

# ALCV036 LED DRIVER SERIES

## IP20 CONSTANT VOLTAGE LED DRIVER

### ALCV036-xxx

#### FEATURES

- Universal AC Input Range 90 ~ 264VAC
- Class II Power Design without Earth Pin
- Fully Isolated Plastic Case
- Protections: OCP/SCP/OTP/OVP
- No Load Consumption <0.5W at 230VAC
- Withstand 300VAC Surge Input for 5 Seconds

#### APPLICATION

- Can be used with LED Strips (aLED KIDEFLEX)



SELV CE



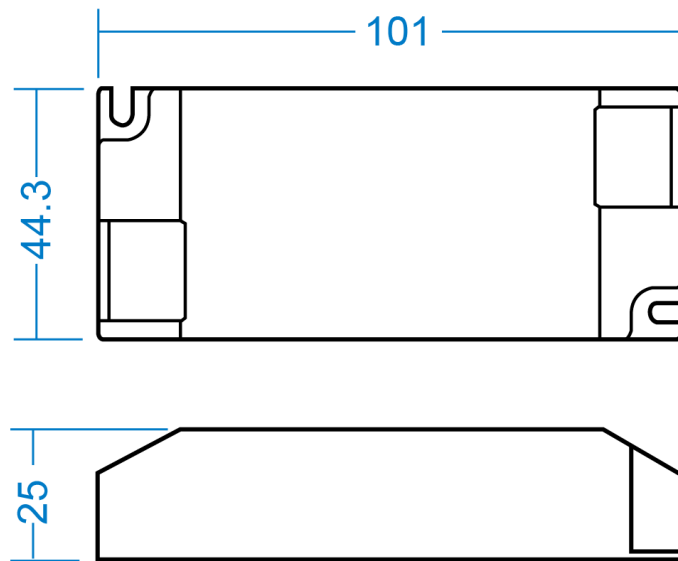
## Technical Data

| Product Code |                                 | ALCV036-012  | ALCV036-024             |
|--------------|---------------------------------|--|-------------------------|
| Output       | DC Voltage Range                | 12V  | 24V                     |
|              | Rated Current                   | 0-3A   | 0-1.5A                  |
|              | Rated Max. Power                | 36W  | 36W                     |
|              | Voltage Tolerance               | ± 5%   | ± 5%                    |
|              | Ripple & Noise (Max.)<br>note.2 | 180 mVp-p  | 240 mVp-p               |
|              | Efficiency (Min)                | 83% at 230VAC full load  | 85% at 230VAC full load |
|              | Set up Time (Max)               | < 1S / 115VAC at full load / < 0.5S / 230VAC at full load                  |                         |
| Input        | Rated Voltage                   | 100 - 240VAC   |                         |
|              | Voltage Range                   | 90 - 264VAC  |                         |
|              | Frequency Range                 | 47 Hz ~ 63 Hz  |                         |
|              | AC Current (Max.)               | 1A at 115VAC / 0.5A at 230VAC  |                         |
|              | Inrush Current (Max.)           | < 30A at 115VAC / < 60A at 230VAC  |                         |
|              | Leakage Current                 | < 0.25mA / 240VAC  |                         |
|              | No Load Consumption             | <0.5W at 230VAC  |                         |
| Protections  | Over Current                    | 110% - 150% Constant current limiting, auto-recovery                       |                         |
|              | Short Circuit                   | Hiccup mode, recovers automatically after fault condition is removed       |                         |
|              | Over Temperature                | Shut down o/p voltage, recovers automatically after temperature goes down. |                         |
|              | Over Voltage                    | 13-18V   | 29-33V                  |
| Environment  | Operation Temp.                 | -20°C ~ 40°C (Refer to output load derating curve)                         |                         |
|              | Operation Humidity              | 20% ~ 90% RH non-condensing.   |                         |
|              | Storage Temp & Humidity         | -20 ~ +80°C , 10% ~ 90% RH   |                         |

## NOTES

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C ambient temperature.
2. Ripple & Noise are measured at 20MHZ bandwidth oscilloscope and with 0.1uF & 47uF parallel capacitor.
3. The power supply is considered a component which will be installed a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.

## Dimensions

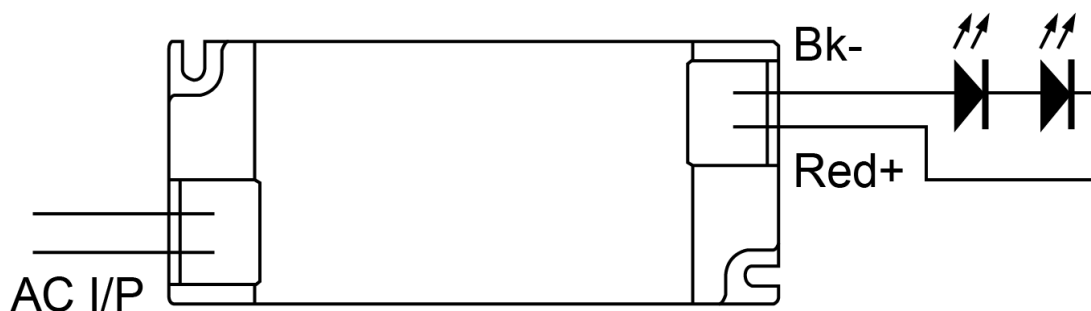


|                              |   |
|------------------------------|---|
| Length                       | 101mm   |
| Width                        | 44,3mm  |
| Height                       | 25mm  |
| Weight                       | 140g  |
| <b>Connection</b>            |   |
| Input                        | 2P screw terminal block   |
| Output                       | 2P screw terminal block   |
| <b>Safety</b>                |   |
| Safety Standards             | EN61347-1, EN61347-2-13;  |
| Withstand Voltage            | I/P - O/P: 3.75K VAC  |
| Isolation Resistance         | I/P - O/P: 100M ohms / 500VDC at 25°C                                   |
| EMI Conduction & radiation   | meet Compliance to EN55015; FCC PART15 CLASSB                           |
| EMS immunity                 | meet Compliance to EN61000-4-2,3,4,5,6,11; EN61547, EN61000-3-2 CLASS C |
| <b>Warranty and Lifetime</b> |   |
| Warranty                     | 5 Years   |

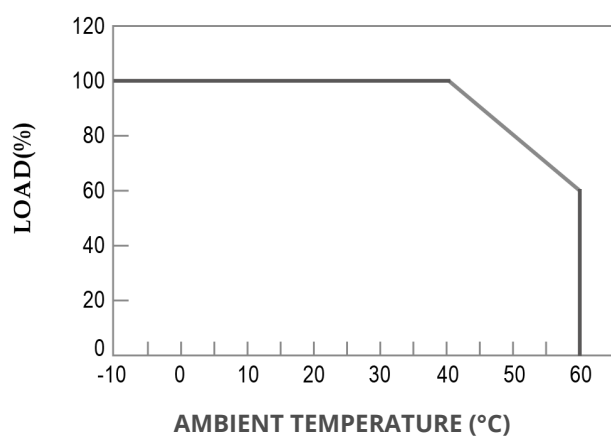
## Compatible products

aLED KIDEFLEX LED Strip

## Wiring Diagram



## Derating Curve



## Power Static Characteristics

