

## Product Features

- 1, Constant current output
- 2, Isolated
- 3, Internal Usage

## 1) Compliances and Approvals

|                                          |          |
|------------------------------------------|----------|
| Approvals                                | CE EAC   |
| Built-in/independent                     | Built in |
| Ingress protection                       | IP20     |
| Suitable for fixture of protection Class | Class II |
| Output Safety Level                      | Isolated |
| Environmental                            | Indoor   |
| Features                                 | Fixed    |

## 2) Electric Input Characteristics

|                           | Symbol | Remarks             | Min. | Typical      | Max. | Unit  |
|---------------------------|--------|---------------------|------|--------------|------|-------|
| <b>Input Voltage</b>      |        |                     |      |              |      |       |
| Rated mains voltage       | Vin    | Nominal range       | 220  | -            | 240  | Vac   |
| Mains voltage range       | Vin.op | operational         | 195  | -            | 264  | Vac   |
| Mains frequency nominal   | fn     | Nominal range       | 50   |              | 60   | Hz    |
| Rated mains voltage       | Vin    | Nominal range       |      | NA           |      | Vdc   |
| <b>Input Current</b>      |        |                     |      |              |      |       |
| Input current             | Iin    | @230Vac, full load  |      | 0.11         |      | A     |
| Input inrush current      |        | @230Vac, 50% width  |      | 13.8A, 115us |      | A, us |
| Power Factor              | PF     | @230Vac, full load  | 0.5  |              |      |       |
| Total Harmonic distortion | THD    | @230Vac, full load  | 20   |              |      | %     |
| System Efficiency         | η      | @230Vac, full load  |      | 83           |      | %     |
| <b>Input Power</b>        |        |                     |      |              |      |       |
| Input Power               | Pin    | @230Vac, full load  |      |              | 15   | W     |
| Input Power@ open load    |        | rated input voltage |      |              | 0.5  | W     |
| Input Power@ standby      |        | rated input voltage |      | NA           |      |       |
| <b>Dimming</b>            |        |                     |      |              |      |       |
| Dimming type              |        |                     |      | NA           |      |       |

## 3) Electric Output Characteristics

|                          | Symbol | Remarks                         | Min. | Typical | Max. | Unit |
|--------------------------|--------|---------------------------------|------|---------|------|------|
| <b>Output Voltage</b>    |        |                                 |      |         |      |      |
| Output voltage range     | Vo     | measured at end of wire         | 30   |         | 40   | Vdc  |
| Output voltage @no load  | Vo.max | open load                       |      | 60      |      | Vdc  |
| <b>Output Current</b>    |        |                                 |      |         |      |      |
| Output Current           | Io     |                                 |      | 300     |      | mA   |
| Output Current tolerance |        |                                 | -5   |         | 5    | %    |
| Current Ripple           |        | @230Vac (Imax-Imin)/(Imax+Imin) |      | 1       |      | %    |
| <b>Output Power</b>      |        |                                 |      |         |      |      |
| Isolation                | Po     | output performance power        |      |         | 12   | W    |
|                          | In-Out | 3000Vac. for 1min               |      |         | 10   | mA   |

| 4) Robustness                | Symbol       | Remarks                                                                | Min. | Typical | Max. | Unit |
|------------------------------|--------------|------------------------------------------------------------------------|------|---------|------|------|
| <b>General</b>               |              |                                                                        |      |         |      |      |
| Electric strength            | Input-Output | 50Hz/60Hz and be applied for 1 min                                     |      | 3000    |      | Vrms |
|                              | Input-GND    |                                                                        |      | 1480    |      | Vrms |
| Insulation Resistance Test   |              | 500Vd.c. for 1min, For SELV part is 100 Vd.c.                          | 2    |         |      | MΩ   |
| <b>Reliability</b>           |              |                                                                        |      |         |      |      |
| Rated Life@Tc.max            |              | 10% failure                                                            |      |         | 50K  | Hrs  |
| Rated Life@Tc.life           |              | 10% failure                                                            |      |         | 100K | Hrs  |
| Surge                        | L-N          |                                                                        |      | 0.5     |      | kV   |
| Surge                        | L/N-PE       |                                                                        |      | NA      |      | kV   |
| <b>Environment Operation</b> |              |                                                                        |      |         |      |      |
| Ambient temperature          | Ta           |                                                                        | -20  |         | 50   | °C   |
| Maximum Tcase                | Tc.max       |                                                                        |      |         | 75   | °C   |
| Tc life                      | Tc.life      |                                                                        |      |         | 65   | °C   |
| Operation Humidity           | H.op         |                                                                        | 10   |         | 90   | %    |
| <b>Environment Storage</b>   |              |                                                                        |      |         |      |      |
| Storage temperature          | T.st         |                                                                        | -25  |         | 75   | °C   |
| Storage Humidity             | Hst          |                                                                        | 10   |         | 90   | %    |
| <b>Abnormal Condition</b>    |              |                                                                        |      |         |      |      |
| Input Over Voltage           |              | Protected, no damage to driver <sup>①</sup>                            |      | Without |      | Vac  |
| Output Short Circuit         |              | Protected, no damage to driver <sup>②</sup>                            |      | With    |      |      |
| Output Open load             |              | Output voltage limited to Vo.max <sup>③</sup>                          |      | 60      |      | Vdc  |
| Too High Ambient Temperature |              | Protected by built-in thermal protection in controller IC <sup>④</sup> |      | With    |      |      |
| Input Over Power             |              | Input power should be limited and no damage to driver <sup>⑤</sup>     |      |         | 15   | W    |

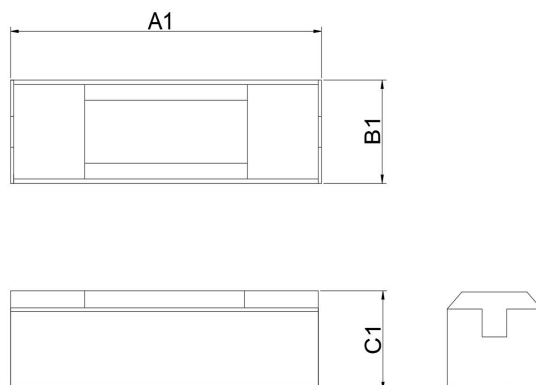
- ① If the LED driver connects to Input Voltage 380Vac, then the protection Turn On and the Led driver is switched off until its connect to Input voltage 220-240Vac.  
In this protection mode, the led driver does not blink and can be not damage more than 48 hours
- ② Auto Recovery
- ③ Auto Recovery
- ④ The output current decreases
- ⑤ There is risk to damage the LED driver or decreases the life time.

#### 5) Warranty

- Warrenty 5 years
- Except for the following circumstance:
  - 1) Improper Installation or operation
  - 2) Misuse
  - 3) Abuse
  - 4) Unauthorized or improper repair alteration
  - 5) Accident or negligence in use, storage, transportation.
  - 6) Any natural destroy
  - 7) Exceed the specifiacion as per the product datasheet

## 6) Mechanical properties

| Symbol           | Remarks              | Unit |
|------------------|----------------------|------|
| Dimensions       | L W H                |      |
|                  | 80(A1) 27(B1) 21(C1) | mm   |
| Housing Material | Plastic              |      |

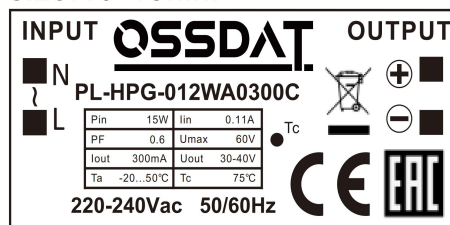


## 7) Physical properties

| Symbol                | Remarks  | Unit |
|-----------------------|----------|------|
| Weight                | 28       | gram |
| Qty to Carton         | 200      | pcs  |
| Carton Size:          | 35*30*15 | cm   |
| G.W:                  | 6        | kgs  |
| Potting Raw materials | without  |      |

Printing can be changed by customer's email confirmation

size:40\*18mm



## Connection

| Signal | Cable Description       | Remark                  |
|--------|-------------------------|-------------------------|
| Input  |                         |                         |
| N      | 0.5-0.75mm <sup>2</sup> | grey, push-in terminal  |
| L      | 0.5-0.75mm <sup>2</sup> | grey, push-in terminal  |
| Output |                         |                         |
| +      | 0.5-0.75mm <sup>2</sup> | red, push-in terminal   |
| -      | 0.5-0.75mm <sup>2</sup> | black, push-in terminal |

## Connection Marking

Yes

**8) Directives / Test Standards**
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**Safety**

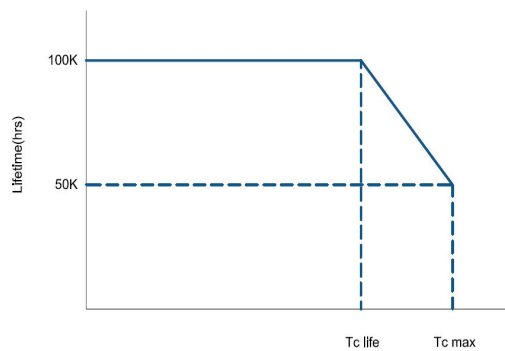
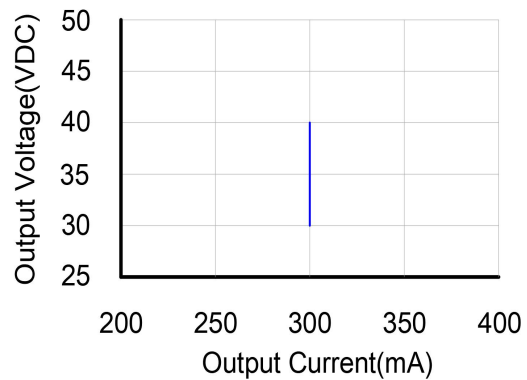
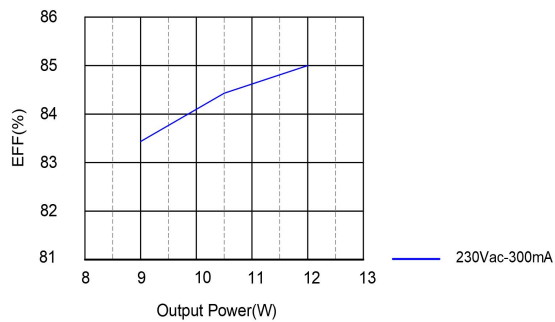
IEC61347-1、IEC61347-2-13

**EMC**

 EN55015、CISPR15、EN61000-3-2、EN61547、EN61000-4-2、EN61000-4-3、EN61000-4-4、  
EN61000-4-5、EN61000-4-6、EN61000-4-11

**9) Addition Remarks**

- The LED driver used in combination with the end device is one of the accessories of the whole light fixture, and the EMC of the whole light fixture is not only susceptible to the driver itself, but to the LED light fixture and the whole light fixture's wiring. The manufacturer of LED light fixture should re-confirm the EMC of the whole light fixture before the whole light fixture is finished.
- The luminaire manufacturer is responsible for the correct choice and installation of the LED drivers according to the application and product datasheets. Operating conditions of the LED drivers may never exceed the specifications as per the product datasheet.
- All parameters, if not specified, are measured at 230Vac full loading and 25°C ambient temperature

**10) Performance**
**Lifetime vs. Temperature Curve**

**Operating window**

**Efficiency VS. Load**

**Power Factor Characteristics**
