SIEMENS

## Data sheet 6EP3337-8SB00-0AY0


SITOP PSU8200/1AC/24VDC/40A

SITOP PSU8200 24 V/40 A stabilized power supply input: 120/230 V AC output: 24 V DC/40 A *Ex approval no longer available*

| Input | |
|---|---|
| type of the power supply network | 1-phase and 2-phase AC |
| supply voltage at AC | |
| ● initial value | Automatic selection; startup starting from Ue ≥ 90/180 V |
| supply voltage | |
| ● 1 at AC rated value | 120 V |
| ● 2 at AC rated value | 230 V |
| input voltage | |
| ● 1 at AC | 85 ... 132 V |
| ● 2 at AC | 170 ... 264 V |
| design of input wide range input | No |
| operating condition of the mains buffering | at Vin = 230 V |
| buffering time for rated value of the output current in the event of power failure minimum | 25 ms |
| operating condition of the mains buffering | at Vin = 230 V |
| line frequency | |
| ● 1 rated value | 50 Hz |
| ● 2 rated value | 60 Hz |
| line frequency | 45 ... 65 Hz |
| input current | |
| ● at rated input voltage 120 V | 15 A |
| ● at rated input voltage 230 V | 9 A |
| current limitation of inrush current at 25 °C maximum | 50 A |
| I2t value maximum | 8 $A^2 \cdot s$ |
| fuse protection type | Yes |
| ● in the feeder | Recommended miniature circuit breaker at 1-phase operation: 16 A characteristic C; required at 2-phase operation: circuit breaker 2-pole connected or circuit breaker 3RV2421-4BA10 (120 V) or 3RV2411-1JA10 (230 V) |

| Output | |
|---|---|
| voltage curve at output | Controlled, isolated DC voltage |
| output voltage at DC rated value | 24 V |
| output voltage | |
| ● at output 1 at DC rated value | 24 V |
| relative overall tolerance of the voltage | 3 % |
| relative control precision of the output voltage | |
| ● on slow fluctuation of input voltage | 0.1 % |
| ● on slow fluctuation of ohm loading | 0.1 % |
| residual ripple | |
| ● maximum | 100 mV |
| ● typical | 50 mV |
| voltage peak | |

| | |
|---|---|
| ● maximum | 240 mV |
| ● typical | 220 mV |
| adjustable output voltage | 24 ... 28 V |
| product function output voltage adjustable | Yes |
| type of output voltage setting | via potentiometer; max. 960 W |
| display version for normal operation | Green LED for 24 V OK; LED yellow for overload; LED red for short-circuit or latching shutdown |
| type of signal at output | Relay contact (NO contact, rating 60 V DC/ 0.3 A) for "24 V OK" |
| behavior of the output voltage when switching on | Overshoot of Vout approx. 3 % |
| response delay maximum | 1.5 s |
| voltage increase time of the output voltage | |
| ● typical | 30 ms |
| output current | |
| ● rated value | 40 A |
| ● rated range | 0 ... 40 A; +60 ... +70 °C: Derating 3%/K |
| supplied active power typical | 960 W |
| short-term overload current | |
| ● on short-circuiting during the start-up typical | 120 A |
| ● at short-circuit during operation typical | 120 A |
| duration of overloading capability for excess current | |
| ● on short-circuiting during the start-up | 25 ms |
| ● at short-circuit during operation | 25 ms |
| constant overload current | |
| ● on short-circuiting during the start-up typical | 60 A |
| product feature | |
| ● bridging of equipment | Yes; switchable characteristic |
| number of parallel-switched equipment resources for increasing the power | 2 |
| **Efficiency** | |
| efficiency in percent | 92 % |
| power loss [W] | |
| ● at rated output voltage for rated value of the output current typical | 82 W |
| ● during no-load operation maximum | 6.8 W |
| **Closed-loop control** | |
| relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical | 1 % |
| relative control precision of the output voltage load step of resistive load 50/100/50 % typical | 1.9 % |
| setting time | |
| ● load step 50 to 100% typical | 2 ms |
| ● load step 100 to 50% typical | 2 ms |
| relative control precision of the output voltage at load step of resistive load 10/90/10 % typical | 3.8 % |
| setting time | |
| ● load step 10 to 90% typical | 1 ms |
| ● load step 90 to 10% typical | 1 ms |
| ● maximum | 1 ms |
| **Protection and monitoring** | |
| design of the overvoltage protection | < 32 V |
| ● typical | 41 A |
| property of the output short-circuit proof | Yes |
| design of short-circuit protection | Alternatively, constant current characteristic approx. 41 A or latching shutdown |
| enduring short circuit current RMS value | |
| ● typical | 41 A |
| overcurrent overload capability in normal operation | 250% Iout rated up to 25 ms, 150% Iout rated up to 5 s/min |
| display version for overload and short circuit | LED yellow for "overload", LED red for "latching shutdown" or "short-circuit" |
| **Safety** | |
| galvanic isolation between input and output | Yes |
| galvanic isolation | Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 |
| operating resource protection class | Class I |
| leakage current | |

| | |
|---|---|
| ● maximum | 0.1 mA |
| ● typical | 0.1 mA |
| protection class IP | IP20 |
| **Approvals** | |
| certificate of suitability | |
| ● CE marking | Yes |
| ● UL approval | Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) |
| ● CSA approval | Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) |
| ● cCSAus, Class 1, Division 2 | No |
| ● ATEX | No |
| certificate of suitability | |
| ● IECEx | No |
| ● NEC Class 2 | No |
| ● ULhazloc approval | No |
| ● FM registration | No |
| type of certification CB-certificate | Yes |
| certificate of suitability | |
| ● EAC approval | Yes |
| certificate of suitability shipbuilding approval | Yes |
| shipbuilding approval | ABS, DNV GL |
| Marine classification association | |
| ● American Bureau of Shipping Europe Ltd. (ABS) | Yes |
| ● French marine classification society (BV) | No |
| ● DNV GL | Yes |
| ● Lloyds Register of Shipping (LRS) | No |
| ● Nippon Kaiji Kyokai (NK) | No |
| **EMC** | |
| standard | |
| ● for emitted interference | EN 55022 Class B |
| ● for mains harmonics limitation | - |
| ● for interference immunity | EN 61000-6-2 |
| **environmental conditions** | |
| ambient temperature | |
| ● during operation | -25 ... +70 °C; with natural convection |
| ● during transport | -40 ... +85 °C |
| ● during storage | -40 ... +85 °C |
| environmental category according to IEC 60721 | Climate class 3K3, 5 … 95% no condensation |
| **Mechanics** | |
| type of electrical connection | screw-type terminals |
| ● at input | L, N, PE: 1 screw terminal each for 0.2 ... 4 mm² single-core/finely stranded |
| ● at output | +, -: 2 screw terminals each for 0.5 ... 10 mm² |
| ● for auxiliary contacts | 13, 14 (alarm signal): 1 screw terminal each for 0.14 ... 1.5 mm² |
| width of the enclosure | 145 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 |
| net weight | 3.1 kg |
| product feature of the enclosure housing can be lined up | Yes |
| fastening method | Snaps onto DIN rail EN 60715 35x15 |
| electrical accessories | Buffer module, redundancy module |
| mechanical accessories | Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20 |
| MTBF at 40 °C | 838 156 h |
| other information | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified) |