



SITOP PSU6200/3AC/24VDC/40A

SITOP PSU6200 24 V/40 A stabilized power supply input: 400 - 500 V AC
output: 24 V DC/40 A with diagnostic interface

| Input | |
|--|---|
| type of the power supply network | 3-phase AC or DC |
| supply voltage at AC | |
| • minimum rated value | 400 V |
| • maximum rated value | 500 V |
| • initial value | 323 V |
| • full-scale value | 576 V |
| input voltage | |
| • at DC | 450 ... 600 V |
| operating condition of the mains buffering | at $V_{in} = 400\text{ V}$ |
| buffering time for rated value of the output current in the event of power failure minimum | 18 ms |
| operating condition of the mains buffering | at $V_{in} = 400\text{ V}$ |
| line frequency | |
| • 1 rated value | 50 Hz |
| • 2 rated value | 60 Hz |
| line frequency | 47 ... 63 Hz |
| input current | |
| • at rated input voltage 400 V | 1.5 A |
| • at rated input voltage 500 V | 1.2 A |
| current limitation of inrush current at 25 °C maximum | 10 A |
| fuse protection type | |
| • in the feeder | three-poled coupled circuit breaker from 4 A characteristic C to 16 A characteristic C or circuit breaker 3RV2011-1EA10 (setting 4 A) or 3RV2711-1ED10 (UL 489) |
| Output | |
| voltage curve at output | Controlled, isolated DC voltage |
| number of outputs | 1 |
| 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 | 0.2 % |
| • on slow fluctuation of ohm loading | 0.1 % |
| residual ripple | |
| • maximum | 80 mV |
| • typical | 50 mV |
| voltage peak | |
| • maximum | 80 mV |
| • typical | 30 mV |
| adjustable output voltage | 24 ... 28 V |

| | |
|--|---|
| product function output voltage adjustable | Yes |
| type of output voltage setting | via potentiometer; max. 960 W (1152 W up to 45°C) |
| display version for normal operation | Green LED for 24 V OK |
| type of signal at output | Electronic contact (NO contact, contact rating 30 V DC/0.1 A) for DC O.K. or diagnostic interface |
| behavior of the output voltage when switching on | Overshoot of Vout < 2 % |
| response delay maximum | 0.5 s |
| voltage increase time of the output voltage | |
| • typical | 100 ms |
| output current | |
| • rated value | 40 A |
| • rated range | 0 ... 40 A; 48 A up to +45°C; +60 ... +70 °C: Derating 3%/K |
| supplied active power typical | 960 W |
| short-term overload current | |
| • on short-circuiting during the start-up typical | 48 A |
| • at short-circuit during operation typical | 48 A |
| product feature | |
| • parallel switching of outputs | can be set with DIP switch |
| • bridging of equipment | Yes; switchable characteristic |
| number of parallel-switched equipment resources for increasing the power | 2 |

Efficiency

| | |
|---|-------|
| efficiency in percent | 96 % |
| power loss [W] | |
| • at rated output voltage for rated value of the output current typical | 40 W |
| • during no-load operation maximum | 4.5 W |

Closed-loop control

| | |
|--|-------|
| relative control precision of the output voltage at load step of resistive load 10/90/10 % typical | 2 % |
| setting time | |
| • load step 10 to 90% typical | 2 ms |
| • load step 90 to 10% typical | 10 ms |
| • maximum | 10 ms |

Protection and monitoring

| | |
|---|--|
| design of the overvoltage protection | < 32 V |
| response value current limitation typical | 48 A |
| property of the output short-circuit proof | Yes |
| design of short-circuit protection | Shutdown and periodic restart attempts |
| overcurrent overload capability in normal operation | overload capability 150 % Iout rated up to 5 s/min |

Safety

| | |
|---|--|
| galvanic isolation between input and output | Yes |
| galvanic isolation | Safety extra low output voltage Vout according to EN 60950-1 |
| operating resource protection class | Class I |
| leakage current | |
| • maximum | 3.5 mA |
| protection class IP | IP20 |

Approvals

| | |
|--------------------------------------|---|
| certificate of suitability | Yes |
| • CE marking | Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) |
| • 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 |

| | |
|---|-------------------------|
| <ul style="list-style-type: none"> • KC approval | No |
| <ul style="list-style-type: none"> • C-Tick | No |
| <ul style="list-style-type: none"> • Regulatory Compliance Mark (RCM) | No |
| certificate of suitability shipbuilding approval | No |
| shipbuilding approval | in process: DNV GL, ABS |
| Marine classification association | |
| <ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) | No |
| <ul style="list-style-type: none"> • French marine classification society (BV) | No |
| <ul style="list-style-type: none"> • DNV GL | No |
| <ul style="list-style-type: none"> • Lloyds Register of Shipping (LRS) | No |
| <ul style="list-style-type: none"> • Nippon Kaiji Kyokai (NK) | No |

EMC

| | |
|--|------------------|
| standard | |
| <ul style="list-style-type: none"> • for emitted interference | EN 55022 Class B |
| <ul style="list-style-type: none"> • for mains harmonics limitation | EN 61000-3-2 |
| <ul style="list-style-type: none"> • for interference immunity | EN 61000-6-2 |

environmental conditions

| | |
|--|--|
| ambient temperature | |
| <ul style="list-style-type: none"> • during operation | -30 ... +70 °C; with natural convection a monotonically increasing start-up from -25 °C, safe start-up from -40 °C |
| <ul style="list-style-type: none"> • during transport | -40 ... +85 °C |
| <ul style="list-style-type: none"> • during storage | -40 ... +85 °C |
| environmental category according to IEC 60721 | Climate class 3K3, 5 ... 95% no condensation |

Mechanics

| | |
|--|---|
| type of electrical connection | Push-in terminals |
| <ul style="list-style-type: none"> • at input | L1, L2, L3, PE: PushIn for 0.5 ... 10 mm ² |
| <ul style="list-style-type: none"> • at output | +1, +2, -1, -2, -3: PushIn for 0.75 ... 16 mm ² |
| <ul style="list-style-type: none"> • for auxiliary contacts | 13, 14 (alarm signal): 1 push-in terminal each for 0.2 ... 1.5 mm ² |
| width of the enclosure | 95 mm |
| height of the enclosure | 135 mm |
| depth of the enclosure | 155 mm |
| required spacing | |
| <ul style="list-style-type: none"> • top | 45 mm |
| <ul style="list-style-type: none"> • bottom | 45 mm |
| <ul style="list-style-type: none"> • left | 0 mm |
| <ul style="list-style-type: none"> • right | 0 mm |
| net weight | 2.1 kg |
| product feature of the enclosure housing can be lined up | Yes |
| fastening method | Snaps onto DIN rail EN 60715 35x7.5/15 |
| electrical accessories | Buffer module, redundancy module |
| mechanical accessories | Identification labels SIMATIC ET 200SP 6ES7193-6LF30-0AW0 |
| other information | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified) |

