

SITOP PSU300M/3AC/24VDC/20A

***** spare part ***** SITOP PSU300M 20 A stabilized power supply input:
400-500 V 3 AC output: 24 V DC/20 A

General information	
product brand name	SITOP PSU300M
product designation	Power supply SITOP modular
type of current supply	24 V/20 A
input	
type of the power supply network	3-phase AC
phase number	3
voltage curve at input	AC
supply voltage at AC	
• minimum rated value	400 V
• maximum rated value	500 V
• initial value	320 V
• full-scale value	575 V
supply voltage	
• at 50 Hz	400 V
• at 60 Hz	500 V
line frequency	50/60 Hz
line frequency	47 ... 63 Hz
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 $V_{in} = 400\text{ V}$
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	18 A
I ² t value maximum	0.8 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
product function output voltage controlled	Yes
product function output voltage stabilized	Yes
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 V
output voltage adjustable	Yes; via potentiometer
adjustable output voltage	24 ... 28.8 V; max. 480 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	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	No overshoot of Vout (soft start)
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 3%/K
supplied active power typical	480 W
short-term overload current	
• at short-circuit during operation typical	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	23 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	36 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	2 %
setting time	
• load step 50 to 100% typical	2 ms
• load step 100 to 50% typical	2 ms
setting time	
• maximum	10 ms
protection and monitoring	
design of the overvoltage protection	< 35 V
property of the output short-circuit proof	Yes
design of short-circuit protection	Alternatively, constant current characteristic approx. 23 A or latching shutdown
• typical	23 A
overcurrent overload capability	
• in normal operation	overload capability 150 % Iout rated up to 5 s/min
enduring short circuit current RMS value	
• typical	23 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	3.5 mA
• typical	0.9 mA
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	
certificate of suitability	

• CE marking • UL approval • EAC approval • NEC Class 2 • SEMI F47	Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 Yes No Yes
type of certification	
• CB-certificate	Yes
MTBF at 40 °C	664 995 h
standards, specifications, approvals hazardous environments	
certificate of suitability	
• IECEx • ATEX • ULhazloc approval • FM registration	No No No No
standards, specifications, approvals marine classification	
shipbuilding approval	Yes
Marine classification association	
• 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	
• during operation • during transport • during storage	-25 ... +70 °C; with natural convection -40 ... +85 °C -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 • at output • for auxiliary contacts	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
mechanical data	
width × height × depth of the enclosure	70 × 125 × 125 mm
installation width × mounting height	70 mm × 225 mm
required spacing	
• top • bottom • left • right	50 mm 50 mm 0 mm 0 mm
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
• DIN-rail mounting • S7 rail mounting • wall mounting	Yes No No
housing can be lined up	Yes
net weight	1.2 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	
• 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

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Classifications			
		Version	Classification
	eClass	16	27-04-07-01
	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	10	EC002540
	ETIM	9	EC002540
	ETIM	8	EC002540
	ETIM	7	EC002540
	IDEA	4	4130
	UNSPSC	15	39-12-10-04

Approvals Certificates

General Product Approval



CB

[Manufacturer Declaration](#)

[Declaration of Conformity](#)



CE

EG-Konf.

[China RoHS](#)



UL

EMV

Maritime application



RCM



ABS



DNV

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