



Input: single-phase: 115 – 230 Vac  
 Output: 48 Vdc 60°C  
 Efficiency up to 92%  
 Strong overload without switch-off, up to 50%  
 Flexible Power continuity: from 480 to 600W  
 “Power Good” Relay  
 Three mode of output protections:  
 1) Manual Reset  
 2) Hiccup Mode  
 3) Continuous Out Mode  
 DIN Rail Mountable  
 Extremely small size  
 3 Years warranty

### Input Data

Nominal Input Voltage (2 x Vac)	115 – 230
Manual select Input from 115 to 230	
Input Voltage range: (115)	90-135 Vac
(230)	180-264 Vac
Inrush Current (Vn and In Load) I <sup>2</sup> t	≤ 50 A ≤ 5 msec.
Frequency	47 – 63 Hz ±6%
Input Current (115 – 230 Vac)	8.5 – 4.2 A
Internal Fuse	T 10 A
External Fuse (recommended)	16 A (MCB 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)
Continuous Current at 24 V < 40°C (In)	12 A (permanent)
Continuous Current at 24 V < 50°C (In)	11 A (permanent)
Continuous Current at 24 V < 60°C (In)	10 A (permanent)
Power Boost Current at 24 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>	In 60°C x 3
Hiccup mode: Max 2 sec. Continuous Mode: Permanent	
Hold-up Time ( min. Vac)	Typ. 20 msec
Residual Ripple	≤ 80 mV <sub>pp</sub>
Efficiency	≥ 92 %
Over temperature Protection	Yes. Shut-down output and automatic restart.
Short-circuit protection	1° Manual Reset 2° Hiccup Mode 3° Continuous Out Mode
Dissipation Power load max (W)	54
Over Load protection	Yes
Over Voltage Output protection	Yes (typ. 72 Vdc)
Parallel connection	Yes. “Easy Parallel”
Power Good Contact rating (EN60947.4.1): Max. DC1: 30 Vdc 1 A; AC1: 60 Vac 1A Min.1mA at 5 Vdc	Resistive load Min permissible load

### Climatic Data

Ambient Temperature operation	-25 up to +70 °C (>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	4 mm <sup>2</sup> (30-10 AWG)
Protection class	I with PE connected
Dimension (w-h-d)	85x120x140 mm
Weight	1.2 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

