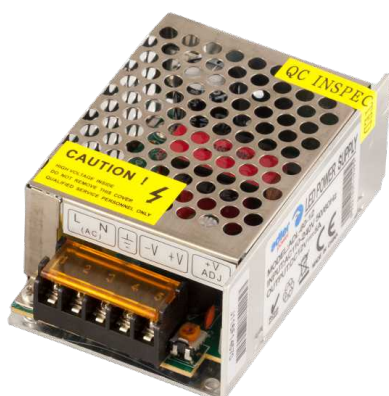


# ADL-60 series

60W Enclosed Type Switching Power Supply



## ■ Features:

- Constant voltage design
- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- Compact size
- Low price



## ELECTRICAL SPECIFICATION

| MODEL                                   | ADL-60-12                         |
|-----------------------------------------|-----------------------------------|
| OUTPUT                                  |                                   |
| Rated Voltage                           | 12V                               |
| Rated Current                           | 5A                                |
| Rated Power                             | 60W                               |
| Voltage Adjustment – potentiometer VIP1 | 11.5 ÷ 13V                        |
| Line Regulation                         | ± 1%                              |
| Load Regulation                         | ± 2%                              |
| Tolerance [3]                           | ± 5%                              |
| Ripple & Noise (max.) [2]               | 600mV <sub>p-p</sub>              |
| Setup, Rise Time [4]                    | 500ms, 30ms / 230VAC at full load |
| Hold up Time                            | 30ms / 230VAC at full load        |
| INPUT                                   |                                   |
| Voltage Range                           | 110 ÷ 264VAC                      |
| Frequency Range                         | 47 ÷ 63Hz                         |
| Efficiency (typ.)                       | 82%                               |
| AC Current (typ.)                       | 0.8A / 115VAC, 0.42A / 230VAC     |
| PROTECTIONS                             |                                   |
| Overload                                | Range: 105 ÷ 150% rated current   |
|                                         | Type: hiccup mode, auto-recovery. |
| Short Circuit                           | Type: hiccup mode, auto-recovery. |
| Over voltage                            | 13.5 ÷ 18.5V                      |
|                                         | Type: hiccup mode, auto-recovery. |

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## WORKING ENVIRONMENT

|                                  |                                          |
|----------------------------------|------------------------------------------|
| Working Temperature              | -20°C ÷ 50°C                             |
| Working Humidity                 | 20 ÷ 90% RH non-condensing               |
| Storage Temperature and Humidity | -40°C ÷ 80°C, 10 ÷ 95% RH non-condensing |

## SAFETY AND EMC REGULATIONS

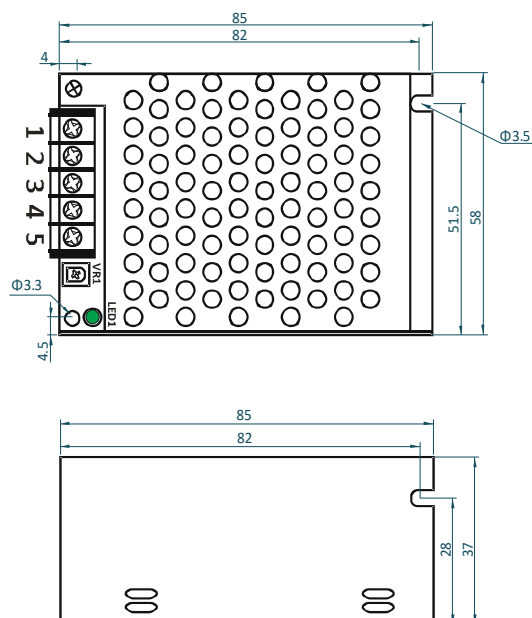
|                   |                                                      |
|-------------------|------------------------------------------------------|
| Safety Standards  | Compliance to EN61347-1, EN61347-2-13, IP67          |
| Withstand Voltage | I-P/O-P: 1.5kVAC; I-P/GND: 1.5kVAC; O-P/GND: 0.5kVAC |
| EMC Emission      | Compliance to EN55015                                |
| EMC Immunity      | Compliance to EN61547                                |
| Harmonic Current  | Compliance to EN61000-3-3; EN61000-3-2               |

## OTHERS

|                    |                                                                        |
|--------------------|------------------------------------------------------------------------|
| Lifetime           | 12 000Hrs for input 230VAC, 20°C ambient temperature, full load        |
| Dimensions         | 85 x 58 x 37mm (L x W x H)                                             |
| Weight and Packing | 0.14kg; 200pcs./ctn; ctn weight and dimensions: 15kg; 46 x 39.3 x 27cm |

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μF i 47μF parallel capacitor.
3. Tolerance includes set up tolerance, line regulation and load regulation.
4. Setup and rise time is measured from 0 to 90% rated output voltage.
5. Power supply is considered as component not indented to apply by end-user. Power supply meets safety and EMC standards however the final equipment with power supply must be re-quality to comply with EMC Directives.

## MECHANICAL SPECIFICATION



## TERMINAL PIN NO. ASSIGNMENT

| PIN No. | Assignment        | PIN No. | Assignment                |
|---------|-------------------|---------|---------------------------|
| 1       | Input: AC/L       | 4       | Output: -V                |
| 2       | Input: AC/N       | 5       | Output: +V                |
| 3       | Frame Ground: GND | VR1     | Output voltage adjustment |
|         |                   | LED1    | Power On indicator        |

## DERATING CURVE

