



**Input: 115 – 230 Vac**  
**Output: 48 Vdc 60°C**  
**Efficiency up to 91%**  
**Strong overload without switch-off, up to 50%**  
**Flexible Power continuity: from 240 to 345 W**  
**Tree type of modality protections:**

- 1) Hiccup mode
- 2) Continuous Out Mode
- 3) Manual Reset

**DIN Rail Mountable**  
**Extremely small size**  
**3 Years warranty**

### Features

#### Input Data

|  |                         |
|--|-------------------------|
| Nominal Input Voltage (2 x Vac)                  | 115 – 230 Vac           |
| Manual select Input from 115 to 230              |                         |
| Input Voltage range: (115)                       | 90-135 Vac              |
| (230)  | 170-264 Vac 238-370 Vdc |
| Inrush Current (Vn and In Load) I <sup>2</sup> t | ≤ 16 A ≤ 5 msec.        |
| Frequency  | 47 – 63 Hz ±6%          |
| Input Current (115 – 230 Vac)                    | 3.3 – 2.2 A             |
| Internal Fuse                                    | T 6.3 A                 |
| External Fuse (recommended)                      | 16 A (curve B)          |

#### Output Data

|   |  |
|---|--|
| Output Voltage (Vn) Factory Setting ±3%     | 48 Vdc                                       |
| Adjustment range (Vadj)                     | 41 – 55 Vdc                                  |
| Start up with Strong Load (capacitive load) | ≤50.000µF                                    |
| Turn-On delay after applying mains voltage  | 1 sec. (max)                                 |
| Rated Current at 48 V 40°C (In)             | 7 A (permanent)                              |
| Rated Current at 48 V 50°C (In)             | 6 A (permanent)                              |
| Rated Current at 48 V 60°C (In)             | 5 A (permanent)                              |
| Power Boost Current at 48 Vdc 60°C(In)      | In 60°C x 1.5 ≥ 3 min.                       |
| Current max. Overload ≅ 4Vdc (permanent)    | I <sub>max</sub> =In60°Cx(1.8 -2.2)          |
| Current Short Circuit I <sub>cc</sub>       |  |
| Max 2 sec.: Hiccup mode                     | In 60°C x 3                                  |
| Permanent : Continuous Mode                 |  |
| Hold-up Time ( min. Vac) 48Vdc 5A           | Typ. 20 msec                                 |
| Residual Ripple                             | ≤ 80 mVpp                                    |
| Efficiency                                  | ≥ 91 %                                       |
| Over temperature Protection                 | Yes. Shut-down output and automatic restart. |
| Short-circuit protection                    | 1° Hiccup Mode                               |
|   | 2° Continuous Out Mode                       |
|   | 3° Manual Reset                              |
| Dissipation power load max (W)              | 28   |
| Over Load protection                        | Yes  |
| Over Voltage Output protection              | Yes (typ. 72 Vdc)                            |
| Parallel connection                         | Yes "Easy Parallel"                          |

#### Climatic Data

|                                    |   |
|------------------------------------|---|
| Ambient Temperature operation      | -25 up to +70 °C<br>(>60° derating 2.5% °C) |
| Ambient Temperature Storage        | -40 up to +85 °C                            |
| Humidity at 25 °C, no condensation | 95 % to 25 °C                               |

#### General Data

|                                       |                     |
|---------------------------------------|---------------------|
| Isolation Voltage (In / Out)          | 3000 Vac            |
| Isolation Voltage (In / PE)           | 1605 Vac            |
| Isolation Voltage (Out / PE)          | 500 Vac             |
| Protection Class (EN/IEC 60529)       | IP 20               |
| Reliability: MTBF IEC 61709           | > 500.000 h         |
| Pollution Degree Environment          | 2                   |
| Connection Terminal Blocks Screw Type | 2,5 mm              |
| Protection class                      | I with PE connected |
| Dimension (w-h-d)                     | 72x115x135 mm       |
| Weight                                | 0.8 kg approx.      |

#### Norms and certifications

The CE mark in According to EMC 2014/30/UE and Low voltage directive 2014/35/UE.

#### Electrical Safety

In compliance to UL508. EN IEC 61010-2-201:2018  
 According to IEC/EN 60950 (VDE 0805) e EN 50178 (VDE 0160) for assembling device. The unit must be installed according to IEC/EN 60950.Input / Output separation: SELV EN60950-1 and PELV EN 60204-1. Double or reinforced insulation.

#### EMC Immunity

EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN61000-6-2

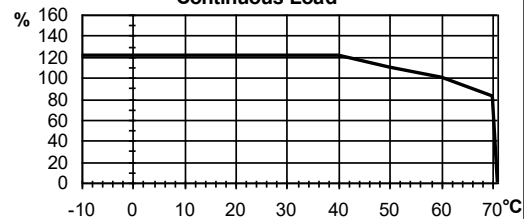
#### EMC Emission:

EN61000-6-4

#### Standards Conformity

EN 60204-1 Safety of Electrical Equipment Machines

Output derating Curve  
Continuous Load



Output Voltage vs. Output Current, typ.

