



SITOP PSU100C/1ACDC/24VDC/4A

SITOP PSU100C 24 V/4 A stabilized power supply input: 120-230 V AC (110-300 V DC) output: 24 V DC/4 A

### input

type of the power supply network	1-phase AC or DC
supply voltage at AC	
• minimum rated value	100 V
• maximum rated value	230 V
• initial value	85 V
• full-scale value	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	
• at rated input voltage 100 V	2.25 A
• at rated input voltage 230 V	1.15 A
current limitation of inrush current at 25 °C maximum	34 A
I <sub>2t</sub> value maximum	3 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	24 V
output voltage	
• at output 1 at DC rated value	24 V
output voltage adjustable	Yes; via potentiometer
adjustable output voltage	22.2 ... 26.4 V
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
• on slow fluctuation of input voltage	0.1 %
• on slow fluctuation of ohm loading	0.2 %
residual ripple	
• maximum	200 mV
• typical	80 mV
voltage peak	
• maximum	300 mV
• typical	80 mV

display version for normal operation	Green LED for output voltage OK
behavior of the output voltage when switching on	Overshoot of Vout approx. 1 %
response delay maximum	1.5 s
voltage increase time of the output voltage	
• typical	400 ms
output current	
• rated value	4 A
• rated range	0 ... 4 A; +55 ... +70 °C: Derating 3%/K; at +70 °C Iout rated 2.2 A
supplied active power typical	96 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	88 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	13 W
• during no-load operation maximum	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	
• load step 10 to 90% typical	4 ms
• load step 90 to 10% typical	4 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
• typical	4.8 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	
• maximum	3.5 mA
• typical	0.4 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; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)
• CSA approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)
• EAC approval	Yes
• NEC Class 2	No
type of certification	
• CB-certificate	Yes
MTBF at 40 °C	2 726 727 h
<b>standards, specifications, approvals hazardous environments</b>	
certificate of suitability	
• IECEx	No
• ATEX	No
• ULhazloc approval	No
• cCSAus, Class 1, Division 2	No

• FM registration	No
<b>standards, specifications, approvals marine classification</b>	
shipbuilding approval	Yes
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	Yes
• French marine classification society (BV)	No
• Det Norske Veritas (DNV)	Yes
• Lloyds Register of Shipping (LRS)	No
<b>standards, specifications, approvals Environmental Product Declaration</b>	
Environmental Product Declaration	Yes
Global Warming Potential [CO2 eq]	
• total	444.5 kg
• during manufacturing	6.3 kg
• during operation	437.9 kg
• after end of life	0.2 kg
<b>ambient conditions</b>	
ambient temperature	
• during operation	-20 ... +70 °C; with natural convection
• during transport	-40 ... +85 °C
• during storage	-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
• at input	L, N, PE: Removable screw terminal, each for 1 x 0.5 ... 2.5 mm <sup>2</sup>
• at output	+: 1 screw terminal for 0.5 ... 2.5 mm <sup>2</sup> ; -: 2 screw terminals for 0.5 ... 2.5 mm <sup>2</sup>
• for auxiliary contacts	-
<b>mechanical data</b>	
width x height x depth of the enclosure	52.5 x 80 x 100 mm
installation width x mounting height	52.5 mm x 180 mm
required spacing	
• top	50 mm
• bottom	50 mm
• left	0 mm
• right	0 mm
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
• standard rail mounting	Yes
• S7 rail mounting	No
• wall mounting	No
housing can be lined up	Yes
net weight	0.32 kg
<b>accessories</b>	
electrical accessories	Removable spring-type terminal 6EP1971-5BA00
<b>further information internet links</b>	
internet link	
• to website: Industry Mall	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>
• to website: Industrial communication	<a href="https://siemens.com/industrial-communication">https://siemens.com/industrial-communication</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>
<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 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

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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	9	EC002540
ETIM	8	EC002540
ETIM	7	EC002540
IDEA	4	4130
UNSPSC	15	39-12-10-04

## Approvals Certificates

### General Product Approval



CB



CB



CSA

[Manufacturer Declaration](#)

[Declaration of Conformity](#)



General Product Approval	For use in hazardous locations	Marine / Shipping	Environment
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EG-Konf.



UL



CSA



ABS



DNV



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