

# FLEX9024B



Input: 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 96 to 120 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 Year warranty

## Input Data

Nominal Input Voltage (2 x Vac)	<b>230 – 400 – 500 Vac</b>
Manual select Input from 230 to 400-500	
Input Voltage range: (230)	<b>187-264 Vac</b>
(400-500)	<b>330-550 Vac 462-770 Vdc</b>
Inrush Current (Vn and In Load)	<b>≤ 28 A ≤ 5 msec.</b>
Frequency	<b>47 – 63 Hz</b>
Input Current (230 – 400 – 500 Vac)	<b>1.0 - 0.58 – 0.46 A</b>
Internal Fuse	<b>T 4 A</b>
External Fuse (recommended)	<b>10 A (MCB curve B)</b>

## Output Data

Output Voltage (Vn) Factory Setting ±3%	<b>24 Vdc</b>
Adjustment range (Vadj)	<b>22 – 27 Vdc</b>
Start up with Strong Load (capacitive load)	<b>≤50.000µF</b>
Turn-On delay after applying mains voltage	<b>1 sec. (max)</b>
Continuous Current at 24 V < 40°C (In)	<b>5 A</b>
Continuous Current at 24 V < 50°C (In)	<b>4,5 A</b>
Continuous Current at 24 V < 60°C (In)	<b>4 A</b>
Power Boost Current at 24 Vdc 60°C(In)	<b>In (60°C) x 1.5 ≥ 3 min.</b>
Current max. Overload ≅ 4Vdc (permanent)	<b>I<sub>max</sub>=In60°Cx(1.8 - 2.2)</b>
Maximum Short Circuit Current I <sub>cc</sub>	
Hiccup mode: Max 2 sec. Continuous Mode	<b>12 A</b>
Hold-up Time ( min. Vac) Vn In 40°C	<b>Typ. 20 msec</b>
Residual Ripple	<b>≤ 80 mV<sub>pp</sub></b>
Efficiency	<b>≥ 89 %</b>
Over temperature Protection	<b>Yes. Shut-down output and automatic restart.</b>
Short-circuit protection	<b>1° Manual Reset</b>
	<b>2° Hiccup Mode</b>
	<b>3° Continuous Out Mode</b>

Max Dissipation Power at Vn In 40°C	<b>12</b>
Over Load protection	<b>Yes</b>
Over Voltage Output protection	<b>Yes (typ. 35 Vdc)</b>
Parallel connection	<b>Yes</b>
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	<b>-25 up to +70 °C</b>
	<b>(&gt;60°derating 2.5% °C)</b>
Ambient Temperature Storage	<b>-40 up to +85 °C</b>
Humidity at 25 °C, no condensation	<b>95 % to 25 °C</b>

## General Data

Isolation Voltage (In / Out)	<b>3000 Vac</b>
Isolation Voltage (In / PE)	<b>1605 Vac</b>
Isolation Voltage (Out / PE)	<b>500 Vac</b>
Protection Class (EN/IEC 60529)	<b>IP 20</b>
Reliability: MTBF IEC 61709	<b>&gt; 500.000 h</b>
Pollution Degree Environment	<b>2</b>
Connection Terminal Blocks Screw Type	<b>2,5 mm<sup>2</sup> (24 – 14 AWG)</b>
Protection class	<b>I with PE connected</b>
Dimension (w-h-d)	<b>55x110x105 mm</b>
Weight	<b>0.50 kg approx.</b>

## 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, EN61000-3-2

## Standards Conformity

EN 60204-1 Safety of Electrical Equipment Machines

