

# FLEX28012A

240 W AC/DC Power Supply Unit – DIN rail

CoolPower  
Solutions



- Universal Input Range 115 / 264 VAC, 47-63 Hz
- 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
- Tree mode of output protections:
  - 1) Hiccup mode
  - 2) Continuous Out Mode
  - 3) Manual Reset
- DIN Rail Mountable
- Extremely small size

## Electrical specifications

### Input Data

Voltage Range	90 - 135 VAC
(Manual select input from 115 V to 230 V)	180 – 264 VAC
Frequency	47 - 63 Hz
Inrush Current (Vn-In nom.load )I <sub>pt</sub>	≤ 16 A ≤ 5 ms
Input Current (115 VAC – 230 VAC)	3,3 – 2,2 A
Internal Fuse, not replaceable	T6,3 A
External Fuse recommended MCB curve B	16 A

### Output Data

Output Voltage (Vn) Factory setting ±3%	12 VDC
Adjustment range (Vadj)	10 – 14 VDC
Start up with Strong Load (capacitive load)	≤50.000µF
Efficiency	≥91%
Turn-on delay after applying mains voltage	1 s max
Rated Current at 12 V 40°C (In)	20 A (permanent )
Rated Current at 12 V 50°C (In)	18 A (permanent )
Rated Current at 12 V 60°C (In)	16 A (permanent )
Power Boost Current at 14 Vdc 60°C(In)	In 60 °Cx1.5 ≥ 3 min
Current max. Overload a.4 Vdc permanent	=In60 °Cx(1.8 -2.2)
Current Short Circuit I <sub>cc</sub>	
Max 2 sec.: Hiccup mode	30 A
Permanent : Continuous Mode	
Hold-up Time ( min. Vac) Vn In 40°C	Typ. 20 msec
Residual Ripple	≤ 80 mVpp
Over temperature Protection	Yes
(Shut-down output and automatic restart)	
Dissipation power load max at Vn In 40°C	28 W
Short-circuit Protection	1° Hiccup Mode
	2° Continuous mode
	3° Restart After Main
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	Resistive load
Min.1mA at 5 Vdc	Min permissive load

### Climatic Data

Ambient operation Temperature	-25 - +70°C
Derating	>60°derating 2.5% °C
Ambient stocking Temperature	-40 - +85°C
Humidity at 25 °C no condensation	95%, 25°C
Cooling	Free air convection

### General Data

Insulation Voltage (Input/Output)	3000 VAC
Insulation Voltage (Input/Ground)	1605 VAC
Insulation Voltage (Output/Ground)	500 VAC
Protection Class (EN/IEC 60529)	IP20
Reliability: MTBF IEC 61709	> 500 000 h
Pollution Degree Environment	2
Connection Terminal Blocks, screw type	2,5 mm (24-14 AWG)
Protection Class (PE connected)	I, with PE
Dimensions (WxHxD)	72 x 115 x 135 mm
Weight	0,65 kg

### 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.

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

### EMC Emission:

EN61000-6-4

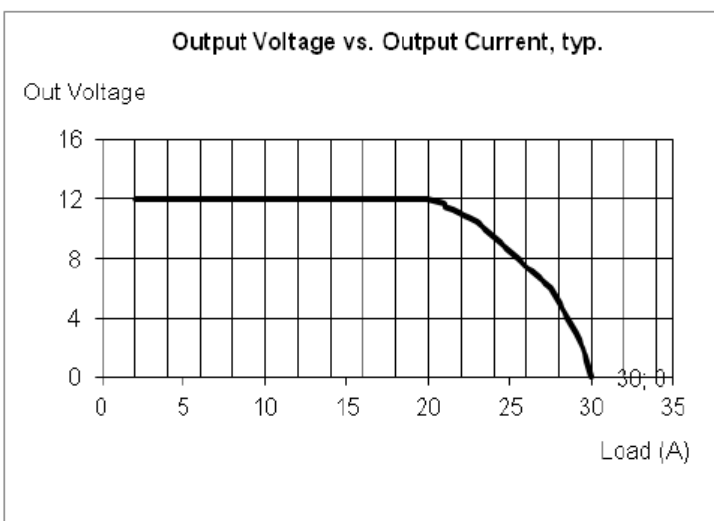
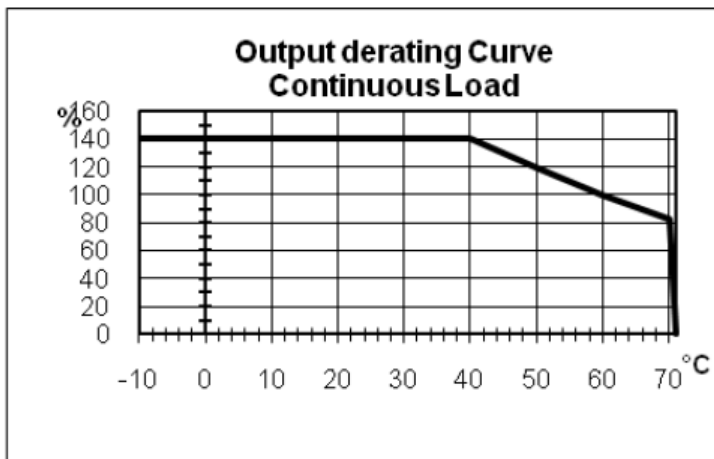
### Standards Conformity

EN 60204-1 Safety of Electrical Equipment Machines

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