

FLEX50048A



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) (230)	90-135 Vac 170-264 Vac 238-370 Vdc
Inrush Current (Vn and In Load) I ² 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)
Rated Current at 48 V 40°C (In)	12 A (permanent)
Rated Current at 48 V 50°C (In)	11 A (permanent)
Rated Current at 48 V 60°C (In)	10 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 _{max} =In60°Cx(1.8 -2.2)
Current Short Circuit I _{cc}	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 _{pp}
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 5V	Resistive load Min permissive 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 ² (30-10 AWG)
Protection class	I with PE connected
Dimension (w-h-d)	85x120x140 mm
Weight	1.2 kg approx.

Regulatory Compliance

- CE mark in conformity with EU Directives: EMC, LVD and RoHS.
 - UKCA mark in conformity with UK S.I. 2016/1091, 2016/1101, 2012/3032.
 - REACH Regulation 1907/2006.

Standards Conformity

- EN IEC 61010-2-201:2018 Safety requirements for electrical equipment for measurement, control and laboratory use.

Approvals

- UL508 Industrial Control Equipment for US & Canada (E308682).

EMC

- EMC Immunity EN 61000-6-2 for industrial environments:
 EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5,
 EN 61000-4-6, EN 61000-4-8, EN 61000-4-11.
 - EMC Emission EN 61000-6-4 for industrial environments (Class A).

