

SITOP PSU100P 24 V/8 A IP67
 SITOP PSU100P IP67 Stabilized power supply input: 120/230 V AC,
 output: 24 V DC/8 A



| Input | |
|--|---------------------------------------|
| Input | 1-phase AC |
| • Note | Automatic range selection |
| Supply voltage | |
| • 1 at AC Rated value | 120 V |
| • 2 at AC Rated value | 230 V |
| Input voltage | |
| • 1 at AC | 85 ... 132 V |
| • 2 at AC | 170 ... 264 V |
| Wide-range input | No |
| Overvoltage resistance | Implemented internally with varistor |
| Mains buffering | at $V_{in} = 120/230\text{ V}$ |
| Mains buffering at I_{out} rated, min. | 40 ms; at $V_{in} = 120/230\text{ V}$ |
| Rated line frequency 1 | 50 Hz |
| Rated line frequency 2 | 60 Hz |
| Rated line range | 47 ... 63 Hz |
| Input current | |
| • at rated input voltage 120 V | 3.5 A |
| • at rated input voltage 230 V | 1.52 A |

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| Switch-on current limiting (+25 °C), max. | 15 A |
| I ² t, max. | 0.6 A ² ·s |
| Built-in incoming fuse | T 6.3 A |
| Protection in the mains power input (IEC 898) | Recommended miniature circuit breaker: from 6 A characteristic C/B |

Output

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|---|--|
| Output | Controlled, isolated DC voltage |
| Rated voltage V _{out} DC | 24 V |
| Total tolerance, static ± | 3 % |
| Static mains compensation, approx. | 0.1 % |
| Static load balancing, approx. | 0.2 % |
| Residual ripple peak-peak, max. | 50 mV |
| Spikes peak-peak, max. (bandwidth: 20 MHz) | 100 mV |
| Product function Output voltage adjustable | No |
| Status display | Green LED: 24 V OK; red LED flashing: "overload/short-circuit" |
| Signaling | Relay contact (NO contact, rating 30 V AC/ 0.5 A; 30 V DC/1 A) for 24 V OK |
| On/off behavior | Overshoot of V _{out} < 3 % |
| Startup delay, max. | 1.5 s |
| Voltage rise, typ. | 23 ms |
| Voltage increase time of the output voltage maximum | 100 ms |
| Rated current value I _{out} rated | 8 A |
| Current range | 0 ... 8 A |
| Supplied active power typical | 206 W |
| Short-term overload current | |
| • on short-circuiting during the start-up typical | 30 A |
| • at short-circuit during operation typical | 30 A |
| Duration of overloading capability for excess current | |
| • on short-circuiting during the start-up | 50 ms |
| • at short-circuit during operation | 50 ms |
| Parallel switching for enhanced performance | Yes; Symmetric wiring required |
| Numbers of parallel switchable units for enhanced performance | 2 |

Efficiency

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|---|--------|
| Efficiency at V _{out} rated, I _{out} rated, approx. | 93.6 % |
| Power loss at V _{out} rated, I _{out} rated, approx. | 13.1 W |

Closed-loop control

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| Dynamic mains compensation (V _{in} rated ±15 %), max. | 0.2 % |
| Dynamic load smoothing (I _{out} : 50/100/50 %), U _{out} ± typ. | 1 % |
| Setting time maximum | 2 ms |

| Protection and monitoring | |
|--|---|
| Output overvoltage protection | < 29 V |
| Current limitation, typ. | 9 A |
| Property of the output Short-circuit proof | Yes |
| Short-circuit protection | Electronic shutdown, automatic restart |
| Enduring short circuit current RMS value | |
| • maximum | 9 A |
| • typical | 8 A |
| Overload/short-circuit indicator | Red LED flashing for "overload/short-circuit" |

| Safety | |
|---------------------------------|--|
| 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 | 1 mA |
| Degree of protection (EN 60529) | IP67, enclosure type 5 indoor |

| Approvals | |
|-----------------------|--|
| CE mark | Yes |
| UL/cUL (CSA) approval | cULus-Listed (UL 508, CSA C22.2 No. 107.1) |
| Explosion protection | - |
| FM approval | - |
| CB approval | No |
| Marine approval | - |

| EMC | |
|-----------------------------|------------------|
| Emitted interference | EN 55022 Class B |
| Supply harmonics limitation | EN 61000-3-2 |
| Noise immunity | EN 61000-6-2 |

| environmental conditions | |
|--------------------------------------|-----------------------------|
| Ambient temperature | |
| • during operation | -25 ... +60 °C |
| — Note | with natural convection |
| • during transport | -40 ... +85 °C |
| • during storage | -40 ... +85 °C |
| Humidity class according to EN 60721 | 3K6 without direct sunlight |

| Mechanics | |
|-----------------------|---|
| Connection technology | screw-type terminals |
| Connections | |
| • Supply input | L1, N, PE: Plug connector 7/8" (counterpart see "Operating Instructions (compact)") |

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|--|---|
| <ul style="list-style-type: none"> • Output | +, -: Plug connector 7/8" (counterpart see "Operating Instructions (compact)") |
| <ul style="list-style-type: none"> • Auxiliary | Alarm signals: M12 plug-in connector 4-pin |
| Product function | |
| <ul style="list-style-type: none"> • removable terminal at input | Yes |
| <ul style="list-style-type: none"> • removable terminal at output | Yes |
| Width of the enclosure | 120 mm |
| Height of the enclosure | 181 mm |
| Depth of the enclosure | 60.5 mm |
| Required spacing | |
| <ul style="list-style-type: none"> • top | 50 mm |
| <ul style="list-style-type: none"> • bottom | 0 mm |
| <ul style="list-style-type: none"> • left | 0 mm |
| <ul style="list-style-type: none"> • right | 0 mm |
| Weight, approx. | 1.3 kg |
| Product feature of the enclosure housing for side-by-side mounting | Yes |
| Installation | Wall mounting |
| MTBF at 40 °C | 800 000 h |
| Other information | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified) |