SIEMENS

Data sheet 6EP3447-8SB00-0AY0

SITOP PSU8200/3AC/48VDC/20A

SITOP PSU8200 48 V/20 A
Stabilized power supplies Input: 3
400-500 V AC Output: 48 V/20 A
DC

Input	
Input	3-phase AC
Rated voltage value Vin rated	400 ... 500 V
Voltage range AC	320 ... 575 V
Wide-range input	Yes
Mains buffering	at Vin = 400 V
Mains buffering at Iout rated, min.	10 ms; at Vin = 400 V
Rated line frequency 1	50 Hz
Rated line frequency 2	60 Hz
Rated line range	45 ... 65 Hz
input current	
● at rated input voltage 400 V	2 A
● at rated input voltage 500 V	1.7 A
Switch-on current limiting (+25 °C), max.	13 A
I^2t, max.	2.24 $A^2 \cdot s$
Protection in the mains power input (IEC 898)	Required: 3-pole connected miniature circuit breaker 10 ... 16 A characteristic C or circuit breaker 3RV2011-1DA10 (setting 3 A) or 3RV2711-1DD10 (UL 489)

Output	
Output	Controlled, isolated DC voltage
Rated voltage Vout DC	48 V
● output voltage at output 1 at DC rated value	48 V
Total tolerance, static ±	3 %
Static mains compensation, approx.	0.1 %
Static load balancing, approx.	0.2 %
Residual ripple peak-peak, max.	100 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	480 mV
Adjustment range	46 ... 56 V
product function output voltage adjustable	Yes
Output voltage setting	via potentiometer; max. 960 W
Status display	Green LED for 48 V OK
Signaling	Relay contact (NO contact, rating 60 V DC/ 0.3 A) for 48 V OK
On/off behavior	minimal overshoot (< 3 %)
Startup delay, max.	0.1 s
voltage increase time of the output voltage maximum	100 ms

Rated current value Iout rated	20 A
Current range	0 ... 20 A
● Note	+60 ... +70 °C: Derating 4%/K
supplied active power typical	960 W
short-term overload current	
● at short-circuit during operation typical	60 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	24 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.	94 %
Power loss at Vout rated, Iout rated, approx.	58 W
power loss [W] during no-load operation maximum	4 W
Closed-loop control	
Dynamic mains compensation (Vin rated ±15 %), max.	1 %
Dynamic load smoothing (Iout: 50/100/50 %), Uout ± typ.	3 %
setting time maximum	10 ms
Protection and monitoring	
Output overvoltage protection	< 57.8 V
Current limitation, typ.	22 A
property of the output short-circuit proof	Yes
Short-circuit protection	Alternatively, constant current characteristic approx. 22 A or latching shutdown
enduring short circuit current RMS value	
● typical	26 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	1 mA
● typical	0.6 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, T4
certificate of suitability NEC Class 2	No
FM approval	-
CB approval	Yes
certificate of suitability EAC approval	Yes
Marine approval	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

● 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	L1, L2, L3, PE: 1 screw terminal each for 0.5 ... 4 mm² single-core/finely stranded
● Output	+: 2 screw terminals each for 0.5 ... 16 mm²; -: 3 screw terminals each for 0.5 ... 16 mm²
● Auxiliary	13, 14 (alarm signal), 15, 16 (Remote): 1 screw terminal each for 0.05 ... 2.5 mm²
width of the enclosure	135 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
Weight, approx.	3.3 kg
product feature of the enclosure housing can be lined up	Yes
Installation	Snaps onto DIN rail EN 60715 35x15
mechanical accessories	Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20
MTBF at 40 °C	520 782 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)