SIEMENS

Data sheet 6EP3344-0SB00-0AY0

SITOP PSU100E/1AC/48VDC/5A

SITOP PSU100E 48 V/5 A Stabilized power supply Input: 120 / 230 V AC Output: 48 V DC/5 A

Input	
type of the power supply network	1-phase AC
supply voltage	
● 1 at AC rated value	100 V
● 2 at AC rated value	230 V
input voltage	
● 1 at AC	85 ... 132 V
● 2 at AC	170 ... 264 V
design of input wide range input	No
operating condition of the mains buffering	at Vin = 120/230 V
buffering time for rated value of the output current in the event of power failure minimum	30 ms
operating condition of the mains buffering	at Vin = 120/230 V
line frequency	
● 1 rated value	50 Hz
● 2 rated value	60 Hz
line frequency	47 ... 63 Hz
input current	
● at rated input voltage 120 V	4.4 A
● at rated input voltage 230 V	2 A
current limitation of inrush current at 25 °C maximum	58 A
I2t value maximum	1.5 A²·s
fuse protection type	T 6.3 A (not accessible), soldered
● in the feeder	Recommended miniature circuit breaker: from 10 A characteristic C
Output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	48 V
output voltage	
● at output 1 at DC rated value	48 V
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
● on slow fluctuation of input voltage	0.2 %
● on slow fluctuation of ohm loading	0.5 %
residual ripple	
● maximum	50 mV
● typical	30 mV
voltage peak	
● maximum	150 mV
● typical	100 mV
adjustable output voltage	48 ... 54 V

product function output voltage adjustable	Yes
type of output voltage setting	via potentiometer; max. 240 W
display version for normal operation	Green LED for 48 V OK
type of signal at output	Relay contact (NO contact, rating 60 V DC/ 0.3 A) for 48 V OK
behavior of the output voltage when switching on	Overshoot of Vout approx. 2 %
response delay maximum	1.5 s
voltage increase time of the output voltage	
● typical	15 ms
● maximum	500 ms
output current	
● rated value	5 A
● rated range	0 ... 5 A; +60 ... +70 °C: Derating 5%/K
supplied active power typical	240 W
product feature	
● bridging of equipment	Yes
number of parallel-switched equipment resources for increasing the power	2
Efficiency	
efficiency in percent	92 %
power loss [W]	
● at rated output voltage for rated value of the output current typical	12 W
Closed-loop control	
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	0.3 %
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	1 %
setting time	
● load step 10 to 90% typical	0.5 ms
● load step 90 to 10% typical	0.5 ms
● maximum	1 ms
Protection and monitoring	
design of the overvoltage protection	< 60 V
● typical	5.3 A
property of the output short-circuit proof	Yes
design of short-circuit protection	Electronic shutdown, automatic restart
enduring short circuit current RMS value	
● typical	8.7 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	1 mA
protection class IP	IP20
Approvals	
certificate of suitability	
● CE marking	Yes
● UL approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259
● CSA approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259
● cCSAus, Class 1, Division 2	No
● ATEX	No
certificate of suitability	
● IECEx	No
● NEC Class 2	No
● ULhazloc approval	No
● FM registration	No
type of certification CB-certificate	No
certificate of suitability	
● EAC approval	Yes
certificate of suitability shipbuilding approval	No

shipbuilding approval	-
Marine classification association	
● American Bureau of Shipping Europe Ltd. (ABS)	No
● French marine classification society (BV)	No
● DNV GL	No
● Lloyds Register of Shipping (LRS)	No
● Nippon Kaiji Kyokai (NK)	No
EMC	
standard	
● for emitted interference	EN 61000-6-4
● for mains harmonics limitation	EN 61000-3-2
● for interference immunity	EN 61000-6-2
environmental conditions	
ambient temperature	
● during operation	-25 ... +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: 1 screw terminal each for 0.5 ... 2.5 mm² single-core/finely stranded
● at output	+, -: 2 screw terminals each for 0.5 ... 2.5 mm²
● for auxiliary contacts	13, 14 (alarm signal): 1 screw terminal each for 0.5 ... 2.5 mm²
width of the enclosure	42 mm
height of the enclosure	125 mm
depth of the enclosure	125 mm
required spacing	
● top	50 mm
● bottom	50 mm
● left	0 mm
● right	0 mm
net weight	0.5 kg
product feature of the enclosure housing can be lined up	Yes
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
MTBF at 40 °C	1 050 000 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)