6EP3233-0TA00-0AY0

Data sheet



SITOP PSU3400/DC/DC/48V/24V/5A

SITOP PSU3400 24 V/5 A Stabilized power supply Input: 48 V DC (28...60 V) Output: 24 V DC/5 A

| nput | |
|--|---|
| type of the power supply network | DC voltage |
| supply voltage at AC | |
| • initial value | Startup as of 36 V, derating necessary for 28 36 V DC |
| supply voltage | |
| • at DC | 48 48 V |
| input voltage | |
| • at DC | 28 60 V |
| design of input wide range input | No |
| overvoltage overload capability | |
| operating condition of the mains buffering | at Vin = 48 V |
| buffering time for rated value of the output current in the event of power failure minimum | 5 ms |
| operating condition of the mains buffering | at Vin = 48 V |
| input current | |
| at rated input voltage 48 V | 2.7 A |
| current limitation of inrush current at 25 °C maximum | 15 A |
| I2t value maximum | 0.12 A²·s |
| fuse protection type | 15 A (not accessible), breaking capacity 100 A |
| • in the feeder | Recommended miniature circuit breaker: 16 A characteristic B or C |
| 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 | 1 % |
| relative overall tolerance of the voltage relative control precision of the output voltage | |
| · | |
| relative control precision of the output voltage | 1 % |
| relative control precision of the output voltage • on slow fluctuation of input voltage | 1 % 0.1 % |
| relative control precision of the output voltage on slow fluctuation of input voltage on slow fluctuation of ohm loading | 1 % 0.1 % |
| relative control precision of the output voltage • on slow fluctuation of input voltage • on slow fluctuation of ohm loading residual ripple | 1 % 0.1 % 0.3 % |
| relative control precision of the output voltage on slow fluctuation of input voltage on slow fluctuation of ohm loading residual ripple maximum | 1 % 0.1 % 0.3 % 150 mV |
| relative control precision of the output voltage | 1 % 0.1 % 0.3 % 150 mV |
| relative control precision of the output voltage on slow fluctuation of input voltage on slow fluctuation of ohm loading residual ripple maximum typical voltage peak | 1 % 0.1 % 0.3 % 150 mV 70 mV |
| relative control precision of the output voltage on slow fluctuation of input voltage on slow fluctuation of ohm loading residual ripple maximum typical voltage peak maximum | 1 % 0.1 % 0.3 % 150 mV 70 mV |
| relative control precision of the output voltage on slow fluctuation of input voltage on slow fluctuation of ohm loading residual ripple maximum typical voltage peak maximum typical | 1 % 0.1 % 0.3 % 150 mV 70 mV 250 mV 220 mV |
| relative control precision of the output voltage | 1 % 0.1 % 0.3 % 150 mV 70 mV 250 mV 220 mV |
| relative control precision of the output voltage on slow fluctuation of input voltage on slow fluctuation of ohm loading residual ripple maximum typical voltage peak maximum typical adjustable output voltage product function output voltage adjustable | 1 % 0.1 % 0.3 % 150 mV 70 mV 250 mV 220 mV 24 28 V Yes |
| relative control precision of the output voltage on slow fluctuation of input voltage on slow fluctuation of ohm loading residual ripple maximum typical voltage peak maximum typical adjustable output voltage product function output voltage adjustable type of output voltage setting | 1 % 0.1 % 0.3 % 150 mV 70 mV 250 mV 220 mV 24 28 V Yes via potentiometer |

| response delay maximum | 0.5 s |
|--|---|
| voltage increase time of the output voltage | 0.00 |
| typical | 10 ms |
| | 20 ms |
| • maximum | 20 1115 |
| output current | |
| rated value | 5 A |
| rated range | 0 6 A; 6 A up to +40°C; +60 +70 °C: Derating 2%/K |
| supplied active power typical | 130 W |
| product feature | |
| bridging of equipment | Yes |
| number of parallel-switched equipment resources for increasing the power | 2 |
| Efficiency | |
| · | 02.0/ |
| efficiency in percent | 92 % |
| power loss [W] | 40.14 |
| at rated output voltage for rated value of the output current typical | 10 W |
| during no-load operation maximum | 1.5 W |
| Closed-loop control | 1.0 ** |
| | 0.3 % |
| relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical | 0.5 % |
| relative control precision of the output voltage load step of | 2 % |
| resistive load 50/100/50 % typical | |
| setting time | |
| load step 50 to 100% typical | 1 ms |
| load step 100 to 50% typical | 1 ms |
| Protection and monitoring | |
| design of the overvoltage protection | Ua < 35 V |
| • typical | 6.5 A |
| property of the output short-circuit proof | Yes |
| design of short-circuit protection | Electronic shutdown, automatic restart |
| display version for overload and short circuit | LED yellow for "overload" |
| Safety | |
| galvanic isolation between input and output | Yes |
| | 165 |
| · | |
| galvanic isolation | Safety extra low output voltage Vout according to EN 60950-1 |
| galvanic isolation operating resource protection class | Safety extra low output voltage Vout according to EN 60950-1 Class III |
| galvanic isolation operating resource protection class protection class IP | Safety extra low output voltage Vout according to EN 60950-1 |
| galvanic isolation operating resource protection class protection class IP Approvals | Safety extra low output voltage Vout according to EN 60950-1 Class III |
| galvanic isolation operating resource protection class protection class IP Approvals certificate of suitability | Safety extra low output voltage Vout according to EN 60950-1 Class III IP20 |
| galvanic isolation operating resource protection class protection class IP Approvals certificate of suitability • CE marking | Safety extra low output voltage Vout according to EN 60950-1 Class III IP20 Yes |
| galvanic isolation operating resource protection class protection class IP Approvals certificate of suitability • CE marking • UL approval | Safety extra low output voltage Vout according to EN 60950-1 Class III IP20 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 |
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| EMC | |
|--|---|
| standard | |
| for emitted interference | EN 61000-6-3 |
| for mains harmonics limitation | not applicable |
| 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, FE: 1 screw terminal each for 0.5 2.5 mm² single-core/finely stranded |
| • at output | +, -: 2 screw terminals each for 0.5 2.5 mm² |
| width of the enclosure | 32 mm |
| height of the enclosure | 100 mm |
| depth of the enclosure | 100 mm |
| required spacing | |
| • top | 50 mm |
| • bottom | 50 mm |
| • left | 0 mm |
| • right | 0 mm |
| net weight | 0.32 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 |
| MTBF at 40 °C | 1 965 061 h |
| other information | Specifications at rated input voltage and ambient temperature +25 $^{\circ}\text{C}$ (unless otherwise specified) |

