

SITOP PSU100D/1AC/24VDC/2.1A

PSU100D 24 V/2.1 A Stabilized power supply input: 100-240 V AC output: DC 24 V/2,1 A



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 85 V 264 V
design of input wide range input	Yes
operating condition of the mains buffering	at $V_{in} = 115/230$ V
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	
<ul style="list-style-type: none"> <li>• 1 rated value</li> <li>• 2 rated value</li> </ul>	50 Hz 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>	1.1 A 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
<ul style="list-style-type: none"> <li>• in the feeder</li> </ul>	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	
<ul style="list-style-type: none"> <li>• at output 1 at DC rated value</li> </ul>	24 V
relative overall tolerance of the voltage	2 %
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 % 1 %
residual ripple	
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	100 mV
voltage peak	
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	100 mV
adjustable output voltage	22 ... 28 V
product function output voltage adjustable	Yes
type of output voltage setting	via potentiometer

display version for normal operation	Green LED for 24 V OK
behavior of the output voltage when switching on	Overshoot of Vout < 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
product feature	
• bridging of equipment	Yes
number of parallel-switched equipment resources for increasing the power	2
<b>Efficiency</b>	
efficiency in percent	86 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	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
response value current limitation typical	2.5 A
property of the output short-circuit proof	Yes
design of short-circuit protection	Electronic shutdown, automatic restart
enduring short circuit current RMS value	
• typical	6 A
display version for overload and short circuit	-
<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>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
• CSA 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
• cCSAus, Class 1, Division 2	No
• ATEX	No
certificate of suitability	
• IECEX	No
• NEC Class 2	No
• ULhazloc approval	No
• FM registration	No
type of certification CB-certificate	Yes
certificate of suitability	
• EAC approval	Yes
certificate of suitability shipbuilding approval	No
shipbuilding approval	-
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	No
• French marine classification society (BV)	No

<ul style="list-style-type: none"> <li>• DNV GL</li> <li>• Lloyds Register of Shipping (LRS)</li> <li>• Nippon Kaiji Kyokai (NK)</li> </ul>	No
	No
	No
<b>EMC</b>	
standard	
<ul style="list-style-type: none"> <li>• for emitted interference</li> <li>• for mains harmonics limitation</li> <li>• for interference immunity</li> </ul>	EN 55022 Class B not applicable EN 61000-6-2
<b>environmental conditions</b>	
ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during transport</li> <li>• during storage</li> </ul>	-10 ... +70 °C; with natural convection -40 ... +85 °C -40 ... +85 °C
<b>Mechanics</b>	
type of electrical connection	screw-type terminals
<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 0.3 ... 1.3 mm <sup>2</sup> single-core/finely stranded +, -: 1 screw terminal each for 0.3 ... 1.3 mm <sup>2</sup> -
width of the enclosure	97 mm
height of the enclosure	128 mm
depth of the enclosure	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
net weight	0.35 kg
fastening method	Wall mounting
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

