



SITOP PSU100C/1ACDC/12VDC/2A

SITOP PSU100C 12 V/2 A stabilized power supply input: 100-230 V AC (110-300 V DC) output: 12 V DC/2 A

Technical Product Detail Page

<https://i.siemens.com/1P6EP1321-5BA00>

input	
type of the power supply network	1-phase AC or DC
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 230 V 85 V 264 V
input voltage at DC	110 ... 300 V
wide range input	Yes
overvoltage overload capability	2.3 × Vin rated, 1.3 ms
buffering time for rated value of the output current in the event of power failure minimum	20 ms
operating condition of the mains buffering	at Vin = 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 230 V</li> </ul>	0.63 A 0.31 A
current limitation of inrush current at 25 °C maximum	33 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 16 A characteristic B or from 10 A characteristic C
output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	12 V
output voltage	
<ul style="list-style-type: none"> <li>• at output 1 at DC rated value</li> </ul>	12 V
output voltage adjustable	Yes; via potentiometer
adjustable output voltage	10.5 ... 12.9 V
relative overall tolerance of the voltage	3 %
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> <li>• typical</li> </ul>	200 mV 40 mV
voltage peak	

<ul style="list-style-type: none"> <li>• maximum</li> </ul>	300 mV
<ul style="list-style-type: none"> <li>• typical</li> </ul>	50 mV
display version for normal operation	Green LED for output voltage OK
behavior of the output voltage when switching on	Overshoot of Vout approx. 5 %
response delay maximum	0.6 s
voltage increase time of the output voltage	
<ul style="list-style-type: none"> <li>• typical</li> </ul>	10 ms
output current	
<ul style="list-style-type: none"> <li>• rated value</li> </ul>	2 A
<ul style="list-style-type: none"> <li>• rated range</li> </ul>	0 ... 2 A; +60 ... +70 °C: Derating 2%/K; at +70 °C Iout rated 1.6 A
supplied active power typical	24 W
bridging of equipment	Yes; Start-up with single nominal load only
number of parallel-switched equipment resources for increasing the power	2
<b>efficiency</b>	
efficiency in percent	82 %
power loss [W]	
<ul style="list-style-type: none"> <li>• at rated output voltage for rated value of the output current typical</li> </ul>	5.8 W
<ul style="list-style-type: none"> <li>• during no-load operation maximum</li> </ul>	0.75 W
<b>closed-loop control</b>	
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	0.1 %
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	3 %
setting time	
<ul style="list-style-type: none"> <li>• load step 10 to 90% typical</li> </ul>	4 ms
<ul style="list-style-type: none"> <li>• load step 90 to 10% typical</li> </ul>	3 ms
<b>protection and monitoring</b>	
design of the overvoltage protection	Yes, according to EN 60950-1
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>	2.4 A
<b>safety</b>	
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	
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	3.5 mA
<ul style="list-style-type: none"> <li>• typical</li> </ul>	0.4 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
<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
MTBF at 40 °C	3 737 060 h
<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	Yes
Marine classification association	
<ul style="list-style-type: none"> <li>• American Bureau of Shipping Europe Ltd. (ABS)</li> </ul>	Yes
<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>	Yes
<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>	162 kg
<ul style="list-style-type: none"> <li>• during manufacturing</li> </ul>	3.2 kg
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	158.6 kg
<ul style="list-style-type: none"> <li>• after end of life</li> </ul>	0.12 kg
<b>ambient conditions</b>	
ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	-20 ... +70 °C; with natural convection
<ul style="list-style-type: none"> <li>• during transport</li> </ul>	-40 ... +85 °C
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-40 ... +85 °C
environmental category according to IEC 60721	Climate class 3K3, 5 ... 95% no condensation
<b>connection method</b>	
type of electrical connection	screw terminal
<ul style="list-style-type: none"> <li>• at input</li> </ul>	L, N, PE: Removable screw terminal, each for 1 x 0.5 ... 2.5 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• at output</li> </ul>	+: 1 screw terminal for 0.5 ... 2.5 mm <sup>2</sup> ; -: 2 screw terminals for 0.5 ... 2.5 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• for auxiliary contacts</li> </ul>	-
<b>mechanical data</b>	
width × height × depth of the enclosure	30 × 80 × 100 mm
installation width × mounting height	30 mm × 180 mm
required spacing	
<ul style="list-style-type: none"> <li>• top</li> </ul>	50 mm
<ul style="list-style-type: none"> <li>• bottom</li> </ul>	50 mm
<ul style="list-style-type: none"> <li>• left</li> </ul>	0 mm
<ul style="list-style-type: none"> <li>• right</li> </ul>	0 mm
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
<ul style="list-style-type: none"> <li>• DIN-rail mounting</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• S7 rail mounting</li> </ul>	No
<ul style="list-style-type: none"> <li>• wall mounting</li> </ul>	No
housing can be lined up	Yes
net weight	0.12 kg
<b>accessories</b>	
electrical accessories	Removable spring-type terminal 6EP1971-5BA00
<b>further information internet links</b>	
internet link	
<ul style="list-style-type: none"> <li>• to website: Industry Mall</li> </ul>	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>
<ul style="list-style-type: none"> <li>• to web page: selection aid TIA Selection Tool</li> </ul>	<a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>
<ul style="list-style-type: none"> <li>• to web page: power supplies</li> </ul>	<a href="https://siemens.com/sitop">https://siemens.com/sitop</a>
<ul style="list-style-type: none"> <li>• to website: CAx-Download-Manager</li> </ul>	<a href="https://siemens.com/cax">https://siemens.com/cax</a>
<ul style="list-style-type: none"> <li>• to website: Industry Online Support</li> </ul>	<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	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

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**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](#)



**General Product Approval**

**Maritime application**

**Environment**

[China RoHS](#)



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