

# RISH FLEX 6012A



**Input: single-phase: 115 - 230 Vac**  
**Output: 12 Vdc 50 °C**  
**Efficiency up to 88%**  
**Strong overload without switch-off**  
**Flexible Power continuity : from 36 to 72 W**  
**DIN Rail Mountable**  
**Extremely small size**  
**3 Year warranty**

## Features

### Input Data

Nominal Input Voltage (2 x Vac)	<b>115 – 230 Vac</b>
Input Voltage range (Vac)	<b>90 – 264</b>
Inrush Current (Vn and In Load) $I^2t$	<b><math>\leq 7 \text{ A} \leq 5 \text{ msec.}</math></b>
Frequency	<b>47 – 63 Hz <math>\pm 6\%</math></b>
Input Current (115 – 230 Vac)	<b>1 – 0.7 A</b>
Internal Fuse	<b>T 4 A</b>
External Fuse (recommended)	<b>6 A (MCB curve B)</b>

### Output Data

Output Voltage (Vn) Factory Setting $\pm 3\%$	<b>12 Vdc</b>
Adjustment range (Vadj)	<b>10 – 15.5 Vdc</b>
Start up with Strong Load (capacitive load)	<b><math>\leq 50.000\mu\text{F}</math></b>
Turn-On delay after applying mains voltage	<b>1.5 sec. (max)</b>
Continuous Current at 12 V up to 40°C (In)	<b>4 A (115) 6 A (230)</b>
Continuous Current at 12 V up to 50°C (In)	<b>3 A (115) 5 A (230)</b>
Power Boost Current at 12 Vdc 50°C(In)	<b>7 A up to 3 min.</b>
Power Boost Current at 15 Vdc 50°C(In)	<b>6 A up to 3 min.</b>
Current max. Overload $\cong 4\text{Vdc}$ (permanent)	<b><math>I_{\text{max}}=I_{\text{n}}50^{\circ}\text{C} \times (1.8 - 2.2)</math></b>
Max current Short Circuit (Icc)	<b>10 A</b>
Hold-up Time ( min. Vac) 12Vdc 5A	<b>Typ. 20 msec</b>
Residual Ripple	<b><math>\leq 80 \text{ mV}_{\text{pp}}</math></b>
Efficiency	<b><math>\geq 88 \%</math></b>
Over temperature Protection	<b>Yes. Shut-down output and automatic restart.</b>
Short-circuit protection	<b>Yes, Continuous Mode</b>
Dissipation power load max (W)	<b>6</b>
Over Load protection	<b>Yes, Continuous Mode</b>
Over Voltage Output protection	<b>Yes (typ. 30 Vdc)</b>
Parallel connection	<b>Yes</b>

### Climatic Data

Ambient Temperature operation	<b>-25 up to +70 °C</b> <b>(&gt;50°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 (24 – 14 AWG)</b>
Protection class	<b>I with PE connected</b>
Dimension (w-h-d)	<b>50x120x50 mm</b>
Weight	<b>0.3 kg approx.</b>

## Norms and certifications

The CE mark in According to EMC 2004/108/EC and Low voltage directive 2006/95/EC.

### 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 6 Edition, 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

