



LOGO!POWER 12 V/4,5 A
 LOGO!POWER 12 V/4.5 A STABILIZED POWER SUPPLY INPUT:
 100-240 V AC (110-300 V DC) OUTPUT: 12 V/4.5 A DC

| Input | |
|---|---|
| Input | 1-phase AC or DC |
| Rated voltage value V_{in} rated | 100 ... 240 V |
| Voltage range AC | 85 ... 264 V |
| Input voltage | |
| • for DC | 110 ... 300 V |
| Wide-range input | Yes |
| Overvoltage resistance | $2.3 \times V_{in}$ rated, 1.3 ms |
| Mains buffering at I_{out} rated, min. | 40 ms; at $V_{in} = 187$ V |
| Rated line frequency | 50 ... 60 Hz |
| Rated line range | 47 ... 63 Hz |
| Input current | |
| • at rated input voltage 120 V | 1.13 A |
| • at rated input voltage 230 V | 0.61 A |
| Switch-on current limiting (+25 °C), max. | 55 A |
| I^2t , max. | 3 A ² ·s |
| Built-in incoming fuse | internal |
| Protection in the mains power input (IEC 898) | Recommended miniature circuit breaker: from 16 A characteristic B or from 10 A characteristic C |
| Output | |
| Output | Controlled, isolated DC voltage |
| Rated voltage V_{out} DC | 12 V |
| Total tolerance, static \pm | 3 % |
| Static mains compensation, approx. | 0.1 % |
| Static load balancing, approx. | 1.5 % |

| | |
|---|-----------------------------------|
| Residual ripple peak-peak, max. | 200 mV |
| Residual ripple peak-peak, typ. | 10 mV |
| Spikes peak-peak, max. (bandwidth: 20 MHz) | 300 mV |
| Spikes peak-peak, typ. (bandwidth: 20 MHz) | 70 mV |
| Adjustment range | 10.5 ... 16.1 V |
| Product function Output voltage adjustable | Yes |
| Output voltage setting | via potentiometer |
| Status display | Green LED for output voltage OK |
| On/off behavior | No overshoot of Vout (soft start) |
| Startup delay, max. | 0.5 s |
| Voltage rise, typ. | 10 ms |
| Rated current value Iout rated | 4.5 A |
| Current range | 0 ... 4.5 A |
| • Note | +55 ... +70 °C: Derating 2%/K |
| Active power supplied typical | 50 W |
| Parallel switching for enhanced performance | Yes |
| Numbers of parallel switchable units for enhanced performance | 2 |

Efficiency

| | |
|--|-------|
| Efficiency at Vout rated, Iout rated, approx. | 85 % |
| Power loss at Vout rated, Iout rated, approx. | 10 W |
| Active power loss during no-load operation maximum | 1.9 W |

Closed-loop control

| | |
|--|-------|
| Dynamic mains compensation (Vin rated $\pm 15\%$), max. | 0.2 % |
| Dynamic load smoothing (Iout: 10/90/10 %), Uout \pm typ. | 4 % |
| Load step setting time 10 to 90%, typ. | 1 ms |
| Load step setting time 90 to 10%, typ. | 1 ms |

Protection and monitoring

| | |
|--|---------------------------------|
| Output overvoltage protection | Yes, according to EN 60950-1 |
| Current limitation, typ. | 5.8 A |
| Property of the output Short-circuit proof | Yes |
| Short-circuit protection | Constant current characteristic |
| Enduring short circuit current RMS value | |
| • maximum | 7 A |
| Overload/short-circuit indicator | - |

Safety

| | |
|-----------------------------|--|
| Primary/secondary isolation | Yes |
| Galvanic isolation | Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 |
| Protection class | Class II (without protective conductor) |

| | |
|--|---|
| CE mark | Yes |
| UL/CSA approval | 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 |
| Explosion protection | ATEX (EX) II 3G Ex nA IIC T3; cCSAus (CSA C22.2 No. 213-M1987, ANSI/ISA-12.12.01-2007) Class I, Div. 2, Group ABCD, T4 |
| Certificate of suitability IECEx | No |
| Certificate of suitability NEC Class 2 | No |
| FM approval | Class I, Div. 2, Group ABCD, T4 |
| CB approval | Yes |
| Marine approval | GL, ABS |
| 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 | |
| <ul style="list-style-type: none"> • during operation — Note • during transport • during storage | -20 ... +70 °C with natural convection -40 ... +85 °C -40 ... +85 °C |
| Humidity class according to EN 60721 | Climate class 3K3, no condensation |

Mechanics

| | |
|---|--|
| Connection technology | screw-type terminals |
| Connections | |
| <ul style="list-style-type: none"> • Supply input • Output • Auxiliary | L, N: 1 screw terminal each for 0.5 ... 2.5 mm ² single-core/finely stranded +, -: 2 screw terminals each for 0.5 ... 2.5 mm ² - |
| Width of the enclosure | 72 mm |
| Height of the enclosure | 90 mm |
| Depth of the enclosure | 52.6 mm |
| Weight, approx. | 0.25 kg |
| Product property of the enclosure housing for side-by-side mounting | Yes |
| Installation | Snaps onto DIN rail EN 60715 35x7.5/15 |
| Other information | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified) |