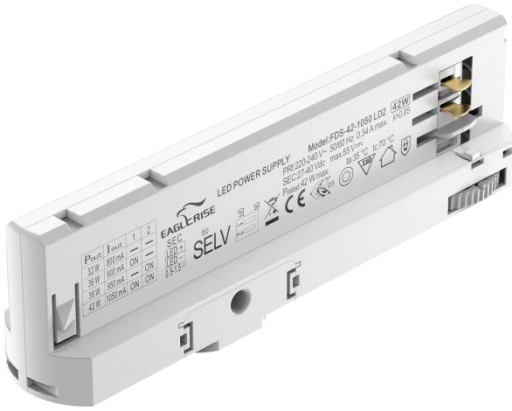


## 42W Constant Current -FDS power supply



■ Approve



### Features

- Class II, SELV, built-in
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP
- Power Factor: >0.9@800-900mA  
>0.95@950-1050mA
- Efficiency ≥89%
- Adjustable Output Current with dip-switch
- 5 years warranty
- IP20

### Applications

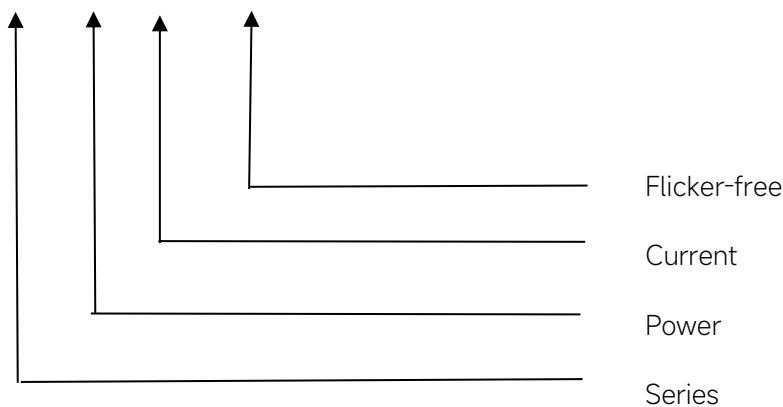
- Track Spot light

### ◆ Description

FDS-42-1050 LD2 is a 42W constant current LED driver that operates from 198-264Vac input with 800 to 1050 mA output current and a forward voltage range from 27 to 40Vdc. The output current is adjustable by DIP Switch. With its compact dimensions from 161.8 x 30.6 x 44.5 mm it is easy to integrate in track spot light products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

### ◆ Model code

#### FDS-42-1050 LD2



## ◆ Specification

|                         | Constant Current   | 800mA                                | 850mA      | 900mA | 950mA | 1000mA | 1050mA |
|-------------------------|--|--------------------------------------|------------|-------|-------|--------|--------|
| Output                  | Voltage Range(VDC)   | 27-40VDC                             |            |       |       |        |        |
|                         | Unload voltage Max.  | 55VDC                                |            |       |       |        |        |
|                         | Current Accuracy   | ±5%                                  |            |       |       |        |        |
|                         | Output HF current ripple(≥1KHz)  | ±5%                                  |            |       |       |        |        |
|                         | Output LF current ripple(≤120Hz)   | ±5%                                  |            |       |       |        |        |
|                         | SVM  | ≤0.4                                 |            |       |       |        |        |
|                         | P <sub>st</sub>  | ≤1                                   |            |       |       |        |        |
|                         | Efficiency(Typ.)   | ≥89%@Full load                       |            |       |       |        |        |
|                         | Input  | Rated input voltage                  | 220-240VAC |       |       |        |        |
| Range of input voltage  |  | 198-264VAC                           |            |       |       |        |        |
| Range input voltage(DC) |  | 198-280VDC                           |            |       |       |        |        |
| Frequency(Hz)           |  | 0/50/60 Hz                           |            |       |       |        |        |
| Displacement factor     |  | ≥0.9                                 |            |       |       |        |        |
| Power Factor            |  | 0.85C-0.95@230VAC, full load         |            |       |       |        |        |
| Input Current max       |  | 0.34A MAX. @Full Load,198VAC         |            |       |       |        |        |
| Start-up time           |  | < 0.5S                               |            |       |       |        |        |
| No Load Power           |  | ≤0.5W                                |            |       |       |        |        |
| THD (Typ.)              |  | <10% @Full load                      |            |       |       |        |        |
| Protection              | Over Load Protection   | 103-120%<br>YES/Auto Resume          |            |       |       |        |        |
|                         | Over Voltage Protection  | > 55VDC<br>YES/Auto Resume           |            |       |       |        |        |
|                         | Short circuit Protection   | YES/Auto Resume                      |            |       |       |        |        |
|                         | Over Temperature Protection  | YES/Auto Resume                      |            |       |       |        |        |
| Environment             | Operating Temperature  | -20°C~+35°C                          |            |       |       |        |        |
|                         | Humidity   | 10%-90%RH                            |            |       |       |        |        |
|                         | T <sub>c</sub>   | 70°C                                 |            |       |       |        |        |
|                         | Storage Temperature  | -20°C~+60°C                          |            |       |       |        |        |
|                         | Life time  | > 50000h@T <sub>c</sub> =70°C,230VAC |            |       |       |        |        |
| Surface                 | Dimension  | 161.8X30.6X44.5(LXWXH)mm             |            |       |       |        |        |
| Standards               | EN 61347-1,EN 61347-2-13(CE-LVD,ENEC); IEC 61347-1,IEC 61347-2-13(CB); EN 62384(ENEC)<br>EN IEC 55015,EN IEC 61000-3-2,EN 61000-3-3(CE-EMC,RCM)EN 61547(CE-EMC,RCM)  |                                      |            |       |       |        |        |
| Others                  | ErP  | EU 2019/2020                         |            |       |       |        |        |
|                         | RoHS   | RoHS (2011/65/EU) (EU)2015/863       |            |       |       |        |        |
| Note                    | 1.All parameters NOT specially mentioned are measured at 230VAC input , full load and 25°C of ambient temperature.<br>2.Ripple & Noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uF & 47 uF parallel capacitor. |                                      |            |       |       |        |        |

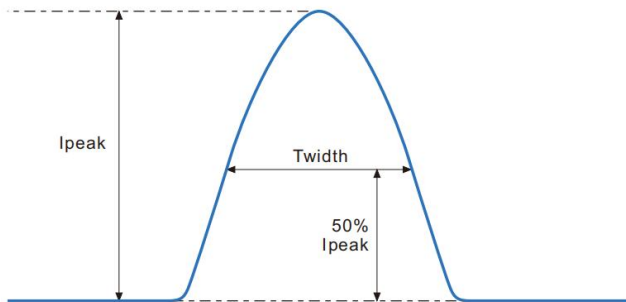
## ◆ Parameter

| Number | Output       |               |                       |           | Switch position |    |
|--------|--------------|---------------|-----------------------|-----------|-----------------|----|
|        | Current (mA) | Voltage (VDC) | Voltage No load (VDC) | Power (W) | 1               | 2  |
| 1      | 800mA        | 27-40VDC      | 55                    | 32        | --              | -- |
| 2      | 900mA        | 27-40VDC      | 55                    | 36        | ON              | -- |
| 3      | 950mA        | 27-40VDC      | 55                    | 38        | --              | ON |
| *4     | 1050mA       | 27-40VDC      | 55                    | 42        | ON              | ON |

\* Factory default

## ◆ Inrush Current

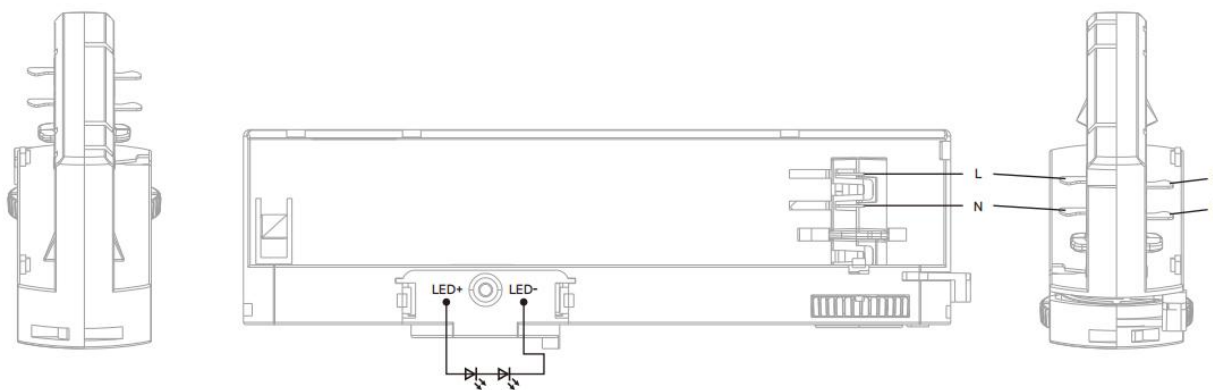
| I <sub>peak</sub> | T <sub>width</sub> | B10   | B16   | B20   | C10   | C16   | C20   |
|-------------------|--------------------|-------|-------|-------|-------|-------|-------|
| 30.5A             | 129.8μs            | 21pcs | 33pcs | 42pcs | 23pcs | 37pcs | 47pcs |



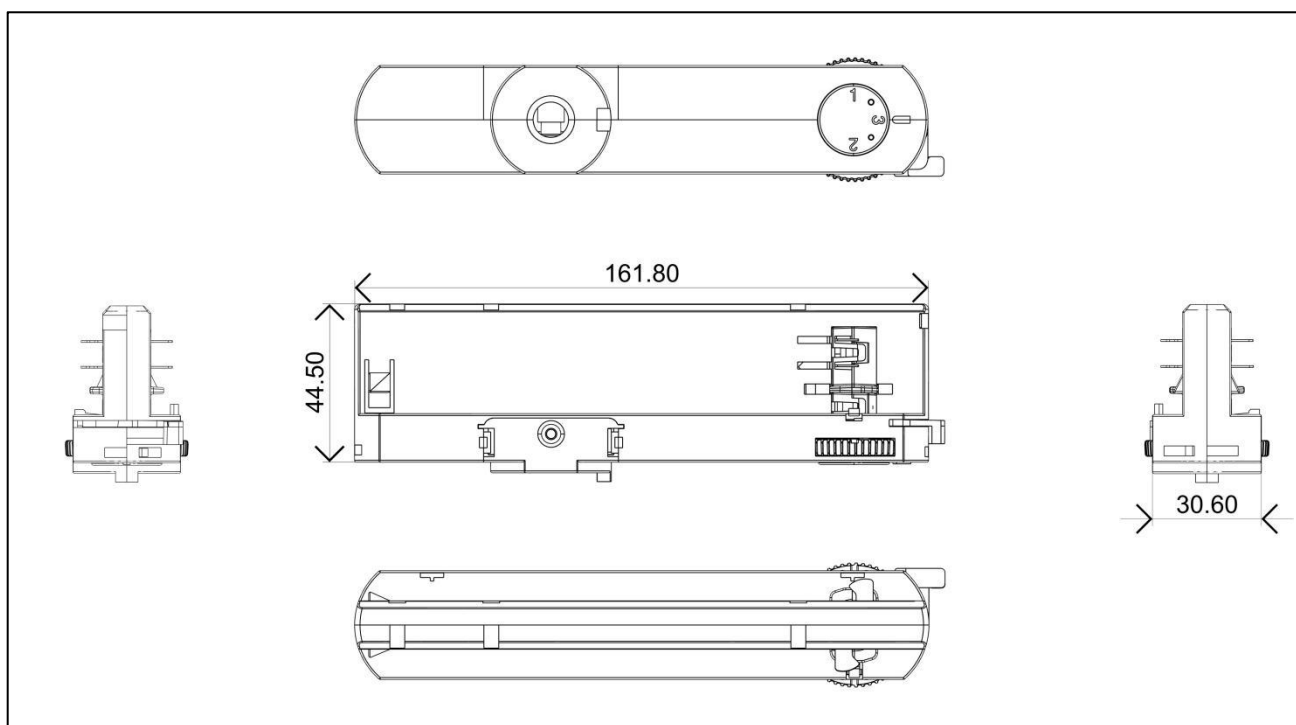
### Remarks:

- 1.The number of drives mounted under different MCBs in the table is the maximum value. Please do not exceed this number during installation.
- 2.Different brands and models of miniature circuit breakers, the number of drives mounted will be slightly different.

◆ **Wiring diagram**



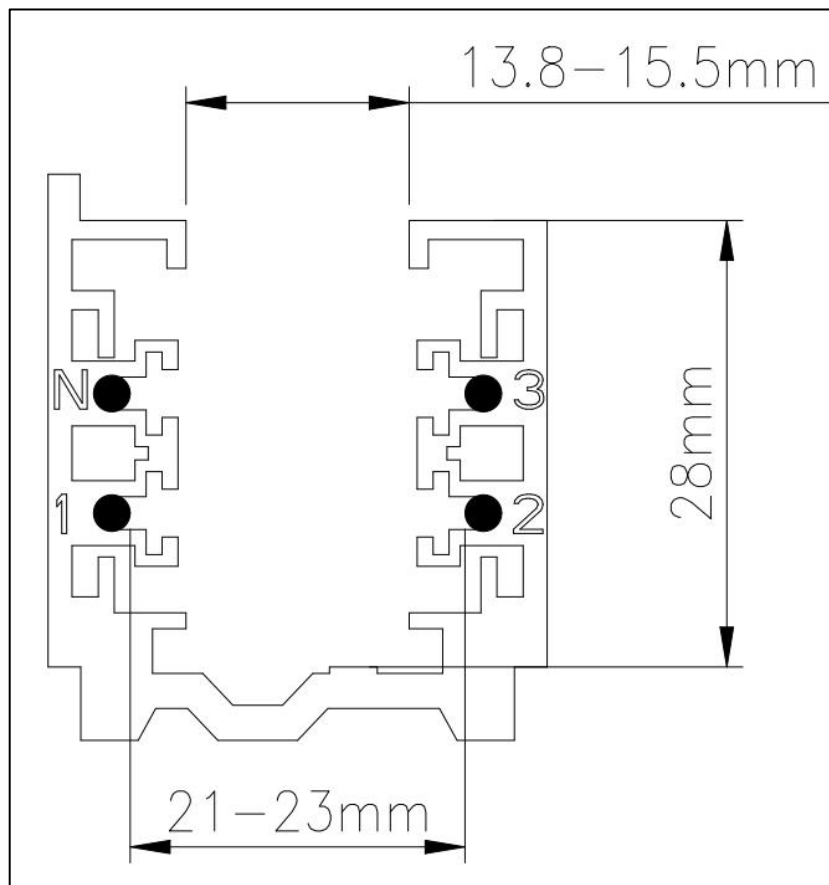
◆ **2D diagram**



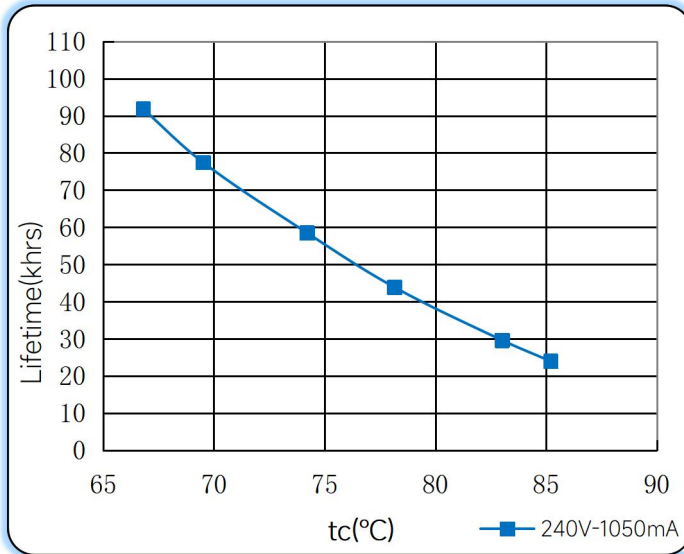
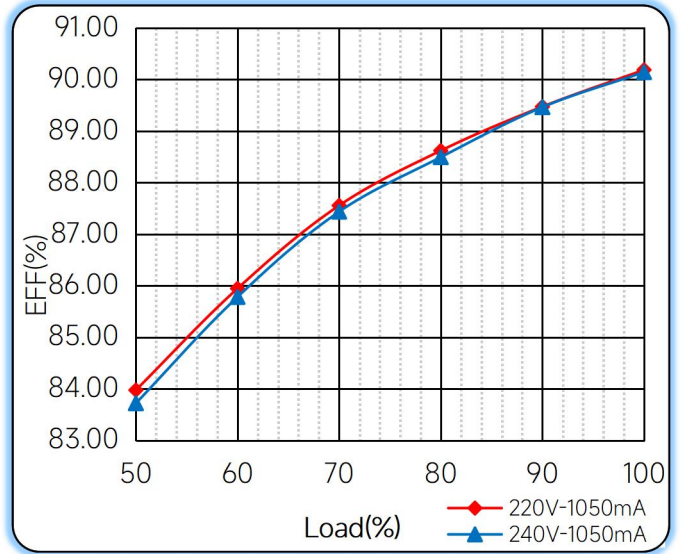
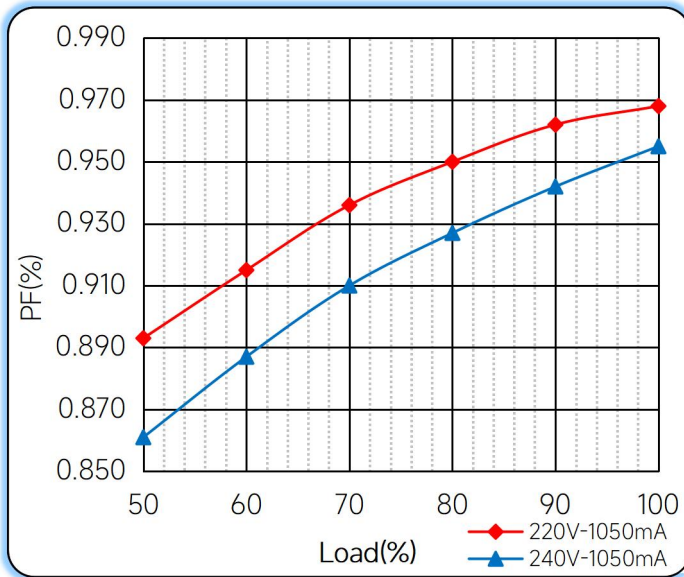
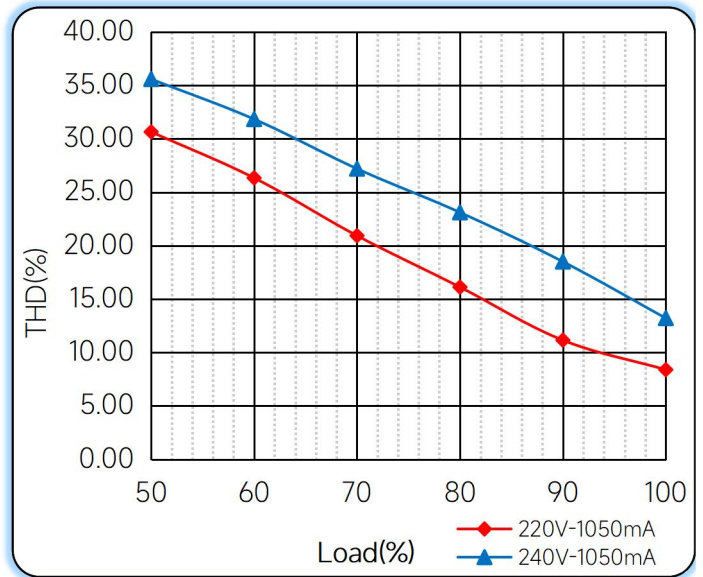
### ◆ Matching brand

|       |            |                |
|-------|------------|----------------|
| Brand | IVELA      | 7501           |
|       | STUCCHI    | 9000XX Series  |
|       | POWERGEAR  | PRO-0431       |
|       | GLOBAL     | XTS 4 & XTSF 4 |
|       | Unipro     | T32B           |
|       | JBD        | H-04           |
|       | GUANG FA   | GF016          |
|       | JIN HAOTAI | 4 wires        |

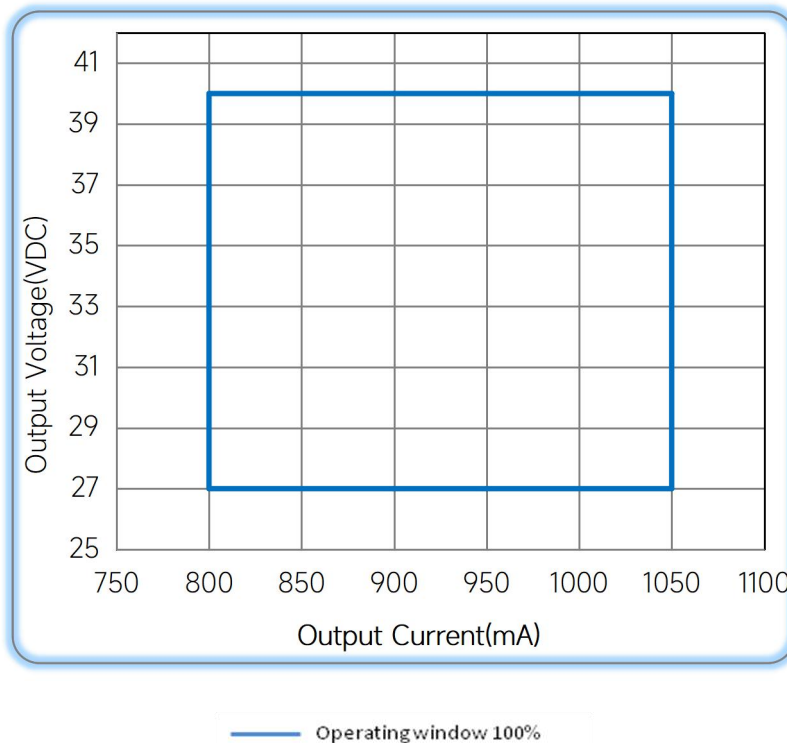
### ◆ Matching description



### ◆ Curve for FDS-42-1050 LD2, $I_o=1050mA$

**Lifetime vs. Temperature Curve**

**Efficiency vs. Load**

**Power Factor Characteristics**

**THD vs. Load**


### ◆ Operating window



### ◆ Revision Updates

| ITEM    | BEFORE | AFTER                        | VERSION | DATE       |
|---------|--------|------------------------------|---------|------------|
| Initial |        |                              | A       | 2022/10/24 |
| PF      |        | 0.85C-0.95@230VAC, full load | B       | 2023/07/22 |

Tel: +86-0757-86256822, +86-0757-86256831

E-mail: sales@eaglerise.com

Website : <https://lighting.eaglerise.com>



EAGLERISE



Manual