SIEMENS

Data sheet 6EP1332-5BA00

SITOP PSU100C/1ACDC/24VDC/2.5A

SITOP PSU100C 24 V/2.5 A stabilized power supply input: 120-230 V AC (110-300 V DC) output: 24 V DC/2.5 A *Ex approval no longer available*

input	
type of the power supply network	1-phase AC or DC
supply voltage at AC minimum rated value	100 ... 230 V
supply voltage at AC maximum rated value	
supply voltage at AC initial value	85 ... 264 V
supply voltage at AC full-scale value	
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 initial value	47 ... 63 Hz
line frequency full-scale value	
input current	
● at rated input voltage 100 V	1.21 A
● at rated input voltage 230 V	0.67 A
current limitation of inrush current at 25 °C maximum	31 A
I2t value maximum	2.4 A²·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 initial value	22.2 V
adjustable output voltage full-scale value	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	55 mV
voltage peak	
● maximum	300 mV

● typical	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. 1 %
response delay maximum	0.7 s
voltage increase time of the output voltage	
● typical	100 ms
output current	
● rated value	2.5 A
● rated range	0 ... 2.5 A; +60 ... +70 °C: Derating 1.6%/K; at +70 °C Iout rated 2.1 A
supplied active power typical	60 W
bridging of equipment	Yes; Start-up with single nominal load only
number of parallel-switched equipment resources for increasing the power	2
efficiency in percent	87 %
power loss [W]	
● at rated output voltage for rated value of the output current typical	9 W
● during no-load operation maximum	0.75 W
closed-loop control	
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
protection and monitoring	
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
● response value current limitation typical	3 A
safety	
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
standard	
● for emitted interference	EN 55022 Class B
● for mains harmonics limitation	not applicable
● for interference immunity	EN 61000-6-2
standards, specifications, approvals	
certificate of suitability	
● CE marking	Yes
● UL approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273, NEC class 2 (acc. to UL 1310)
● CSA approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273, NEC class 2 (acc. to UL 1310)
● EAC approval	Yes
● NEC Class 2	Yes; according to UL1310, File E151273
type of certification	
● CB-certificate	Yes
MTBF at 40 °C	2 881 014 h
standards, specifications, approvals hazardous environments	
certificate of suitability	
● IECEx	No
● ATEX	No
● ULhazloc approval	No

● cCSAus, Class 1, Division 2	No
● FM registration	No
standards, specifications, approvals marine classification	
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
standards, specifications, approvals Environmental Product Declaration	
Environmental Product Declaration	Yes
Global Warming Potential [CO2 eq]	
● total	286.1 kg
● during manufacturing	4.3 kg
● during operation	281.5 kg
● after end of life	0.14 kg
ambient conditions	
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
connection method	
type of electrical connection	screw-type terminals
● at input	L, N, PE: Removable screw terminal, each for 1 x 0.5 ... 2.5 mm²
● at output	+: 1 screw terminal for 0.5 ... 2.5 mm²; -: 2 screw terminals for 0.5 ... 2.5 mm²
● for auxiliary contacts	-
mechanical data	
width × height × depth of the enclosure	45 × 80 × 100 mm
installation width × mounting height	45 × 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	0.22 kg
accessories	
electrical accessories	Removable spring-type terminal 6EP1971-5BA00
further information internet links	
internet link	
● to web page: selection aid TIA Selection Tool	https://siemens.com/tst
● to website: Industrial communication	http://www.siemens.com/simatic-net
● to website: CAx-Download-Manager	http://www.siemens.com/cax
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 security 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 security 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 security measures that may be implemented, please visit

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Classifications

	Version	Classification
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

Manufacturer Declaration

Declaration of Conformity

General Product Approval

For use in hazardous locations

For use in hazardous locations

CCC-Ex

Marine / Shipping

Environment

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