SIEMENS

Data sheet



SITOP PSU3800/3AC/24VDC/30-40A

SITOP PSU3800 24 V/30-40 A stabilized power supply input: 400-500 V 3 AC output: 24 V DC/30-40 A suitable for battery charging

input	
type of the power supply network	3-phase AC
supply voltage at AC	
minimum rated value	400 V
 maximum rated value 	500 V
• initial value	320 V
• full-scale value	575 V
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	45 65 Hz
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 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	
and the second second second	Operational State of DO contracts
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	Controlled, isolated DC voltage 24 V
•	-
output voltage at DC rated value	-
output voltage at DC rated value output voltage	24 V
output voltage at DC rated value output voltage • at output 1 at DC rated value	24 V 24 V
output voltage at DC rated value output voltage • at output 1 at DC rated value output voltage adjustable	24 V 24 V Yes; via potentiometer
output voltage at DC rated value output voltage • at output 1 at DC rated value output voltage adjustable adjustable output voltage	24 V 24 V Yes; via potentiometer 24 28 V; max. 960 W
output voltage at DC rated value output voltage • at output 1 at DC rated value output voltage adjustable adjustable output voltage relative overall tolerance of the voltage	24 V 24 V Yes; via potentiometer 24 28 V; max. 960 W
output voltage at DC rated value output voltage • at output 1 at DC rated value output voltage adjustable adjustable output voltage relative overall tolerance of the voltage relative control precision of the output voltage	24 V 24 V Yes; via potentiometer 24 28 V; max. 960 W 3 %
output voltage at DC rated value output voltage • at output 1 at DC rated value output voltage adjustable adjustable output voltage relative overall tolerance of the voltage relative control precision of the output voltage • on slow fluctuation of input voltage	24 V 24 V Yes; via potentiometer 24 28 V; max. 960 W 3 % 0.1 %
output voltage at DC rated value output voltage • at output 1 at DC rated value output voltage adjustable adjustable output voltage relative overall tolerance of the voltage relative control precision of the output voltage • on slow fluctuation of input voltage • on slow fluctuation of ohm loading	24 V 24 V Yes; via potentiometer 24 28 V; max. 960 W 3 % 0.1 %
output voltage at DC rated value output voltage • at output 1 at DC rated value output voltage adjustable adjustable output voltage relative overall tolerance of the voltage relative control precision of the output voltage • on slow fluctuation of input voltage • on slow fluctuation of ohm loading residual ripple	24 V 24 V Yes; via potentiometer 24 28 V; max. 960 W 3 % 0.1 % 0.2 %
output voltage at DC rated value output voltage	24 V 24 V Yes; via potentiometer 24 28 V; max. 960 W 3 % 0.1 % 0.2 %
output voltage at DC rated value output voltage	24 V 24 V Yes; via potentiometer 24 28 V; max. 960 W 3 % 0.1 % 0.2 % 100 mV
output voltage at DC rated value output voltage	24 V 24 V Yes; via potentiometer 24 28 V; max. 960 W 3 % 0.1 % 0.2 % 100 mV
output voltage at DC rated value output voltage	24 V 24 V Yes; via potentiometer 24 28 V; max. 960 W 3 % 0.1 % 0.2 % 100 mV 240 mV Green LED for 24 V OK
output voltage at DC rated value output voltage	24 V 24 V Yes; via potentiometer 24 28 V; max. 960 W 3 % 0.1 % 0.2 % 100 mV 240 mV Green LED for 24 V OK Relay contact (NO contact, rating 60 V DC/ 0.3 A) for "24 V OK"

• maximum	100 me	
maximum output current	100 ms	
output current • rated value	40. A	
• rated range	40 A 0 40 A; +60 +70 °C: Derating 4%/K	
•	·	
supplied active power typical	960 W	
constant overload current		
on short-circuiting during the start-up typical	48 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 	66 W	
during no-load operation maximum	4 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	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	Constant current characteristic approx. 44 A	
• typical	44 A	
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	
EMC		
standard	FN 55000 Class B	
 for emitted interference 	EN 55022 Class B	
• for mains harmonics limitation	EN 61000-3-2	
• for interference immunity		
• for interference immunity standards, specifications, approvals	EN 61000-3-2	
for interference immunity standards, specifications, approvals certificate of suitability	EN 61000-6-2	
for interference immunity standards, specifications, approvals certificate of suitability	EN 61000-3-2 EN 61000-6-2 Yes	
for interference immunity standards, specifications, approvals certificate of suitability	EN 61000-6-2	
for interference immunity standards, specifications, approvals certificate of suitability	EN 61000-3-2 EN 61000-6-2 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus	
for interference immunity standards, specifications, approvals certificate of suitability	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	
for interference immunity standards, specifications, approvals certificate of suitability	EN 61000-3-2 EN 61000-6-2 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)	
for interference immunity standards, specifications, approvals certificate of suitability	EN 61000-3-2 EN 61000-6-2 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	
for interference immunity standards, specifications, approvals certificate of suitability	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; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes Yes	
for interference immunity standards, specifications, approvals certificate of suitability • CE marking • UL approval • CSA approval • UKCA marking • EAC approval • Regulatory Compliance Mark (RCM)	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 Yes	
for interference immunity standards, specifications, approvals certificate of suitability	EN 61000-3-2 EN 61000-6-2 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 Yes Yes No	
for interference immunity standards, specifications, approvals certificate of suitability • CE marking • UL approval • CSA approval • UKCA marking • EAC approval • Regulatory Compliance Mark (RCM) • NEC Class 2 • SEMI F47	EN 61000-3-2 EN 61000-6-2 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 Yes Yes No	
for interference immunity standards, specifications, approvals certificate of suitability • CE marking • UL approval • CSA approval • UKCA marking • EAC approval • Regulatory Compliance Mark (RCM) • NEC Class 2 • SEMI F47 type of certification	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 Yes Yes No Yes	
for interference immunity standards, specifications, approvals certificate of suitability • CE marking • UL approval • CSA approval • UKCA marking • EAC approval • Regulatory Compliance Mark (RCM) • NEC Class 2 • SEMI F47 type of certification • CB-certificate	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 Yes Yes No Yes	
for interference immunity standards, specifications, approvals certificate of suitability • CE marking • UL approval • CSA approval • UKCA marking • EAC approval • Regulatory Compliance Mark (RCM) • NEC Class 2 • SEMI F47 type of certification • CB-certificate MTBF at 40 °C	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 Yes Yes Yes Yes No Yes	
for interference immunity standards, specifications, approvals certificate of suitability • CE marking • UL approval • CSA approval • UKCA marking • EAC approval • Regulatory Compliance Mark (RCM) • NEC Class 2 • SEMI F47 type of certification • CB-certificate MTBF at 40 °C standards, specifications, approvals hazardous environments	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 Yes Yes Yes Yes No Yes	

• 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) 	No
 French marine classification society (BV) 	No
Det Norske Veritas (DNV)	Yes
Lloyds Register of Shipping (LRS)	No
standards, specifications, approvals Environmental Product	
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	05
during operation	-25 +70 °C; With natural convection
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	L1, L2, L3, PE: 1 screw terminal each for 0.5 4 mm ² single-core/finely stranded
• at output	+: 2 screw terminals each for 0.5 16 mm²; -: 3 screw terminals each for 0.5
•	16 mm²
for auxiliary contacts	13, 14 (alarm signal), 15, 16 (Remote): 1 screw terminal each for 0.05 2.5 mm ²
mechanical data	
width × height × depth of the enclosure	135 × 145 × 150 mm
installation width × mounting height	135 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
standard rail mounting	Yes
S7 rail mounting	No
wall mounting	No
housing can be lined up	Yes
net weight	3.3 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 website: Industrial communication	https://siemens.com/industrial-communication
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	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)

	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 Declara-<u>tion</u>

Declaration of Conformity





General Product Approval

Marine / Shipping

Environment







last modified:

8/28/2024