



SITOP PSU100E/1AC/48VDC/5A

SITOP PSU100E 48 V/5 A Stabilized power supply Input: 120 / 230 V AC Output: 48 V DC/5 A

Technical Product Detail Page

<https://i.siemens.com/1P6EP3344-0SB00-0AY0>

input	
type of the power supply network	1-phase AC
supply voltage	100 V/230 V
input voltage 1 at AC	85 ... 132 V
input voltage 2 at AC	170 ... 264 V
wide range input	No
buffering time for rated value of the output current in the event of power failure minimum	30 ms
operating condition of the mains buffering	at $V_{in} = 120/230\text{ V}$
line frequency	50/60 Hz
line frequency	47 ... 63 Hz
input current	
• at rated input voltage 120 V	4.4 A
• at rated input voltage 230 V	2 A
current limitation of inrush current at 25 °C maximum	58 A
I ² t value maximum	1.5 A ² ·s
fuse protection type	T 6.3 A (not accessible), soldered
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	48 V
output voltage	
• at output 1 at DC rated value	48 V
output voltage adjustable	Yes; via potentiometer
adjustable output voltage	48 ... 54 V; max. 240 W
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
• on slow fluctuation of input voltage	0.2 %
• on slow fluctuation of ohm loading	0.5 %
residual ripple	
• maximum	50 mV
• typical	30 mV
voltage peak	
• maximum	150 mV
• typical	100 mV
display version for normal operation	Green LED for 48 V OK
type of signal at output	Relay contact (NO contact, rating 60 V DC/ 0.3 A) for 48 V OK
behavior of the output voltage when switching on	Overshoot of V_{out} approx. 2 %

response delay maximum	1.5 s
voltage increase time of the output voltage	
• typical	15 ms
• maximum	500 ms
output current	
• rated value	5 A
• rated range	0 ... 5 A; +60 ... +70 °C: Derating 5%/K
supplied active power typical	240 W
bridging of equipment	Yes
number of parallel-switched equipment resources for increasing the power	2
efficiency	
efficiency in percent	92 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	12 W
closed-loop control	
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	0.3 %
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	1 %
setting time	
• load step 10 to 90% typical	0.5 ms
• load step 90 to 10% typical	0.5 ms
• maximum	1 ms
protection and monitoring	
design of the overvoltage protection	< 60 V
property of the output short-circuit proof	Yes
design of short-circuit protection	Electronic shutdown, automatic restart
• typical	5.3 A
enduring short circuit current RMS value	
• typical	8.7 A
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	1 mA
protection class IP	IP20
EMC	
standard	
• for emitted interference	EN 61000-6-4
• 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
• EAC approval	Yes
• NEC Class 2	No
type of certification	
• CB-certificate	No
MTBF at 40 °C	1 050 000 h
standards, specifications, approvals hazardous environments	
certificate of suitability	
• IECEx	No
• ATEX	No
• ULhazloc approval	No

<ul style="list-style-type: none"> • FM registration 	No
standards, specifications, approvals marine classification	
shipbuilding approval	No
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) 	No No No No
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> • 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
<ul style="list-style-type: none"> • at input • at output • for auxiliary contacts 	L, N, PE: 1 screw terminal each for 0.5 ... 2.5 mm ² single-core/finely stranded +, -: 2 screw terminals each for 0.5 ... 2.5 mm ² 13, 14 (alarm signal): 1 screw terminal each for 0.5 ... 2.5 mm ²
mechanical data	
width × height × depth of the enclosure	42 × 125 × 125 mm
installation width × mounting height	42 mm × 225 mm
required spacing	
<ul style="list-style-type: none"> • top • bottom • left • right 	50 mm 50 mm 0 mm 0 mm
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
<ul style="list-style-type: none"> • DIN-rail mounting • S7 rail mounting • wall mounting 	Yes No No
housing can be lined up	Yes
net weight	0.5 kg
further information internet links	
internet link	
<ul style="list-style-type: none"> • to website: Industry Mall • to web page: selection aid TIA Selection Tool • to web page: power supplies • to website: CAx-Download-Manager • to website: Industry Online Support 	https://mall.industry.siemens.com https://www.siemens.com/tstcloud https://siemens.com/sitop https://siemens.com/cax 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)

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	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

[Manufacturer Declaration](#)

[Declaration of Conformity](#)



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