



SITOP PSU100C/1ACDC/24VDC/0.6A

SITOP PSU100C 24 V/0.6 A stabilized power supply input: 100-230 V AC (110-300 V DC) output: 24 V DC/0.6 A *Ex approval no longer available*

| Input | |
|--|---|
| type of the power supply network | 1-phase AC or DC |
| supply voltage at AC | |
| • minimum rated value | 100 V |
| • maximum rated value | 230 V |
| • initial value | 85 V |
| • full-scale value | 264 V |
| input voltage | |
| • at DC | 110 ... 300 V |
| design of input wide range input | Yes |
| overvoltage overload capability | 2.3 × Vin rated, 1.3 ms |
| 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 | 20 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 | 47 ... 63 Hz |
| input current | |
| • at rated input voltage 100 V | 0.28 A |
| • at rated input voltage 230 V | 0.18 A |
| current limitation of inrush current at 25 °C maximum | 28 A |
| I2t value maximum | 0.7 A²·s |
| fuse protection type | internal |
| • in the feeder | Recommended miniature circuit breaker: from 16 A characteristic B or from 10 A characteristic 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 | 3 % |
| relative control precision of the output voltage | |
| • on slow fluctuation of input voltage | 0.1 % |
| • on slow fluctuation of ohm loading | 0.2 % |
| residual ripple | |
| • maximum | 200 mV |
| • typical | 40 mV |
| voltage peak | |

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| <ul style="list-style-type: none"> • maximum | 300 mV |
| <ul style="list-style-type: none"> • typical | 20 mV |
| product function output voltage adjustable | No |
| type of output voltage setting | - |
| display version for normal operation | Green LED for output voltage OK |
| behavior of the output voltage when switching on | Overshoot of Vout approx. 5 % |
| response delay maximum | 1 s |
| voltage increase time of the output voltage | |
| <ul style="list-style-type: none"> • typical | 25 ms |
| output current | |
| <ul style="list-style-type: none"> • rated value | 0.6 A |
| <ul style="list-style-type: none"> • rated range | 0 ... 0.6 A |
| supplied active power typical | 14 W |
| short-term overload current | |
| <ul style="list-style-type: none"> • at short-circuit during operation typical | 1 A |
| product feature | |
| <ul style="list-style-type: none"> • bridging of equipment | No |
| Efficiency | |
| efficiency in percent | 82 % |
| power loss [W] | |
| <ul style="list-style-type: none"> • at rated output voltage for rated value of the output current typical | 2.6 W |
| <ul style="list-style-type: none"> • during no-load operation maximum | 0.75 W |
| Closed-loop control | |
| relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical | 0.1 % |
| relative control precision of the output voltage at load step of resistive load 10/90/10 % typical | 3 % |
| setting time | |
| <ul style="list-style-type: none"> • load step 10 to 90% typical | 3 ms |
| <ul style="list-style-type: none"> • load step 90 to 10% typical | 3 ms |
| Protection and monitoring | |
| design of the overvoltage protection | Yes, according to EN 60950-1 |
| response value current limitation typical | 0.7 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 | - |
| 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 | |
| <ul style="list-style-type: none"> • maximum | 3.5 mA |
| <ul style="list-style-type: none"> • typical | 0.4 mA |
| protection class IP | IP20 |
| Approvals | |
| certificate of suitability | |
| <ul style="list-style-type: none"> • CE marking | Yes |
| <ul style="list-style-type: none"> • UL approval | Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273, NEC class 2 (acc. to UL 1310) |
| <ul style="list-style-type: none"> • CSA approval | Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273, NEC class 2 (acc. to UL 1310) |
| <ul style="list-style-type: none"> • cCSAus, Class 1, Division 2 | No |
| <ul style="list-style-type: none"> • ATEX | No |
| certificate of suitability | |
| <ul style="list-style-type: none"> • IECEx | No |
| <ul style="list-style-type: none"> • NEC Class 2 | Yes |
| <ul style="list-style-type: none"> • ULhazloc approval | No |
| <ul style="list-style-type: none"> • FM registration | No |

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| type of certification CB-certificate | Yes |
| certificate of suitability | Yes |
| • 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 | not applicable |
| • for interference immunity | EN 61000-6-2 |
| environmental conditions | |
| ambient temperature | |
| • during operation | -20 ... +70 °C; with natural convection |
| • during transport | -40 ... +85 °C |
| • during storage | -40 ... +85 °C |
| environmental category acc. to IEC 60721 | Climate class 3K3, 5 ... 95% no condensation |
| Mechanics | |
| type of electrical connection | screw-type terminals |
| • at input | L, N, PE: Removable screw terminal, each for 1 x 0.5 ... 2.5 mm ² |
| • at output | +: 1 screw terminal for 0.5 ... 2.5 mm ² ; -: 2 screw terminals for 0.5 ... 2.5 mm ² |
| • for auxiliary contacts | - |
| width of the enclosure | 22.5 mm |
| height of the enclosure | 80 mm |
| depth of the enclosure | 100 mm |
| required spacing | |
| • top | 50 mm |
| • bottom | 50 mm |
| • left | 0 mm |
| • right | 0 mm |
| net weight | 0.12 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 | Removable spring-type terminal 6EP1971-5BA00 |
| MTBF at 40 °C | 3 910 833 h |
| other information | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified) |

