

SITOP PSU300S/3AC/24VDC/10A

***** spare part ***** SITOP PSU300S 10 A stabilized power supply input:
400-500 V 3 AC output: 24 V / 10 A DC

input	
type of the power supply network	3-phase AC
supply voltage at AC	400 ... 500 V
supply voltage at AC	340 ... 550 V
wide range input	Yes
buffering time for rated value of the output current in the event of power failure minimum	6 ms
operating condition of the mains buffering	at $V_{in} = 400 \text{ V}$
Rated line frequency	50/60 Hz
line frequency	47 ... 63 Hz
input current	
• at rated input voltage 400 V	0.7 A
• at rated input voltage 500 V	0.5 A
current limitation of inrush current at 25 °C maximum	36 A
I^2t value maximum	0.9 A ² ·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	
• at output 1 at DC	24 ... 24 V
output voltage adjustable	Yes; via potentiometer
adjustable output voltage initial value	24 V
adjustable output voltage full-scale value	28 V; max. 240 W
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
• on slow fluctuation of input voltage	0.5 %
• on slow fluctuation of ohm loading	1 %
residual ripple	
• maximum	150 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	No overshoot of V_{out} (soft start)
response delay maximum	1.5 s
voltage increase time of the output voltage	
• typical	30 ms
• maximum	500 ms
output current	
• rated value	10 A
• rated range	0 ... 10 A; 12 A up to +45 °C
supplied active power typical	240 W
short-term overload current	
• on short-circuiting during the start-up typical	16 A
• at short-circuit during operation typical	16 A

duration of overloading capability for excess current	
• on short-circuiting during the start-up	100 ms
• at short-circuit during operation	100 ms
bridging of equipment	Yes
number of parallel-switched equipment resources for increasing the power	2
Efficiency	
efficiency in percent	91 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	24 W
closed-loop control	
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	3 %
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	3 %
setting time	
• load step 50 to 100% typical	2 ms
• load step 100 to 50% typical	2 ms
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	3 %
setting time	
• load step 10 to 90% typical	2 ms
• load step 90 to 10% typical	2 ms
• maximum	10 ms
protection and monitoring	
design of the overvoltage protection	protection against overvoltage in case of internal fault $V_{out} < 35 \text{ V}$
property of the output short-circuit proof	Yes
design of short-circuit protection	Electronic shutdown, automatic restart
• response value current limitation typical	11 A
overcurrent overload capability	
• in normal operation	overload capability 150 % I_{out} rated up to 5 s/min
enduring short circuit current RMS value	
• maximum	3.2 A
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
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	
• CE mark	Yes
• UL/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)
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• certificate of suitability EAC approval	Yes
• certificate of suitability NEC Class 2	No
• CB approval	Yes
MTBF at 40 °C	571 429 h
standards, specifications, approvals hazardous environments	
• certificate of suitability IECEx	No
• certificate of suitability ATEX	No
• certificate of suitability ULhazloc approval	No

<ul style="list-style-type: none"> • certificate of suitability cCSAus, Class 1, Division 2 • FM approval 	No No
standards, specifications, approvals marine classification	
	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
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> • during operation • during transport • during storage 	0 ... 70 °C; with natural convection -40 ... +85 °C -40 ... +85 °C
Humidity class according to EN 60721	Climate class 3K3, 5 ... 95% no condensation
connection method	
<ul style="list-style-type: none"> • Connection technology • Connections Supply input • Connections Output • Connections Auxiliary 	screw-type terminals L1, L2, L3, PE: 1 screw terminal each for 0.2 ... 4 mm ² single-core/finely stranded +, -: 2 screw terminals each for 0.2 ... 4 mm ² 13, 14 (alarm signal): 1 screw terminal each for 0.14 ... 1.5 mm ²
mechanical data	
width × height × depth of the enclosure	90 × 145 × 150 mm
installation width × Installation height	90 × 225 mm
required spacing	
<ul style="list-style-type: none"> • top • bottom • left • right 	40 mm 40 mm 0 mm 0 mm
<ul style="list-style-type: none"> • Installation • fastening method standard rail mounting • fastening method S7 rail mounting • fastening method wall mounting 	Snaps onto DIN rail EN 60715 35x7.5/15 Yes No No
housing can be lined up	Yes
Weight, approx.	1.6 kg
accessories	
electrical accessories	Buffer module
mechanical accessories	Device identification label 20 mm × 7 mm, pale turquoise 3RT1900-1SB20
further information internet links	
internet link	
<ul style="list-style-type: none"> • 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	
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 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	For use in hazardous locations
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[Manufacturer Declaration](#)

[Declaration of Conformity](#)



For use in hazardous locations	Marine / Shipping
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