



SITOP PSU100S/1AC/12VDC/14A

SITOP PSU100S 12 V/14 A stabilized power supply input: 120/230 V AC output: 12 V DC/14 A

input	
type of the power supply network	1-phase AC
supply voltage at AC	Automatic range selection
supply voltage	120 V/230 V
input voltage 1 at AC	85 ... 132 V
input voltage 2 at AC	170 ... 264 V
wide range input	No
overvoltage overload capability	$2.3 \times V_{in}$ rated, 1.3 ms
buffering time for rated value of the output current in the event of power failure minimum	20 ms
operating condition of the mains buffering	at $V_{in} = 93/187$ V
line frequency	50/60 Hz
line frequency	47 ... 63 Hz
input current	
• at rated input voltage 120 V	3.24 A
• at rated input voltage 230 V	1.41 A
current limitation of inrush current at 25 °C maximum	60 A
fuse protection type	T 6.3 A/250 V (not accessible)
fuse protection type in the feeder	Recommended miniature circuit breaker: from 10 A characteristic C
output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	12 V
output voltage	
• at output 1 at DC rated value	12 V
output voltage adjustable	Yes; via potentiometer
adjustable output voltage	11.5 ... 15.5 V
relative control precision of the output voltage	
• on slow fluctuation of input voltage	0.1 %
• on slow fluctuation of ohm loading	1 %
residual ripple	
• maximum	150 mV
• typical	20 mV
voltage peak	
• maximum	240 mV
• typical	100 mV
display version for normal operation	Green LED for 12 V OK
type of signal at output	Relay contact (NO contact, rating 60 V DC/ 0.3 A) for 12 V OK
behavior of the output voltage when switching on	Overshoot of $V_{out} < 3$ %
response delay maximum	0.3 s
voltage increase time of the output voltage	

• typical	10 ms
output current	
• rated value	14 A
• rated range	0 ... 14 A; +50 ... +70 °C: Derating 3.5%/K
supplied active power typical	168 W
short-term overload current	
• on short-circuiting during the start-up typical	40 A
• at short-circuit during operation typical	40 A
duration of overloading capability for excess current	
• on short-circuiting during the start-up	800 ms
• at short-circuit during operation	800 ms
bridging of equipment	Yes
number of parallel-switched equipment resources for increasing the power	2
efficiency	
efficiency in percent	87 %
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 at load step of resistive load 10/90/10 % typical	5 %
setting time	
• load step 10 to 90% typical	1 ms
• load step 90 to 10% typical	1 ms
protection and monitoring	
design of the overvoltage protection	< 20 V
property of the output short-circuit proof	Yes
design of short-circuit protection	Constant current characteristic
response value current limitation	14 ... 16.4 A
overcurrent overload capability	
• in normal operation	overload capability 150 % I _{out} rated up to 5 s/min
enduring short circuit current RMS value	
• typical	16.4 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
leakage current	
• maximum	3.5 mA
• typical	0.8 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	
• 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)
• 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
• NEC Class 2	No
type of certification	
• CB-certificate	Yes
MTBF at 40 °C	1 614 510 h
standards, specifications, approvals hazardous environments	
certificate of suitability	
• IECEx	No
• ATEX	No

<ul style="list-style-type: none"> • ULhazloc approval • cCSAus, Class 1, Division 2 • FM registration 	No
	No
	No
standards, specifications, approvals marine classification	
shipbuilding approval	Yes
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) 	No
<ul style="list-style-type: none"> • French marine classification society (BV) 	No
<ul style="list-style-type: none"> • Det Norske Veritas (DNV) 	Yes
<ul style="list-style-type: none"> • Lloyds Register of Shipping (LRS) 	No
standards, specifications, approvals Environmental Product Declaration	
Environmental Product Declaration	Yes
Global Warming Potential [CO2 eq]	
<ul style="list-style-type: none"> • total 	769.3 kg
<ul style="list-style-type: none"> • during manufacturing 	18.1 kg
<ul style="list-style-type: none"> • during operation 	750.6 kg
<ul style="list-style-type: none"> • after end of life 	0.49 kg
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> • during operation 	-25 ... +70 °C; with natural convection
<ul style="list-style-type: none"> • during transport 	-40 ... +85 °C
<ul style="list-style-type: none"> • 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
<ul style="list-style-type: none"> • at input 	L, N, PE: 1 screw terminal each for 0.5 ... 2.5 mm ² single-core/finely stranded
<ul style="list-style-type: none"> • at output 	+, -: 2 screw terminals each for 0.5 ... 2.5 mm ²
<ul style="list-style-type: none"> • for auxiliary contacts 	Alarm signals: 2 screw terminals for 0.5 ... 2.5 mm ²
<ul style="list-style-type: none"> • for signaling contact 	2 screw terminals for 0.5 ... 2.5 mm ²
mechanical data	
width × height × depth of the enclosure	70 × 120
installation width × mounting height	70 mm
required spacing	
<ul style="list-style-type: none"> • top 	50 mm
<ul style="list-style-type: none"> • bottom 	50 mm
<ul style="list-style-type: none"> • left 	0 mm
<ul style="list-style-type: none"> • right 	0 mm
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
<ul style="list-style-type: none"> • standard rail mounting 	Yes
<ul style="list-style-type: none"> • S7 rail mounting 	No
<ul style="list-style-type: none"> • wall mounting 	No
housing can be lined up	Yes
net weight	0.7 kg
further information internet links	
internet link	
<ul style="list-style-type: none"> • to website: Industry Mall 	https://mall.industry.siemens.com
<ul style="list-style-type: none"> • to web page: selection aid TIA Selection Tool 	https://siemens.com/tst
<ul style="list-style-type: none"> • to website: Industrial communication 	http://www.siemens.com/simatic-net
<ul style="list-style-type: none"> • to website: CAX-Download-Manager 	http://www.siemens.com/cax
<ul style="list-style-type: none"> • 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

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Classifications			
		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 Declaration](#)



[Declaration of Conformity](#)



General Product Approval

For use in hazardous locations

[Miscellaneous](#)


IECEX


ATEX

[CCC-Ex](#)


UL

Marine / Shipping

Environment



