SIEMENS

Data sheet 6EP3337-8SB00-0AY0

SITOP PSU8200/1AC/24VDC/40A

SITOP PSU8200 24 V/40 A stabilized power supply input: 120/230 V AC output: 24 V DC/40 A *Ex approval no longer available*

Input	
type of the power supply network	1-phase and 2-phase AC
supply voltage at AC	
● initial value	Automatic selection; startup starting from Ue ≥ 90/180 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	170 ... 264 V
design of input wide range input	No
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	25 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	45 ... 65 Hz
input current	
● at rated input voltage 120 V	15 A
● at rated input voltage 230 V	9 A
current limitation of inrush current at 25 °C maximum	50 A
I2t value maximum	8 A²·s
fuse protection type	Yes
● in the feeder	Recommended miniature circuit breaker at 1-phase operation: 16 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	50 mV

voltage peak	
● maximum	240 mV
● typical	220 mV
adjustable output voltage	24 ... 28 V
product function output voltage adjustable	Yes
type of output voltage setting	via potentiometer; max. 960 W
display version for normal operation	Green LED for 24 V OK; LED yellow for overload; LED red for short-circuit or latching shutdown
type of signal at output	Relay contact (NO contact, rating 60 V DC/ 0.3 A) for "24 V OK"
behavior of the output voltage when switching on	Overshoot of Vout approx. 3 %
response delay maximum	1.5 s
voltage increase time of the output voltage	
● typical	30 ms
output current	
● rated value	40 A
● rated range	0 ... 40 A; +60 ... +70 °C: Derating 3%/K
supplied active power typical	960 W
short-term overload current	
● on short-circuiting during the start-up typical	120 A
● at short-circuit during operation typical	120 A
duration of overloading capability for excess current	
● on short-circuiting during the start-up	25 ms
● at short-circuit during operation	25 ms
constant overload current	
● on short-circuiting during the start-up typical	60 A
product feature	
● bridging of equipment	Yes; switchable characteristic
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	82 W
● during no-load operation maximum	6.8 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	1.9 %
setting time	
● load step 50 to 100% typical	2 ms
● load step 100 to 50% typical	2 ms
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	3.8 %
setting time	
● load step 10 to 90% typical	1 ms
● load step 90 to 10% typical	1 ms
● maximum	1 ms
Protection and monitoring	
design of the overvoltage protection	< 32 V
● typical	41 A
property of the output short-circuit proof	Yes
design of short-circuit protection	Alternatively, constant current characteristic approx. 41 A or latching shutdown
enduring short circuit current RMS value	
● typical	41 A
overcurrent overload capability in normal operation	250% Iout rated up to 25 ms, 150% Iout rated up to 5 s/min
display version for overload and short circuit	LED yellow for "overload", LED red for "latching shutdown" or "short-circuit"
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	0.1 mA
● typical	0.1 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; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)
● CSA approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)
● NEC Class 2	No
● EAC approval	Yes
● Regulatory Compliance Mark (RCM)	Yes
type of certification	
● BIS	Yes; R-41183539
● CB-certificate	Yes
certificate of suitability	
● IECEx	No
● ATEX	No
● ULhazloc approval	No
● cCSAus, Class 1, Division 2	No
● FM registration	No
certificate of suitability shipbuilding approval	Yes
Marine classification association	
● American Bureau of Shipping Europe Ltd. (ABS)	Yes
● 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	-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 0.2 ... 4 mm² single-core/finely stranded
● at output	+, -: 2 screw terminals each for 0.5 ... 10 mm²
● for auxiliary contacts	13, 14 (alarm signal): 1 screw terminal each for 0.14 ... 1.5 mm²
width of the enclosure	145 mm
height of the enclosure	145 mm
depth of the enclosure	150 mm
required spacing	
● top	40 mm
● bottom	40 mm
● left	0 mm
● right	0 mm
net weight	3.1 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, redundancy module
mechanical accessories	Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20
MTBF at 40 °C	838 156 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)