SIEMENS

Data sheet 6EP1336-3BA10

SITOP PSU8200 20A STABILIZED POWER SUPPLY INPUT: 120-230 V AC 110-220 V DC OUTPUT: 24 V/20 A DC

Technical specifications	
Product	SITOP PSU8200
Power supply, type	24 V/20 A

Input	
Input	1-phase AC or DC
Supply voltage for DC	110 ... 220 V
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
Input voltage for DC	88 ... 350 V
Wide-range input	Yes
Mains buffering at Iout rated, min.	20 ms; at Vin = 230 V
Rated line frequency	50 ... 60 Hz
Rated line range	45 ... 65 Hz
Input current at rated input voltage 120 V Rated value	4.6 A
Input current at rated input voltage 230 V Rated value	2.5 A
Switch-on current limiting (+25 °C), max.	20 A
I^2t, max.	5 $A^2 \cdot s$
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.	0.25 s
Voltage rise, typ.	50 ms
Rated current value Iout rated	20 A
Current range	0 ... 20 A
• Note	+60 ... +70 °C: Derating 3%/K
Active power supplied typical	480 W
Constant overload current on short-circuiting during the start-up typical	30 A
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
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.	42 W

Closed-loop control	
Dynamic mains compensation (Vin rated ±15 %), max.	0.5 %
Dynamic load smoothing (Iout: 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 % 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
Leakage current typical	1 mA
CE mark	Yes
UL/CSA approval	Yes
UL/cUL (CSA) approval	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259
Explosion protection	IECEx Ex nA nC IIC T3 Gc; ATEX (EX) II 3G Ex nA nC IIC T3; cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T3
Certificate of suitability IECEx	No
Certificate of suitability NEC Class 2	No
FM approval	-
CB approval	No
Marine approval	GL, ABS
Degree of protection (EN 60529)	IP20

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Emitted interference	EN 55022 Class B
Supply harmonics limitation	EN 61000-3-2
Noise immunity	EN 61000-6-2

Operating data

Ambient temperature during operation	-25 ... +70 °C
• Note	with natural convection
Ambient temperature during transport	-40 ... +85 °C
Ambient temperature during storage	-40 ... +85 °C
Humidity class according to EN 60721	Climate class 3K3, 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
Connections Output	+, -: 2 screw terminals each for 0.2 ... 4 mm²

Connections Auxiliary	13, 14 (alarm signal): 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
Weight, approx.	1.2 kg
Product property 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, pastel-turpuoise 3RT1900-1SB20
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)