

FLEX28012A



Input: 115 – 230 Vac
Output: 12 Vdc 60°C
Efficiency up to 91%
Strong overload without switch-off, up to 50%
Flexible Power continuity: from 240 to 336 W
“Power Good” Relay
Three mode of output protections:
 1) Hiccup mode
 2) Continuous Out Mode
 3) Manual Reset
DIN Rail Mountable
Extremely small size
3 Years warranty

Input Data

Nominal Input Voltage (2 x Vac)	
Manual select Input from 115 to 230	115 – 230 Vac
Input Voltage range: (115) (230)	90-135 Vac 170-264 Vac 238-370 Vdc
Inrush Current (Vn and In 40°C)	≤ 16 A ≤ 5 msec.
Frequency	47 – 63 Hz
Input Current (115 – 230 Vac, In 40°C)	3.3 – 2.2 A
Internal Fuse	T 6.3 A
External Fuse (recommended)	16 A (MCB curve B)

Output Data

Output Voltage (Vn) Factory Setting ±3%	12 Vdc
Adjustment range (Vadj)	12 – 15 Vdc
Start up with Strong Load (capacitive load)	≤50.000μF
Turn-On delay after applying mains voltage	1 sec. (max)
Rated Current at 12 V 40°C (In)	20 A
Rated Current at 12 V 50°C (In)	18 A
Rated Current at 12 V 60°C (In)	16 A
Power Boost Current at 14 Vdc 60°C(In)	In 60 °C x 1.5 ≥ 3 min.
Current max. Overload ≅ 4Vdc (permanent)	Imax=In60 °C x (1.8 -2.2)
Maximum Short Circuit Current Icc	
Hiccup mode: Max 2 sec. Continuous Mode	30 A
Hold-up Time (min. Vac) Vn In 40°C	Typ. 20 msec
Residual Ripple	≤ 80 mV_{pp}
Efficiency	≥ 91 %
Over temperature Protection	Yes. Shut-down output and automatic restart.
Short-circuit protection	1° Hiccup Mode 2° Continuous mode 3° Restart After Main
Max Dissipation Power at Vn In 40°C	28 W
Over Load protection	Yes
Over Voltage Output protection	Yes (typ. 35 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 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	2,5 mm (24 – 14 AWG)
Protection class	I with PE connected
Dimension (w-h-d)	72x115x135 mm
Weight	0.8 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.

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).

