

LOGO!POWER 24 V/2.5 A  
 LOGO!POWER 24 V / 2.5 A Stabilized power supply input: 100-240  
 V AC output: DC 24 V / 2.5 A



| Input                                     |                            |
|---|----------------------------|
| Input                                     | 1-phase AC or DC           |
| Rated voltage value $V_{in}$ rated        | 100 ... 240 V              |
| Voltage range AC                          | 85 ... 264 V               |
| Input voltage                             |                            |
| • at DC                                   | 110 ... 300 V              |
| Wide-range input                          | Yes                        |
| Overvoltage resistance                    | 300 V AC for 1 s           |
| Mains buffering at $I_{out}$ rated, min.  | 40 ms; at $V_{in} = 187$ 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            | 1.22 A                     |
| • at rated input voltage 230 V            | 0.66 A                     |
| Switch-on current limiting (+25 °C), max. | 52 A                       |
| $I^2t$ , max.                             | 3 A <sup>2</sup> ·s        |
| Built-in incoming fuse                    | internal                   |

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|---|--|
| Protection in the mains power input (IEC 898)                 | Recommended miniature circuit breaker: from 10 A characteristic B or from 6 A characteristic C |
| <b>Output</b>   |  |
| Output  | Controlled, isolated DC voltage  |
| Rated voltage Vout DC   | 24 V   |
| Total tolerance, static ±                                     | 3 %  |
| Static mains compensation, approx.                            | 0.1 %  |
| Static load balancing, approx.                                | 0.1 %  |
| Residual ripple peak-peak, max.                               | 200 mV   |
| Residual ripple peak-peak, typ.                               | 30 mV  |
| Spikes peak-peak, max. (bandwidth: 20 MHz)                    | 300 mV   |
| Spikes peak-peak, typ. (bandwidth: 20 MHz)                    | 50 mV  |
| Adjustment range  | 22.2 ... 26.4 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.  | 100 ms   |
| Rated current value Iout rated                                | 2.5 A  |
| Current range   | 0 ... 2.5 A  |
| • Note  | +55 ... +70 °C: Derating 2%/K  |
| Supplied active power typical                                 | 60 W   |
| Parallel switching for enhanced performance                   | Yes  |
| Numbers of parallel switchable units for enhanced performance | 2  |
| <b>Efficiency</b>   |  |
| Efficiency at Vout rated, Iout rated, approx.                 | 90 %   |
| Power loss at Vout rated, Iout rated, approx.                 | 7 W  |
| Power loss [W] during no-load operation maximum               | 0.3 W  |
| <b>Closed-loop control</b>                                    |  |
| Dynamic mains compensation (Vin rated ±15 %), max.            | 0.2 %  |
| Dynamic load smoothing (Iout: 10/90/10 %), Uout ± typ.        | 2 %  |
| Load step setting time 10 to 90%, typ.                        | 1 ms   |
| Load step setting time 90 to 10%, typ.                        | 1 ms   |
| <b>Protection and monitoring</b>                              |  |
| Output overvoltage protection                                 | Yes, according to EN 60950-1   |
| Current limitation, typ.                                      | 3.2 A  |
| Property of the output Short-circuit proof                    | Yes  |
| Short-circuit protection                                      | Constant current characteristic  |

|   |   |
|---|---|
| Enduring short circuit current RMS value                    |   |
| <ul style="list-style-type: none"> <li>• maximum</li> </ul> | 3.2 A   |
| Overcurrent overload capability in normal operation         | overload capability 150% I <sub>out</sub> rated typ. 200 ms |
| Overload/short-circuit indicator                            | -   |
| measuring point for output current                          | 50 mV $\hat{=}$ 2.5 A                                       |

### Safety

|                                 |  |
|---------------------------------|--|
| Primary/secondary isolation     | Yes  |
| Galvanic isolation              | Safety extra-low output voltage U <sub>out</sub> acc. to EN 60950-1 and EN 50178   |
| Protection class                | Class II (without protective conductor)  |
| CE mark                         | Yes  |
| UL/cUL (CSA) approval           | cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259;<br>cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273, NEC class 2 (acc. to UL 1310) |
| Explosion protection            | ATEX (EX) II 3G Ex nA IIC T3; cULus Class I Div. 2 (ANSI/ISA-12.12.01, CSA C22.2 No. 213) Group ABCD, T4, File E488866                                     |
| FM approval                     | Class I, Div. 2, Group ABCD, T4  |
| CB approval                     | Yes  |
| Marine approval                 | ABS, BV, DNV GL, LRS   |
| 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"> <li>• during operation</li> <li>— Note</li> <li>• during transport</li> <li>• during storage</li> </ul> | -25 ... +70 °C<br>with natural convection<br>-40 ... +85 °C<br>-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"> <li>• Supply input</li> <li>• Output</li> <li>• Auxiliary</li> </ul> | L, N: 1 screw terminal each for 0.5 ... 2.5 mm <sup>2</sup> single-core/finely stranded<br>+, -: 1 screw terminal each for 0.5 ... 2.5 mm <sup>2</sup><br>- |
| Width of the enclosure  | 54 mm   |
| Height of the enclosure   | 90 mm   |
| Depth of the enclosure  | 53 mm   |
| Required spacing  |   |

|  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• top</li> <li>• bottom</li> <li>• left</li> <li>• right</li> </ul> | <p>20 mm</p> <p>20 mm</p> <p>0 mm</p> <p>0 mm</p>   |
| Weight, approx.  | 0.2 kg  |
| Product feature of the enclosure housing for side-by-side mounting   | Yes   |
| Installation   | Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions           |
| MTBF at 40 °C  | 2 864 520 h   |
| Other information  | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified) |