# **SIEMENS**

# **Data sheet**



# SITOP PSU8200/3AC/24VDC/20A

SITOP PSU8200 24 V/20 A stabilized power supply input: 400-500 V 3 AC output: 24 V DC/20 A \*Ex approval no longer available\*

input				
type of the power supply network	3-phase AC			
supply voltage at AC minimum rated value	400 500 V			
supply voltage at AC maximum rated value				
supply voltage at AC initial value	320 575 V			
supply voltage at AC full-scale value				
wide range input	Yes			
buffering time for rated value of the output current in the event of power failure minimum	15 ms			
operating condition of the mains buffering	at Vin = 400 V			
line frequency	50/60 Hz			
line frequency initial value	47 63 Hz			
line frequency full-scale value				
input current				
at rated input voltage 400 V	1.2 A			
at rated input voltage 500 V	1 A			
current limitation of inrush current at 25 °C maximum	16 A			
I2t value maximum	0.8 A²-s			
fuse protection type	none			
fuse protection type in the feeder	Required: 3-pole connected miniature circuit breaker 6 16 A characteristic C or circuit breaker 3RV2011-1DA10 (setting 3 A) or 3RV2711-1DD10 (UL 489)			
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 initial value	24 V			
adjustable output voltage full-scale value	28 V; max. 480 W			
relative overall tolerance of the voltage	3 %			
relative control precision of the output voltage				
<ul> <li>on slow fluctuation of input voltage</li> </ul>	0.1 %			
on slow fluctuation of ohm loading	0.2 %			
residual ripple				
• maximum	100 mV			
voltage peak				
maximum	200 mV			
display version for normal operation	Green LED for 24 V OK			
display version for normal operation type of signal at output	Green LED for 24 V OK Relay contact (NO contact, rating 60 V DC/ 0.3 A) for "24 V OK"			

response delay maximum	2.5 s	
voltage increase time of the output voltage		
• maximum	500 ms	
output current		
rated value	20 A	
rated range	0 20 A; +60 +70 °C: Derating 2%/K	
supplied active power typical	480 W	
short-term overload current		
<ul> <li>at short-circuit during operation typical</li> </ul>	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	22 A	
bridging of equipment	Yes; switchable characteristic	
number of parallel-switched equipment resources for increasing	2	
the power		
efficiency in percent	94 %	
power loss [W]		
at rated output voltage for rated value of the output	31 W	
current typical		
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	1 %	
setting time		
<ul><li>load step 50 to 100% typical</li></ul>	0.2 ms	
<ul><li>load step 100 to 50% typical</li></ul>	0.2 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	0.2 ms	
• load step 90 to 10% typical	0.2 ms	
• maximum	10 ms	
protection and monitoring		
design of the overvoltage protection	< 32 V	
property of the output short-circuit proof	Yes	
design of short-circuit protection	Alternatively, constant current characteristic approx. 22 A or latching shutdown	
200.g., 0. 6.10.1 0.104. p. 0.001.	, and a second and a second a	
response value current limitation typical	22 A	
overcurrent overload capability		
in normal operation	overload capability 150 % lout rated up to 5 s/min	
enduring short circuit current RMS value		
• typical	22 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 Vout according to EN 60950-1	
operating resource protection class	Class I	
leakage current		
maximum	3.5 mA	
• typical	0.9 mA	
protection class IP	IP20	
standard		
• for emitted interference	EN 55022 Class B	
for mains harmonics limitation	EN 61000-3-2	
for interference immunity     constructions approvals	EN 61000-6-2	
standards, specifications, approvals		
certificate of suitability	V	
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)	

- CCA approval	
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
SEMI F47      The second of a second	Yes
type of certification	V D 44400074
• BIS	Yes; R-41188271
CB-certificate	Yes
MTBF at 40 °C	590 573 h
standards, specifications, approvals hazardous environments	
certificate of suitability	
• IECEx	No
• ATEX	No
ULhazloc approval	No
<ul> <li>cCSAus, Class 1, Division 2</li> </ul>	No
<ul> <li>FM registration</li> </ul>	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 De	
Environmental Product Declaration	Yes
Global Warming Potential [CO2 eq]	163
• total	090 kg
	989 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 °C; With natural convection; startup tested starting from -40 °C nominal voltage
<ul> <li>during transport</li> </ul>	-40 +85 °C
during storage	-40 +85 °C
environmental category according to IEC 60721	-40 +85 °C  Climate class 3K3, 5 95% no condensation
environmental category according to IEC 60721	
environmental category according to IEC 60721 connection method	Climate class 3K3, 5 95% no condensation
environmental category according to IEC 60721  connection method  type of electrical connection	Climate class 3K3, 5 95% no condensation  screw-type terminals  L1, L2, L3, PE: 1 screw terminal each for 0.2 4 mm² single-core/finely
environmental category according to IEC 60721  connection method  type of electrical connection  • at input	Climate class 3K3, 5 95% no condensation  screw-type terminals  L1, L2, L3, PE: 1 screw terminal each for 0.2 4 mm² single-core/finely stranded  +, -: 2 screw terminals each for 0.2 4 mm²  13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²; 15, 16
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environmental category according to IEC 60721  connection method  type of electrical connection     • at input     • at output     • for auxiliary contacts  mechanical data  width × height × depth of the enclosure installation width × mounting height required spacing	Climate class 3K3, 5 95% no condensation  screw-type terminals  L1, L2, L3, PE: 1 screw terminal each for 0.2 4 mm² single-core/finely stranded  +, -: 2 screw terminals each for 0.2 4 mm²  13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²; 15, 16 (Remote): 1 screw terminal each for 0.14 1.5 mm²  70 × 125 × 125 mm  70 × 225 mm
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environmental category according to IEC 60721  connection method  type of electrical connection     • at input     • at output     • for auxiliary contacts  mechanical data  width × height × depth of the enclosure installation width × mounting height  required spacing     • top     • bottom	Climate class 3K3, 5 95% no condensation  screw-type terminals  L1, L2, L3, PE: 1 screw terminal each for 0.2 4 mm² single-core/finely stranded  +, -: 2 screw terminals each for 0.2 4 mm²  13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²; 15, 16 (Remote): 1 screw terminal each for 0.14 1.5 mm²  70 × 125 × 125 mm  70 × 225 mm  50 mm  50 mm
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environmental category according to IEC 60721  connection method  type of electrical connection     • at input     • at output     • for auxiliary contacts  mechanical data  width × height × depth of the enclosure installation width × mounting height  required spacing     • top     • bottom     • left     • right  fastening method     • standard rail mounting	Climate class 3K3, 5 95% no condensation  screw-type terminals L1, L2, L3, PE: 1 screw terminal each for 0.2 4 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 4 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²; 15, 16 (Remote): 1 screw terminal each for 0.14 1.5 mm²  70 × 125 × 125 mm  70 × 225 mm  50 mm 50 mm 0 mm 0 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15
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mechanical accessories

Device identification label 20 mm × 7 mm, Tl-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

• to website: CAx-Download-Manager

http://www.siemens.com/cax

additional information

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

### security information

security information

Siemens provides products and solutions with industrial security 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 security 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 security measures that may be implemented, please visional products and solutions.

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#### Classifications

	Version	Classification
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** 



ЭВ



CD

Manufacturer Declaration Declaration of Conformity





## **General Product Approval**

For use in hazardous locations











CCC-Ex

## Marine / Shipping









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