

# Residual Current Circuit Breakers

## 1, 2 and 4pole series up to 125AF



Type	RCBO					
	RKP	RKS	RKS-b	RKJ	RKJ-b	
Protection	Ground fault and overcurrent	Ground fault and overcurrent	Ground fault and overcurrent	Ground fault and overcurrent	Ground fault and overcurrent	Ground fault and overcurrent
Rated current	3 (C, D curve), 6, 10, 16, 20, 25, 32A (B, C, D curve)	6, 10, 16, 20, 25, 32A (40, 50A) * (B, C curve)	6, 10, 16, 20, 25, 32A (40, 50A) * (B, C curve)	1, 2, 3, 4, 5, 6, 10, 16, 20, 25, 32, 40, 50, 63(B, C, D curve)	6, 10, 16, 20, 25, 32A (B, C curve)	6, 10, 16, 20, 25, 32A (B, C curve)
Rated residual current	-	-	-	-	-	-
Operating, $I_{\Delta n}$	30, 100, 300mA (Non-adjustable)	30, 100mA (Non-adjustable)	30, 100mA (Non-adjustable)	30, 100, 300mA (Non-adjustable)	10, 30mA (Non-adjustable)	10, 30mA (Non-adjustable)
Non-operating, $I_{\Delta no}$	$0.5I_{\Delta n}$	$0.5I_{\Delta n}$	$0.5I_{\Delta n}$	$0.5I_{\Delta n}$	$0.5I_{\Delta n}$	$0.5I_{\Delta n}$
Poles	1P+N	1P+N	1P+N	1P+N, 2P, 3P, 3P+N, 4P	1P+N	1P+N
Rated voltage	230VAC	230VAC	240VAC	230VAC	240VAC	240VAC
Residual current off-time	$\leq 0.1$ sec.	$\leq 0.3$ sec.	$\leq 0.3$ sec.	$\leq 0.1$ sec.	$\leq 0.1$ sec.	$\leq 0.1$ sec.
Standard	IEC 61009	IEC 61009	IEC 61009	IEC61009-1	IEC 61009	IEC 61009
Approval	CCC, SEMKO CB, CE, SABS	SEMKO CB, CE, SABS	SEMKO CB, CE	SEMKO CB	SEMKO CB, CE	SEMKO CB, CE
Type of trip	-	-	-	-	-	-
Ground fault	Electronic	Electronic	Electronic	Electro-magnetic	Electronic	Electronic
Overcurrent	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic
Breaking capacity	4.5kA	10kA	10kA	6kA	10kA	6kA (32A 4.5kA)
Conditional short circuit capacity	-	-	-	-	-	-
Endurance Electrical	4,000 operations	4,000 operations	4,000 operations	4,000 operations	4,000 operations	4,000 operations
Mechanical	10,000 operations	10,000 operations	10,000 operations	10,000 operations	10,000 operations	10,000 operations
Mount	On 35mm DIN rail	On 35mm DIN rail	On 35mm DIN rail	On 35mm DIN rail	On 35mm DIN rail	On 35mm DIN rail
Width	35.6mm	18mm	18mm	17.8mm	18mm	18mm
Terminal	Lug type (Cable up to 10mm <sup>2</sup> )	Lug type (Cable up to 10mm <sup>2</sup> )	Lug type (Cable up to 10mm <sup>2</sup> )	Lug type (Cable up to 25mm <sup>2</sup> )	Lug type (Cable up to 10mm <sup>2</sup> )	Lug type (Cable up to 10mm <sup>2</sup> )
Type of operation	AC	AC	AC	A/AC	A/AC	A/AC
Dimension						
Characteristic curve	See page 49	See page 49	See page 49	-	-	-

\* 40, 50A are available only for RKS-b

# Residual Current Circuit Breakers With Overcurrent Protection

## DIN rail mounting



### RKS type

#### Technical data

Standard	Confirming to IEC 61009	
Approval	SEMKO CB, CE, SABS	
Protection	Ground fault and overcurrent	
Rated current	6, 10, 16, 20, 25, 32A	
Rated voltage	230VAC	
Breaking capacity	10kA	
Characteristic	B, C curve	
Rated residual operating current	30, 100mA	
Number of poles	1P+N	
Rated insulation voltage [Ui]	500V	
Rated impulse withstand voltage [Uimp]	4kV	
Type of trip	Ground fault	Electronic
	Overcurrent	Thermal-magnetic
Terminal	Lug type (Cables up to 10mm <sup>2</sup> )	
Mount	35mm DIN rail	
Width	18mm	
Electrical endurance	4,000 operations	

#### RKS B curve

In	I <sub>Δn</sub>	Model	Order No.	Pack. unit (Pcs.)
6A	30mA	RKS 1P+N B6A 30mA	06220395R0	50
	100mA	RKS 1P+N B6A 100mA	06220396R0	50
10A	30mA	RKS 1P+N B10A 30mA	06220397R0	50
	100mA	RKS 1P+N B10A 100mA	06220398R0	50
16A	30mA	RKS 1P+N B16A 30mA	06220399R0	50
	100mA	RKS 1P+N B16A 100mA	06220400R0	50
20A	30mA	RKS 1P+N B20A 30mA	06220401R0	50
	100mA	RKS 1P+N B20A 100mA	06220402R0	50
25A	30mA	RKS 1P+N B25A 30mA	06220403R0	50
	100mA	RKS 1P+N B25A 100mA	06220404R0	50
32A	30mA	RKS 1P+N B32A 30mA	06220405R0	50
	100mA	RKS 1P+N B32A 100mA	06220406R0	50

#### RKS C curve

In	I <sub>Δn</sub>	Model	Order No.	Pack. unit (Pcs.)
6A	30mA	RKS 1P+N C6A 30mA	06220407R0	50
	100mA	RKS 1P+N C6A 100mA	06220408R0	50
10A	30mA	RKS 1P+N C10A 30mA	06220409R0	50
	100mA	RKS 1P+N C10A 100mA	06220410R0	50
16A	30mA	RKS 1P+N C16A 30mA	06220411R0	50
	100mA	RKS 1P+N C16A 100mA	06220412R0	50
20A	30mA	RKS 1P+N C20A 30mA	06220413R0	50
	100mA	RKS 1P+N C20A 100mA	06220414R0	50
25A	30mA	RKS 1P+N C25A 30mA	06220415R0	50
	100mA	RKS 1P+N C25A 100mA	06220416R0	50
32A	30mA	RKS 1P+N C32A 30mA	06220417R0	50
	100mA	RKS 1P+N C32A 100mA	06220418R0	50

CE  
Certificate


RKS-b 1+N

## RKS-b type

### Technical data

Standard	Confirming to IEC 61009
Approval	SEMKO CB, CE
Protection	Ground fault and overcurrent
Rated current	6, 10, 16, 20, 25, 32, 40, 50A
Rated voltage	240VAC
Breaking capacity	10kA
Characteristic	B, C curve
Rated residual operating current	30, 100mA
Number of poles	1P+N
Rated insulation voltage [Ui]	500V
Rated impulse withstand voltage [Uimp]	4kV
Type of trip	Ground fault Overcurrent
	Electronic Thermal-magnetic
Terminal	Lug type (Cables up to 10mm <sup>2</sup> )
Mount	35mm DIN rail
Width	18mm
Electrical endurance	4,000 operations

### RKS B curve

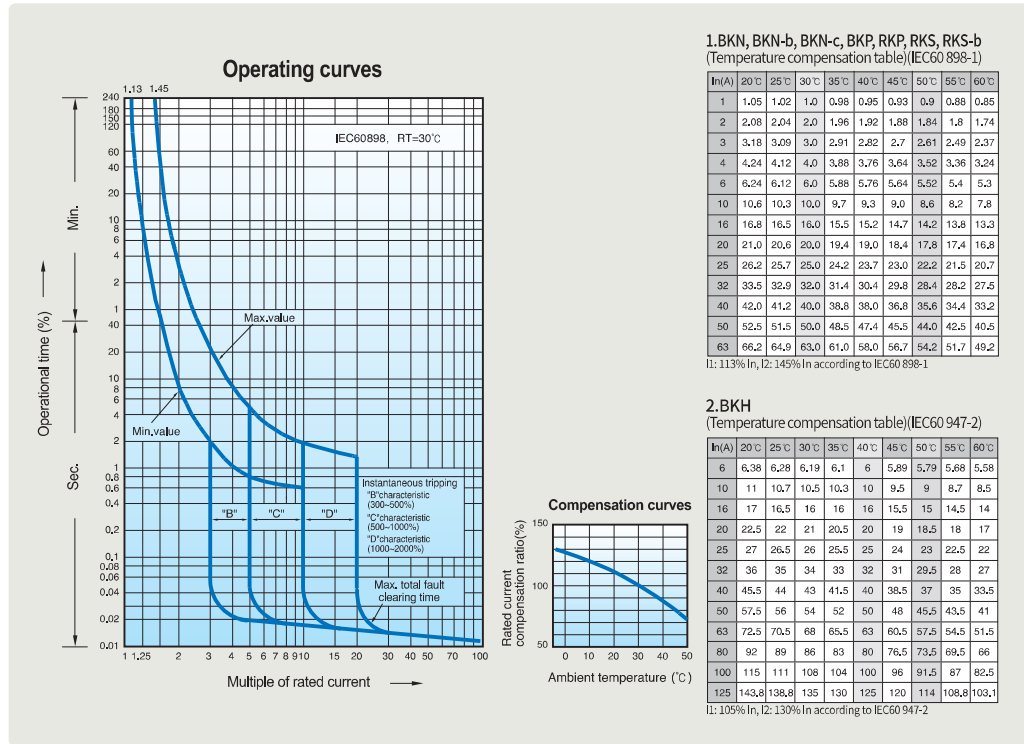
In	I <sub>Δn</sub>	Model	Order No.	Pack. unit (Pcs.)
6A	30mA	RKS-b 1P+N B6A 30mA	06220615R0	50
	100mA	RKS-b 1P+N B6A 100mA	06220616R0	50
10A	30mA	RKS-b 1P+N B10A 30mA	06220617R0	50
	100mA	RKS-b 1P+N B10A 100mA	06220618R0	50
16A	30mA	RKS-b 1P+N B16A 30mA	06220619R0	50
	100mA	RKS-b 1P+N B16A 100mA	06220620R0	50
20A	30mA	RKS-b 1P+N B20A 30mA	06220621R0	50
	100mA	RKS-b 1P+N B20A 100mA	06220622R0	50
25A	30mA	RKS-b 1P+N B25A 30mA	06220623R0	50
	100mA	RKS-b 1P+N B25A 100mA	06220624R0	50
32A	30mA	RKS-b 1P+N B32A 30mA	06220625R0	50
	100mA	RKS-b 1P+N B32A 100mA	06220626R0	50
40A	30mA	RKS-b 1P+N B40A 30mA	06220627R0	50
	100mA	RKS-b 1P+N B40A 100mA	06220628R0	50
50A	30mA	RKS-b 1P+N B50A 30mA	06220629R0	50
	100mA	RKS-b 1P+N B50A 100mA	06220630R0	50

### RKS C curve

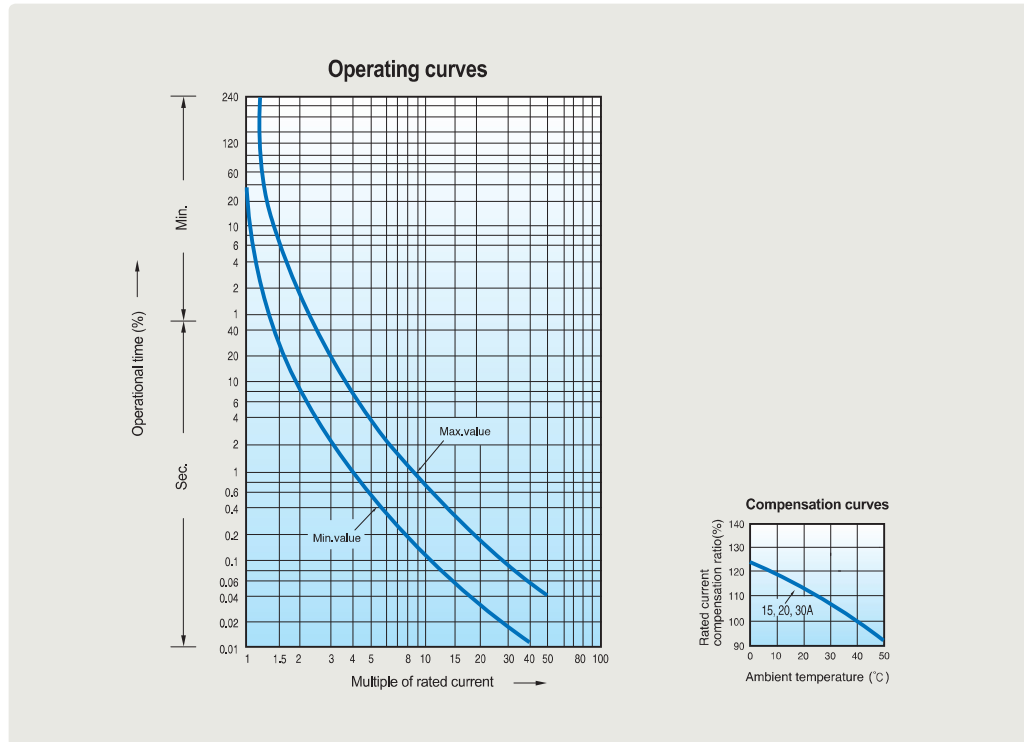
In	I <sub>Δn</sub>	Model	Order No.	Pack. unit (Pcs.)
6A	30mA	RKS-b 1P+N C6A 30mA	06220647R0	50
	100mA	RKS-b 1P+N C6A 100mA	06220648R0	50
10A	30mA	RKS-b 1P+N C10A 30mA	06220649R0	50
	100mA	RKS-b 1P+N C10A 100mA	06220650R0	50
16A	30mA	RKS-b 1P+N C16A 30mA	06220651R0	50
	100mA	RKS-b 1P+N C16A 100mA	06220652R0	50
20A	30mA	RKS-b 1P+N C20A 30mA	06220653R0	50
	100mA	RKS-b 1P+N C20A 100mA	06220654R0	50
25A	30mA	RKS-b 1P+N C25A 30mA	06220655R0	50
	100mA	RKS-b 1P+N C25A 100mA	06220656R0	50
32A	30mA	RKS-b 1P+N C32A 30mA	06220657R0	50
	100mA	RKS-b 1P+N C32A 100mA	06220658R0	50
40A	30mA	RKS-b 1P+N C40A 30mA	06220659R0	50
	100mA	RKS-b 1P+N C40A 100mA	06220660R0	50
50A	30mA	RKS-b 1P+N C50A 30mA	06220661R0	50
	100mA	RKS-b 1P+N C50A 100mA	06220662R0	50

# Characteristics curves & temperature compensation

- BKN
- BKN-b
- BKN-c
- BKH
- BKP
- RKP
- RKS
- RKS-b



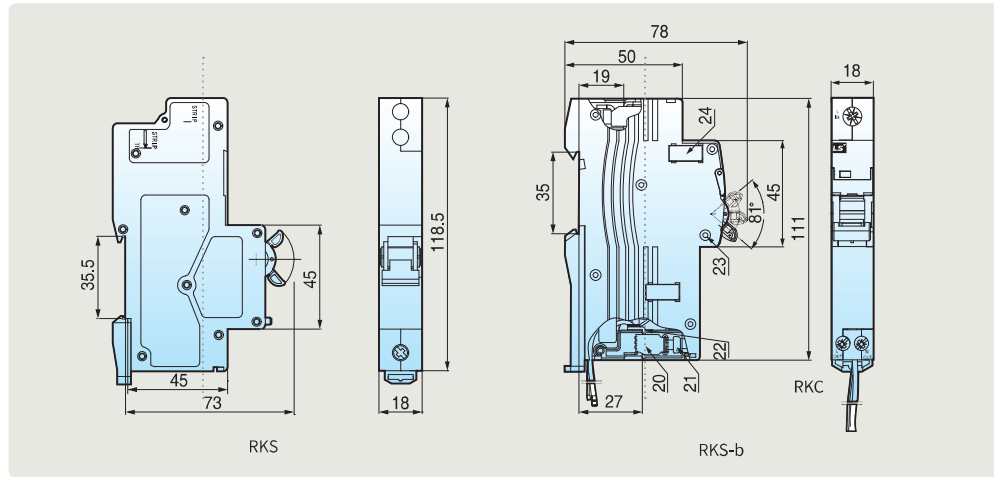
- 32KGRc
- 32KGRd



# Overall dimensions

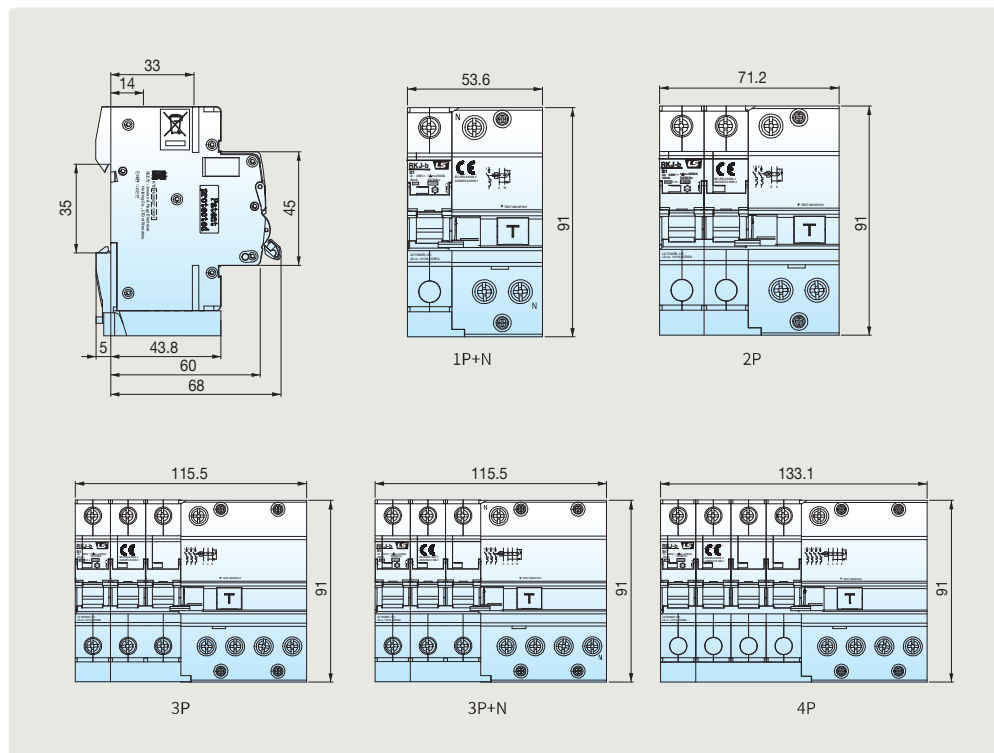
RKS

RKS-b



RKJ

RKJ-b



RKC

