



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 Vin = 120/230 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 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 $U_a > 24$ V: 4% $ I_a /V$ $ U_a $; at $U_e < 100$ V/ < 200 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 • typical	Alternatively, constant current characteristic approx. 6 A or latching shutdown 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
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. 60950-1, UL 60950-1)

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• EAC approval	Yes
• Regulatory Compliance Mark (RCM)	Yes
• NEC Class 2	No
type of certification	
• CB-certificate	Yes
MTBF at 40 °C	1 421 519 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	294.6 kg
• during manufacturing	12.6 kg
• during operation	281.6 kg
• after end of life	0.18 kg
ambient conditions	
ambient temperature	
• during operation	-25 ... +70 °C; With natural convection; startup tested starting from -40 °C nominal voltage
• during transport	-40 ... +85 °C
• during storage	-40 ... +85 °C
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 ... 2.5 mm ² single-core/finely stranded
• at output	+, -: 2 screw terminals each for 0.2 ... 2.5 mm ²
• 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 x height x depth of the enclosure	45 x 125
installation width x mounting height	45 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
• standard rail mounting	Yes
• S7 rail mounting	No
• 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 x 7 mm, TI-grey 3RT2900-1SB20
further information internet links	
internet link	

- to web page: selection aid TIA Selection Tool
- to website: Industrial communication
- to website: CAx-Download-Manager

<https://siemens.com/tst>
<http://www.siemens.com/simatic-net>
<http://www.siemens.com/cax>

additional information

other information

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

security information

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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

CB

CB

CB

CB



[Manufacturer Declaration](#)

[Declaration of Conformity](#)

**UK
CA**

General Product Approval

For use in hazardous locations

Marine / Shipping



[CCC-Ex](#)



Marine / Shipping

Environment



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5/7/2024 