

# FLEX6005A



**Input: single-phase: 115 – 230 Vac**  
**Output: 5 Vdc 50°C**  
**Efficiency up to 82%**  
**Strong overload without switch-off**  
**Flexible Power continuity : up to 35 W**  
**DIN Rail Mountable**  
**Extremely small size**  
**3 Year warranty**

## Features

### Input Data

|                                        |                                         |
|----------------------------------------|-----------------------------------------|
| Nominal Input Voltage (2 x Vac)        | 115 – 230 Vac                           |
| Input Voltage range (Vac)              | 90 – 264                                |
| Inrush Current (Vn and In Load) $I^2t$ | $\leq 7 \text{ A} \leq 5 \text{ msec.}$ |
| Frequency                              | 47 – 63 Hz $\pm 6\%$                    |
| Input Current (115 – 230 Vac)          | 0.5 – 0.25 A                            |
| Internal Fuse                          | T 4 A                                   |
| External Fuse (recommended)            | 6 A (MCB curve B)                       |

### Output Data

|                                                       |                                                          |
|-------------------------------------------------------|----------------------------------------------------------|
| Output Voltage (Vn) Factory Setting $\pm 3\%$         | 5 Vdc                                                    |
| Adjustment range (Vadj)                               | 4.75 – 5.25 Vdc                                          |
| Start up with Strong Load (capacitive load)           | $\leq 50.000 \mu\text{F}$                                |
| Turn-On delay after applying mains voltage            | 1 sec. (max)                                             |
| Continuous Current at 5 V up to 40°C (In)             | 5 A                                                      |
| Continuous Current at 5 V up to 50°C (In)             | 5 A                                                      |
| Continuous Current at 5 V up to 60°C (In)             | 5 A                                                      |
| Power Boost Current at 5 Vdc up to 50°C(In)           | 7 A $\geq 3 \text{ min.}$                                |
| Current max. Overload $\cong 2\text{Vdc}$ (permanent) | $I_{\text{max}} = I_n 50^\circ\text{C} \times (1.3-1.4)$ |
| Max current Short Circuit (Icc)                       | 10 A                                                     |
| Hold-up Time ( min. Vac) 5Vdc 5A                      | Typ. 20 msec                                             |
| Residual Ripple                                       | $\leq 80 \text{ mV}_{\text{pp}}$                         |
| Efficiency                                            | $\geq 82 \%$                                             |
| Over temperature Protection                           | Yes. Shut-down output and automatic restart.             |
| Short-circuit protection                              | Yes, Continuous Mode                                     |
| Dissipation power load max (W)                        | 6                                                        |
| Over Load protection                                  | Yes, Continuous Mode                                     |
| Over Voltage Output protection                        | Yes (typ. 15 Vdc)                                        |
| Parallel connection                                   | Yes                                                      |

### Climatic Data

|                                    |                                                     |
|------------------------------------|-----------------------------------------------------|
| Ambient Temperature operation      | -25 up to +70 °C<br>( $>60^\circ$ 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           | $> 500.000 \text{ h}$ |
| Pollution Degree Environment          | 2                     |
| Connection Terminal Blocks Screw Type | 2,5 mm (24 – 14 AWG)  |
| Protection class                      | I with PE connected   |
| Dimension (w-h-d)                     | 50x120x50 mm          |
| Weight                                | 0.3 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.

### 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).

