

SITOP PSU100D/1AC/24VDC/2.1A

\*\*\*\*\* spare part \*\*\*\*\* PSU100D 24 V/2.1 A stabilized power supply input:  
100-240 V AC output: 24 V DC/2.1 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	1.1 A
• at rated input voltage 240 V	0.7 A
current limitation of inrush current at 25 °C maximum	60 A
I <sup>2</sup> t value maximum	1.2 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	24 V
output voltage	
• at output 1 at DC rated value	24 V
output voltage adjustable	Yes; via potentiometer
adjustable output voltage	22 ... 28 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 24 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	30 ms
output current	
• rated value	2.1 A
• rated range	0 ... 2.1 A; +50 ... +70 °C: Derating 2.5%/K
supplied active power typical	50 W
bridging of equipment	Yes
number of parallel-switched equipment resources for increasing the power	2
efficiency	

efficiency in percent	86 %
power loss [W]	
<ul style="list-style-type: none"> <li>at rated output voltage for rated value of the output current typical</li> </ul>	8 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	< 35 V
property of the output short-circuit proof	Yes
design of short-circuit protection	Electronic shutdown, automatic restart
<ul style="list-style-type: none"> <li>typical</li> </ul>	2.5 A
enduring short circuit current RMS value	
<ul style="list-style-type: none"> <li>typical</li> </ul>	6 A
<b>safety</b>	
galvanic isolation between input and output	Yes
galvanic isolation	Safety extra low output voltage $V_{out}$ according to EN 60950-1
operating resource protection class	Class I
leakage current	
<ul style="list-style-type: none"> <li>maximum</li> </ul>	3.5 mA
<ul style="list-style-type: none"> <li>typical</li> </ul>	1 mA
protection class IP	IP20
<b>EMC</b>	
standard	
<ul style="list-style-type: none"> <li>for emitted interference</li> </ul>	EN 55022 Class B
<ul style="list-style-type: none"> <li>for mains harmonics limitation</li> </ul>	not applicable
<ul style="list-style-type: none"> <li>for interference immunity</li> </ul>	EN 61000-6-2
<b>standards, specifications, approvals</b>	
certificate of suitability	
<ul style="list-style-type: none"> <li>CE marking</li> </ul>	Yes
<ul style="list-style-type: none"> <li>UL approval</li> </ul>	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
<ul style="list-style-type: none"> <li>EAC approval</li> </ul>	Yes
<ul style="list-style-type: none"> <li>NEC Class 2</li> </ul>	No
type of certification	
<ul style="list-style-type: none"> <li>CB-certificate</li> </ul>	Yes
<b>standards, specifications, approvals hazardous environments</b>	
certificate of suitability	
<ul style="list-style-type: none"> <li>IECEX</li> </ul>	No
<ul style="list-style-type: none"> <li>ATEX</li> </ul>	No
<ul style="list-style-type: none"> <li>ULhazloc approval</li> </ul>	No
<ul style="list-style-type: none"> <li>FM registration</li> </ul>	No
<b>standards, specifications, approvals marine classification</b>	
shipbuilding approval	No
Marine classification association	
<ul style="list-style-type: none"> <li>American Bureau of Shipping Europe Ltd. (ABS)</li> </ul>	No
<ul style="list-style-type: none"> <li>French marine classification society (BV)</li> </ul>	No
<ul style="list-style-type: none"> <li>Det Norske Veritas (DNV)</li> </ul>	No
<ul style="list-style-type: none"> <li>Lloyds Register of Shipping (LRS)</li> </ul>	No
<b>standards, specifications, approvals Environmental Product Declaration</b>	
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
<ul style="list-style-type: none"> <li>total</li> </ul>	257.3 kg
<ul style="list-style-type: none"> <li>during manufacturing</li> </ul>	6.9 kg
<ul style="list-style-type: none"> <li>during operation</li> </ul>	250.1 kg
<ul style="list-style-type: none"> <li>after end of life</li> </ul>	0.1 kg
<b>ambient conditions</b>	
ambient temperature	

<ul style="list-style-type: none"> <li>during operation</li> <li>during transport</li> <li>during storage</li> </ul>	<p>-10 ... +70 °C; with natural convection</p> <p>-40 ... +85 °C</p> <p>-40 ... +85 °C</p>		
<b>connection method</b>			
type of electrical connection <ul style="list-style-type: none"> <li>at input</li> <li>at output</li> <li>for auxiliary contacts</li> </ul>	screw terminal L, N, PE: 1 screw terminal each for 0.3 ... 1.3 mm <sup>2</sup> single-core/finely stranded +, -: 1 screw terminal each for 0.3 ... 1.3 mm <sup>2</sup> -		
<b>mechanical data</b>			
width × height × depth of the enclosure	97 × 128 × 38 mm		
required spacing <ul style="list-style-type: none"> <li>top</li> <li>bottom</li> <li>left</li> <li>right</li> </ul>	20 mm 0 mm 20 mm 20 mm		
fastening method <ul style="list-style-type: none"> <li>DIN-rail mounting</li> <li>S7 rail mounting</li> <li>wall mounting</li> </ul>	Wall mounting No No Yes		
net weight	0.35 kg		
<b>further information internet links</b>			
internet link <ul style="list-style-type: none"> <li>to website: Industry Mall</li> <li>to web page: selection aid TIA Selection Tool</li> <li>to website: CAx-Download-Manager</li> <li>to website: Industry Online Support</li> </ul>	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a> <a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a> <a href="https://siemens.com/cax">https://siemens.com/cax</a> <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>		
<b>additional information</b>			
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)		
<b>security information</b>			
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>		
<b>Classifications</b>			
		<b>Version</b>	<b>Classification</b>
	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

#### Environmental Product Declaration

- |  |          |
|--|----------|
| • global warming potential [CO2 eq] / during manufacturing | 6.9 kg   |
| • global warming potential [CO2 eq] / during operation     | 250.1 kg |
| • global warming potential [CO2 eq] / after end of life    | 0.1 kg   |
| • global warming potential [CO2 eq] / total                | 257.3 kg |

#### Environment      General Product Approval



[Manufacturer Declaration](#)

[Declaration of Conformity](#)



[China RoHS](#)



#### General Product Approval



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