

# ADLS-240 series

240W Enclosed Type Switching Power Supply



## ■ Features:

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



## ELECTRICAL SPECIFICATION

| MODEL                     | ADLS-240-12                                                          |
|---------------------------|----------------------------------------------------------------------|
| OUTPUT                    |                                                                      |
| Rated Voltage             | 12V                                                                  |
| Rated Current             | 20A                                                                  |
| Rated Power               | 240W                                                                 |
| Line Regulation           | ± 1%                                                                 |
| Load Regulation           | ± 2%                                                                 |
| Tolerance [3]             | ± 5%                                                                 |
| Ripple & Noise (max.) [2] | 1V <sub>p-p</sub>                                                    |
| Setup, Rise Time [4]      | 500ms, 30ms / 230VAC at full load                                    |
| Hold up Time              | 20ms / 230VAC at full load                                           |
| INPUT                     |                                                                      |
| Voltage Range             | 180 ÷ 264VAC                                                         |
| Frequency Range           | 47 ÷ 63Hz                                                            |
| Efficiency (typ.)         | 85%                                                                  |
| AC Current (typ.)         | 2.5A / 230VAC                                                        |
| PROTECTIONS               |                                                                      |
| Overload                  | Range: 110 ÷ 170% rated current                                      |
|                           | Type: fold forward mode(voltage rises, current drops), auto-recovery |
| Over voltage              | 13.5 ÷ 20.5V                                                         |
|                           | Type: hiccup mode, auto-recovery.                                    |
| Over Temperature          | Range: 110°C ± 10°C (detect by main IC)                              |
|                           | Type: shut-off, auto-recovery.                                       |

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## WORKING ENVIRONMENT

|                                  |                                          |
|----------------------------------|------------------------------------------|
| Working Temperature              | -20°C ÷ 50°C (Refer to Derating Curve)   |
| Working Humidity                 | 20 ÷ 90% RH non-condensing               |
| Storage Temperature and Humidity | -40°C ÷ 80°C, 10 ÷ 95% RH non-condensing |

## SAFETY AND EMC REGULATIONS

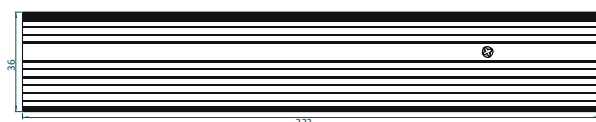
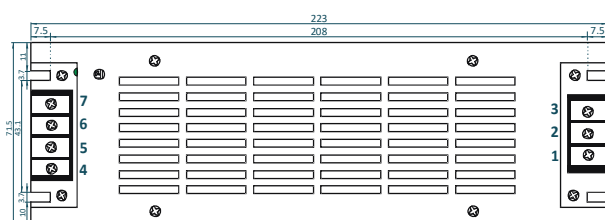
|                   |                                                      |
|-------------------|------------------------------------------------------|
| Safety Standards  | Compliance to EN61347-1, EN61347-2-13                |
| Withstand Voltage | I-P/O-P: 1.5kVAC; I-P/GND: 1.5kVAC; O-P/GND: 0.5kVAC |
| 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         | 223 x 71.5 x 36mm (L x W x H)                                           |
| Weight and Packing | 0.54kg; 40pcs./ctn; ctn weight and dimensions: 24.5kg; 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.

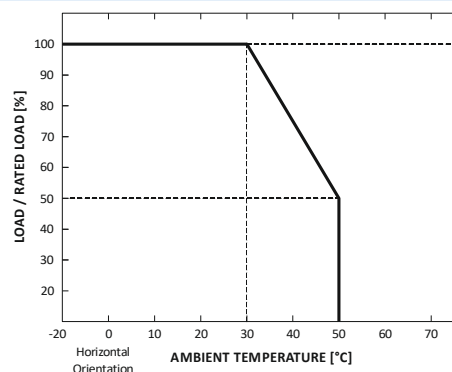
## MECHANICAL SPECIFICATION



## TERMINAL PIN NO. ASSIGNMENT

| PIN No. | Assignment        | PIN No. | Assignment         |
|---------|-------------------|---------|--------------------|
| 1       | Frame Ground: GND | 4,6     | Output: -V         |
| 2       | Input: AC/L       | 7,8     | Output: +V         |
| 3       | Input: AC/N       | LED1    | Power On indicator |

## DERATING CURVE



## EU DECLARATION OF CONFORMITY

For the following equipment:

|            |             |
|------------|-------------|
| Part No.:  | ADLS-240-12 |
| Batch No.: | J117Exxxxx  |

Is herewith confirmed to comply with the requirements set out in the Council Directive, the following standards were applied:

**ROHS Directive 2011/65/EU**

**Low Voltage Directive 2014/35/UE:**

| Standard           | Description                                                                                                 |
|--------------------|-------------------------------------------------------------------------------------------------------------|
| EN 61347-1:2015    | Lamp controlgear - General and safety requirements.                                                         |
| EN 61347-2-13:2014 | Lamp controlgear - Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules |

**Electromagnetic Compatibility Directive 2014/30/UE:**

| Standard               | Description                            |
|------------------------|----------------------------------------|
| EN55015:2013 + A1:2015 | Conducted emission / Radiated emission |
| EN61000-3-2:2014       | Harmonic current.                      |
| EN61000-3-3:2013       | Voltage flicker.                       |
| EN61547:2009           | Electro-magnetic susceptibility.       |

*Power supply is considered as component of final equipment 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 and LVD Directives.*

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Company stamp

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Działu Technicznego  
Łukasz Jaromin

Person signature and stamp