

SITOP PSU100D/1AC/12VDC/8.3A

\*\*\*\*\* spare part \*\*\*\*\* PSU100D 12 V/8.3 A stabilized power supply input: 100-240 V AC output: 12 V DC/8.3 A



### input

type of the power supply network	1-phase AC
supply voltage at AC	
• minimum rated value	100 V
• maximum rated value	240 V
• initial value	85 V
• full-scale value	264 V
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 $V_{in} = 115/230$ V
line frequency	50/60 Hz
line frequency	47 ... 63 Hz
input current	
• at rated input voltage 100 V	2 A
• at rated input voltage 240 V	1.1 A
current limitation of inrush current at 25 °C maximum	75 A
I <sub>2t</sub> value maximum	5.5 A <sup>2</sup> ·s
fuse protection type	internal
fuse protection type in the feeder	Recommended miniature circuit breaker: from 10 A characteristic C or from 16 A characteristic B

### 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 ... 14 V
relative overall tolerance of the voltage	2 %
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	100 mV
voltage peak	
• maximum	100 mV
display version for normal operation	Green LED for 12 V OK
behavior of the output voltage when switching on	Overshoot of $V_{out} < 2$ %
response delay maximum	1 s
voltage increase time of the output voltage	

• maximum output current	30 ms
• rated value	8.3 A
• rated range	0 ... 8.3 A; +50 ... +70 °C: Derating 2.5%/K
supplied active power typical	100 W
bridging of equipment	Yes
number of parallel-switched equipment resources for increasing the power	2
<b>efficiency</b>	
efficiency in percent	84 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	19 W
<b>closed-loop control</b>	
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	0.5 %
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	5 %
<b>protection and monitoring</b>	
design of the overvoltage protection	< 17.6 V
property of the output short-circuit proof	Yes
design of short-circuit protection	Electronic shutdown, automatic restart
• typical	9.9 A
enduring short circuit current RMS value	
• typical	10 A
<b>safety</b>	
galvanic isolation between input and output	Yes
galvanic isolation	Safety extra low output voltage Vout according to EN 60950-1
operating resource protection class	Class I
leakage current	
• maximum	3.5 mA
• typical	1 mA
protection class IP	IP20
<b>EMC</b>	
standard	
• for emitted interference	EN 55022 Class B
• for mains harmonics limitation	EN 61000-3-2
• for interference immunity	EN 61000-6-2
<b>standards, specifications, approvals</b>	
certificate of suitability	
• CE marking	Yes
• UL approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus (UL 60950-1, CSA C22.2 No. 60950-1), File E151273
• EAC approval	Yes
• NEC Class 2	No
type of certification	
• CB-certificate	Yes
<b>standards, specifications, approvals hazardous environments</b>	
certificate of suitability	
• IECEx	No
• ATEX	No
• ULhazloc approval	No
• FM registration	No
<b>standards, specifications, approvals marine classification</b>	
shipbuilding approval	No
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	No
• French marine classification society (BV)	No
• Det Norske Veritas (DNV)	No
• Lloyds Register of Shipping (LRS)	No

standards, specifications, approvals Environmental Product Declaration			
Environmental Product Declaration		Yes	
global warming potential [CO2 eq]		605.9 kg	
• total		11.3 kg	
• during manufacturing		594.3 kg	
• during operation		0.17 kg	
• after end of life			
ambient conditions			
ambient temperature		-10 ... +70 °C; with natural convection	
• during operation		-40 ... +85 °C	
• during transport		-40 ... +85 °C	
• during storage			
connection method			
type of electrical connection		screw terminal	
• at input		L, N, PE: 1 screw terminal each for 0.3 ... 1.3 mm <sup>2</sup> single-core/finely stranded	
• at output		+, -: 2 screw terminals each for 0.3 ... 1.3 mm <sup>2</sup>	
• for auxiliary contacts		-	
mechanical data			
width × height × depth of the enclosure		97 × 158 × 38 mm	
required spacing			
• top		20 mm	
• bottom		0 mm	
• left		20 mm	
• right		20 mm	
fastening method		Wall mounting	
• DIN-rail mounting		No	
• S7 rail mounting		No	
• wall mounting		Yes	
net weight		0.57 kg	
further information internet links			
internet link			
• to website: Industry Mall		<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>	
• to web page: selection aid TIA Selection Tool		<a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>	
• to website: CAx-Download-Manager		<a href="https://siemens.com/cax">https://siemens.com/cax</a>	
• to website: Industry Online Support		<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>	
additional information			
other information		Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)	
security information			
security information		<p>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 <a href="http://www.siemens.com/cybersecurity-industry">www.siemens.com/cybersecurity-industry</a>. 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 <a href="https://www.siemens.com/cert">https://www.siemens.com/cert</a>. (V4.7)</p>	
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](#)



[China RoHS](#)



#### Environment



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