## **SIEMENS**

Data sheet 6EP1331-5BA00



## SITOP PSU100C/1ACDC/24VDC/0.6A

SITOP PSU100C 24 V/0.6 A stabilized power supply input: 100-230 V AC (110-300 V DC) output: 24 V DC/0.6 A \*Ex approval no longer available\*

ıput	
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
design of input wide range input	Yes
overvoltage overload capability	2.3 × Vin rated, 1.3 ms
operating condition of the mains buffering	at Vin = 230 V
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	
• 1 rated value	50 Hz
2 rated value	60 Hz
line frequency	47 63 Hz
input current	
at rated input voltage 100 V	0.28 A
at rated input voltage 230 V	0.18 A
current limitation of inrush current at 25 °C maximum	28 A
I2t value maximum	0.7 A <sup>2</sup> ·s
fuse protection type	internal
• in the feeder	Recommended miniature circuit breaker: from 16 A characteristic B or from 10 A characteristic C
utput	
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
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
<ul> <li>on slow fluctuation of input voltage</li> </ul>	0.1 %
<ul> <li>on slow fluctuation of ohm loading</li> </ul>	0.2 %
residual ripple	
• maximum	200 mV
• typical	40 mV
voltage peak	
• maximum	300 mV

• typical	20 mV
product function output voltage adjustable	No
type of output voltage setting	
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	1s
voltage increase time of the output voltage	
• typical	25 ms
output current	20 1110
• rated value	0.6 A
	0 0.6 A
rated range	
supplied active power typical	14 W
short-term overload current	
at short-circuit during operation typical	1 A
product feature	
bridging of equipment	No
Efficiency	
efficiency in percent	82 %
power loss [W]	
<ul> <li>at rated output voltage for rated value of the output</li> </ul>	2.6 W
current typical	
during no-load operation maximum	0.75 W
Closed-loop control	
relative control precision of the output voltage with rapid	0.1 %
fluctuation of the input voltage by +/- 15% typical	
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	3 %
setting time	
-	2 mg
load step 10 to 90% typical     load step 20 to 10% typical	3 ms
load step 90 to 10% typical	3 ms
Protection and monitoring	
design of the overvoltage protection	Yes, according to EN 60950-1
• typical	0.7 A
property of the output short-circuit proof	Yes
	The standing about the contract of the contrac
design of short-circuit protection	Electronic shutdown, automatic restart
display version for overload and short circuit	- Electronic snutdown, automatic restart
display version for overload and short circuit	
display version for overload and short circuit Safety	
display version for overload and short circuit  Safety  galvanic isolation between input and output	- Yes
display version for overload and short circuit  Safety  galvanic isolation between input and output galvanic isolation operating resource protection class	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178
display version for overload and short circuit  Safety  galvanic isolation between input and output galvanic isolation	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178
display version for overload and short circuit  Safety  galvanic isolation between input and output  galvanic isolation  operating resource protection class  leakage current  • maximum	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I
display version for overload and short circuit  Safety  galvanic isolation between input and output  galvanic isolation  operating resource protection class  leakage current  • maximum  • typical	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I  3.5 mA
display version for overload and short circuit  Safety  galvanic isolation between input and output galvanic isolation operating resource protection class leakage current  • maximum • typical protection class IP	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I  3.5 mA 0.4 mA
display version for overload and short circuit  Safety  galvanic isolation between input and output galvanic isolation operating resource protection class leakage current  • maximum • typical protection class IP  Approvals	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I  3.5 mA 0.4 mA
display version for overload and short circuit  Safety  galvanic isolation between input and output  galvanic isolation operating resource protection class leakage current  • maximum  • typical protection class IP  Approvals certificate of suitability	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I  3.5 mA 0.4 mA IP20
display version for overload and short circuit  Safety  galvanic isolation between input and output  galvanic isolation  operating resource protection class  leakage current  • maximum  • typical  protection class IP  Approvals  certificate of suitability  • CE marking	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I  3.5 mA 0.4 mA IP20
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display version for overload and short circuit  Safety  galvanic isolation between input and output  galvanic isolation operating resource protection class leakage current  • maximum  • typical protection class IP  Approvals  certificate of suitability  • CE marking  • UL approval  • CSA approval	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I  3.5 mA 0.4 mA IP20  Yes 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) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-Recognized (UL 60950, 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)
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EAC approval	Yes
certificate of suitability shipbuilding approval	Yes
shipbuilding approval	ABS, DNV GL
Marine classification association	
<ul> <li>American Bureau of Shipping Europe Ltd. (ABS)</li> </ul>	Yes
<ul> <li>French marine classification society (BV)</li> </ul>	No
DNV GL	Yes
<ul> <li>Lloyds Register of Shipping (LRS)</li> </ul>	No
<ul> <li>Nippon Kaiji Kyokai (NK)</li> </ul>	No
EMC	
standard	
• for emitted interference	EN 55022 Class B
<ul> <li>for mains harmonics limitation</li> </ul>	not applicable
• for interference immunity	EN 61000-6-2
environmental 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
Mechanics	
type of electrical connection	screw-type terminals
• 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 mm²; -: 2 screw terminals for 0.5 2.5 mm²
for auxiliary contacts	-
width of the enclosure	22.5 mm
height of the enclosure	80 mm
depth of the enclosure	100 mm
required spacing	
<ul> <li>top</li> </ul>	50 mm
• bottom	50 mm
• left	0 mm
● right	0 mm
net weight	0.12 kg
product feature of the enclosure housing can be lined up	Yes
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
electrical accessories	Removable spring-type terminal 6EP1971-5BA00
MTBF at 40 °C	3 910 833 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

