



SITOP PSU100D/1AC/24VDC/2.2A

PSU100D 24 V/2.2 A stabilized power supply input: 100-240 V AC output: 24 V DC/2.2 A

Technical Product Detail Page

<https://i.siemens.com/1P6EP1331-1LD01>

input	
type of the power supply network	1-phase AC
supply voltage at AC	
<ul style="list-style-type: none"> <li>• minimum rated value</li> <li>• maximum rated value</li> <li>• initial value</li> <li>• full-scale value</li> </ul>	100 V 240 V 90 V 264 V
wide range input	Yes
overvoltage overload capability	1.25 × Vin rated, 500 ms
buffering time for rated value of the output current in the event of power failure minimum	12 ms
operating condition of the mains buffering	at Vin = 115/230 V
line frequency	50/60 Hz
line frequency	47 ... 63 Hz
input current	
<ul style="list-style-type: none"> <li>• at rated input voltage 100 V</li> <li>• at rated input voltage 240 V</li> </ul>	1.2 A 0.7 A
current limitation of inrush current at 25 °C maximum	45 A
I2t value maximum	2 A <sup>2</sup> ·s
fuse protection type	T3.15AL250V (internal)
fuse protection type in the feeder	Recommended miniature circuit breaker: from 16 A characteristic B, from 20 A characteristic B (for North America)
output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	24 V
output voltage	
<ul style="list-style-type: none"> <li>• at output 1 at DC rated value</li> </ul>	24 V
output voltage adjustable	Yes; via potentiometer
adjustable output voltage	21.6 ... 26.4 V
relative overall tolerance of the voltage	1 %
relative control precision of the output voltage	
<ul style="list-style-type: none"> <li>• on slow fluctuation of input voltage</li> <li>• on slow fluctuation of ohm loading</li> </ul>	0.5 % 0.5 %
voltage peak	
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	150 mV
display version for normal operation	Green LED for 24 V OK
behavior of the output voltage when switching on	Overshoot of Vout < 10 %
response delay maximum	1 s

voltage increase time of the output voltage	
• maximum	30 ms
output current	
• rated value	2.2 A
• rated range	0 ... 2.2 A; +50 ... +70 °C: Derating 2.0%/K
supplied active power typical	50 W
bridging of equipment	No
<b>efficiency</b>	
efficiency in percent	88 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	7.1 W
<b>closed-loop control</b>	
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	10 %
setting time	
• load step 50 to 100% typical	4 ms
• load step 100 to 50% typical	4 ms
<b>protection and monitoring</b>	
design of the overvoltage protection	< 33.6 V
property of the output short-circuit proof	Yes
design of short-circuit protection	Electronic shutdown, automatic restart
response value current limitation	2.42 ... 3.85 A
enduring short circuit current RMS value	
• typical	5 A
<b>safety</b>	
galvanic isolation between input and output	Yes
galvanic isolation	Safety extra low output voltage $V_{out}$ according to EN 62368-1
operating resource protection class	Class I
leakage current	
• maximum	0.5 mA
<b>EMC</b>	
standard	
• for emitted interference	EN 55032 Class B
• for mains harmonics limitation	IEC 61000-3-2
• for interference immunity	EN 55035
<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 62368-1, CSA C22.2 NO 62368-1-14), File E151273
• UKCA marking	Yes
• EAC approval	No
• NEC Class 2	No
type of certification	
• BIS	Yes; R-61003204
• CB-certificate	Yes
MTBF at 25 °C	700 000 h; according to SR-332, 100% full load (24 V, 2.2 A), input voltage: 115 V / 230 V AC
<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

<ul style="list-style-type: none"> <li>• French marine classification society (BV)</li> <li>• Det Norske Veritas (DNV)</li> <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> <li>• during manufacturing</li> <li>• during operation</li> <li>• after end of life</li> </ul>	225.7 kg 3.6 kg 222.1 kg 0.05 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>	-25 ... +70 °C; with natural convection; The device is not recommended to be placed on low thermal conductive surface (e. g. plastics). -40 ... +85 °C -40 ... +85 °C	
relative humidity with condensation according to IEC 60068-2-38 maximum	20 ... 90% without condensation	
<b>connection method</b>		
type of electrical connection	screw terminal	
<ul style="list-style-type: none"> <li>• at input</li> <li>• at output</li> <li>• for auxiliary contacts</li> </ul>	L, N, PE: 1 screw terminal each for 0.75 ... 2 mm <sup>2</sup> single-core/finely stranded +, -: 1 screw terminal each for 0.75 ... 2 mm <sup>2</sup> -	
<b>mechanical data</b>		
width × height × depth of the enclosure	82 × 29 × 99 mm	
fastening method	Wall mounting	
<ul style="list-style-type: none"> <li>• DIN-rail mounting</li> <li>• S7 rail mounting</li> <li>• wall mounting</li> </ul>	No No Yes	
net weight	0.18 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 web page: power supplies</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/sitop">https://siemens.com/sitop</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**

<b>General Product Approval</b>	<b>Environment</b>
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[Manufacturer Declaration](#)



[China RoHS](#)



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