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 |
| ● output voltage at output 1 at DC rated value | 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 |

| | |
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| ● 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 |
| certificate of suitability EAC 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 can be lined up | 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) |