SIEMENS

Data sheet 6EP1336-3BA10

SITOP PSU8200/1ACDC/24VDC/20A SITOP PSU8200 20 A Stabilized power supply input: 120-230 V AC 110-220 V DC output: 24 V DC/20 A



Input	
Input	1-phase and 2-phase AC or DC
Rated voltage value Vin rated	120 230 V
Voltage range AC	85 275 V
• Note	Derating of temperature necessary down to 50 °C at Vin < 100 V AC or DC
supply voltage	
• at DC	110 220 V
input voltage	
• at DC	88 350 V
Wide-range input	Yes
Mains buffering	at Vin = 230 V
Mains buffering at lout rated, min.	20 ms; at Vin = 230 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 120 V 	4.6 A
 at rated input voltage 230 V 	2.5 A

Switch-on current limiting (+25 °C), max.	20 A
l²t, max.	5 A ² ·s
Built-in incoming fuse	Yes
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker at 1-phase operation: 10 A characteristic C; required at 2-phase operation: circuit breaker 2-pole connected or circuit breaker 3RV2711-1HD10 (UL 489) at 120 V or 3RV2711-1ED10 (UL 489) at 230 V

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.	0.3 %
Residual ripple peak-peak, max.	100 mV
Residual ripple peak-peak, typ.	80 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	200 mV
Spikes peak-peak, typ. (bandwidth: 20 MHz)	100 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	Relay contact (NO contact, rating 60 V DC/ 0.3 A) for "24 V OK"
On/off behavior	No overshoot of Vout (soft start)
Startup delay, max.	1.5 s
Voltage rise, typ.	50 ms
Rated current value lout rated	20 A
Current range	0 20 A
• Note	+60 +70 °C: Derating 3%/K
supplied active power typical	480 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	30 A
Parallel switching for enhanced performance	Yes; switchable characteristic
Numbers of parallel switchable units for enhanced performance	2

Efficiency	
Efficiency at Vout rated, lout rated, approx.	93 %
Power loss at Vout rated, lout rated, approx.	42 W

Closed-loop control



Dynamic mains compensation (Vin rated ±15 %), max.	0.5 %
Dynamic load smoothing (lout: 50/100/50 %), Uout ± typ.	1 %
Load step setting time 50 to 100%, typ.	1 ms
Load step setting time 100 to 50%, typ.	1 ms
setting time maximum	5 ms
Protection and monitoring	
Output overvoltage protection	< 33 V
Current limitation, typ.	21.5 A
property of the output short-circuit proof	Yes
Short-circuit protection	Alternatively, constant current characteristic approx. 23 A or latching shutdown
enduring short circuit current RMS value	
• typical	23 A
overcurrent overload capability in normal operation	overload capability 150 % lout 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 T3 Gc; ATEX (EX) II 3G Ex nA nC 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	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 4 mm² single-core/finely stranded
Output	+, -: 2 screw terminals each for 0.2 4 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	90 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.	1.2 kg
product feature of the enclosure housing for side-by- side mounting	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	667 048 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

