SIEMENS

## Data sheet 6EP3333-8SB00-0AY0


SITOP PSU8200 24 V/5 A
SITOP PSU8200 24 V/5 A STABILIZED POWER SUPPLY INPUT: 120/230 V AC OUTPUT: 24 V/5 A DC

| Input | |
|---|---|
| Input | 1-phase AC |
| Supply voltage | |
| • 1 with AC Rated value | 120 V |
| • 2 with AC Rated value | 230 V |
| • Note | Automatic range selection |
| Input voltage | |
| • 1 with AC | 85 ... 132 V |
| • 2 with AC | 170 ... 264 V |
| Wide-range input | No |
| Mains buffering at Iout rated, min. | 35 ms; at Vin = 120/230 V |
| Rated line frequency | 50 ... 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 |
| 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 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 |
| Active power supplied 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 |
| Active power loss 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 |
| 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 | 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 IECEx | Yes |
| Certificate of suitability NEC Class 2 | No |
| FM approval | - |
| CB approval | Yes |
| Marine approval | GL, ABS |
| Degree of protection (EN 60529) | IP20 |

| EMC | |
|---|---|
| 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 |
| • during transport | -40 ... +85 °C |
| • 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 ... 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 |
| Product function | |
| • removable terminal at input | No |
| • removable terminal at output | No |
| Width of the enclosure | 45 mm |
| Height of the enclosure | 125 mm |
| Depth of the enclosure | 125 mm |
| Weight, approx. | 0.8 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 |
| Other information | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified) |