



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

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	90 V
• full-scale value	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	
• at rated input voltage 100 V	1.2 A
• at rated input voltage 240 V	0.7 A
current limitation of inrush current at 25 °C maximum	45 A
I2t value maximum	2 A²·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	
• at output 1 at DC rated value	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	
• on slow fluctuation of input voltage	0.5 %
• on slow fluctuation of ohm loading	0.5 %
voltage peak	
• maximum	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	
<ul style="list-style-type: none"> rated value rated range 	2.2 A 0 ... 2.2 A; +50 ... +70 °C: Derating 2.0%/K
supplied active power typical	50 W
bridging of equipment	No
efficiency	
efficiency in percent	88 %
power loss [W]	
<ul style="list-style-type: none"> at rated output voltage for rated value of the output current typical 	7.1 W
closed-loop control	
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	10 %
setting time	
<ul style="list-style-type: none"> load step 50 to 100% typical load step 100 to 50% typical 	4 ms 4 ms
protection and monitoring	
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	
<ul style="list-style-type: none"> typical 	5 A
safety	
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	
<ul style="list-style-type: none"> maximum 	0.5 mA
standard	
<ul style="list-style-type: none"> for emitted interference for mains harmonics limitation for interference immunity 	EN 55032 Class B IEC 61000-3-2 EN 55035
standards, specifications, approvals	
certificate of suitability	
<ul style="list-style-type: none"> CE marking UL approval CSA approval UKCA marking EAC approval NEC Class 2 	Yes 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 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 Yes No No
type of certification	
<ul style="list-style-type: none"> BIS CB-certificate 	Yes; R-611003204 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
standards, specifications, approvals hazardous environments	
certificate of suitability	
<ul style="list-style-type: none"> IECEX ATEX ULhazloc approval cCSAus, Class 1, Division 2 FM registration 	No No No No No
standards, specifications, approvals marine classification	
shipbuilding approval	No
Marine classification association	
<ul style="list-style-type: none"> American Bureau of Shipping Europe Ltd. (ABS) French marine classification society (BV) Det Norske Veritas (DNV) 	No No No

<ul style="list-style-type: none"> • Lloyds Register of Shipping (LRS) 	No
standards, specifications, approvals Environmental Product Declaration	
Environmental Product Declaration	Yes
Global Warming Potential [CO2 eq]	
<ul style="list-style-type: none"> • total 	225.7 kg
<ul style="list-style-type: none"> • during manufacturing 	3.6 kg
<ul style="list-style-type: none"> • during operation 	222.1 kg
<ul style="list-style-type: none"> • after end of life 	0.05 kg
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> • during operation 	-25 ... +70 °C; with natural convection; The device is not recommended to be placed on low thermal conductive surface (e. g. plastics).
<ul style="list-style-type: none"> • during transport 	-40 ... +85 °C
<ul style="list-style-type: none"> • during storage 	-40 ... +85 °C
relative humidity with condensation according to IEC 60068-2-38 maximum	20 ... 90% without condensation
connection method	
type of electrical connection	screw terminal
<ul style="list-style-type: none"> • at input 	L, N, PE: 1 screw terminal each for 0.75 ... 2 mm ² single-core/finely stranded
<ul style="list-style-type: none"> • at output 	+, - 1 screw terminal each for 0.75 ... 2 mm ²
<ul style="list-style-type: none"> • for auxiliary contacts 	-
mechanical data	
width × height × depth of the enclosure	82 × 29 × 99 mm
fastening method	Wall mounting
<ul style="list-style-type: none"> • standard rail mounting 	No
<ul style="list-style-type: none"> • S7 rail mounting 	No
<ul style="list-style-type: none"> • wall mounting 	Yes
net weight	0.18 kg
further information internet links	
internet link	
<ul style="list-style-type: none"> • to website: Industry Mall 	https://mall.industry.siemens.com
<ul style="list-style-type: none"> • to web page: selection aid TIA Selection Tool 	https://siemens.com/tst
<ul style="list-style-type: none"> • to website: Industrial communication 	http://www.siemens.com/simatic-net
<ul style="list-style-type: none"> • to website: CAx-Download-Manager 	http://www.siemens.com/cax
<ul style="list-style-type: none"> • to website: Industry Online Support 	https://support.industry.siemens.com
additional information	
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)
security information	
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 www.siemens.com/cybersecurity-industry . 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 https://www.siemens.com/cert . (V4.7)

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	Environment
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[Manufacturer Declaration](#)



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