SIEMENS

Data sheet 6EP1337-3BA00

SITOP PSU100M/1AC/24VDC/40A

SITOP PSU100M 40 A Stabilized power supply Input: 120/230 V AC Output: 24 V DC/40 A !!!!Phased-out product!!!! Successor: 6EP3337-8SB00-0AY0 *Ex approval no longer available*

Input	
type of the power supply network	1-phase AC
supply voltage at AC	
● initial value	Set by means of wire jumper on the device; starting from Vin > 95/190 V
supply voltage	
● 1 at AC rated value	120 V
● 2 at AC rated value	230 V
input voltage	
● 1 at AC	85 ... 132 V
● 2 at AC	176 ... 264 V
design of input wide range input	No
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 120 V	15 A
● at rated input voltage 230 V	8 A
current limitation of inrush current at 25 °C maximum	125 A
I2t value maximum	26 A²·s
fuse protection type	Yes
● in the feeder	Recommended miniature circuit breaker at 1-phase operation: 20 A characteristic C; required at 2-phase operation: circuit breaker 2-pole connected or circuit breaker 3RV2421-4BA10 (120 V) or 3RV2411-1JA10 (230 V)
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
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	0.1 %
residual ripple	
● maximum	100 mV

● typical	60 mV
voltage peak	
● maximum	200 mV
● typical	120 mV
adjustable output voltage	24 ... 28.8 V
product function output voltage adjustable	Yes
type of output voltage setting	via potentiometer
display version for normal operation	Green LED for 24 V OK
type of signal at output	via signaling module (6EP1961-3BA10)
behavior of the output voltage when switching on	Overshoot of Vout approx. 3 %
response delay maximum	0.1 s
voltage increase time of the output voltage	
● typical	50 ms
output current	
● rated value	40 A
● rated range	0 ... 40 A; +60 ... +70 °C: Derating 2.5%/K
supplied active power typical	960 W
short-term overload current	
● at short-circuit during operation typical	120 A
duration of overloading capability for excess current	
● at short-circuit during operation	25 ms
constant overload current	
● on short-circuiting during the start-up typical	46 A
product feature	
● bridging of equipment	Yes; switchable characteristic
number of parallel-switched equipment resources for increasing the power	2
Efficiency	
efficiency in percent	88 %
power loss [W]	
● at rated output voltage for rated value of the output current typical	131 W
Closed-loop control	
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	1 %
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	2 %
setting time	
● load step 50 to 100% typical	2 ms
● load step 100 to 50% typical	2 ms
setting time	
● maximum	5 ms
Protection and monitoring	
design of the overvoltage protection	< 35 V
● typical	46 A
property of the output short-circuit proof	Yes
design of short-circuit protection	Alternatively, constant current characteristic approx. 46 A or latching shutdown
enduring short circuit current RMS value	
● typical	46 A
display version for overload and short circuit	LED yellow for "overload", LED red for "latching shutdown"
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
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
● NEC Class 2	No
● EAC approval	Yes
● Regulatory Compliance Mark (RCM)	Yes
type of certification	
● CB-certificate	No
certificate of suitability	
● IECEx	No
● ATEX	No
● ULhazloc approval	No
● cCSAus, Class 1, Division 2	No
● FM registration	No
certificate of suitability shipbuilding approval	No
Marine classification association	
● American Bureau of Shipping Europe Ltd. (ABS)	No
● French marine classification society (BV)	No
● Lloyds Register of Shipping (LRS)	No
EMC	
standard	
● for emitted interference	EN 55022 Class B
● for mains harmonics limitation	-
● for interference immunity	EN 61000-6-2
environmental conditions	
ambient temperature	
● during operation	0 ... 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 0.2 ... 4 mm² single-core/finely stranded
● at output	+, -: 2 screw terminals each for 0.5 ... 10 mm²
● for auxiliary contacts	-
width of the enclosure	240 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	2.9 kg
product feature of the enclosure housing can be lined up	Yes
fastening method	Snaps onto DIN rail EN 60715 35x15
electrical accessories	Buffer module, signaling module
MTBF at 40 °C	540 249 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)