

# FLEX28024B



Input: single-phase: 230 - 400 - 500 Vac

Output: 24 Vdc 60 °C

Efficiency up to 89%

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)	230 – 400 – 500 Vac
Manual select Input from 230 to 400-500	
Input Voltage range: (230)	187-264 Vac
(400-500)	330-550 Vac 462-770 Vdc
Inrush Current (Vn and In Load)	≤ 34 A ≤ 5 msec.
Frequency	47 – 63 Hz
Input Current (230 – 400 – 500 Vac)	2.49 – 1.44 – 1.15 A
Internal Fuse	T 4 A
External Fuse (recommended)	16 A (MCB curve B)

## Output Data

Output Voltage (Vn) Factory Setting ±3%	24 Vdc
Adjustment range (Vadj)	22 – 27 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)	14 A
Continuous Current at 24 V < 50°C (In)	12 A
Continuous Current at 24 V < 60°C (In)	10 A
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)
Maximum Short Circuit Current I <sub>cc</sub>	
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 <sub>pp</sub>
Efficiency	≥ 89 %
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)	40
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 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 <sup>2</sup> (24 – 14 AWG)
Protection class	I with PE connected
Dimension (w-h-d)	72x115x135 mm
Weight	0.85 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.

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

