SIEMENS

Data sheet 6EP3333-8SB00-0AY0

SITOP PSU8200/1AC/24VDC/5A

SITOP PSU8200 24 V/5 A Stabilized power supply input: 120/230 V AC, output: 24 V DC/5 A

Input	
Input	1-phase AC
● Note	Automatic range selection
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
Wide-range input	No
Mains buffering	at Vin = 120/230 V
Mains buffering at Iout rated, min.	35 ms; at Vin = 120/230 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	2.1 A
● at rated input voltage 230 V	1.2 A
Switch-on current limiting (+25 °C), max.	10 A
I^2t, max.	0.2 $A^2 \cdot s$
Built-in incoming fuse	T 3.15 A (not accessible)
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker at 1-phase operation: from 6 A (10 A) characteristic C (B); required at 2-phase operation: circuit breaker 2-pole connected or circuit breaker 3RV2011-1EA10 (setting 3.8 A) or 3RV2711-1ED10 (UL 489) at 230 V; 3RV2011-1DA10 (setting 3 A) or 3RV2711-1DD10 (UL 489) at 400/500 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.	0.2 %
Residual ripple peak-peak, max.	50 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	200 mV
Adjustment range	24 ... 28.8 V
product function output voltage adjustable	Yes
Output voltage setting	via potentiometer; max. 120 W

Status display	Green LED for 24 V OK
Signaling	Relay contact (NO contact, rating 60 V DC/ 0.3 A) for "24 V OK"
On/off behavior	Overshoot of Vout approx. 3 %
Startup delay, max.	1.5 s
Voltage rise, typ.	30 ms
Rated current value Iout rated	5 A
Current range	0 ... 5 A
● Note	As of Ua>24 V: 4% [Ia]/V [Ua]; at Ue<100 V/<200 V: 80% Ia rated
supplied active power typical	120 W
short-term overload current	
● at short-circuit during operation typical	15 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	6 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.	93 %
Power loss at Vout rated, Iout rated, approx.	9 W
power loss [W] during no-load operation maximum	1.5 W
Closed-loop control	
Dynamic mains compensation (Vin rated ±15 %), max.	0.1 %
Dynamic load smoothing (Iout: 50/100/50 %), Uout ± typ.	2 %
Load step setting time 50 to 100%, typ.	0.25 ms
Load step setting time 100 to 50%, typ.	0.5 ms
Dynamic load smoothing (Iout: 10/90/10 %), Uout ± typ.	2 %
Load step setting time 10 to 90%, typ.	0.25 ms
Load step setting time 90 to 10%, typ.	0.5 ms
setting time maximum	1 ms
Protection and monitoring	
Output overvoltage protection	< 33 V
Current limitation, typ.	6 A
property of the output short-circuit proof	Yes
Short-circuit protection	Alternatively, constant current characteristic approx. 6 A or latching shutdown
enduring short circuit current RMS value	
● typical	6 A
overcurrent overload capability in normal operation	overload capability 150 % Iout rated up to 5 s/min
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	1 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; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)
Explosion protection	IECEx Ex nA nC IIC T4 Gc; ATEX (EX) II 3G Ex nA nC IIC T4 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	Yes

certificate of suitability EAC approval	Yes
Marine approval	ABS, DNV GL
EMC	
Emitted interference	EN 55022 Class B
Supply harmonics limitation	EN 61000-3-2
Noise immunity	EN 61000-6-2
environmental conditions	
ambient temperature	
● during operation	-25 ... +70 °C
— Note	With natural convection; startup tested starting from -40 °C nominal voltage
● 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 ... 2.5 mm² single-core/finely stranded
● Output	+, -: 2 screw terminals each for 0.2 ... 2.5 mm²
● Auxiliary	13, 14 (alarm signal): 1 screw terminal each for 0.14 ... 1.5 mm²; 15, 16 (Remote): 1 screw terminal each for 0.14 ... 1.5 mm²
width of the enclosure	45 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.	0.8 kg
product feature of the enclosure housing can be lined up	Yes
Installation	Snaps onto DIN rail EN 60715 35x7.5/15
electrical accessories	Buffer module
mechanical accessories	Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20
MTBF at 40 °C	1 421 519 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)