SIEMENS

## Data sheet 6EP3436-8SB00-2AY0

SITOP PSU8600 20A PN
SITOP PSU8600 20A PN STABILIZED POWER SUPPLY INPUT: 3 400-500 V AC OUTPUT: 24 V/20 A DC WITH PN/IE CONNECTION


| Input | |
|---|---|
| Input | 3-phase AC |
| Rated voltage value Vin rated | 400 ... 500 V |
| Voltage range AC | 320 ... 575 V |
| • Note | Derating 320 … 360 and 530 … 575 V |
| Wide-range input | Yes |
| Mains buffering at Iout rated, min. | 15 ms; at Vin = 400 V; Prioritized voltage supply to the outputs at power failure via DIP switch can be selected (only with expansion module CNX8600) |
| Rated line frequency 1 | 50 Hz |
| Rated line frequency 2 | 60 Hz |
| Rated line range | 47 ... 63 Hz |
| Input current | |
| • at rated input voltage 400 V | 1.4 A |
| • at rated input voltage 500 V | 1.1 A |
| Switch-on current limiting (+25 °C), max. | 14 A |
| $I^2t$, max. | 1.2 $A^2 \cdot s$ |
| Built-in incoming fuse | none |

| | |
|---|---|
| Protection in the mains power input (IEC 898) | Required: 3-pole connected miniature circuit breaker 6 ... 16 A characteristic C or circuit breaker 3RV2011-1DA10 (setting 3 A) or 3RV2711-1DD10 (UL 489) |

| Output | |
|---|---|
| Output | Controlled, isolated DC voltage |
| Number of outputs | 1 |
| 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. | 0.2 % |
| Static load balancing, approx. | 0.1 % |
| Residual ripple peak-peak, max. | 100 mV |
| Spikes peak-peak, max. (bandwidth: 20 MHz) | 200 mV |
| Adjustment range | 5 ... 28 V |
| Product function Output voltage adjustable | Yes |
| Output voltage setting | via potentiometer; Derating > 24 V: 4%/V; max. 480 W overall system |
| Status display | 3-color LED for operating state device; LED for operating mode manual/remote; 4 LEDs for communication PROFINET; 3-color LED for operating state output |
| Signaling | Relay contact (changeover contact, contact current capacity DC 60 V/0.3 A) for "Operating state OK" |
| On/off behavior | No overshoot of Vout (soft start) |
| Startup delay, max. | 1 s |
| connection of outputs operating | Simultaneous connecting-in of all outputs after device booting or delay time of 25 ms, 100 ms or "load-optimized" for sequential cutting-in of the outputs via DIP switches can be set (only with expansion module CNX8600) |
| Voltage increase time of the output voltage maximum | 500 ms |
| Rated current value Iout rated | 20 A |
| Output current | |
| • per output | 20 A |
| • at output 1 Rated value | 20 A |
| Current range | 0 ... 20 A |
| • Note | +50 ... +60 °C: Derating 2.5%/K; no derating in connection with expansion module CNX8600 and total load of the outputs at the basic device max. 240 W |
| Supplied active power typical | 480 W |
| Short-term overload current | |
| • at short-circuit during operation typical | 60 A |
| • Note | only in operation without CNX8600 extension module |
| Duration of overloading capability for excess current | |
| • at short-circuit during operation | 25 ms |

| | |
|---|---|
| Parallel switching for enhanced performance | Yes; suitable output characteristics via DIP switch can be selected |
| 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. | 34 W |
| Power loss [W] during no-load operation maximum | 12 W |

| Closed-loop control | |
|---|---|
| Dynamic mains compensation (Vin rated ±15 %), max. | 0.1 % |
| Dynamic load smoothing (Iout: 50/100/50 %), Uout ± typ. | 0.4 % |
| Setting time maximum | 10 ms |

| Protection and monitoring | |
|---|---|
| Output overvoltage protection | < 35 V |
| Property of the output Short-circuit proof | Yes |
| Short-circuit protection | electronic overload cut-off; optionally constant current operation can be selected via DIP switches |
| adjustable response value current of current-dependent overload trip | 2 ... 20 A |
| type of threshold value setting | via potentiometer |
| characteristics of electronic overload switch-off | Ia >1.0…<1.5 x Ia threshold permissible for 5 s; Ia limit (= 1.5 x Ia threshold) permissible for 200 ms |
| characteristics of constant current operation | Ia limit (= 1.5 x Ia threshold) permissible for 5 s, afterwards Ia threshold continuous |
| Reset | Via sensor |
| Remote reset | Non-electrically isolated 24 V input (signal level "high" at > 15 V) |
| Overcurrent overload capability in normal operation | Total system overloadable 150% Ia rated to 5 s/min |
| Overload/short-circuit indicator | 3-color LED for operating state device; 3-color LED for operating state output |

| Interface | |
|---|---|
| Specification interface | Ethernet/PROFINET |

| 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 |
| 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 |

| | |
|---|---|
| FM approval | - |
| CB approval | Yes |
| Marine approval | GL; ABS in process |
| 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 ... +60 °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 | Plug-in terminals with screwed connection |
| Connections | |
| • Supply input | L1, L2, L3, PE: Plug-in terminal with 1 screwed connection each for 0.08 ... 4 mm² single-wire / fine stranded |
| • Output | Output: plug-in terminals with 2 screw connectors for 0.08 ... 4 mm²; 0 V: screw terminal with 3 screw connectors for 0.08 ... 4 mm² |
| • Auxiliary | RST (Reset): Plug-in terminal (together with alarm signal) with 1 screwed connection for 0.2 ... 1.5 mm² |
| Connections signaling contact | 11, 12, 14 (alarm signal): Plug-in terminal (together with Reset) with 1 screwed connection each for 0.2 ... 1.5 mm² |
| Product function | |
| • removable terminal at input | Yes |
| • removable terminal at output | Yes |
| Design of the interface for communication | PROFINET/Ethernet: two RJ45 sockets (2-port switch) |
| Suitability for interaction modular system | Yes |
| Width of the enclosure | 80 mm |
| Height of the enclosure | 125 mm |
| Depth of the enclosure | 150 mm |
| Required spacing | |
| • top | 50 mm |
| • bottom | 50 mm |
| • left | 0 mm |
| • right | 0 mm |
| Weight, approx. | 1.8 kg |

| | |
|---|---|
| Product feature of the enclosure housing for side-by-side mounting | Yes |
| Installation | Snaps onto DIN rail EN 60715 35x15 |
| Electrical accessories | Expansion modules CNX8600, buffer modules BUF8600 |
| Mechanical accessories | Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20 |
| Other information | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified) |