



SITOP PSU8200/1ACDC/24VDC/20A

SITOP PSU8200 20 A stabilized power supply input: 120-230 V AC 110-220 V DC
output: 24 V DC/20 A

input	
type of the power supply network	1-phase and 2-phase AC or DC
supply voltage at AC	
• minimum rated value	120 V
• maximum rated value	230 V
• initial value	85 V
• full-scale value	275 V
supply voltage at AC	temperature derating necessary at $U_{in} < 100$ V AC or DC at 50 °C; additional derating at $U_{in} < 100$ V: $U_{in}=95$ V Pa max=460 W, $U_{in}=90$ V Pa max=440 W, $U_{in}=85$ V Pa max=420 W
supply voltage at DC	110 ... 220 V
input voltage at DC	88 ... 350 V
wide range input	Yes
buffering time for rated value of the output current in the event of power failure minimum	20 ms
operating condition of the mains buffering	at $V_{in} = 230$ V
line frequency	50/60 Hz
line frequency	47 ... 63 Hz
input current	
• at rated input voltage 120 V	4.6 A
• at rated input voltage 230 V	2.5 A
current limitation of inrush current at 25 °C maximum	20 A
I ² t value maximum	5 A ² ·s
fuse protection type	Yes
fuse protection type in the feeder	Recommended miniature circuit breaker at 1-phase operation: 10 A characteristic C; required at 2-phase operation: circuit breaker 2-pole connected or circuit breaker 3RV2711-1HD10 (UL 489) at 120 V or 3RV2711-1ED10 (UL 489) at 230 V
output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	24 V
output voltage	
• at output 1 at DC rated value	24 V
output voltage adjustable	Yes; via potentiometer
adjustable output voltage	24 ... 28 V
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
• on slow fluctuation of input voltage	0.1 %
• on slow fluctuation of ohm loading	0.3 %
residual ripple	
• maximum	100 mV
• typical	80 mV

voltage peak	
• maximum	200 mV
• typical	100 mV
display version for normal operation	Green LED for 24 V OK
type of signal at output	Relay contact (NO contact, rating 60 V DC/ 0.3 A) for "24 V OK"
behavior of the output voltage when switching on	No overshoot of Vout (soft start)
response delay maximum	1.5 s
voltage increase time of the output voltage	
• typical	250 ms
output current	
• rated value	20 A
• rated range	0 ... 20 A; +60 ... +70 °C: Derating 3%/K
supplied active power typical	480 W
short-term overload current	
• at short-circuit during operation typical	60 A
duration of overloading capability for excess current	
• at short-circuit during operation	25 ms
constant overload current	
• on short-circuiting during the start-up typical	30 A
bridging of equipment	Yes; switchable characteristic
number of parallel-switched equipment resources for increasing the power	2
efficiency	
efficiency in percent	94 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	31 W
closed-loop control	
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	0.5 %
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	1 %
setting time	
• load step 50 to 100% typical	1 ms
• load step 100 to 50% typical	1 ms
setting time	
• maximum	5 ms
protection and monitoring	
design of the overvoltage protection	< 31.8 V
property of the output short-circuit proof	Yes
design of short-circuit protection	Alternatively, constant current characteristic approx. 21.5 A or latching shutdown
• typical	21.5 A
overcurrent overload capability	
• in normal operation	overload capability 150 % Iout rated up to 5 s/min
enduring short circuit current RMS value	
• typical	21.5 A
display version for overload and short circuit	LED yellow for "overload", LED red for "latching shutdown"
safety	
galvanic isolation between input and output	Yes
galvanic isolation	SELV (ES1) output voltage Vout according to EN 61204-7, transformer according to EN 61558-2-16
operating resource protection class	Class I
leakage current	
• maximum	3.5 mA
• typical	1 mA
protection class IP	IP20
EMC	
standard	
• for emitted interference	EN 55022 Class B
• for mains harmonics limitation	EN 61000-3-2
• for interference immunity	EN 61000-6-2

standards, specifications, approvals

certificate of suitability	
• CE marking	Yes
• UL approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 62368-1, UL 62368-1)
• CSA approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 62368-1, UL 62368-1)
• UKCA marking	Yes
• EAC approval	Yes
• Regulatory Compliance Mark (RCM)	Yes
• NEC Class 2	No
• SEMI F47	Yes
type of certification	
• BIS	Yes; R-41183539
• CB-certificate	Yes
MTBF at 40 °C	583 500 h

standards, specifications, approvals hazardous environments

certificate of suitability	
• IECEx	No
• ATEX	No
• ULhazloc approval	No
• cCSAus, Class 1, Division 2	No
• FM registration	No

standards, specifications, approvals marine classification

shipbuilding approval	Yes
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	Yes
• French marine classification society (BV)	No
• Det Norske Veritas (DNV)	Yes
• Lloyds Register of Shipping (LRS)	No

standards, specifications, approvals Environmental Product Declaration

Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
• total	989.5 kg
• during manufacturing	18.9 kg
• during operation	970 kg
• after end of life	0.27 kg

ambient conditions

ambient temperature	
• during operation	-25 ... +70; With natural convection; startup tested starting from -40 °C nominal voltage
• during transport	-40 ... +85
• during storage	-40 ... +85
environmental category according to IEC 60721	Climate class 3K3, 5 ... 95% no condensation

connection method

type of electrical connection	screw terminal
• at input	L, N, PE: 1 screw terminal each for 0.2 ... 4 mm ² single-core/finely stranded
• at output	+, -, 2 screw terminals each for 0.2 ... 4 mm ²
• for auxiliary contacts	13, 14 (alarm signal), 15, 16 (Remote ON OFF): 1 screw terminal each for 0.14 ... 1.5 mm ²

mechanical data

width × height × depth of the enclosure	90 × 125 × 125 mm
installation width × mounting height	90 mm × 225 mm
required spacing	
• top	50 mm
• bottom	50 mm
• left	0 mm
• right	0 mm
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
• DIN-rail mounting	Yes
• S7 rail mounting	No

• wall mounting	No
housing can be lined up	Yes
net weight	1.2 kg
accessories	
electrical accessories	Buffer module
mechanical accessories	Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20
further information internet links	
internet link	
• to website: Industry Mall	https://mall.industry.siemens.com
• to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
• to web page: power supplies	https://siemens.com/sitop
• to website: CAX-Download-Manager	https://siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com
additional information	
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

security information	
security information	<p>Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)</p>

Classifications			
		Version	Classification
	eClass	14	27-04-07-01
	eClass	12	27-04-07-01
	eClass	9.1	27-04-07-01
	eClass	9	27-04-07-01
	eClass	8	27-04-90-02
	eClass	7.1	27-04-90-02
	eClass	6	27-04-90-02
	ETIM	9	EC002540
	ETIM	8	EC002540
	ETIM	7	EC002540
	IDEA	4	4130
	UNSPSC	15	39-12-10-04

Approvals Certificates	
General Product Approval	



[Manufacturer Declaration](#)

[Declaration of Conformity](#)



General Product Approval	Marine / Shipping	Environment
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[BIS CRS](#)



last modified:

4/4/2025



SITOP PSU8200/1AC/24VDC/5A

SITOP PSU8200 24 V/5 A stabilized power supply input: 120/230 V AC output: 24 V DC/5 A

input	
type of the power supply network	1-phase AC
supply voltage at AC	Automatic range selection
supply voltage	120 V/230 V
input voltage 1 at AC	85 ... 132 V
input voltage 2 at AC	170 ... 264 V
wide range input	No
buffering time for rated value of the output current in the event of power failure minimum	35 ms
operating condition of the mains buffering	at $V_{in} = 120/230 \text{ V}$
line frequency	50/60 Hz
line frequency	47 ... 63 Hz
input current	
• at rated input voltage 120 V	2.1 A
• at rated input voltage 230 V	1.2 A
current limitation of inrush current at 25 °C maximum	10 A
I^2t value maximum	0.2 A ² s
fuse protection type	T 3.15 A (not accessible)
fuse protection type in the feeder	Recommended miniature circuit breaker at 1-phase operation: from 6 A (10 A) characteristic C (B); required at 2-phase operation: circuit breaker 2-pole connected or circuit breaker 3RV2011-1EA10 (setting 3.8 A) or 3RV2711-1ED10 (UL 489) at 230 V; 3RV2011-1DA10 (setting 3 A) or 3RV2711-1DD10 (UL 489) at 400/500 V
output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	24 V
output voltage	
• at output 1 at DC rated value	24 V
output voltage adjustable	Yes; via potentiometer
adjustable output voltage	24 ... 28.8 V; max. 120 W
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
• on slow fluctuation of input voltage	0.1 %
• on slow fluctuation of ohm loading	0.2 %
residual ripple	
• maximum	50 mV
voltage peak	
• maximum	200 mV
display version for normal operation	Green LED for 24 V OK
type of signal at output	Relay contact (NO contact, rating 60 V DC/ 0.3 A) for "24 V OK"
behavior of the output voltage when switching on	Overshoot of V_{out} approx. 3 %

response delay maximum	1.5 s
voltage increase time of the output voltage	
• typical	30 ms
output current	
• rated value	5 A
• rated range	0 ... 5 A; As of $U_a > 24 \text{ V}$: 4% $[I_a]/V [U_a]$; at $U_e < 100 \text{ V}/< 200 \text{ V}$: 80% I_a rated
supplied active power typical	120 W
short-term overload current	
• at short-circuit during operation typical	15 A
duration of overloading capability for excess current	
• at short-circuit during operation	25 ms
constant overload current	
• on short-circuiting during the start-up typical	6 A
bridging of equipment	Yes; switchable characteristic
number of parallel-switched equipment resources for increasing the power	2
efficiency	
efficiency in percent	93 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	9 W
• during no-load operation maximum	1.5 W
closed-loop control	
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	0.1 %
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	2 %
setting time	
• load step 50 to 100% typical	0.25 ms
• load step 100 to 50% typical	0.5 ms
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	2 %
setting time	
• load step 10 to 90% typical	0.25 ms
• load step 90 to 10% typical	0.5 ms
• maximum	1 ms
protection and monitoring	
design of the overvoltage protection	< 33 V
property of the output short-circuit proof	Yes
design of short-circuit protection	Alternatively, constant current characteristic approx. 6 A or latching shutdown
• typical	6 A
overcurrent overload capability	
• in normal operation	overload capability 150 % I_{out} rated up to 5 s/min
enduring short circuit current RMS value	
• typical	6 A
display version for overload and short circuit	LED yellow for "overload", LED red for "latching shutdown"
safety	
galvanic isolation between input and output	Yes
galvanic isolation	Safety extra-low output voltage U_{out} acc. to EN 60950-1 and EN 50178
operating resource protection class	Class I
leakage current	
• maximum	3.5 mA
• typical	1 mA
protection class IP	IP20
EMC	
standard	
• for emitted interference	EN 55022 Class B
• for mains harmonics limitation	EN 61000-3-2
• for interference immunity	EN 61000-6-2
standards, specifications, approvals	
certificate of suitability	
• CE marking	Yes

<ul style="list-style-type: none"> • UL approval 	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)
<ul style="list-style-type: none"> • CSA approval 	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)
<ul style="list-style-type: none"> • EAC approval 	Yes
<ul style="list-style-type: none"> • Regulatory Compliance Mark (RCM) 	Yes
<ul style="list-style-type: none"> • NEC Class 2 	No
type of certification	
<ul style="list-style-type: none"> • BIS 	Yes; R-41183539
<ul style="list-style-type: none"> • CB-certificate 	Yes
MTBF at 40 °C	1 421 519 h
standards, specifications, approvals hazardous environments	
certificate of suitability	
<ul style="list-style-type: none"> • IECEx 	No
<ul style="list-style-type: none"> • ATEX 	No
<ul style="list-style-type: none"> • ULhazloc approval 	No
<ul style="list-style-type: none"> • cCSAus, Class 1, Division 2 	No
<ul style="list-style-type: none"> • FM registration 	No
standards, specifications, approvals marine classification	
shipbuilding approval	Yes
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) 	Yes
<ul style="list-style-type: none"> • French marine classification society (BV) 	No
<ul style="list-style-type: none"> • Det Norske Veritas (DNV) 	Yes
<ul style="list-style-type: none"> • Lloyds Register of Shipping (LRS) 	No
standards, specifications, approvals Environmental Product Declaration	
Environmental Product Declaration	Yes
global warming potential [CO ₂ eq]	
<ul style="list-style-type: none"> • total 	294.6 kg
<ul style="list-style-type: none"> • during manufacturing 	12.6 kg
<ul style="list-style-type: none"> • during operation 	281.6 kg
<ul style="list-style-type: none"> • after end of life 	0.18 kg
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> • during operation 	-25 ... +70; With natural convection; startup tested starting from -40 °C nominal voltage
<ul style="list-style-type: none"> • during transport 	-40 ... +85
<ul style="list-style-type: none"> • during storage 	-40 ... +85
environmental category according to IEC 60721	Climate class 3K3, 5 ... 95% no condensation
connection method	
type of electrical connection	screw terminal
<ul style="list-style-type: none"> • at input 	L, N, PE: 1 screw terminal each for 0.2 ... 2.5 mm ² single-core/finely stranded
<ul style="list-style-type: none"> • at output 	+, -: 2 screw terminals each for 0.2 ... 2.5 mm ²
<ul style="list-style-type: none"> • for auxiliary contacts 	13, 14 (alarm signal): 1 screw terminal each for 0.14 ... 1.5 mm ² ; 15, 16 (Remote): 1 screw terminal each for 0.14 ... 1.5 mm ²
mechanical data	
width × height × depth of the enclosure	45 × 125 × 125 mm
installation width × mounting height	45 mm × 225 mm
required spacing	
<ul style="list-style-type: none"> • top 	50 mm
<ul style="list-style-type: none"> • bottom 	50 mm
<ul style="list-style-type: none"> • left 	0 mm
<ul style="list-style-type: none"> • right 	0 mm
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
<ul style="list-style-type: none"> • DIN-rail mounting 	Yes
<ul style="list-style-type: none"> • S7 rail mounting 	No
<ul style="list-style-type: none"> • wall mounting 	No
housing can be lined up	Yes
net weight	0.8 kg
accessories	
electrical accessories	Buffer module

mechanical accessories	Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20
further information internet links	
internet link	
• to website: Industry Mall	https://mall.industry.siemens.com
• to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
• to web page: power supplies	https://siemens.com/sitop
• to website: CAX-Download-Manager	https://siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com

additional information	
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

security information	
security information	<p>Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)</p>

Classifications			
		Version	Classification
	eClass	14	27-04-07-01
	eClass	12	27-04-07-01
	eClass	9.1	27-04-07-01
	eClass	9	27-04-07-01
	eClass	8	27-04-90-02
	eClass	7.1	27-04-90-02
	eClass	6	27-04-90-02
	ETIM	9	EC002540
	ETIM	8	EC002540
	ETIM	7	EC002540
	IDEA	4	4130
	UNSPSC	15	39-12-10-04






Approvals Certificates	
General Product Approval	



[Manufacturer Declaration](#)

[Declaration of Conformity](#)



General Product Approval			Marine / Shipping		
			BIS CRS		

Environment



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SITOP PSU8200/1AC/24VDC/10A

SITOP PSU8200 24 V/10 A stabilized power supply input: 120/230 V AC output: 24 V DC/10 A

input	
type of the power supply network	1-phase AC
supply voltage at AC	Automatic range selection
supply voltage	120 V/230 V
input voltage 1 at AC	85 ... 132 V
input voltage 2 at AC	170 ... 264 V
wide range input	No
buffering time for rated value of the output current in the event of power failure minimum	35 ms
operating condition of the mains buffering	at $V_{in} = 120/230 \text{ V}$
line frequency	50/60 Hz
line frequency	47 ... 63 Hz
input current	
• at rated input voltage 120 V	4 A
• at rated input voltage 230 V	1.9 A
current limitation of inrush current at 25 °C maximum	10 A
I^2t value maximum	0.3 A ² s
fuse protection type	T 6.3 A (not accessible)
fuse protection type in the feeder	Recommended miniature circuit breaker at 1-phase operation: from 6 A (10 A) characteristic C (B); required at 2-phase operation: circuit breaker 2-pole connected or circuit breaker 3RV2011-1EA10 (setting 3.8 A) or 3RV2711-1ED10 (UL 489) at 230 V; 3RV2011-1DA10 (setting 3 A) or 3RV2711-1DD10 (UL 489) at 400/500 V
output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	24 V
output voltage	
• at output 1 at DC rated value	24 V
output voltage adjustable	Yes; via potentiometer
adjustable output voltage	24 ... 28.8 V; max. 240 W
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
• on slow fluctuation of input voltage	0.1 %
• on slow fluctuation of ohm loading	0.3 %
residual ripple	
• maximum	50 mV
voltage peak	
• maximum	200 mV
display version for normal operation	Green LED for 24 V OK
type of signal at output	Relay contact (NO contact, rating 60 V DC/ 0.3 A) for "24 V OK"
behavior of the output voltage when switching on	Overshoot of V_{out} approx. 3 %






response delay maximum	1.5 s
voltage increase time of the output voltage	
• typical	70 ms
output current	
• rated value	10 A
• rated range	0 ... 10 A; +60 ... +70 °C: Derating 2%/K; as of U _a >24 V: 4% [I _a]/V [U _a]; at U _e <100 V/<200 V: 80% I _a rated
supplied active power typical	240 W
short-term overload current	
• at short-circuit during operation typical	30 A
duration of overloading capability for excess current	
• at short-circuit during operation	25 ms
constant overload current	
• on short-circuiting during the start-up typical	12 A
bridging of equipment	Yes; switchable characteristic
number of parallel-switched equipment resources for increasing the power	2
efficiency	
efficiency in percent	94 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	18 W
• during no-load operation maximum	1.5 W
closed-loop control	
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	0.1 %
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	4 %
setting time	
• load step 50 to 100% typical	0.25 ms
• load step 100 to 50% typical	0.5 ms
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	4 %
setting time	
• load step 10 to 90% typical	0.25 ms
• load step 90 to 10% typical	0.5 ms
• maximum	1 ms
protection and monitoring	
design of the overvoltage protection	< 33 V
property of the output short-circuit proof	Yes
design of short-circuit protection	Alternatively, constant current characteristic approx. 12 A or latching shutdown
• typical	12 A
overcurrent overload capability	
• in normal operation	overload capability 150 % I _{out} rated up to 5 s/min
enduring short circuit current RMS value	
• typical	12 A
display version for overload and short circuit	LED yellow for "overload", LED red for "latching shutdown"
safety	
galvanic isolation between input and output	Yes
galvanic isolation	Safety extra-low output voltage U _{out} acc. to EN 60950-1 and EN 50178
operating resource protection class	Class I
leakage current	
• maximum	3.5 mA
• typical	1 mA
protection class IP	IP20
EMC	
standard	
• for emitted interference	EN 55022 Class B
• for mains harmonics limitation	EN 61000-3-2
• for interference immunity	EN 61000-6-2
standards, specifications, approvals	
certificate of suitability	

<ul style="list-style-type: none"> • CE marking • UL approval • CSA approval • EAC approval • Regulatory Compliance Mark (RCM) • NEC Class 2 • SEMI F47 	Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes Yes No Yes
type of certification	
<ul style="list-style-type: none"> • BIS • CB-certificate 	Yes; R-41183539 Yes
MTBF at 40 °C	1 292 102 h
standards, specifications, approvals hazardous environments	
certificate of suitability	
<ul style="list-style-type: none"> • IECEx • ATEX • ULhazloc approval • cCSAus, Class 1, Division 2 • FM registration 	No No No No No
standards, specifications, approvals marine classification	
shipbuilding approval	Yes
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV) • Lloyds Register of Shipping (LRS) 	Yes No Yes No
standards, specifications, approvals Environmental Product Declaration	
Environmental Product Declaration	Yes
global warming potential [CO ₂ eq]	
<ul style="list-style-type: none"> • total • during manufacturing • during operation • after end of life 	579.4 kg 15.8 kg 563.2 kg 0.23 kg
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> • during operation • during transport • during storage 	-25 ... +70; With natural convection; startup tested starting from -40 °C nominal voltage -40 ... +85 -40 ... +85
environmental category according to IEC 60721	Climate class 3K3, 5 ... 95% no condensation
connection method	
type of electrical connection	screw terminal
<ul style="list-style-type: none"> • at input • at output • for auxiliary contacts 	L, N, PE: 1 screw terminal each for 0.2 ... 2.5 mm ² single-core/finely stranded +, -: 2 screw terminals each for 0.2 ... 2.5 mm ² 13, 14 (alarm signal): 1 screw terminal each for 0.14 ... 1.5 mm ² ; 15, 16 (Remote): 1 screw terminal each for 0.14 ... 1.5 mm ²
mechanical data	
width × height × depth of the enclosure	55 × 125 × 125 mm
installation width × mounting height	55 mm × 225 mm
required spacing	
<ul style="list-style-type: none"> • top • bottom • left • right 	50 mm 50 mm 0 mm 0 mm
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
<ul style="list-style-type: none"> • DIN-rail mounting • S7 rail mounting • wall mounting 	Yes No No
housing can be lined up	Yes
net weight	1 kg

accessories	
electrical accessories	Buffer module
mechanical accessories	Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20
further information internet links	
internet link	
<ul style="list-style-type: none">• to website: Industry Mall• to web page: selection aid TIA Selection Tool• to web page: power supplies• to website: CAX-Download-Manager• to website: Industry Online Support	https://mall.industry.siemens.com https://www.siemens.com/tstcloud https://siemens.com/sitop https://siemens.com/cax https://support.industry.siemens.com
additional information	
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

Classifications			
		Version	Classification
	eClass	14	27-04-07-01
	eClass	12	27-04-07-01
	eClass	9.1	27-04-07-01
	eClass	9	27-04-07-01
	eClass	8	27-04-90-02
	eClass	7.1	27-04-90-02
	eClass	6	27-04-90-02
	ETIM	9	EC002540
	ETIM	8	EC002540
	ETIM	7	EC002540
	IDEA	4	4130
	UNSPSC	15	39-12-10-04



General Product Approval		Marine / Shipping	Environment
 UL	 RCM	BIS CRS  ABS	 DNV
			 EPD



SITOP PSU8200/1AC/24VDC/40A

SITOP PSU8200 24 V/40 A stabilized power supply input: 120/230 V AC output: 24 V DC/40 A

input	
type of the power supply network	1-phase and 2-phase AC
supply voltage at AC	Automatic selection; startup starting from $U_e \geq 90/180$ V
supply voltage	120 V/230 V
input voltage 1 at AC	85 ... 132 V
input voltage 2 at AC	170 ... 264 V
wide range input	No
buffering time for rated value of the output current in the event of power failure minimum	25 ms
operating condition of the mains buffering	at $V_{in} = 230$ V
line frequency	50/60 Hz
line frequency	45 ... 65 Hz
input current	
• at rated input voltage 120 V	15 A
• at rated input voltage 230 V	9 A
current limitation of inrush current at 25 °C maximum	50 A
I^2t value maximum	8 A ² s
fuse protection type	Yes
fuse protection type in the feeder	Recommended miniature circuit breaker at 1-phase operation: 16 A characteristic C; required at 2-phase operation: circuit breaker 2-pole connected or circuit breaker 3RV2421-4BA10 (120 V) or 3RV2411-1JA10 (230 V)
output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	24 V
output voltage	
• at output 1 at DC rated value	24 V
output voltage adjustable	Yes; via potentiometer
adjustable output voltage	24 ... 28 V; max. 960 W
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
• on slow fluctuation of input voltage	0.1 %
• on slow fluctuation of ohm loading	0.1 %
residual ripple	
• maximum	100 mV
• typical	50 mV
voltage peak	
• maximum	240 mV
• typical	220 mV
display version for normal operation	Green LED for 24 V OK; LED yellow for overload; LED red for short-circuit or latching shutdown

type of signal at output	Relay contact (NO contact, rating 60 V DC/ 0.3 A) for "24 V OK"
behavior of the output voltage when switching on	Overshoot of Vout approx. 3 %
response delay maximum	1.5 s
voltage increase time of the output voltage <ul style="list-style-type: none"> • typical 	30 ms
output current <ul style="list-style-type: none"> • rated value • rated range 	40 A 0 ... 40 A; +60 ... +70 °C: Derating 3%/K
supplied active power typical	960 W
short-term overload current <ul style="list-style-type: none"> • on short-circuiting during the start-up typical • at short-circuit during operation typical 	120 A 120 A
duration of overloading capability for excess current <ul style="list-style-type: none"> • on short-circuiting during the start-up • at short-circuit during operation 	25 ms 25 ms
constant overload current <ul style="list-style-type: none"> • on short-circuiting during the start-up typical 	60 A
bridging of equipment	Yes; switchable characteristic
number of parallel-switched equipment resources for increasing the power	2
efficiency	
efficiency in percent	92 %
power loss [W] <ul style="list-style-type: none"> • at rated output voltage for rated value of the output current typical • during no-load operation maximum 	82 W 6.8 W
closed-loop control	
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	1 %
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	1.9 %
setting time <ul style="list-style-type: none"> • load step 50 to 100% typical • load step 100 to 50% typical 	2 ms 2 ms
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	3.8 %
setting time <ul style="list-style-type: none"> • load step 10 to 90% typical • load step 90 to 10% typical • maximum 	1 ms 1 ms 1 ms
protection and monitoring	
design of the overvoltage protection	< 32 V
property of the output short-circuit proof	Yes
design of short-circuit protection <ul style="list-style-type: none"> • typical 	Alternatively, constant current characteristic approx. 41 A or latching shutdown 41 A
overcurrent overload capability <ul style="list-style-type: none"> • in normal operation 	250% Iout rated up to 25 ms, 150% Iout rated up to 5 s/min
enduring short circuit current RMS value <ul style="list-style-type: none"> • typical 	41 A
display version for overload and short circuit	LED yellow for "overload", LED red for "latching shutdown" or "short-circuit"
safety	
galvanic isolation between input and output	Yes
galvanic isolation	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178
operating resource protection class	Class I
leakage current <ul style="list-style-type: none"> • maximum • typical 	0.1 mA 0.1 mA
protection class IP	IP20
EMC	
standard <ul style="list-style-type: none"> • for emitted interference • for mains harmonics limitation 	EN 55022 Class B -

• for interference immunity	EN 61000-6-2
standards, specifications, approvals	
certificate of suitability	
• CE marking	Yes
• UL approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)
• CSA approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)
• EAC approval	Yes
• Regulatory Compliance Mark (RCM)	Yes
• NEC Class 2	No
type of certification	
• BIS	Yes; R-41183539
• CB-certificate	Yes
MTBF at 40 °C	838 156 h
standards, specifications, approvals hazardous environments	
certificate of suitability	
• IECEx	No
• ATEX	No
• ULhazloc approval	No
• cCSAus, Class 1, Division 2	No
• FM registration	No
standards, specifications, approvals marine classification	
shipbuilding approval	Yes
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	Yes
• French marine classification society (BV)	No
• Det Norske Veritas (DNV)	Yes
• Lloyds Register of Shipping (LRS)	No
standards, specifications, approvals Environmental Product Declaration	
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
• total	2 616.1 kg
• during manufacturing	48.8 kg
• during operation	2 565.8 kg
• after end of life	0.7 kg
ambient conditions	
ambient temperature	
• during operation	-25 ... +70; with natural convection
• during transport	-40 ... +85
• during storage	-40 ... +85
environmental category according to IEC 60721	Climate class 3K3, 5 ... 95% no condensation
connection method	
type of electrical connection	screw terminal
• at input	L, N, PE: 1 screw terminal each for 0.2 ... 4 mm ² single-core/finely stranded
• at output	+, -: 2 screw terminals each for 0.5 ... 10 mm ²
• for auxiliary contacts	13, 14 (alarm signal): 1 screw terminal each for 0.14 ... 1.5 mm ²
mechanical data	
width × height × depth of the enclosure	145 × 145 × 150 mm
installation width × mounting height	150 mm × 225 mm
required spacing	
• top	40 mm
• bottom	40 mm
• left	0 mm
• right	0 mm
fastening method	Snaps onto DIN rail EN 60715 35x15
• DIN-rail mounting	Yes
• S7 rail mounting	No
• wall mounting	No
housing can be lined up	Yes
net weight	3.1 kg

electrical accessories	Buffer module, redundancy module
mechanical accessories	Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20

internet link	<ul style="list-style-type: none"> • to website: Industry Mall https://mall.industry.siemens.com • to web page: selection aid TIA Selection Tool https://www.siemens.com/tstcloud • to web page: power supplies https://siemens.com/sitop • to website: CAx-Download-Manager https://siemens.com/cax • to website: Industry Online Support https://support.industry.siemens.com
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additional information

other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)
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security information

<p>security information</p>	<p>Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)</p>
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Classifications

	Version	Classification
eClass	14	27-04-07-01
eClass	12	27-04-07-01
eClass	9.1	27-04-07-01
eClass	9	27-04-07-01
eClass	8	27-04-90-02
eClass	7.1	27-04-90-02
eClass	6	27-04-90-02
ETIM	9	EC002540
ETIM	8	EC002540
ETIM	7	EC002540
IDEA	4	4130
UNSPSC	15	39-12-10-04

Approvals Certificates

General Product Approval



General Product Approval	Marine / Shipping
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SITOP PSU8200/1AC/DC24V/40A/EX

SITOP PSU8200 EX 24 V/40 A Stabilized power supply input: 120/230 V AC
output: 24 V DC/40 A

input	
type of the power supply network	1-phase and 2-phase AC
supply voltage at AC	Automatic selection; startup starting from $U_e \geq 90/180$ V
supply voltage	120 V/230 V
input voltage 1 at AC	85 ... 132 V
input voltage 2 at AC	170 ... 264 V
wide range input	No
buffering time for rated value of the output current in the event of power failure minimum	25 ms
operating condition of the mains buffering	at $V_{in} = 230$ V
line frequency	50/60 Hz
line frequency	45 ... 65 Hz
input current	
• at rated input voltage 120 V	15 A
• at rated input voltage 230 V	9 A
current limitation of inrush current at 25 °C maximum	50 A
I^2t value maximum	8 A ² s
fuse protection type	Yes
fuse protection type in the feeder	Recommended miniature circuit breaker at 1-phase operation: 16 A characteristic C; required at 2-phase operation: circuit breaker 2-pole connected or circuit breaker 3RV2421-4BA10 (120 V) or 3RV2411-1JA10 (230 V)
output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	24 V
output voltage	
• at output 1 at DC rated value	24 V
output voltage adjustable	Yes; via potentiometer
adjustable output voltage	24 ... 28 V; max. 960 W
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
• on slow fluctuation of input voltage	0.1 %
• on slow fluctuation of ohm loading	0.1 %
residual ripple	
• maximum	100 mV
• typical	50 mV
voltage peak	
• maximum	240 mV
• typical	220 mV
display version for normal operation	Green LED for 24 V OK; LED yellow for overload; LED red for short-circuit or latching shutdown






type of signal at output	Relay contact (NO contact, rating 60 V DC/ 0.3 A) for "24 V OK"
behavior of the output voltage when switching on	Overshoot of Vout approx. 3 %
response delay maximum	1.5 s
voltage increase time of the output voltage <ul style="list-style-type: none"> • typical 	30 ms
output current <ul style="list-style-type: none"> • rated value • rated range 	40 A 0 ... 40 A; +60 ... +70 °C: Derating 3%/K
supplied active power typical	960 W
short-term overload current <ul style="list-style-type: none"> • on short-circuiting during the start-up typical • at short-circuit during operation typical 	120 A 120 A
duration of overloading capability for excess current <ul style="list-style-type: none"> • on short-circuiting during the start-up • at short-circuit during operation 	25 ms 25 ms
constant overload current <ul style="list-style-type: none"> • on short-circuiting during the start-up typical 	60 A
bridging of equipment	No
efficiency	
efficiency in percent	92 %
power loss [W] <ul style="list-style-type: none"> • at rated output voltage for rated value of the output current typical • during no-load operation maximum 	82 W 6.8 W
closed-loop control	
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	1 %
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	1.9 %
setting time <ul style="list-style-type: none"> • load step 50 to 100% typical • load step 100 to 50% typical 	2 ms 2 ms
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	3.8 %
setting time <ul style="list-style-type: none"> • load step 10 to 90% typical • load step 90 to 10% typical • maximum 	1 ms 1 ms 1 ms
protection and monitoring	
design of the overvoltage protection	< 32 V
property of the output short-circuit proof	Yes
design of short-circuit protection <ul style="list-style-type: none"> • typical 	Alternatively, constant current characteristic approx. 41 A or latching shutdown 41 A
overcurrent overload capability <ul style="list-style-type: none"> • in normal operation 	250% Iout rated up to 25 ms, 150% Iout rated up to 5 s/min
enduring short circuit current RMS value <ul style="list-style-type: none"> • typical 	41 A
display version for overload and short circuit	LED yellow for "overload", LED red for "latching shutdown" or "short-circuit"
safety	
galvanic isolation between input and output	Yes
galvanic isolation	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178
operating resource protection class	Class I
leakage current <ul style="list-style-type: none"> • maximum • typical 	0.1 mA 0.1 mA
protection class IP	IP20
EMC	
standard <ul style="list-style-type: none"> • for emitted interference • for mains harmonics limitation • for interference immunity 	EN 55022 Class B - EN 61000-6-2

standards, specifications, approvals	
certificate of suitability	
• CE marking	Yes
• UL approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259
• CSA approval	Yes; CSA C22.2 No. 62368-1
• UKCA marking	Yes
• Regulatory Compliance Mark (RCM)	Yes
• NEC Class 2	No
type of certification	
• BIS	Yes; R-41183539
• CB-certificate	Yes
MTBF at 40 °C	838 156 h
standards, specifications, approvals hazardous environments	
certificate of suitability	
• IECEx	Yes; IECEx Ex ec nC IIC T3 Gc
• ATEX	Yes; ATEX (EX) II 3G Ex ec nC IIC T3 Gc
• ULhazloc approval	Yes
• cCSAus, Class 1, Division 2	Yes
• UKEX	Yes
• CCC for hazardous zone according to GB standard	Yes
• FM registration	No
standards, specifications, approvals marine classification	
shipbuilding approval	No
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	No
• French marine classification society (BV)	No
• Det Norske Veritas (DNV)	Yes
• Lloyds Register of Shipping (LRS)	No
standards, specifications, approvals Environmental Product Declaration	
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
• total	2 616.1 kg
• during manufacturing	48.8 kg
• during operation	2 565.8 kg
• after end of life	0.7 kg
ambient conditions	
ambient temperature	
• during operation	-25 ... +70; with natural convection
• during transport	-40 ... +85
• during storage	-40 ... +85
environmental category according to IEC 60721	Climate class 3K3, 5 ... 95% no condensation
connection method	
type of electrical connection	screw terminal
• at input	L, N, PE: 1 screw terminal each for 0.2 ... 4 mm ² single-core/finely stranded
• at output	+, -: 2 screw terminals each for 0.5 ... 10 mm ²
• for auxiliary contacts	13, 14 (alarm signal): 1 screw terminal each for 0.14 ... 1.5 mm ²
mechanical data	
width × height × depth of the enclosure	145 × 145 × 150 mm
installation width × mounting height	150 mm × 225 mm
required spacing	
• top	40 mm
• bottom	40 mm
• left	0 mm
• right	0 mm
fastening method	Snaps onto DIN rail EN 60715 35x15
• DIN-rail mounting	Yes
• S7 rail mounting	No
• wall mounting	No
housing can be lined up	Yes
net weight	3.1 kg

accessories	
electrical accessories	Buffer module, redundancy module
mechanical accessories	Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20
further information internet links	
internet link	
<ul style="list-style-type: none">● to website: Industry Mall● to web page: selection aid TIA Selection Tool● to web page: power supplies● to website: CAX-Download-Manager● to website: Industry Online Support	https://mall.industry.siemens.com https://www.siemens.com/tstcloud https://siemens.com/sitop https://siemens.com/cax https://support.industry.siemens.com
additional information	
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

Classifications			
		Version	Classification
	eClass	14	27-04-07-01
	eClass	12	27-04-07-01
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	eClass	6	27-04-90-02
	ETIM	9	EC002540
	ETIM	8	EC002540
	ETIM	7	EC002540
	IDEA	4	4130
	UNSPSC	15	39-12-10-04

Manufacturer Declara-
tion

For use in hazardous locations				Marine / Shipping	
 IECEX		 ATEX	CCC-Ex	 UL	 DNV



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