

# FLEX28048A



**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 (>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

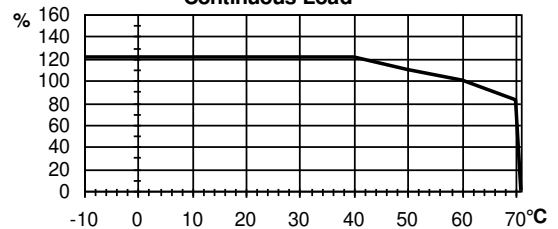
## EMC Emission:

EN61000-6-4

## Standards Conformity

EN 60204-1 Safety of Electrical Equipment Machines

Output derating Curve  
Continuous Load



Output Voltage vs. Output Current, typ.

