SIEMENS

Data sheet 6EP3437-8SB00-0AY0

SITOP PSU8200/3AC/24VDC/40A
SITOP PSU8200 24 V/40 A Regulated power supply Input: 3AC 400-500 V Output: 24 V DC/40 A

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	2.1 A
• at rated input voltage 500 V	1.7 A
Switch-on current limiting (+25 °C), max.	13 A
I^2t, max.	2.24 $A^2 \cdot s$
Built-in incoming fuse	none
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	24 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)	240 mV
Adjustment range	24 ... 28 V
product function output voltage adjustable	Yes
Output voltage setting	via potentiometer; max. 960 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	minimal overshooting (< 2 %)
Startup delay, max.	0.1 s
voltage increase time of the output voltage maximum	100 ms
Rated current value Iout rated	40 A
Current range	0 ... 40 A
• Note	+60 ... +70 °C: Derating 4%/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	44 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.	66 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	< 31.8 V
Current limitation, typ.	44 A

property of the output short-circuit proof	Yes
Short-circuit protection	Alternatively, constant current characteristic approx. 44 A or latching shutdown
enduring short circuit current RMS value	
• typical	50 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
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
• 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 for side-by-side mounting	Yes
Installation	Snaps onto DIN rail EN 60715 35x15
electrical accessories	Buffer module
mechanical accessories	Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20
MTBF at 40 °C	517 015 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)