

SITOP POWER DC/DC 24 V/2 A
 SITOP power 2 A, DC/DC Stabilized power supply input: 48/60/110 V
 DC output: 24 V DC/2 A



| Input | |
|---|---|
| Input | DC voltage |
| Supply voltage | |
| • at DC | 48 ... 110 V |
| Input voltage | |
| • at DC | 38 ... 121 V |
| Wide-range input | Yes |
| Overvoltage resistance | - |
| Mains buffering at lout rated, min. | 5 ms; at $V_{in} = 48\text{ V}$ |
| Input current | |
| • at rated input voltage 48 V | 1.2 A |
| • at rated input voltage 110 V | 0.5 A |
| Switch-on current limiting (+25 °C), max. | 33 A |
| Built-in incoming fuse | T 2.5 A (not accessible) |
| Protection in the mains power input (IEC 898) | Recommended miniature circuit breaker: 10 to 25 A characteristic B or 6 to 25 A characteristic C, suitable for DC |
| Output | |
| Output | Controlled, isolated DC voltage |
| Rated voltage V_{out} DC | 24 V |

| | |
|---|--|
| Total tolerance, static \pm | 1 % |
| Static mains compensation, approx. | 0.1 % |
| Static load balancing, approx. | 0.4 % |
| Residual ripple peak-peak, max. | 100 mV |
| Spikes peak-peak, max. (bandwidth: 20 MHz) | 300 mV |
| Adjustment range | 23.5 ... 26.5 V |
| Product function Output voltage adjustable | Yes |
| Output voltage setting | via potentiometer |
| Status display | Green LED for 24 V OK |
| On/off behavior | Overshoot of Vout on startup max. 25 V |
| Startup delay, max. | 3 s |
| Voltage rise, typ. | 30 ms |
| Rated current value Iout rated | 2 A |
| Current range | 0 ... 2 A |
| Supplied active power typical | 48 W |
| Parallel switching for enhanced performance | Yes |
| Numbers of parallel switchable units for enhanced performance | 2 |

| Efficiency | |
|---|------|
| Efficiency at Vout rated, Iout rated, approx. | 84 % |
| Power loss at Vout rated, Iout rated, approx. | 9 W |

| Closed-loop control | |
|---|--------|
| Dynamic mains compensation (Vin rated ± 15 %), max. | 0.3 % |
| Dynamic load smoothing (Iout: 50/100/50 %), Uout \pm typ. | 0.8 % |
| Load step setting time 50 to 100%, typ. | 2.5 ms |
| Load step setting time 100 to 50%, typ. | 2.5 ms |

| Protection and monitoring | |
|--|--|
| Output overvoltage protection | Yes, suppressor diode at output |
| Current limitation | 2.1 ... 3 A |
| Property of the output Short-circuit proof | Yes |
| Short-circuit protection | Electronic shutdown, automatic restart |
| Enduring short circuit current RMS value <ul style="list-style-type: none"> • maximum | 2 A |
| Overload/short-circuit indicator | - |

| Safety | |
|---|--|
| Primary/secondary isolation | Yes |
| Galvanic isolation | Safety extra low output voltage Vout according to EN 60950-1 |
| Protection class | Class I |
| Leakage current <ul style="list-style-type: none"> • maximum | 3.5 mA |

| | |
|---------------------------------|--|
| • typical | 0.7 mA |
| CE mark | Yes |
| UL/cUL (CSA) approval | cULus-Listed (UL 508, CSA C22.2 No. 142), File E179336 |
| Explosion protection | - |
| FM approval | - |
| CB approval | No |
| Marine approval | - |
| Degree of protection (EN 60529) | IP20 |

EMC

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

Operating data

| | |
|--------------------------------------|------------------------------------|
| Ambient temperature | |
| • during operation | 0 ... 70 °C |
| — Note | with natural convection |
| • during transport | -40 ... +70 °C |
| • during storage | -40 ... +70 °C |
| Humidity class according to EN 60721 | Climate class 3K3, no condensation |

Mechanics

| | |
|--|---|
| Connection technology | screw-type terminals |
| Connections | |
| • Supply input | L+, M1, PE: 1 screw terminal each for 2 x 0.5 ... 2.5/1.5 mm ² single-core/finely stranded |
| • Output | L+, M: 1 screw terminal each for 2 x 0.5 ... 2.5 mm ² |
| • Auxiliary | - |
| Width of the enclosure | 80 mm |
| Height of the enclosure | 135 mm |
| Depth of the enclosure | 120 mm |
| Required spacing | |
| • top | 50 mm |
| • bottom | 50 mm |
| • left | 0 mm |
| • right | 0 mm |
| Weight, approx. | 0.5 kg |
| Product feature of the enclosure housing for side-by-side mounting | Yes |
| Installation | Snaps onto DIN rail EN 60715 35x15 |
| MTBF at 40 °C | 1 580 078 h |
| Other information | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified) |

