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

Input	
Input	1-phase AC
● Note	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
Wide-range input	No
Overvoltage resistance	2.3 × Vin rated, 1.3 ms
Mains buffering	at Vin = 230 V
Mains buffering at Iout rated, min.	20 ms; at Vin = 230 V
Rated line frequency 1	50 Hz
Rated line frequency 2	60 Hz
Rated line range	47 ... 63 Hz
input current	
● at rated input voltage 120 V	15 A
● at rated input voltage 230 V	8 A
Switch-on current limiting (+25 °C), max.	125 A
I^2t, max.	26 $A^2 \cdot s$
Built-in incoming fuse	Yes
Protection in the mains power input (IEC 898)	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	
Output	Controlled, isolated DC voltage
Rated voltage Vout DC	24 V
● output voltage at output 1 at DC rated value	24 V
Total tolerance, static ±	3 %
Static mains compensation, approx.	0.1 %
Static load balancing, approx.	0.1 %

Residual ripple peak-peak, max.	100 mV
Residual ripple peak-peak, typ.	60 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	200 mV
Spikes peak-peak, typ. (bandwidth: 20 MHz)	120 mV
Adjustment range	24 ... 28.8 V
product function output voltage adjustable	Yes
Output voltage setting	via potentiometer
Status display	Green LED for 24 V OK
Signaling	via signaling module (6EP1961-3BA10)
On/off behavior	Overshoot of Vout approx. 3 %
Startup delay, max.	0.1 s
Voltage rise, typ.	50 ms
Rated current value Iout rated	40 A
Current range	0 ... 40 A
● Note	+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
Parallel switching for enhanced performance	Yes; switchable characteristic
Numbers of parallel switchable units for enhanced performance	2
Efficiency	
Efficiency at Vout rated, Iout rated, approx.	88 %
Power loss at Vout rated, Iout rated, approx.	131 W
Closed-loop control	
Dynamic mains compensation (Vin rated ±15 %), max.	1 %
Dynamic load smoothing (Iout: 50/100/50 %), Uout ± typ.	2 %
Load step setting time 50 to 100%, typ.	2 ms
Load step setting time 100 to 50%, typ.	2 ms
setting time maximum	5 ms
Protection and monitoring	
Output overvoltage protection	< 35 V
Current limitation, typ.	46 A
property of the output short-circuit proof	Yes
Short-circuit protection	Alternatively, constant current characteristic approx. 46 A or latching shutdown
enduring short circuit current RMS value	
● typical	46 A
Overload/short-circuit indicator	LED yellow for "overload", LED red for "latching shutdown"
Safety	
Primary/secondary isolation	Yes
galvanic isolation	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178
Protection class	Class I
leakage current	
● maximum	3.5 mA
● typical	0.4 mA
Degree of protection (EN 60529)	IP20
Approvals	
CE mark	Yes
UL/cUL (CSA) approval	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259
Explosion protection	IECEx Ex nA IIC T3 Gc; ATEX (EX) II 3G Ex nA IIC T3 Gc; cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T3
certificate of suitability NEC Class 2	No
FM approval	-

CB approval	No
certificate of suitability EAC approval	Yes
Marine approval	-
EMC	
Emitted interference	EN 55022 Class B
Supply harmonics limitation	-
Noise immunity	EN 61000-6-2
environmental conditions	
ambient temperature	
● during operation	0 ... 70 °C
— Note	with natural convection
● during transport	-40 ... +85 °C
● during storage	-40 ... +85 °C
Humidity class according to EN 60721	Climate class 3K3, 5 … 95% no condensation
Mechanics	
Connection technology	screw-type terminals
Connections	
● Supply input	L, N, PE: 1 screw terminal each for 0.2 ... 4 mm² single-core/finely stranded
● Output	+, -: 2 screw terminals each for 0.5 ... 10 mm²
● Auxiliary	-
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
Weight, approx.	2.9 kg
product feature of the enclosure housing can be lined up	Yes
Installation	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)