



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

General information

Technical Product Detail Page

<https://i.siemens.com/1P6EP1332-5BA00>

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	$2.3 \times V_{in \text{ rated}}$, 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 $V_{in} = 230 \text{ V}$
line frequency	50/60 Hz
line frequency	47 ... 63 Hz
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
I ² t value maximum	2.4 A ² ·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	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	
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	< 60 V
property of the output short-circuit proof	Yes
design of short-circuit protection	Electronic shutdown, automatic restart
• typical	3 A
safety	
galvanic isolation between input and output	Yes
galvanic isolation	Output voltage: SELV, ES1 (IEC 62368-1), DVC As (IEC 61204-7)
operating resource protection class	Class I
leakage current	
• maximum	3.5 mA
• typical	0.4 mA
protection class IP	IP20
EMC	
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)
• 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 • ATEX • ULhazloc approval • FM registration	No No No No
standards, specifications, approvals marine classification	
shipbuilding approval	Yes
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV) • Lloyds Register of Shipping (LRS)	Yes No Yes No
standards, specifications, approvals Environmental Product Declaration	
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
• total • during manufacturing • during operation • after end of life	250.5 kg 4.2 kg 246.1 kg 0.15 kg
ambient conditions	
ambient temperature	
• during operation • during transport • during storage	-20 ... +70 °C; with natural convection -40 ... +85 °C -40 ... +85 °C
environmental category according to IEC 60721	Climate class 3K3, 5 ... 95% no condensation
connection method	
type of electrical connection	screw terminal
• at input • at output • for auxiliary contacts	L, N, PE: Removable screw terminal, each for 1 x 0.5 ... 2.5 mm² +: 1 screw terminal for 0.5 ... 2.5 mm²; -: 2 screw terminals for 0.5 ... 2.5 mm² -
mechanical data	
width × height × depth of the enclosure	45 × 80 × 100 mm
installation width × mounting height	45 mm × 180 mm
required spacing	
• top • bottom • left • right	50 mm 50 mm 0 mm 0 mm
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
• DIN-rail mounting • S7 rail mounting • wall mounting	Yes No 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 website: Industry Mall • to web page: selection aid TIA Selection Tool • to web page: power supplies • to website: CAX-Download-Manager • to website: Industry Online Support	https://mall.industry.siemens.com https://www.siemens.com/tstcloud https://siemens.com/sitop https://siemens.com/cax 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,

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Classifications

	Version	Classification
eClass	16	27-04-07-01
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

Environmental Product Declaration	
• global warming potential [CO2 eq] / during manufacturing	4.2 kg
• global warming potential [CO2 eq] / during operation	246.1 kg
• global warming potential [CO2 eq] / after end of life	0.15 kg
• global warming potential [CO2 eq] / total	250.5 kg

Environment	General Product Approval
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[Manufacturer Declaration](#)

[Declaration of Conformity](#)



General Product Approval	Maritime application
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[China RoHS](#)



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