

SITOP PSU100D/1AC/12VDC/8.3A

PSU100D 12 V/8.3 A Stabilized power supply input: 100-240 V AC output: 12 V DC/8,3 A



| Input | |
|---|---|
| type of the power supply network | 1-phase AC |
| supply voltage at AC | |
| <ul style="list-style-type: none"> • minimum rated value • maximum rated value • initial value • full-scale value | 100 V 240 V 85 V 264 V |
| design of input wide range input | Yes |
| operating condition of the mains buffering | at $V_{in} = 115/230$ V |
| buffering time for rated value of the output current in the event of power failure minimum | 15 ms |
| operating condition of the mains buffering | at $V_{in} = 115/230$ V |
| line frequency | |
| <ul style="list-style-type: none"> • 1 rated value • 2 rated value | 50 Hz 60 Hz |
| line frequency | 47 ... 63 Hz |
| input current | |
| <ul style="list-style-type: none"> • at rated input voltage 100 V • at rated input voltage 240 V | 2 A 1.1 A |
| current limitation of inrush current at 25 °C maximum | 75 A |
| I ² t value maximum | 5.5 A ² ·s |
| fuse protection type | internal |
| <ul style="list-style-type: none"> • in the feeder | Recommended miniature circuit breaker: from 10 A characteristic C or from 16 A characteristic B |
| Output | |
| voltage curve at output | Controlled, isolated DC voltage |
| output voltage at DC rated value | 12 V |
| output voltage | |
| <ul style="list-style-type: none"> • at output 1 at DC rated value | 12 V |
| relative overall tolerance of the voltage | 2 % |
| relative control precision of the output voltage | |
| <ul style="list-style-type: none"> • on slow fluctuation of input voltage • on slow fluctuation of ohm loading | 0.5 % 1 % |
| residual ripple | |
| <ul style="list-style-type: none"> • maximum | 100 mV |
| voltage peak | |
| <ul style="list-style-type: none"> • maximum | 100 mV |
| adjustable output voltage | 11 ... 14 V |
| product function output voltage adjustable | Yes |
| type of output voltage setting | via potentiometer |

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| display version for normal operation | Green LED for 12 V OK |
| behavior of the output voltage when switching on | Overshoot of Vout < 2 % |
| response delay maximum | 1 s |
| voltage increase time of the output voltage <ul style="list-style-type: none"> • maximum | 30 ms |
| output current <ul style="list-style-type: none"> • rated value • rated range | 8.3 A 0 ... 8.3 A; +50 ... +70 °C: Derating 2.5%/K |
| supplied active power typical | 100 W |
| product feature <ul style="list-style-type: none"> • bridging of equipment | Yes |
| number of parallel-switched equipment resources for increasing the power | 2 |
| Efficiency | |
| efficiency in percent | 84 % |
| power loss [W] <ul style="list-style-type: none"> • at rated output voltage for rated value of the output current typical | 19 W |
| Closed-loop control | |
| 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 resistive load 50/100/50 % typical | 5 % |
| Protection and monitoring | |
| design of the overvoltage protection | < 17.6 V |
| response value current limitation typical | 9.9 A |
| property of the output short-circuit proof | Yes |
| design of short-circuit protection | Electronic shutdown, automatic restart |
| enduring short circuit current RMS value <ul style="list-style-type: none"> • typical | 10 A |
| display version for overload and short circuit | - |
| 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 <ul style="list-style-type: none"> • maximum • typical | 3.5 mA 1 mA |
| protection class IP | IP20 |
| Approvals | |
| certificate of suitability <ul style="list-style-type: none"> • CE marking • UL approval • CSA approval • cCSAus, Class 1, Division 2 • ATEX | Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus (UL 60950-1, CSA C22.2 No. 60950-1), File E151273 Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus (UL 60950-1, CSA C22.2 No. 60950-1), File E151273 No No |
| certificate of suitability <ul style="list-style-type: none"> • IECEX • NEC Class 2 • ULhazloc approval • FM registration | No No No No |
| type of certification CB-certificate | Yes |
| certificate of suitability <ul style="list-style-type: none"> • EAC approval | Yes |
| certificate of suitability shipbuilding approval | No |
| shipbuilding approval | - |
| Marine classification association <ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) | No No |

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| <ul style="list-style-type: none"> • DNV GL • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) | No |
| | No |
| | No |
| EMC | |
| standard | |
| <ul style="list-style-type: none"> • for emitted interference • for mains harmonics limitation • for interference immunity | EN 55022 Class B EN 61000-3-2 EN 61000-6-2 |
| environmental conditions | |
| ambient temperature | |
| <ul style="list-style-type: none"> • during operation • during transport • during storage | -10 ... +70 °C; with natural convection -40 ... +85 °C -40 ... +85 °C |
| Mechanics | |
| type of electrical connection | screw-type terminals |
| <ul style="list-style-type: none"> • at input • at output • for auxiliary contacts | L, N, PE: 1 screw terminal each for 0.3 ... 1.3 mm ² single-core/finely stranded +, -: 2 screw terminals each for 0.3 ... 1.3 mm ² - |
| width of the enclosure | 97 mm |
| height of the enclosure | 158 mm |
| depth of the enclosure | 38 mm |
| required spacing | |
| <ul style="list-style-type: none"> • top • bottom • left • right | 20 mm 0 mm 20 mm 20 mm |
| net weight | 0.57 kg |
| fastening method | Wall mounting |
| other information | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified) |

