60 Hz | 20 W | VDE, UL | RAL 7032 | 63 m³/h | 8MR6423-2LV25 | | – |
| | | | | VDE, UL | RAL 7035 | 63 m³/h | 8MR6423-5LV25 | 58 m³/h | 8MR6523-5LV25 |
| | | 24 V DC | 4.1 W | VDE | RAL 7035 | 63 m³/h | 8MR6402-5LV25 | | – |
| | 177 × 177 mm | 115 V AC, 50/60 Hz | 20 W | VDE, UL | RAL 7035 | 115 m³/h | 8MR6411-5LV30 | 105 m³/h | 8MR6511-5LV30 |
| | | 230 V AC, 50/60 Hz | 20 W | VDE, UL | RAL 7035 | 115 m³/h | 8MR6423-5LV30 | 105 m³/h | 8MR6523-5LV30 |
| | | 24 V DC | 4.1 W | VDE | RAL 7035 | 115 m³/h | 8MR6402-5LV30 | | – |
| | 223 × 223 mm | 115 V AC, 50/60 Hz | 18 W | VDE, UL | RAL 7035 | 160 m³/h | 8MR6411-5LV45 | 147 m³/h | 8MR6511-5LV45 |
| | | | 43 W | VDE, UL | RAL 7035 | 250 m³/h | 8MR6411-5LV41 | 230 m³/h | 8MR6511-5LV41 |
| | | 24 V DC | 6.5 W | VDE | RAL 7035 | 160 m³/h | 8MR6402-5LV45 | | – |
| | | 230 V AC, 50/60 Hz | 18 W | VDE, UL | RAL 7032 | 160 m³/h | 8MR6423-2LV45 | | – |
| | | | | VDE, UL | RAL 7035 | 160 m³/h | 8MR6423-5LV45 | 147 m³/h | 8MR6523-5LV45 |
| | | | 45 W | VDE, UL | RAL 7032 | 250 m³/h | 8MR6423-2LV41 | | – |
| | | | | VDE, UL | RAL 7035 | 250 m³/h | 8MR6423-5LV41 | 230 m³/h | 8MR6423-5LV41 |
| | | 24 V DC | 16 W | VDE, UL | RAL 7032 | 250 m³/h | 8MR6402-2LV41 | | – |
| | | | | VDE | RAL 7035 | 250 m³/h | 8MR6402-5LV41 | | – |
| | 292 × 292 mm | 115 V AC, 50/60 Hz | 64 W | VDE, UL | RAL 7035 | 580 m³/h | 8MR6411-5LV60 | 531 m³/h | 8MR6511-5LV60 |
| | | | 115 W | VDE, UL | RAL 7035 | 930 m³/h | 8MR6411-5LV80 | 850 m³/h | 8MR6511-5LV80 |
| | | 230 V AC, 50/60 Hz | 64 W | VDE, UL | RAL 7032 | 580 m³/h | 8MR6423-2LV60 | | – |
| | | | | VDE, UL | RAL 7035 | 580 m³/h | 8MR6423-5LV60 | 531 m³/h | 8MR6523-5LV60 |
| | | | 135 W | VDE, UL | RAL 7035 | 930 m³/h | 8MR6423-5LV80 | 850 m³/h | 8MR6523-5LV80 |
|  | **EMC filter fans** | | | | | | | | |
| | 177 × 177 mm | 115 V AC, 50/60 Hz | 20 W | VDE, UL | RAL 7035 | 115 m³/h | 8MR6411-6LV30 | 105 m³/h | 8MR6511-6LV30 |
| | | 230 V AC, 50/60 Hz | 20 W | VDE, UL | RAL 7035 | 115 m³/h | 8MR6423-6LV30 | 105 m³/h | 8MR6523-6LV30 |
| | 223 × 223 mm | 115 V AC, 50/60 Hz | 18 W | VDE, UL | RAL 7035 | 160 m³/h | 8MR6411-6LV45 | 147 m³/h | 8MR6511-6LV45 |
| | | | 43 W | VDE, UL | RAL 7035 | 250 m³/h | 8MR6411-6LV41 | 230 m³/h | 8MR6511-6LV41 |
| | | 230 V AC, 50/60 Hz | 18 W | VDE, UL | RAL 7035 | 160 m³/h | 8MR6423-6LV45 | 147 m³/h | 8MR6523-6LV45 |
| | | | 45 W | VDE, UL | RAL 7035 | 250 m³/h | 8MR6423-6LV41 | 230 m³/h | 8MR6523-6LV41 |



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# Filter fans and outlet filters

## Outlet filters without fan





| | Cutout | External dimensions W × H | Mounting depth | Cover grille height | Color | Standard | Degree of protection IP54 Article No. | Degree of protection IP55 Article No. |
|---|---|---|---|---|---|---|---|---|
| **Standard outlet filters** | | | | | | | | |
| | 68 × 68 mm | 80 × 80 mm | 11 mm | 4 mm | RAL 7035 | VDE | 8MR6400-5GV08 | – |
| | 92 × 92 mm | 105 × 105 mm | 12 mm | 4.5 mm | RAL 7032 | VDE, UL | 8MR6400-2GV10 | – |
| | | | | | RAL 7035 | VDE, UL | 8MR6400-5GV10 | – |
| | 116 × 116 mm | 130 × 130 mm | 24 mm | 5 mm | RAL 7035 | VDE | 8MR6400-5GV20 | – |
| | 125 × 125 mm | 148 × 148 mm | 23 mm | 5.5 mm | RAL 7032 | VDE, UL | 8MR6400-2GV25 | – |
| | | | | | RAL 7035 | VDE, UL | 8MR6400-5GV25 | 8MR6500-5GV25 |
| | 177 × 177 mm | 204 × 204 mm | 26 mm | 6 mm | RAL 7035 | VDE, UL | 8MR6400-5GV30 | 8MR6500-5GV30 |
| | 223 × 223 mm | 250 × 250 mm | 32 mm | 6 mm | RAL 7032 | VDE, UL | 8MR6400-2GV45 | – |
| | | | | | RAL 7035 | VDE, UL | 8MR6400-5GV45 | 8MR6500-5GV45 |
| | 292 × 292 mm | 323 × 323 mm | 33 mm | 6.5 mm | RAL 7032 | VDE, UL | 8MR6400-2GV67 | – |
| | | | | | RAL 7035 | VDE, UL | 8MR6400-5GV67 | 8MR6500-5GV67 |
| **EMC outlet filters** | | | | | | | | |
| | 177 × 177 mm | 204 × 204 mm | 26 mm | 6 mm | RAL 7035 | VDE, UL | 8MR6400-6GV30 | 8MR6500-6GV30 |
| | 223 × 223 mm | 250 × 250 mm | 32 mm | 6 mm | RAL 7035 | VDE, UL | 8MR6400-6GV45 | 8MR6500-6GV45 |

## Filter mats for filter fans and outlet filters



| | Degree of protection IP54 Dimensions W × H | Standard | Article No. | Degree of protection IP55 Dimensions W × H | Standard | Article No. |
|---|---|---|---|---|---|---|
| **Standard filter mats** | | | | | | |
| | 65 × 65 mm | VDE | 8MR6000-0AM08 | | VDE | – |
| | 92 × 92 mm | VDE | 8MR6000-0AM10 | | VDE | – |
| | 112 × 112 mm | VDE | 8MR6000-0AM20 | | VDE | – |
| | 125 × 125 mm | VDE | 8MR6000-0AM25 | 116 × 116 mm | VDE | 8MR6000-0CF25 |
| | 177 × 177 mm | VDE | 8MR6000-0AM30 | 169 × 169 mm | VDE | 8MR6000-0CF30 |
| | 223 × 223 mm | VDE | 8MR6000-0AM45 | 215 × 215 mm | VDE | 8MR6000-0CF45 |
| | 292 × 292 mm | VDE | 8MR6000-0AM67 | 281 × 281 mm | VDE | 8MR6000-0CF67 |

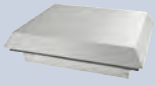


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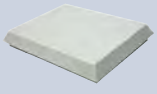
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# Roof filter fans and roof outlet filters

## Roof filter fans

| | Air current, free-blowing at 50 Hz | External dimensions W × H × D | Voltage | Input rating | Standard | Degree of protection IP44 Article No. | Degree of protection IP54 Article No. |
|---|---|---|---|---|---|---|---|
|  | **For cutout 223 × 223 mm, color RAL 7035** | | | | | | |
| | 71 m³/h | 287 × 287 × 104 mm | 230 V AC, 50/60 Hz | 40 W | VDE, UL | – | 8MR6423-5VL44 |
| | | | 115 V AC, 50/60 Hz | 48 W | VDE | – | 8MR6411-5VL44 |
| | | | 24 V DC | 8.8 W | VDE, UL | – | 8MR6402-5VL44 |
| | 240 m³/h | 287 × 287 × 174 mm | 230 V AC, 50/60 Hz | 45 W | VDE, UL | – | 8MR6423-5VL41 |
| | | | 115 V AC, 50/60 Hz | 43 W | VDE | – | 8MR6411-5VL41 |
| | | | 24 V DC | 16 W | VDE, UL | – | 8MR6402-5VL41 |
| | 300 m³/h | 287 × 287 × 174 mm | 230 V AC, 50/60 Hz | 45 W | VDE, UL | – | 8MR6423-5VL55 |
|  | **For cutout 292 × 292 mm, color RAL 7035** | | | | | | |
| | 232 m³/h | 361 × 361 × 114 mm | 230 V AC, 50/60 Hz | 68 W | VDE, UL | – | 8MR6423-5VL64 |
| | | | 115 V AC, 50/60 Hz | 68 W | VDE | – | 8MR6411-5VL64 |
| | | | 24 V DC | 14 W | VDE, UL | – | 8MR6402-5VL64 |
| | 550 m³/h | 361 × 361 × 211 mm | 230 V AC, 50/60 Hz | 64 W | VDE, UL | – | 8MR6423-5VL60 |
| | | | 115 V AC, 50/60 Hz | 64 W | VDE | – | 8MR6411-5VL60 |
| | | | 24 V DC | 55 W | VDE, UL | – | 8MR6402-5VL60 |
| | 840 m³/h | 361 × 361 × 203 mm | 230 V AC, 50/60 Hz | 135 W | VDE, UL | – | 8MR6423-5VL80 |
| | | | 115 V AC, 50/60 Hz | 115 W | VDE | – | 8MR6411-5VL80 |
| | | | 24 V DC | 105 W | VDE, UL | – | 8MR6402-5VL80 |
|  | **For cutout 345 × 265 mm, color RAL 7035, metal** | | | | | | |
| | 405 m³/h | 420 × 340 × 108 mm | 115 V AC, 50/60 Hz | 40/45 W | VDE, UL | 8MR6311-5DL40 | – |
| | | | 230 V AC, 50/60 Hz | 40/45 W | VDE, UL | 8MR6323-5DL40 | – |
| | 690 m³/h | 420 × 340 × 108 mm | 115 V AC, 50/60 Hz | 100/130 W | VDE, UL | 8MR6311-5DL42 | – |
| | | | 230 V AC, 50/60 Hz | 100/130 W | VDE, UL | 8MR6323-5DL42 | – |

## Roof outlet filters without fan

| | External dimensions W × H × D | Standard | Degree of protection IP44 Article No. | Degree of protection IP54 Article No. |
|---|---|---|---|---|
|  | **For cutout 223 × 223 mm, color RAL 7035** | | | |
| | 287 × 287 × 85 mm | VDE, UL | – | 8MR6400-5VE45 |
|  | **For cutout 292 × 292 mm, color RAL 7035** | | | |
| | 361 × 361 × 96 mm | VDE, UL | – | 8MR6400-5VE67 |
|  | **For cutout 345 × 265 mm, color RAL 7035, metal** | | | |
| | 420 × 340 × 83 mm | VDE, UL | 8MR6000-5DE40 | – |

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# Air conditioners/cooling devices

## For roof mounting, degree of protection inside IP54/outside IP34, color RAL 7035



| Cooling capacity | Rated power | Dimensions W × H × D | Air capacity Inside | Air capacity Outside | Design | Mounting Undrilled | Mounting Part | Standard | Article No. |
|---|---|---|---|---|---|---|---|---|---|
| **230 V, 50/60 Hz** | | | | | | | | | |
| 410 W | 270 W | 259 × 264 × 486 mm | 235 m³/h | 330 m³/h | ■ | ■ | – | VDE | 8MR6423-5DE04 |
| 820 W | 510 W | 340 × 340 × 600 mm | 330 m³/h | 570 m³/h | ■ | ■ | – | VDE | 8MR6423-5DE08 |
| 1150 W | 550 W | 401 × 415 × 567 mm | 570 m³/h | 1010 m³/h | ■ | ■ | – | VDE | 8MR6423-5DE12 |
| 1550 W | 810 W | 401 × 415 × 567 mm | 860 m³/h | 1820 m³/h | ■ | ■ | – | VDE | 8MR6423-5DE15 |
| 2050 W | 1190 W | 401 × 415 × 567 mm | 1050 m³/h | 1820 m³/h | ■ | ■ | – | VDE | 8MR6423-5DE20 |
| **400 V, 50/60 Hz** | | | | | | | | | |
| 2900 W | 1210 W | 492 × 496 × 797 mm | 860 m³/h | 3410 m³/h | ■ | ■ | – | VDE | 8MR6440-5DE30 |
| 3850 W | 1630 W | 492 × 496 × 797 mm | 1450 m³/h | 3410 m³/h | ■ | ■ | – | VDE | 8MR6440-5DE40 |

# Heat exchangers

## Air/air heat exchangers, degree of protection IP54, color RAL 7035



| Thermal power | Rated power | Dimensions W × H × D | Air capacity Inside | Air capacity Outside | Design | Mounting Undrilled | Mounting Part | Standard | Article No. |
|---|---|---|---|---|---|---|---|---|---|
| **230 V, 50/60 Hz** | | | | | | | | | |
| 36 W/K | 140 W | 316 × 771 × 103 mm | 570 m³/h | 570 m³/h | ■ | ■ | – | VDE | 8MR6423-5ML36 |
| 80 W/K | 240 W | 317 × 1260 × 148 mm | 1050 m³/h | 1050 m³/h | ■ | ■ | – | VDE | 8MR6423-5ML80 |



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# Heater units









| Rated value | Rated power | Shutdown temperature | Standard | Article No. |
|---|---|---|---|---|
| **Heater units with PTC thermistor, UL-approved** | | | | |
| 120 ... 240 V AC/DC | 15 W | – | VDE, UL | 8MR2130-1A |
| | 30 W | – | VDE, UL | 8MR2130-3A |
| | 45 W | – | VDE, UL | 8MR2130-4A |
| | 60 W | – | VDE, UL | 8MR2130-6A |
| | 75 W | – | VDE, UL | 8MR2130-7A |
| | 100 W | – | VDE, UL | 8MR2130-0A |
| | 150 W | – | VDE, UL | 8MR2130-5A |
| **Semiconductor heater units without thermostat, compact design, UL-approved** | | | | |
| 120 ... 240 V AC/DC | 50 W | – | VDE | 8MR2131-4A |
| | 100 W | – | VDE | 8MR2131-0A |
| | 150 W | – | VDE | 8MR2131-5A |
| **Semiconductor heater units with thermostat, compact design** | | | | |
| 120 ... 240 V AC/DC | 50 W | 15 °C | VDE | 8MR2132-1A |
| | | 25 °C | VDE | 8MR2132-1AB |
| | 100 W | 15 °C | VDE | 8MR2132-0A |
| | | 25 °C | VDE | 8MR2132-0AB |
| | 150 W | 15 °C | VDE | 8MR2132-5A |
| | | 25 °C | VDE | 8MR2132-5AB |
| **Semiconductor heater units** | | | | |
| 12 ... 30 V AC/DC | 15 W | – | VDE | 8MR2130-1BA |
| | 30 W | – | VDE | 8MR2130-3BA |
| | 45 W | – | VDE | 8MR2130-4BA |
| | 60 W | – | VDE | 8MR2130-6BA |



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# Fan heaters

## Fan heaters







| Version | Voltage | Continuous heat output | Parameter | Standard | Article No. |
|---|---|---|---|---|---|
| **Standard version** | | | | | |
| Without fan | 230 V AC | 100 W | – | VDE, UL | 8MR2140-0A |
| | | 150 W | – | VDE, UL | 8MR2140-1A |
| | | 200 W | – | VDE, UL | 8MR2140-2A |
| | | 300 W | – | VDE, UL | 8MR2140-3A |
| | | 400 W | – | VDE, UL | 8MR2140-4A |
| With fan | 230 V AC | 100 W | – | VDE, UL | 8MR2140-0B |
| | | 150 W | – | VDE, UL | 8MR2140-1B |
| | | 200 W | – | VDE, UL | 8MR2140-2B |
| | | 300 W | – | VDE, UL | 8MR2140-3B |
| | | 400 W | – | VDE, UL | 8MR2140-4B |
| **Compact fan heater** | | | | | |
| Without fan | 230 V AC | 250 W | – | VDE, UL | 8MR2122-4A |
| | | 400 W | – | VDE, UL | 8MR2122-8A |
| | 120 V AC | 250 W | – | VDE, UL | 8MR2122-4B |
| | | 400 W | – | VDE, UL | 8MR2122-8B |
| With fan | 24 V DC | 250 W | – | VDE, UL | 8MR2122-4AB |
| | 48 V DC | 250 W | – | VDE, UL | 8MR2122-4AC |
| | | 400 W | – | VDE, UL | 8MR2122-8AA |
| **With integrated thermostat** | | | | | |
| For floor mounting | 230 V AC | 950 W | 0 ... +60 °C | VDE, UL | 8MR2150-0A |
| For wall mounting | 230 V AC | 950 W | 0 ... +60 °C | VDE, UL | 8MR2150-0C |
| **With integrated hygrostat** | | | | | |
| For wall mounting | 230 V AC | 950 W | 65% R.H. | VDE, UL | 8MR2150-0CA |

## Semiconductor fan heaters









| Mounting | Voltage | Continuous heat output | Version | Standard | Article No. |
|---|---|---|---|---|---|
| **Fan heaters** | | | | | |
| Clip fixing | 230 V AC | 150 W | – | VDE, UL | 8MR2150-2C |
| | | 250 W | – | VDE, UL | 8MR2150-5A |
| | | 400 W | – | VDE, UL | 8MR2150-4A |
| | 120 V AC | 250 W | – | VDE, UL | 8MR2150-5AA |
| | | 400 W | – | VDE, UL | 8MR2150-4AA |
| Screw fixing | 230 V AC | 150 W | – | VDE, UL | 8MR2150-2D |
| | | 250 W | – | VDE, UL | 8MR2150-5B |
| | | 400 W | – | VDE, UL | 8MR2150-4B |
| | 120 V AC | 250 W | – | VDE, UL | 8MR2150-5AB |
| | | 400 W | – | VDE, UL | 8MR2150-4AB |
| **PTC fan heaters for wall mounting** | | | | | |
| Screw fixing | 230 V AC | 1200 W | With thermostat 0 ... +60 °C | VDE, UL | 8MR2150-3A |
| | | 1200 W | Without thermostat | VDE, UL | 8MR2150-3B |
| Clip fixing | 120 V AC | 1200 W | With thermostat +32 ... +140 °F | VDE, UL | 8MR2151-3A |
| | | 1200 W | Without thermostat | VDE, UL | 8MR2151-3B |
| **PTC fan heaters for floor mounting** | | | | | |
| Screw fixing | 230 V AC | 1200 W | With thermostat 0 ... +60 °C | VDE, UL | 8MR2150-2A |
| | | 1200 W | Without thermostat | VDE, UL | 8MR2150-2B |
| Clip fixing | 120 V AC | 1200 W | With thermostat +32 ... +140 °F | VDE, UL | 8MR2151-2A |
| | | 1200 W | Without thermostat | VDE, UL | 8MR2151-2B |



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# Thermostats

## Adjustable thermostats









| Version | Max. switching power | Temperature range | Standard | Article No. |
|---|---|---|---|---|
| **Mini thermostat** | | | | |
| NC<br>with red adjusting knob | 250 V AC, 10 (2) A | 0 ... +60 °C | VDE | 8MR2170-1KA |
| | | −10 ... +50 °C | VDE | 8MR2170-1KB |
| | | +20 ... +80 °C | VDE | 8MR2170-1KC |
| | | +32 ... +140 °F | VDE | 8MR2170-1KD |
| | | +14 ... +122 °F | VDE | 8MR2170-1KE |
| NO<br>with blue adjusting knob | 250 V AC, 10 (2) A | 0 ... +60 °C | VDE | 8MR2170-2KA |
| | | −10 ... +50 °C | VDE | 8MR2170-2KB |
| | | +20 ... +80 °C | VDE | 8MR2170-2KC |
| | | +32 ... +140 °F | VDE | 8MR2170-2KD |
| | | +14 ... +122 °F | VDE | 8MR2170-2KE |
| **Mechanical thermostat** | | | | |
| CO | 250 V AC, 10 (4) A | +5 ... +60 °C | VDE, UL | 8MR2170-1A |
| | | −20 ... +30 °C | VDE, UL | 8MR2170-1B |
| **Electronic thermostat** | | | | |
| CO | 230 V AC, 8 (1.6) A | −20 ... +60 °C | VDE | 8MR2170-1GA |
| | 120 V AC, 8 (1.6) A | −4 ... +140 °F | VDE | 8MR2170-1GB |
| | 24 V DC, 16 A | 0 ... +60 °C | VDE | 8MR2170-2A |
| CO, integrated | 230 V AC, 8 (1.6) A | −20 ... +60 °C | VDE | 8MR2170-1GC |
| **Zwillings-Thermostat** | | | | |
| NC and NO | 250 V AC, 10 (2) A | 0 ... +60 °C | VDE, UL | 8MR2170-1E |
| NO and NO | 250 V AC, 10 (2) A | 0 ... +60 °C | VDE, UL | 8MR2170-1EA |



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# Thermostats

## Tamper-proof thermostats





| Version | Max. switching power | Shutdown temperature | Standard | Article No. |
|---|---|---|---|---|
| **Tamper-proof thermostat** | | | | |
| NC | 250 V AC, 5 (1.6) A | 15 °C | VDE, UL | 8MR2171-1BA |
| | | 25 °C | VDE, UL | 8MR2171-2BA |
| NO | 250 V AC, 5 (1.6) A | 35 °C | VDE, UL | 8MR2171-3BB |
| | | 50 °C | VDE, UL | 8MR2171-1BB |
| | | 60 °C | VDE, UL | 8MR2171-2BB |
| **Twin thermostat** | | | | |
| NC and NO | 250 V AC, 5 (1.6) A | 15 °C \| 50 °C (NC \| NO) | VDE, UL | 8MR2172-1A |
| | 250 V AC, 5 (1.6) A or 30 W DC | 25 °C \| 60 °C (NC \| NO) | VDE, UL | 8MR2172-2A |
| NO and NO | 250 V AC, 5 (1.6) A | 50 °C \| 60 °C (NO \| NO) | VDE, UL | 8MR2172-1AB |



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# Hygrostats and hygrotherms

## Hygrostats





| Version | Relative air humidity | Voltage | Max. switching power | Standard | Article No. |
|---|---|---|---|---|---|
| **Mechanical hygrostat** | | | | | |
| CO | 35 ... 95% | 230 V AC | 250 V AC,<br>5 (0.2) A/20 W DC | VDE, UL | 8MR2170-1C |
| **Electronic hygrostat** | | | | | |
| CO | 40 ... 90% | 230 V AC | 240 V AC, 8 (1.6) A | VDE | 8MR2170-1AF |
| | | 120 V AC | 240 V AC, 8 (1.6) A | VDE | 8MR2170-2AF |
| | 65% | 230 V AC | 240 V AC | VDE | 8MR2170-1BF |
| | | 120 V AC | 120 V AC | VDE | 8MR2170-2BF |

## Hygrotherms



| Version | Relative air humidity | Temperature range | Voltage | Max. switching power | Standard | Article No. |
|---|---|---|---|---|---|---|
| **Electronic hygrotherm** | | | | | | |
| NC and NO | 50 ... 90% | +32 ... +140 °F | 100 ... 240 V AC | NC:<br>120 V AC, 6 (1) A<br>NO:<br>120 V AC, 8 (1.6) A | VDE, UL | 8MR2170-4F |
| | | 0 ... +60 °C | 100 ... 240 V AC | NC:<br>100 ... 240 V AC, 6 (1) A<br>NO:<br>100 ... 240 V AC, 8 (1.6) A | VDE, UL | 8MR2170-4E |



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# Appendix




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### General information

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| Information on low-voltage power distribution and electrical installation technology | www.siemens.com/lowvoltage |
| Tender specifications | www.siemens.com/tenderspecifications |
| Conversion tool | www.siemens.com/conversion-tool |
| Image database | www.siemens.com/lowvoltage/picturedb |
| CAx download manager | www.siemens.com/cax |
| Newsletter system | www.siemens.com/lowvoltage/newsletter |
| Siemens YouTube channel | www.youtube.com/Siemens |
| Catalog LV 10 | www.siemens.com/lv10 |
| Catalog LV 13 | www.siemens.com/lv13 |
| Catalog LV 18 | www.siemens.com/lv18 |
| Brochures/catalogs | www.siemens.com/lowvoltage/catalogs |
| Operating instructions/manuals | www.siemens.com/lowvoltage/manuals |
| SiePortal | www.siemens.com/sieportal |
| SiePortal (knowledge base) | www.siemens.com/lowvoltage/product-support |
| SiePortal (product catalog) | www.siemens.com/lowvoltage/product-catalog |
| Online Support App | www.siemens.com/support-app |
| My Documentation Manager (MDM) | www.siemens.com/lowvoltage/mdm |
| Configurators | www.siemens.com/lowvoltage/configurators |
| Direct forwarding to SiePortal | www.siemens.com/product_catalog_SIEP?Article No. |
| Training | www.siemens.com/sitrain-lowvoltage |
| Local contacts | www.siemens.com/lowvoltage/contact<br>www.siemens.com/lowvoltage/components/contact<br>www.siemens.com/lowvoltage/systems/contact<br>www.siemens.com/lowvoltage/software/contact |
| Technical Support | www.siemens.com/support-request |
| Information on services | www.siemens.com/service-offers |
| Control panels for the North American market | www.siemens.com/northamerican-standards |
| Integrated Control Panels | www.siemens.com/controlpanel |
| Smart Control Panel Design | www.siemens.com/controlpanel/cpd |
| Energy savings and amortization | www.automation.siemens.com/sinasave |
| SIMATIC Energy Suite | www.siemens.com/energysuite |
| SITOP power supplies | www.siemens.com/sitop |
| Power distribution with Totally Integrated Power | www.siemens.com/tip |
| TIA Selection Tool | www.siemens.com/tst |
| Electrical Product Finder | www.siemens.com/electrical-product-finder |
| Sustainability | www.siemens.com/sustainability |
| Siemens EcoTech | www.siemens.com/SiemensEcoTech<br>www.siemens.com/lowvoltage/SiemensEcoTech |
| SENTRON product phase-out | www.siemens.com/info-sentron |

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## Information + ordering

| | |
|---|---|
| **Technical overviews** | |
| Air circuit breakers | www.siemens.com/lowvoltage/produkt-support (109781188) |
| Molded case circuit breakers | www.siemens.com/lowvoltage/product-support (109767421) |
| Miniature circuit breakers | www.siemens.com/lowvoltage/product-support (109769082) |
| Residual current protective devices/arc fault detection devices | www.siemens.com/lowvoltage/product-support (109769082) |
| Switching devices | www.siemens.com/lowvoltage/product-support (109769083) |
| Overvoltage protection devices | www.siemens.com/lowvoltage/product-support (109769084) |
| Fuse systems | www.siemens.com/lowvoltage/product-support (109769085) |
| Switch disconnectors | www.siemens.com/lowvoltage/product-support (109764946) |
| Transfer switching equipment and load transfer switches | www.siemens.com/lowvoltage/product-support (109770919) |
| Measuring devices, power monitoring and digitalization solutions | www.siemens.com/lowvoltage/product-support (109764480) |
| Monitoring devices | www.siemens.com/lowvoltage/product-support (109769086) |
| Transformers, power supply units and socket outlets | www.siemens.com/lowvoltage/product-support (109778781) |
| Busbar systems | www.siemens.com/lowvoltage/product-support (109769087) |
| Terminal blocks | www.siemens.com/lowvoltage/product-support (109769088) |
| Switchboards, distribution boards and small distribution boards | www.siemens.com/lowvoltage/product-support (109769089) |
| Busbar trunking systems | www.siemens.com/lowvoltage/product-support (109769090) |
| System cubicles, system lighting and system air-conditioning | www.siemens.com/lowvoltage/product-support (109769091) |
| **All the important things at a glance** | |
| Air circuit breakers | www.siemens.com/sentron-3wa |
| Molded case circuit breakers | www.siemens.com/sentron-3va |
| Miniature circuit breakers | www.siemens.com/mcb<br>www.siemens.com/circuit-protection |
| Residual current protective devices/arc fault detection devices | www.siemens.com/rccb<br>www.siemens.com/circuit-protection |
| Switching devices | www.siemens.com/switching-devices |
| Overvoltage protection devices | www.siemens.com/overvoltage-protection |
| Fuse systems | www.siemens.com/fuses |
| Switch disconnectors | www.siemens.com/switching-devices |
| Transfer switching equipment and load transfer switches | www.siemens.com/switching-devices<br>sie.ag/2XBonIi |
| Measuring devices, power monitoring and digitalization solutions | www.siemens.com/sentron-measuring-devices<br>www.siemens.com/sentron-digital |
| Monitoring devices | www.siemens.com/lowvoltage |
| Transformers, power supply units and socket outlets | www.siemens.com/switching-devices |
| Busbar systems | www.siemens.com/distribution-components |
| Terminal blocks | www.siemens.com/distribution-components |
| Switchboards, distribution boards and small distribution boards | www.siemens.com/sivacon-S8<br>www.siemens.com/distributionsystems |
| Busbar trunking systems | www.siemens.com/sivacon-8PS |
| System cubicles, system lighting and system air-conditioning | www.siemens.com/sivacon-8mf |
| **Your product in detail** | |
| Brochure – 3WA air circuit breakers | www.siemens.com/lowvoltage/product-support (109800077) |
| Brochure – Energy and data successfully put on track | www.siemens.com/lowvoltage/product-support (109747761) |
| Brochure – SENTRON Powermanager – update and benefit | www.siemens.com/lowvoltage/product-support (109805178) |
| Brochure – SIVACON 8MF1 system cubicles – As versatile as your requirements | www.siemens.com/lowvoltage/product-support (109744677) |
| Brochure – SIVACON S8$^{plus}$ – The plus for your business: Intelligent. Flexible. Safe. | www.siemens.com/lowvoltage/product-support (109747937) |
| Catalog – LV 70 · 2023 – SIVACON 8PS busbar trunking systems – BD01, BD2 up to 1250 A | www.siemens.com/lowvoltage/product-support (109744546) |
| Quick Selection Guide – 3WA air circuit breakers | www.siemens.com/lowvoltage/product-support (109781967) |
| Quick Selection Guide – 3WL air circuit breakers | www.siemens.com/lowvoltage/product-support (109751638) |
| Quick Selection Guide – 3VA molded case circuit breaker | www.siemens.com/lowvoltage/product-support (109757591) |

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| Technology Primer – Miniature circuit breakers | www.siemens.com/lowvoltage/product-support (109482304) |
| Technology Primer – Residual current protective devices | www.siemens.com/lowvoltage/product-support (109482301) |
| Technology Primer – Overvoltage protection devices | www.siemens.com/lowvoltage/product-support (109756965) |
| Technology Primer – Fuse systems | www.siemens.com/lowvoltage/product-support (109482303) |
| **Siemens YouTube channel** | |
| 3WA air circuit breaker – Teaserfilm | sie.ag/2Myvit |
| 3WA air circuit breaker – Highlightfilm | sie.ag/3dy65A |
| 3VA molded case circuit breakers (general) | sie.ag/2gSX4K |
| Miniature circuit breakers (general) | sie.ag/59PC9j |
| Residual current protective devices (general) | sie.ag/58TyMb |
| Siemens fuse systems | sie.ag/2J9ihb |
| Power monitoring (general) | sie.ag/7N6g4g |
| Siemens ALPHA FIX terminal blocks – 8WH2 terminal with spring-loaded-connection | sie.ag/6FTjPN |
| SIVACON power distribution (general) | sie.ag/6wacV9 |
| Siemens SIVACON S4 power distribution boards up to 4000 A | sie.ag/6v6kNm |
| SIMARIS create | sie.ag/4JTAHi |
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| Arc fault detection devices | sie.ag/6Chm71 |
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| Overvoltage protection devices | sie.ag/3ZMwRuw |
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| Busbar systems | sie.ag/2lXoUFl |
| Terminal blocks | sie.ag/2kW8ZXo |
| SIVACON S4 (NF) | sie.ag/2JUQwE4 |
| Distribution boards | sie.ag/2kURLd8 |
| Switchboards | sie.ag/3Ier6zp |
| SIVACON S8 Power distribution boards and motor control centers | sie.ag/3EbN0kC |
| Small distribution boards | sie.ag/3I4DUYm |
| Planning the power distribution system | sie.ag/2m3oFbS |
| SIVACON 8PS | sie.ag/2lXpCT1<br>www.siemens.com/sivacon8PS-contact |
| System cubicles | sie.ag/339cQB9 |
| SIVACON S8 | www.siemens.com/sivacon-partnerfinder<br>www.siemens.com/sivaconS8-contact |
| **Order support** | |
| 3WA air circuit breakers – Made for makers. Simply reliable. | www.siemens.com/lowvoltage/catalogs (109800074) |
| 3VA molded case circuit breakers – One system. Global use. | www.siemens.com/lowvoltage/catalogs (109765994) |
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| **Order support** | |
| 3LD2 main control and EMERGENCY-STOP-switching equipment – End-to-end safety for user and systems | www.siemens.com/lowvoltage/catalogs (109755626) |
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| 3NJ63 switch disconnectors with fuses – End-to-end safety for user and systems | www.siemens.com/lowvoltage/catalogs (109755619) |
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| 3KC remotely operated transfer switching equipment (RTSE) – End-to-end safety for user and systems | www.siemens.com/lowvoltage/catalogs (109755627) |
| 3KC manual transfer switching equipment (MTSE) – End-to-end safety for user and systems | www.siemens.com/lowvoltage/catalogs (109750227) |
| **Configurators** | |
| SIVACON 8PS – BD01 and BD2 | www.siemens.com/LV70 |
| 3WA air circuit breakers | www.siemens.com/lowvoltage/3wa-configurator |
| 3WL air circuit breakers | www.siemens.com/lowvoltage/3wl-configurator |
| 3WL10 air circuit breakers | www.siemens.com/lowvoltage/3wl10-configurator |
| 3VA molded case circuit breakers | www.siemens.com/lowvoltage/3va-configurator |
| 3VA27 molded case circuit breakers | www.siemens.com/lowvoltage/3va27-configurator |
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| 3KD switch disconnectors | www.siemens.com/lowvoltage/3kd-configurator |
| 3KF switch disconnectors with fuses | www.siemens.com/lowvoltage/3kf-configurator |
| 3NP1 fuse switch disconnectors | www.siemens.com/lowvoltage/3np1-configurator |
| 7KM PAC and 7KT PAC measuring device | www.siemens.com/lowvoltage/pac-configurator |
| SIVACON 8PS | sie.ag/2JEhpv2 |
| SIVACON 8MF1 system cubicle | www.siemens.com/lowvoltage/8mf1-configurator |

## Commissioning + operation

| | |
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| **Tools/software** | |
| SENTRON Powerconfig | www.siemens.com/powerconfig |
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| SIMARIS create | www.siemens.com/simaris-create |
| SIMARIS configuration | www.siemens.com/simarisconfig |
| SIMARIS therm | www.siemens.com/simaristherm |
| **Manuals** | |
| Application Manual – SIVACON S4 Power distribution boards up to 6300 A | www.siemens.com/lowvoltage/manuals (25909512) |
| Communication Manual – 3WL air circuit breakers via COM35 – PROFINET IO, Modbus TCP | www.siemens.com/lowvoltage/manuals (109757987) |
| Communication Manual – 3WL10 air circuit breakers & 3VA27 molded case circuit breakers | www.siemens.com/lowvoltage/manuals (109760220) |
| Communication Manual – 3VA molded case circuit breakers with IEC and UL certification | www.siemens.com/lowvoltage/manuals (98746267) |
| Communication Manual – SENTRON PAC5100/5200 7KM5212/5412 | www.siemens.com/lowvoltage/manuals (109477870) |
| Configuration Manual – 3VA selectivity | www.siemens.com/lowvoltage/manuals (109743975) |
| Configuration manual – 3WL1 air circuit breakers | www.siemens.com/lowvoltage/manuals (35681108) |
| Configuration Manual – Miniature circuit breakers | www.siemens.com/lowvoltage/manuals (45302792) |
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| Configuration Manual – Transfer Switching Equipment and Load Transfer Switches | www.siemens.com/lowvoltage/manuals (109769745) |
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| Configuration Manual – Monitoring devices | www.siemens.com/lowvoltage/manuals (45316099) |
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| Configuration Manual – 8US busbar systems | www.siemens.com/lowvoltage/manuals (109769746) |
| Equipment Manual – 3WA1 air circuit breakers | www.siemens.com/lowvoltage/manuals (109763061) |
| Equipment Manual – 3VA molded case circuit breakers with IEC certificate | www.siemens.com/lowvoltage/manuals (90318775) |
| Equipment Manual – 3VA27 molded case circuit breakers & 3WL10 air circuit breakers | www.siemens.com/lowvoltage/manuals (109753821) |
| Equipment Manual – 3KD switch disconnector | www.siemens.com/lowvoltage/manuals (109758120) |
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| Equipment Manual – 3KC0 manual transfer switching equipment | www.siemens.com/lowvoltage/manuals (109763232) |
| Equipment Manual – 3KC4 and 3KC8 transfer switching equipment | www.siemens.com/lowvoltage/manuals (109738725) |
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| Equipment Manual – 3KC ATC6300 transfer control device | www.siemens.com/lowvoltage/manuals (109755149) |
| Equipment Manual – 3KC ATC6500 transfer control device | www.siemens.com/lowvoltage/manuals (109758018) |
| Equipment Manual – 7KT PAC1600 energy meter | www.siemens.com/lowvoltage/manuals (109759827) |
| Equipment Manual – 7KT PAC1600 multimeter | www.siemens.com/lowvoltage/manuals (109760293) |
| Equipment Manual – 7KM PAC2200 power monitoring device | www.siemens.com/lowvoltage/manuals (109746835) |
| Equipment Manual – 7KM PAC3200T power monitoring device | www.siemens.com/lowvoltage/manuals (109746833) |
| Equipment Manual – SENTRON PAC5100/5200 7KM5212/5412 | www.siemens.com/lowvoltage/manuals (109477872) |
| Equipment Manual – 7KM PAC3120 and 7KM PAC3220 | www.siemens.com/lowvoltage/manuals (109767307) |
| Equipment Manual – 7KN Powercenter 3000 | www.siemens.com/lowvoltage/manuals (109763838) |
| Equipment Manual – 7KM PAC2200CLP power monitoring device | www.siemens.com/lowvoltage/manuals (109783220) |
| Installation Manual – Circuit protection devices with communication and measuring function | www.siemens.com/lowvoltage/manuals (109791805) |
| Planning Manual – Planning with SIVACON 8PS | www.siemens.com/lowvoltage/manuals (109478425) |
| Planning Manual – SIVACON S8 – Technical planning information | www.siemens.com/lowvoltage/manuals (107113936) |
| Quick Installation Guide – 7KN Powercenter 3000 | www.siemens.com/lowvoltage/manuals (109766001) |
| SEM3™ – Embedded Micro Metering Module™ | www.siemens.com/lowvoltage/manuals (109748928) |
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| System Manual – 3WL/3VL circuit breakers with communication capability – Modbus | www.siemens.com/lowvoltage/manuals (39850157) |
| System Manual – 3WL/3VL circuit breakers with communication capability – PROFIBUS | www.siemens.com/lowvoltage/manuals (12560390) |
| System Manual – SENTRON 3NJ62 in-line plug-in switch disconnectors with fuses | www.siemens.com/lowvoltage/manuals (31753460) |
| System Manual – SENTRON 3NP1 fuse switch disconnector | www.siemens.com/lowvoltage/manuals (33515690) |
| System Manual – 7KT multichannel current measuring system | www.siemens.com/lowvoltage/manuals (109483442) |
| System Manual – SENTRON PAC4200 power monitoring device | www.siemens.com/lowvoltage/manuals (34261595) |
| System Manual – SENTRON PAC4220 power monitoring device | www.siemens.com/lowvoltage/manuals (109823026) |
| System Manual – Circuit protection devices with communication and measuring function | www.siemens.com/lowvoltage/manuals (109791806) |

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| Face-to-face or online training | |
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| Video tutorial on the 3WL air circuit breaker | www.lowvoltage.siemens.com/wcms/3wl-tutorial |
| 3WA air circuit breakers | www.siemens.com/sitrain-lowvoltage (WT-LV3WA) |
| 3WL10 air circuit breaker, size 0 | www.siemens.com/sitrain-lowvoltage (WT-LVA3WL0) |
| 3WL air circuit breakers, sizes 1-3 | www.siemens.com/sitrain-lowvoltage (WT-LVA3WL) |
| Protection systems in low-voltage power distribution | www.siemens.com/sitrain-lowvoltage (WT-LVAPS) |
| Maintenance and operation of 3WA circuit breakers | www.siemens.com/sitrain-lowvoltage (LV-3WAMAIN) |
| Maintenance and operation of 3WL circuit breakers | www.siemens.com/sitrain-lowvoltage (LV-3WLMAIN) |
| Maintenance and operation of 3WL and 3WA circuit breakers | www.siemens.com/sitrain-lowvoltage (LV-CBMAIN) |
| Certification: Maintenance and operation of 3WL and 3WA circuit breakers | www.siemens.com/sitrain-lowvoltage (LV-CBCERT) |
| 3WL and 3WA air circuit breakers protection technology and communication | www.siemens.com/sitrain-lowvoltage (LV-COPR) |
| 3VA molded case circuit breaker | www.siemens.com/sitrain-lowvoltage (WT-LVA3VA) |
| SENTRON circuit protection devices with measuring and communication function | www.siemens.com/sitrain-lowvoltage (WT-LVBCOM) |
| Basic principles of electrical engineering | www.siemens.com/sitrain-lowvoltage (WT-LVBGET) |
| Protection concept | www.siemens.com/sitrain-lowvoltage (WT-LVBPC) |
| 5SM6/5SV6 arc fault detection devices | www.siemens.com/sitrain-lowvoltage (WT-LVBAFDD) |
| Digitalization in power distribution boards | www.siemens.com/sitrain-lowvoltage (WT-LVDIGI) |
| Power Monitoring with SENTRON | www.siemens.com/sitrain-lowvoltage (WT-LVAEM) |
| Energy Management with SENTRON Powermanager – User training | www.siemens.com/sitrain-lowvoltage (LV-PM) |
| SENTRON Powermanager graphic module – User training | www.siemens.com/sitrain-lowvoltage (LV-PMG) |
| SIMARIS configuration | www.siemens.com/sitrain-lowvoltage (WT-LVASIMC) |
| SIVACON 8PS | www.power-academy.siemens.com |

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| SIRIUS Command for commanding, signaling and detecting applications | www.siemens.com/sirius-command |
| SIRIUS Hybrid for starting motors | www.siemens.com/sirius-hybrid |
| SIRIUS Monitor for monitoring and responding | www.siemens.com/sirius-monitor |
| Control and signaling devices SIRIUS ACT – Performance in Action | www.siemens.com/sirius-act |
| SIRIUS modular system | www.siemens.com/sirius-control |
| SIRIUS Intelligent link modules | www.siemens.com/sirius-ilm |
| IO-Link – the new communication standard | www.siemens.com/io-link |
| Systematic industrial safety technology: Safety Integrated | www.siemens.com/safety-integrated |
| SIMOCODE motor management | www.siemens.com/simocode |
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| SIRIUS Media | www.siemens.com/sirius-media |
| SIRIUS ExplaineArium | www.youtube.com/@explainearium |
| SIRIUS product phase-out | www.siemens.com/info-sirius |

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# Conditions of sale and delivery

## 1. General Provisions

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### 1.1 For customers with a seat or registered office in European Union

For customers with a seat or registered office in European Union, the following terms and conditions apply subordinate to T&C:

- for products, which include specific terms and conditions in the text of the product description, these specific terms and conditions shall apply and subordinate thereto,
- for stand-alone software products and software products forming a part of a product or project, the "General Conditions for Software Products for Infrastructure & Industry Business (German law)"[1)] and/or
- for consulting services the "Allgemeine Geschäftsbedingungen für Beratungsleistungen für Infrastructure & Industry Geschäft (Deutsches Recht)"[1)] (available only in German) and/or
- for other services, the "Supplementary Terms and Conditions for Services for Infrastructure & Industry Business (German Law) ("BL")"[1)] and/or
- for other products the "General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry"[1)].
  In case such products should contain Open Source Software, the conditions of which shall prevail over the "General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry"[1)], the Product will be given a note as to which special conditions apply to this open source software. This shall apply mutatis mutandis for notices referring to other third-party software components.

### 1.2 For customers with a seat or registered office outside European Union

For customers with a seat or registered office outside European Union, the following terms and conditions apply subordinate to T&C:

- for products, which include specific terms and conditions in the description text, these specific terms and conditions shall apply and subordinate thereto,
- for consulting services the "Standard Terms and Conditions for Consulting Services for Infrastructure & Industry Business (Swiss Law)"[1)] and/or
- for other services the "International Terms & Conditions for Services"[1)] supplemented by "Software Licensing Conditions"[1)] and/or
- for other products the "International Terms & Conditions for Products"[1)] supplemented by "Software Licensing Conditions"[1)]

### 1.3 For customers with master or framework agreement

To the extent products offered are covered by an existing master or framework agreement, the terms and conditions of that agreement shall apply instead of T&C.

## 2. Additional Terms and Conditions

The dimensions are in mm. In Germany, according to the German law on units in measuring technology, data in inches apply only to devices for export.

Illustrations are not binding.

Insofar as there are no remarks on the individual pages of this catalog – especially with regard to data, dimensions and weights given – these are subject to change without prior notice.

[1)] The text of the Terms and Conditions of Siemens AG can be downloaded at https://mall.industry.siemens.com/legal/ww/en/terms_of_trade_en.pdf

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## 3. Export Control and Sanctions Compliance

### 3.1 General

Customer shall comply with all applicable sanctions, embargoes and (re-)export control laws and regulations, and, in any event, with those of the European Union, the United States of America and any locally applicable jurisdiction (collectively "Export Regulations").

### 3.2 Checks for Products

Prior to any transaction by customer concerning products (including hardware, documentation and technology) delivered by Siemens, or products (including maintenance and technical support) performed by Siemens with a third party, customer shall check and certify by appropriate measures that

- (i) the customer's use, transfer, or distribution of such products, the brokering of contracts or the provision of other economic resources in connection with products will not be in violation of any Export Regulations, also taking into account any prohibitions to circumvent these (e.g., by undue diversion)
- (ii) the products are not intended or provided for prohibited or unauthorized non-civilian purposes (e.g. armaments, nuclear technology, weapons, or any other usage in the field of defense and military);
- (iii) customer has screened all direct and indirect parties involved in the receipt, use, transfer, or distribution of the products against all applicable restricted party lists of the Export Regulations concerning trading with entities, persons and organizations listed therein and
- (iv) products within the scope of items-related restrictions, as specified in the respective annexes to the Export Regulations, will not, unless permitted by the Export Regulations, be
  (a) exported, directly or indirectly (e.g., via Eurasian Economic Union (EAEU) countries), to Russia or Belarus, or
  (b) resold to any third party business partner that does not take a prior commitment not to export such products to Russia or Belarus.

### 3.3 Non-Acceptable Use of Software and Cloud Services

Customer shall not, unless permitted by the Export Regulations or respective governmental licenses or approvals,

- (i) download, install, access or use the products from or in any location prohibited by or subject to comprehensive sanctions or subject or to license requirements according to the Export Regulations;
- (ii) grant access to, transfer, (re-)export (including any "deemed (re-)exports"), or otherwise make available the products to any entity, person, or organization identified on a restricted party list of the Export Regulations;
- (iii) use the products for any purpose prohibited by the Export Regulations (e.g. use in connection with armaments, nuclear technology or weapons);
- (iv) upload to a products platform any customer content unless it is non-controlled (e.g. in the EU: AL = N; in the U.S.: ECCN = N or EAR99);
- (v) facilitate any of the afore mentioned activities by any user. Customer shall provide all users with all information necessary to ensure compliance with the Export Regulations.

### 3.4 Semiconductor Development

Customer will not, without advance written authorization from Siemens, use offerings for the development or production of integrated circuits at any semiconductor fabrication facility located in China meeting the criteria specified in the U.S. Export Administration Regulations, 15 C.F.R. 744.23.

### 3.5 Information

Upon request by Siemens, customer shall promptly provide Siemens with all information pertaining to users, the intended use and the location of use or the final destination (in the case of hardware, documentation and technology) of the products. Customer will notify Siemens prior to customer disclosing any information to Siemens that is defense-related or requires controlled or special data handling pursuant to applicable government regulations, and will use the disclosure tools and methods specified by Siemens.

### 3.6 Reservation

Siemens shall not be obligated to fulfill this agreement if such fulfillment is prevented by any impediments arising out of national or international foreign trade or customs requirements or any embargoes or other sanctions. Customer acknowledges that Siemens may be obliged under the Export Regulations to limit or suspend access by customer and/or users to products.

## 4. Miscellaneous

Errors excepted and subject to change without prior notice.

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# Notes

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# Notes

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# Catalogs and further information




**LV 10**
**Low-Voltage Power Distribution and Electrical Installation Technology**
SENTRON • SIVACON • ALPHA

PDF (E86060-K8280-A101-B9-7600)




**ET D1**
**Switches and Socket Outlets**
DELTA

PDF (SIEP-C10409-00-7600)




**LV 13**
**3WA Air Circuit Breakers**
SENTRON

PDF (E86060-K8280-B101-A4-7600)



**SiePortal**
Information and Ordering Platform on the Internet:

**sieportal.siemens.com**




**LV 18**
**Air Circuit Breakers and Molded Case Circuit Breakers with UL Certification**
SENTRON

PDF (E86060-K8280-E347-B2-7600)



**SITRAIN**
Digital Industry Academy

**www.siemens.com/sitrain**




**IC 10**
**Industrial Controls**
SIRIUS

PDF (E86060-K1010-A101-B7-7600)

**Siemens TIA Selection Tool**
for the selection, configuration and ordering of TIA products and devices

**www.siemens.com/tst**

The catalogs listed above and additional catalogs are available in PDF format at
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