

0-10V LED Driver



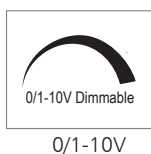
INTRODUCTION

The 0/1-10V series led driver provides the best compromise between an attractive price and qualified performance.

With a focus on application-related functions, the LED Driver range offers good quality and performance that ensures reliable operation of LED module.

Features

- Independent fixed output LED Driver
- Specific, optimized output current and voltage
- Output power dim, 4-60W
- Whole range are featured with flicker free performance
- Idea circuit design overcome luminaire flickering with voltage fluctuation.
- For luminaires of protection class I and protection class II
- Temperature protection as per EN / IEC61347
- Small, super compact dimensions
- Nominal life-time up to 50,000h



SELV



RoHS



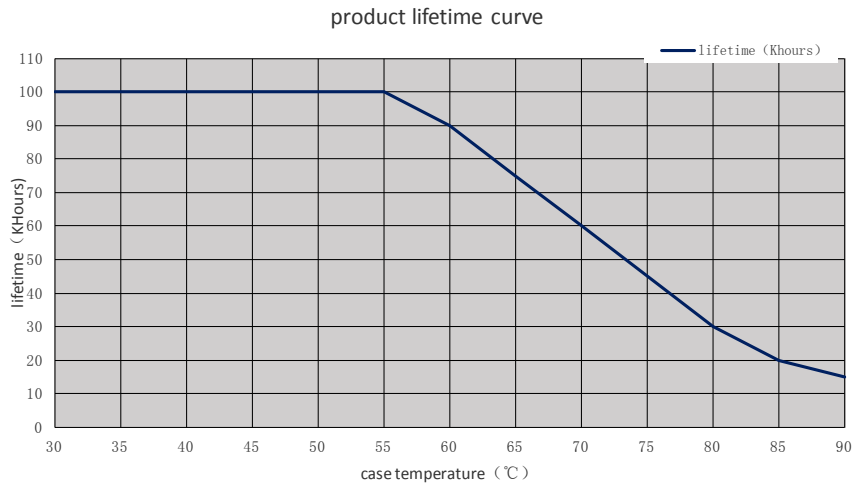
TECHNICAL DATASHEET

Driver Datasheet (0/1-10V-dimmable)

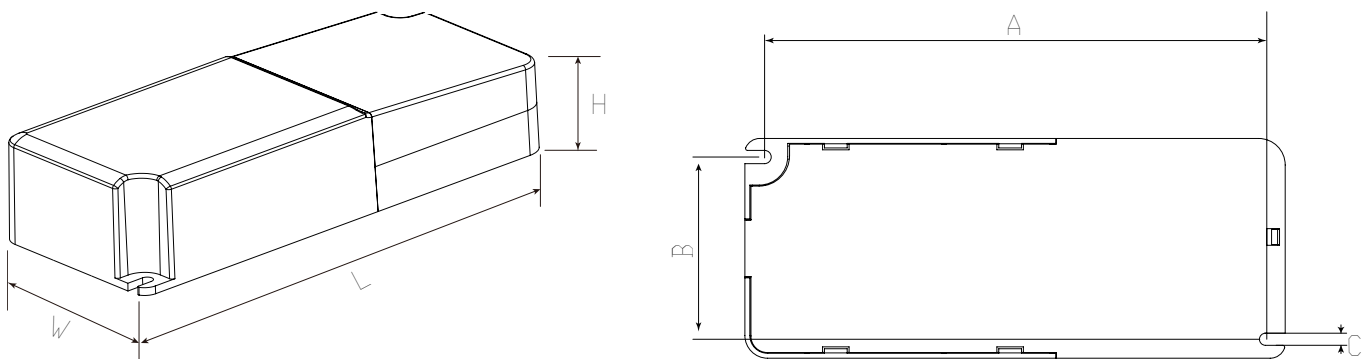
| Code | | | | PLD6060V | PLD60120V |
|-------------|--------------------------------|--|--|-------------------------------------|------------------|
| Input | Input Power | | | 24-45W | 45-60W |
| | Input Voltage | 180-264V | | | |
| | Rated Input Voltage(V) | 200-240V | | | |
| | Frequency | 50/60HZ | | | |
| | Input Current | | | ≤0.28A | ≤0.37A |
| | Rated Input Current | | | ≤0.25A | ≤0.34A |
| | Power Factor (typ) | 0.9 | | | |
| | Total Harmonic Distortion(THD) | <20% @230V | | | |
| | Efficiency (typ) | | | ≥87% | ≥89% |
| | Inrush Current (Typ.) | | | 16A/214uS | 24.2A/362uS |
| | Max Circuit Breaker | Please refer to" Circuit breaker Specification" | | | |
| | Leakage Current | <0.5mA/240V | | | |
| | No Load Wattage | <0.5w @230v | | | |
| Output | Output Voltage Range | 28-40V | | | |
| | Rated Output Current | | | 600-1050mA | 1050-1500mA |
| | Line Regulation | ±5% | | | |
| | Open Circuit Voltage (max) | 50V | | | |
| | Setup time(note1) | <0.5S @230V | | | |
| | Flickering Index(IEEESd 1789) | 1%(NO RISK) | | | |
| Protection | Short Circuit Protection | Constant current limiting, recovers automatically after fault condition is removed | | | |
| | Over Voltage Protection | Shut down o/p voltage | | | |
| | Over Temperature Protection | Shut down o/p voltage, recovers automatically after temperature goes down | | | |
| Environment | Ambient temperature range ta | -20...+50 °C | | | |
| | Maximum case temperature tc | 85°C (Measured on tc point indicated of the product label, tc not exceeded) | | | |
| | Operating temperature | -20...+45 °C | | | |
| | Storage temperature/humidity | -25...+85 °C; 5-95% RH | | | |
| | Relative humidity | 5...85% | | | |
| | Environmental rating | Indoor | | | |
| | IP rating | IP20 | | | |
| | Life time | >50,000H @25°C | | | |
| Safety&EMC | Safety standards | IEC/EN61347-1, IEC/EN61347-2-13, IEC/EN62384 independent,GB19510.14,GB19510.1 approved | | | |
| | Withstand voltage | I/P-O/P:3.75KVac,<5mA 60S;I/P-FG:1.6KVac,<5mA 60S;O/P-FG:0.5KVac,<5mA 60S | | | |
| | Isolation Resistance | I/P-O/P: 500VDC, ≥100M Ω | | | |
| | surge | IEC/EN61000-4-5(L-N:0.5KV,LN-PE 1KV) | | IEC/EN61000-4-5(L-N:1KV,LN-PE 2KV) | |
| | EMC Emission | IEC/EN55015, IEC/EN61000-3-2 | | | |
| | EMC Immunity | IEC/EN61000-4-2,3,4,5,6,8,11; IEC/EN61547 | | | |
| Other | Dimension(mm) | | | 144*80*32(L*W*H) | 156*80*32(L*W*H) |
| | Weight | | | 0.195KG | 0.245KG |

Product Referenced Lifetime Curve

The curve below illustrates the driver's lifetime date when the LED driver's Max. case temperature reaches 40 °C, 50°C, 60°C, 70°C, 80°C and 90°C



DIMENSION



| Code | Dimension(mm) | | | | | | Product Weight (Kg) | | Package weight (Kg) | | Carton Size(cm) | Qty/CTN |
|-----------|---------------|------|------|-----|------|-----|---------------------|--------|---------------------|---------|-----------------|---------|
| | L | W | H | A | B | C | N.W/PC | G.W/PC | N.W/CTN | G.W/CTN | | |
| PLD6060V | 144.0 | 80.0 | 32.0 | 135 | 70.3 | 3.5 | 0.195 | 0.21 | 18.63 | 19.25 | 46.5*34.5*24.5 | 60pcs |
| PLD60120V | 156.0 | 80.0 | 32.0 | 148 | 70.3 | 3.5 | 0.245 | 0.26 | 15.84 | 16.46 | 46.5*34.5*24.5 | 60pcs |

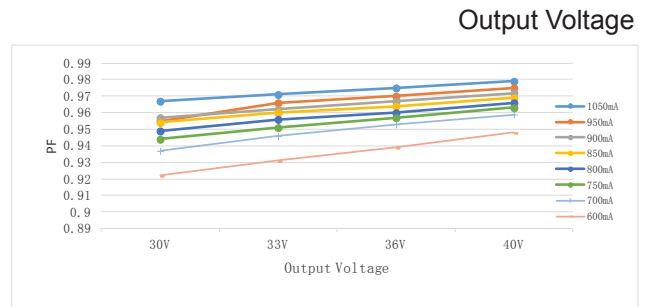
CIRCUIT BREAKER SPECIFICATION

| Circuit Breaker Specification | | | | | | | | | |
|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|--|
| Code | B10 | B13 | B16 | B20 | C10 | C13 | C16 | C20 | |
| | 10 | 13 | 16 | 20 | 10 | 13 | 16 | 20 | |
| PLD6060V | 18 | 24 | 30 | 37 | 23 | 30 | 38 | 47 | |
| PLD60120V | 8 | 10 | 12 | 16 | 13 | 17 | 21 | 26 | |

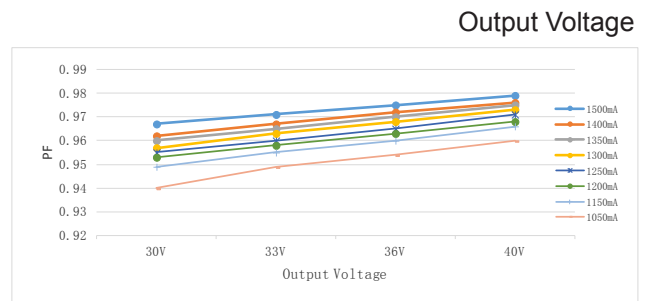
DIP SWITCH TABLE

POWER FACTOR CHARACTERISTIC

| Code | Vout | Po Max | Io | 1 | 2 | 3 |
|----------|--------|--------|--------|----|----|----|
| PLD6060V | 30-40V | 42W | 1050mA | ON | ON | ON |
| | 30-40V | 38W | 950mA | - | ON | ON |
| | 30-40V | 36W | 900mA | ON | - | ON |
| | 30-40V | 34W | 850mA | ON | ON | - |
| | 30-40V | 32W | 800mA | - | - | ON |
| | 30-40V | 30W | 750mA | - | ON | - |
| | 30-40V | 28W | 700mA | ON | - | - |
| | 30-40V | 24W | 600mA | - | - | - |



| Code | Vout | Po Max | Io | 1 | 2 | 3 |
|-----------|--------|--------|--------|----|----|----|
| PLD60120V | 30-40V | 60W | 1500mA | ON | ON | ON |
| | 30-40V | 56W | 1400mA | - | ON | ON |
| | 30-40V | 54W | 1350mA | ON | - | ON |
| | 30-40V | 52W | 1300mA | ON | ON | - |
| | 30-40V | 50W | 1250mA | - | - | ON |
| | 30-40V | 48W | 1200mA | - | ON | - |
| | 30-40V | 46W | 1150mA | ON | - | - |
| | 30-40V | 42W | 1050mA | - | - | - |



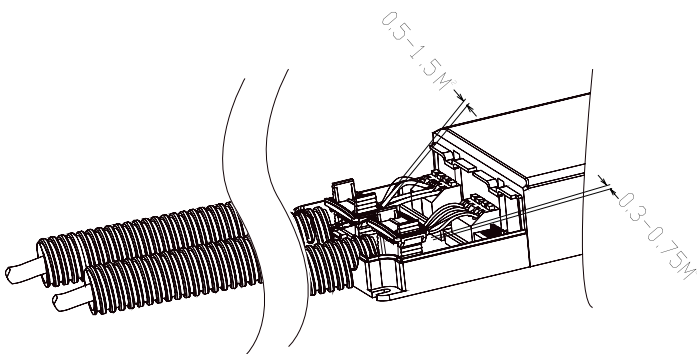
CIRCUIT DIAGRAM

No-load operation

In case of open circuit, protection will be activated, there will be 50V output voltage.

Glow wire test

According to EN 61347-1 with increased temperature of 960°C passed.



0/1-10V Dimming Connection

