SIEMENS

## Data sheet 6EP1332-1LD00

SITOP PSU100D/1AC/24VDC/3.1A

PSU100D 24 V /3.1 A Stabilized power supply input: 100-240 V AC output: 24 V DC/3.1 A

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| **Input** | |
| type of the power supply network | 1-phase AC |
| supply voltage at AC | |
| ● minimum rated value | 100 V |
| ● maximum rated value | 240 V |
| ● initial value | 85 V |
| ● full-scale value | 264 V |
| design of input wide range input | Yes |
| operating condition of the mains buffering | at Vin = 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 Vin = 115/230 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 | 1.5 A |
| ● at rated input voltage 240 V | 1 A |
| current limitation of inrush current at 25 °C maximum | 60 A |
| I2t value maximum | 1.2 A²·s |
| fuse protection type | internal |
| ● 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 | 24 V |
| output voltage | |
| ● at output 1 at DC rated value | 24 V |
| relative overall tolerance of the voltage | 2 % |
| relative control precision of the output voltage | |
| ● on slow fluctuation of input voltage | 0.5 % |
| ● on slow fluctuation of ohm loading | 1 % |
| residual ripple | |
| ● maximum | 100 mV |
| voltage peak | |
| ● maximum | 100 mV |
| adjustable output voltage | 22 ... 28 V |
| product function output voltage adjustable | Yes |
| type of output voltage setting | via potentiometer |
| display version for normal operation | Green LED for 24 V OK |
| behavior of the output voltage when switching on | Overshoot of Vout < 2 % |

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| response delay maximum | 2.5 s |
| voltage increase time of the output voltage | |
| ● maximum | 30 ms |
| output current | |
| ● rated value | 3.1 A |
| ● rated range | 0 ... 3.1 A; +50 ... +70 °C: Derating 2.5%/K |
| supplied active power typical | 75 W |
| product feature | |
| ● bridging of equipment | Yes |
| number of parallel-switched equipment resources for increasing the power | 2 |
| **Efficiency** | |
| efficiency in percent | 86 % |
| power loss [W] | |
| ● at rated output voltage for rated value of the output current typical | 12 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 | < 35 V |
| response value current limitation typical | 3.7 A |
| property of the output short-circuit proof | Yes |
| design of short-circuit protection | Electronic shutdown, automatic restart |
| enduring short circuit current RMS value | |
| ● typical | 6 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 | |
| ● maximum | 3.5 mA |
| ● typical | 1 mA |
| protection class IP | IP20 |
| **Approvals** | |
| certificate of suitability | |
| ● CE marking | Yes |
| ● UL approval | 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 |
| ● CSA approval | 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 |
| ● 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 |
| certificate of suitability shipbuilding approval | No |
| shipbuilding approval | - |
| Marine classification association | |
| ● American Bureau of Shipping Europe Ltd. (ABS) | No |
| ● French marine classification society (BV) | No |
| ● DNV GL | No |
| ● Lloyds Register of Shipping (LRS) | No |
| ● Nippon Kaiji Kyokai (NK) | No |
| **EMC** | |

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|---|---|
| standard | |
| ● for emitted interference | EN 55022 Class B |
| ● for mains harmonics limitation | EN 61000-3-2 |
| ● for interference immunity | EN 61000-6-2 |
| **environmental conditions** | |
| ambient temperature | |
| ● during operation | -10 ... +70 °C; with natural convection |
| ● during transport | -40 ... +85 °C |
| ● during storage | -40 ... +85 °C |
| **Mechanics** | |
| type of electrical connection | screw-type terminals |
| ● at input | L, N, PE: 1 screw terminal each for 0.3 ... 1.3 mm² single-core/finely stranded |
| ● at output | +, -: 1 screw terminal each for 0.3 ... 1.3 mm² |
| ● for auxiliary contacts | - |
| width of the enclosure | 97 mm |
| height of the enclosure | 128 mm |
| depth of the enclosure | 38 mm |
| required spacing | |
| ● top | 20 mm |
| ● bottom | 0 mm |
| ● left | 20 mm |
| ● right | 20 mm |
| net weight | 0.37 kg |
| fastening method | Wall mounting |
| other information | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified) |