SIEMENS

Data sheet



SITOP PSU8200/3AC/24VDC/40A

SITOP PSU8200 24 V/40 A stabilized power supply input: 400-500 V 3 AC output: 24 V DC/40 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	10 ms	
operating condition of the mains buffering	at Vin = 400 V	
line frequency	50/60 Hz	
line frequency initial value	45 65 Hz	
line frequency full-scale value		
input current		
 at rated input voltage 400 V 	2.1 A	
• at rated input voltage 500 V	1.7 A	
current limitation of inrush current at 25 °C maximum	13 A	
12t value maximum	2.24 A²·s	
fuse protection type	none	
fuse protection type in the feeder	Required: 3-pole connected miniature circuit breaker 10 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. 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	0.2 %	
residual ripple		
• maximum	100 mV	
voltage peak		
maximum	240 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	minimal overshooting (< 2 %)	

response delay maximum	0.1 s	
voltage increase time of the output voltage		
maximum	100 ms	
output current		
rated value	40 A	
rated range	0 40 A; +60 +70 °C: Derating 4%/K	
supplied active power typical	960 W	
short-term overload current		
at short-circuit during operation typical	120 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 	44 A	
bridging of equipment	Yes; switchable characteristic	
number of parallel-switched equipment resources for increasing the power	2	
efficiency in percent	94 %	
power loss [W]		
 at rated output voltage for rated value of the output current typical 	66 W	
during no-load operation maximum closed-loop control	4 W	
·	4.0/	
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	3 %	
setting time		
maximum	10 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. 44 A or latching shutdown	
 response value current limitation typical 	44 A	
overcurrent overload capability		
in normal operation	overload capability 150 % lout rated up to 5 s/min	
enduring short circuit current RMS value		
• typical	50 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 Uout acc. to EN 60950-1 and EN 50178	
operating resource protection class	Class I	
leakage current		
• maximum	1 mA	
• typical	0.6 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	Yes	
CE markingUL approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus	
CSA approval	(CSA C22.2 No. 60950-1, UL 60950-1)	
▼ ΟΟΛ αμριυναι	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	
	Yes	

type of certification	
• BIS	Yes; R-41183539
CB-certificate	Yes
MTBF at 40 °C	517 015 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 D	Declaration
Environmental Product Declaration	Yes
Global Warming Potential [CO2 eq]	
• total	2 118.7 kg
during manufacturing	52 kg
 during operation 	2 065.2 kg
after end of life	0.74 kg
ambient conditions	
ambient temperature	
 during operation 	-25 +70 °C; With natural convection
 during transport 	-40 +85 °C
during storage	-40 +85 °C
	01: 1 1 01:0 5 050/ 1 1:
environmental category according to IEC 60721	Climate class 3K3, 5 95% no condensation
environmental category according to IEC 60721 connection method	Climate class 3K3, 5 95% no condensation
	screw-type terminals
connection method	
connection method type of electrical connection • at input • at output	screw-type terminals L1, L2, L3, PE: 1 screw terminal each for 0.5 4 mm² single-core/finely stranded +: 2 screw terminals each for 0.5 16 mm²; -: 3 screw terminals each for 0.5 16 mm²
connection method type of electrical connection	screw-type terminals L1, L2, L3, PE: 1 screw terminal each for 0.5 4 mm² single-core/finely stranded +: 2 screw terminals each for 0.5 16 mm²; -: 3 screw terminals each for 0.5
connection method type of electrical connection	screw-type terminals L1, L2, L3, PE: 1 screw terminal each for 0.5 4 mm² single-core/finely stranded +: 2 screw terminals each for 0.5 16 mm²; -: 3 screw terminals each for 0.5 16 mm² 13, 14 (alarm signal), 15, 16 (Remote): 1 screw terminal each for 0.05 2.5 mm²
connection method type of electrical connection	screw-type terminals L1, L2, L3, PE: 1 screw terminal each for 0.5 4 mm² single-core/finely stranded +: 2 screw terminals each for 0.5 16 mm²; -: 3 screw terminals each for 0.5 16 mm² 13, 14 (alarm signal), 15, 16 (Remote): 1 screw terminal each for 0.05 2.5 mm²
connection method type of electrical connection	screw-type terminals L1, L2, L3, PE: 1 screw terminal each for 0.5 4 mm² single-core/finely stranded +: 2 screw terminals each for 0.5 16 mm²; -: 3 screw terminals each for 0.5 16 mm² 13, 14 (alarm signal), 15, 16 (Remote): 1 screw terminal each for 0.05 2.5 mm²
connection method type of electrical connection	screw-type terminals L1, L2, L3, PE: 1 screw terminal each for 0.5 4 mm² single-core/finely stranded +: 2 screw terminals each for 0.5 16 mm²; -: 3 screw terminals each for 0.5 16 mm² 13, 14 (alarm signal), 15, 16 (Remote): 1 screw terminal each for 0.05 2.5 mm² 135 × 145 × 150 mm 135 × 225 mm
connection method type of electrical connection	screw-type terminals L1, L2, L3, PE: 1 screw terminal each for 0.5 4 mm² single-core/finely stranded +: 2 screw terminals each for 0.5 16 mm²; -: 3 screw terminals each for 0.5 16 mm² 13, 14 (alarm signal), 15, 16 (Remote): 1 screw terminal each for 0.05 2.5 mm² 135 × 145 × 150 mm 135 × 225 mm
connection method type of electrical connection	screw-type terminals L1, L2, L3, PE: 1 screw terminal each for 0.5 4 mm² single-core/finely stranded +: 2 screw terminals each for 0.5 16 mm²; -: 3 screw terminals each for 0.5 16 mm² 13, 14 (alarm signal), 15, 16 (Remote): 1 screw terminal each for 0.05 2.5 mm² 135 × 145 × 150 mm 135 × 225 mm 40 mm 40 mm
connection method type of electrical connection	screw-type terminals L1, L2, L3, PE: 1 screw terminal each for 0.5 4 mm² single-core/finely stranded +: 2 screw terminals each for 0.5 16 mm²; -: 3 screw terminals each for 0.5 16 mm² 13, 14 (alarm signal), 15, 16 (Remote): 1 screw terminal each for 0.05 2.5 mm² 135 × 145 × 150 mm 135 × 225 mm 40 mm 40 mm 0 mm
connection method type of electrical connection	screw-type terminals L1, L2, L3, PE: 1 screw terminal each for 0.5 4 mm² single-core/finely stranded +: 2 screw terminals each for 0.5 16 mm²; -: 3 screw terminals each for 0.5 16 mm² 13, 14 (alarm signal), 15, 16 (Remote): 1 screw terminal each for 0.05 2.5 mm² 135 × 145 × 150 mm 135 × 225 mm 40 mm 40 mm 0 mm 0 mm
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	screw-type terminals L1, L2, L3, PE: 1 screw terminal each for 0.5 4 mm² single-core/finely stranded +: 2 screw terminals each for 0.5 16 mm²; -: 3 screw terminals each for 0.5 16 mm² 13, 14 (alarm signal), 15, 16 (Remote): 1 screw terminal each for 0.05 2.5 mm² 135 × 145 × 150 mm 135 × 225 mm 40 mm 40 mm 0 mm 0 mm Snaps onto DIN rail EN 60715 35x15
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	screw-type terminals L1, L2, L3, PE: 1 screw terminal each for 0.5 4 mm² single-core/finely stranded +: 2 screw terminals each for 0.5 16 mm²; -: 3 screw terminals each for 0.5 16 mm² 13, 14 (alarm signal), 15, 16 (Remote): 1 screw terminal each for 0.05 2.5 mm² 135 × 145 × 150 mm 135 × 225 mm 40 mm 40 mm 0 mm 0 mm Snaps onto DIN rail EN 60715 35x15 Yes
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 • S7 rail mounting	screw-type terminals L1, L2, L3, PE: 1 screw terminal each for 0.5 4 mm² single-core/finely stranded +: 2 screw terminals each for 0.5 16 mm²; -: 3 screw terminals each for 0.5 16 mm² 13, 14 (alarm signal), 15, 16 (Remote): 1 screw terminal each for 0.05 2.5 mm² 135 × 145 × 150 mm 135 × 225 mm 40 mm 40 mm 0 mm 0 mm Snaps onto DIN rail EN 60715 35x15 Yes No
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 • S7 rail mounting • wall mounting	screw-type terminals L1, L2, L3, PE: 1 screw terminal each for 0.5 4 mm² single-core/finely stranded +: 2 screw terminals each for 0.5 16 mm²; -: 3 screw terminals each for 0.5 16 mm² 13, 14 (alarm signal), 15, 16 (Remote): 1 screw terminal each for 0.05 2.5 mm² 135 × 145 × 150 mm 135 × 225 mm 40 mm 40 mm 0 mm Snaps onto DIN rail EN 60715 35x15 Yes No
connection method type of electrical connection	screw-type terminals L1, L2, L3, PE: 1 screw terminal each for 0.5 4 mm² single-core/finely stranded +: 2 screw terminals each for 0.5 16 mm²; -: 3 screw terminals each for 0.5 16 mm² 13, 14 (alarm signal), 15, 16 (Remote): 1 screw terminal each for 0.05 2.5 mm² 135 × 145 × 150 mm 135 × 225 mm 40 mm 40 mm 0 mm Snaps onto DIN rail EN 60715 35x15 Yes No No No
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 • S7 rail mounting • wall mounting housing can be lined up net weight	screw-type terminals L1, L2, L3, PE: 1 screw terminal each for 0.5 4 mm² single-core/finely stranded +: 2 screw terminals each for 0.5 16 mm²; -: 3 screw terminals each for 0.5 16 mm² 13, 14 (alarm signal), 15, 16 (Remote): 1 screw terminal each for 0.05 2.5 mm² 135 × 145 × 150 mm 135 × 225 mm 40 mm 40 mm 0 mm Snaps onto DIN rail EN 60715 35x15 Yes No
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 • S7 rail mounting • wall mounting housing can be lined up net weight accessories	screw-type terminals L1, L2, L3, PE: 1 screw terminal each for 0.5 4 mm² single-core/finely stranded +: 2 screw terminals each for 0.5 16 mm²; -: 3 screw terminals each for 0.5 16 mm² 13, 14 (alarm signal), 15, 16 (Remote): 1 screw terminal each for 0.05 2.5 mm² 135 × 145 × 150 mm 135 × 225 mm 40 mm 40 mm 0 mm Snaps onto DIN rail EN 60715 35x15 Yes No No Yes 3.3 kg
connection method type of electrical connection	screw-type terminals L1, L2, L3, PE: 1 screw terminal each for 0.5 4 mm² single-core/finely stranded +: 2 screw terminals each for 0.5 16 mm²; -: 3 screw terminals each for 0.5 16 mm² 13, 14 (alarm signal), 15, 16 (Remote): 1 screw terminal each for 0.05 2.5 mm² 135 × 145 × 150 mm 135 × 225 mm 40 mm 40 mm 0 mm Snaps onto DIN rail EN 60715 35x15 Yes No No Yes 3.3 kg Buffer module
type of electrical connection	screw-type terminals L1, L2, L3, PE: 1 screw terminal each for 0.5 4 mm² single-core/finely stranded +: 2 screw terminals each for 0.5 16 mm²; -: 3 screw terminals each for 0.5 16 mm² 13, 14 (alarm signal), 15, 16 (Remote): 1 screw terminal each for 0.05 2.5 mm² 135 × 145 × 150 mm 135 × 225 mm 40 mm 40 mm 0 mm Snaps onto DIN rail EN 60715 35x15 Yes No No Yes 3.3 kg
connection method type of electrical connection	screw-type terminals L1, L2, L3, PE: 1 screw terminal each for 0.5 4 mm² single-core/finely stranded +: 2 screw terminals each for 0.5 16 mm²; -: 3 screw terminals each for 0.5 16 mm² 13, 14 (alarm signal), 15, 16 (Remote): 1 screw terminal each for 0.05 2.5 mm² 135 × 145 × 150 mm 135 × 225 mm 40 mm 40 mm 0 mm Snaps onto DIN rail EN 60715 35x15 Yes No No Yes 3.3 kg Buffer module
type of electrical connection	screw-type terminals L1, L2, L3, PE: 1 screw terminal each for 0.5 4 mm² single-core/finely stranded +: 2 screw terminals each for 0.5 16 mm²; -: 3 screw terminals each for 0.5 16 mm² 13, 14 (alarm signal), 15, 16 (Remote): 1 screw terminal each for 0.05 2.5 mm² 135 × 145 × 150 mm 135 × 225 mm 40 mm 40 mm 0 mm Snaps onto DIN rail EN 60715 35x15 Yes No No Yes 3.3 kg Buffer module Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20
type of electrical connection	screw-type terminals L1, L2, L3, PE: 1 screw terminal each for 0.5 4 mm² single-core/finely stranded +: 2 screw terminals each for 0.5 16 mm²; -: 3 screw terminals each for 0.5 16 mm² 13, 14 (alarm signal), 15, 16 (Remote): 1 screw terminal each for 0.05 2.5 mm² 135 × 145 × 150 mm 135 × 225 mm 40 mm 40 mm 0 mm Snaps onto DIN rail EN 60715 35x15 Yes No No Yes 3.3 kg Buffer module Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20
type of electrical connection	screw-type terminals L1, L2, L3, PE: 1 screw terminal each for 0.5 4 mm² single-core/finely stranded +: 2 screw terminals each for 0.5 16 mm²; -: 3 screw terminals each for 0.5 16 mm² 13, 14 (alarm signal), 15, 16 (Remote): 1 screw terminal each for 0.05 2.5 mm² 135 × 145 × 150 mm 135 × 225 mm 40 mm 40 mm 0 mm Snaps onto DIN rail EN 60715 35x15 Yes No No Yes 3.3 kg Buffer module Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20

additional information

other 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-ofthe-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 visit https://www.siemens.com/industrialsecurity. 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 Security RSS Feed under https://www.siemens.com/cert. (V4.6)

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





Manufacturer Declaration Declaration of Conformity





General Product Approval

For use in hazardous locations





CCC-Ex







Marine / Shipping

Environment





last modified:

2/29/2024