

# FLEX9024A



**Input: single-phase: 115 – 230 Vac**  
**Output: 24 Vdc 60°C**  
**Efficiency up to 89%**  
**Strong overload without switch-off, up to 50%**  
**Flexible Power continuity: from 95 to 120 W**  
**“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 Vac
Manual select Input from 115 to 230	
Input Voltage range: (115)	90-135 Vac
(230)	170-264 Vac 238-370 Vdc
Inrush Current (Vn and In Load)	≤ 36 A ≤ 5 msec.
Frequency	47 – 63 Hz
Input Current (115 – 230 Vac)	1.91 – 0.96 A
Internal Fuse	T 4 A
External Fuse (recommended)	10 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)	5 A
Continuous Current at 24 V < 50°C (In)	4.5 A
Continuous Current at 24 V < 60°C (In)	4 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	12 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
Max Dissipation Power at Vn In 40°C	15 W
Over Load protection	Yes
Over Voltage Output protection	Yes (typ. 35 Vdc)
Parallel connection	Yes
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 permissible 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)	55x110x105 mm
Weight	0.56 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).

