

SITOP PSU100C 24 V/0.6 A
 SITOP PSU100C 24 V/0.6 A Stabilized power supply input: 100-230 V AC (DC 110-300 V) output: DC 24 V/0,6 A



| Input | |
|---|-----------------------------------|
| Input | 1-phase AC or DC |
| Rated voltage value V_{in} rated | 100 ... 230 V |
| Voltage range AC | 85 ... 264 V |
| Input voltage | |
| • at DC | 110 ... 300 V |
| Wide-range input | Yes |
| Overvoltage resistance | $2.3 \times V_{in}$ rated, 1.3 ms |
| Mains buffering | at $V_{in} = 230$ V |
| Mains buffering at I_{out} rated, min. | 20 ms; at $V_{in} = 230$ V |
| Rated line frequency 1 | 50 Hz |
| Rated line frequency 2 | 60 Hz |
| Rated line range | 47 ... 63 Hz |
| Input current | |
| • at rated input voltage 100 V | 0.28 A |
| • at rated input voltage 230 V | 0.18 A |
| Switch-on current limiting (+25 °C), max. | 28 A |
| I^2t , max. | 0.7 A ² ·s |
| Built-in incoming fuse | internal |

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| Protection in the mains power input (IEC 898) | Recommended miniature circuit breaker: from 16 A characteristic B or from 10 A characteristic C |
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Output

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| Output | Controlled, isolated DC voltage |
| Rated voltage V_{out} DC | 24 V |
| Total tolerance, static \pm | 3 % |
| Static mains compensation, approx. | 0.1 % |
| Static load balancing, approx. | 0.2 % |
| Residual ripple peak-peak, max. | 200 mV |
| Residual ripple peak-peak, typ. | 40 mV |
| Spikes peak-peak, max. (bandwidth: 20 MHz) | 300 mV |
| Spikes peak-peak, typ. (bandwidth: 20 MHz) | 20 mV |
| Product function Output voltage adjustable | No |
| Output voltage setting | - |
| Status display | Green LED for output voltage OK |
| On/off behavior | Overshoot of V_{out} approx. 5 % |
| Startup delay, max. | 1 s |
| Voltage rise, typ. | 25 ms |
| Rated current value I_{out} rated | 0.6 A |
| Current range | 0 ... 0.6 A |
| Supplied active power typical | 14 W |
| Short-term overload current | |
| • at short-circuit during operation typical | 1 A |
| Parallel switching for enhanced performance | No |

Efficiency

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| Efficiency at V_{out} rated, I_{out} rated, approx. | 82 % |
| Power loss at V_{out} rated, I_{out} rated, approx. | 2.6 W |
| Power loss [W] during no-load operation maximum | 0.75 W |

Closed-loop control

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| Dynamic mains compensation (V_{in} rated ± 15 %), max. | 0.1 % |
| Dynamic load smoothing (I_{out} : 10/90/10 %), $U_{out} \pm$ typ. | 3 % |
| Load step setting time 10 to 90%, typ. | 3 ms |
| Load step setting time 90 to 10%, typ. | 3 ms |

Protection and monitoring

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| Output overvoltage protection | Yes, according to EN 60950-1 |
| Current limitation, typ. | 0.7 A |
| Property of the output Short-circuit proof | Yes |
| Short-circuit protection | Electronic shutdown, automatic restart |
| Overload/short-circuit indicator | - |

Safety

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| Primary/secondary isolation | Yes |
| Galvanic isolation | Safety extra-low output voltage U _{out} acc. to EN 60950-1 and EN 50178 |
| Protection class | Class I |
| Leakage current | |
| • maximum | 3.5 mA |
| • typical | 0.4 mA |
| Degree of protection (EN 60529) | IP20 |

Approvals

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| CE mark | Yes |
| UL/cUL (CSA) approval | 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) |
| Explosion protection | IECEx Ex nA IIC T4 Gc; ATEX (EX) II 3G Ex nA IIC T4; cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T4 |
| FM approval | - |
| CB approval | Yes |
| Marine approval | ABS, DNV GL |

EMC

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| Emitted interference | EN 55022 Class B |
| Supply harmonics limitation | not applicable |
| Noise immunity | EN 61000-6-2 |

environmental conditions

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| Ambient temperature | |
| • during operation | -20 ... +70 °C |
| — Note | with natural convection |
| • during transport | -40 ... +85 °C |
| • during storage | -40 ... +85 °C |
| Humidity class according to EN 60721 | Climate class 3K3, 5 ... 95% no condensation |

Mechanics

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| Connection technology | screw-type terminals |
| Connections | |
| • Supply input | L, N, PE: Removable screw terminal, each for 1 x 0.5 ... 2.5 mm ² |
| • Output | +: 1 screw terminal for 0.5 ... 2.5 mm ² ; -: 2 screw terminals for 0.5 ... 2.5 mm ² |
| • Auxiliary | - |
| Width of the enclosure | 22.5 mm |
| Height of the enclosure | 80 mm |
| Depth of the enclosure | 100 mm |
| Required spacing | |
| • top | 50 mm |

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|---|---|
| <ul style="list-style-type: none"> • bottom • left • right | 50 mm |
| | 0 mm |
| | 0 mm |
| Weight, approx. | 0.12 kg |
| Product feature of the enclosure housing for side-by-side mounting | Yes |
| Installation | 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) |