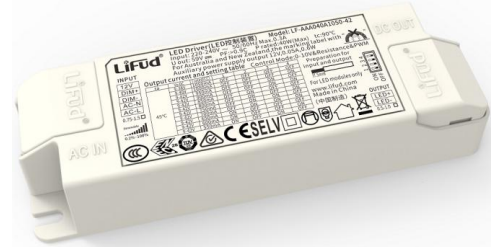


**Product Description**

LF-AAA040A1050-42 is a 40W 0-10V/PWM/Rx dimmable constant current flicker-free LED driver. Its input voltage ranges from 220 to 240Vac and output current can be adjusted via DIP switch from 550mA to 1050mA, in steps of 50mA.

**Features**

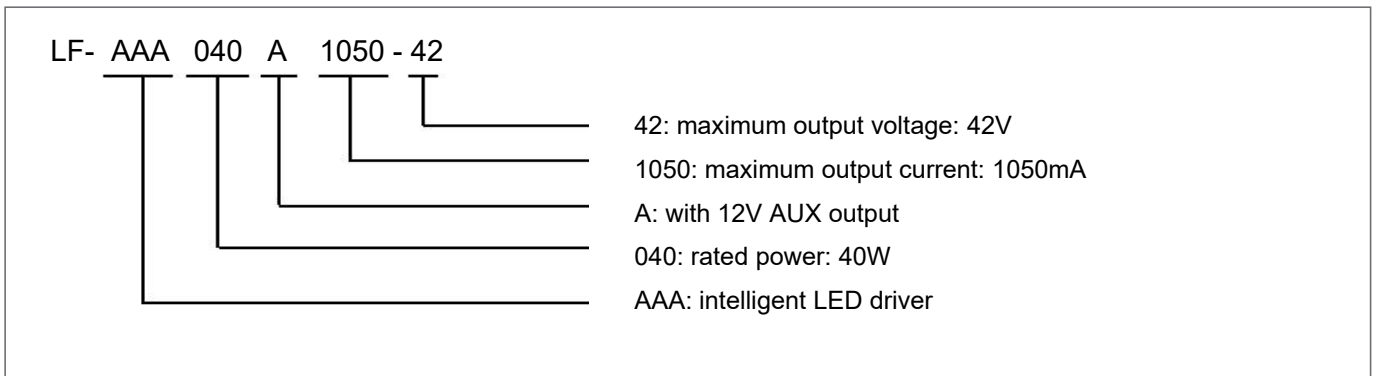
- IP20
- 0-10//PWM/Rx dimmable
- Suitable for Class II light fixtures
- Constant current output and output current adjustable via DIP switch
- Built-in active PFC function
- 12Vdc 50mA AUX output
- Standby power consumption <0.5W
- 5-year warranty (please refer to the warranty condition)



**Applications**

- Indoor office lighting
- Decorative lighting
- Commercial lighting
- Residential lighting

**Product Naming**



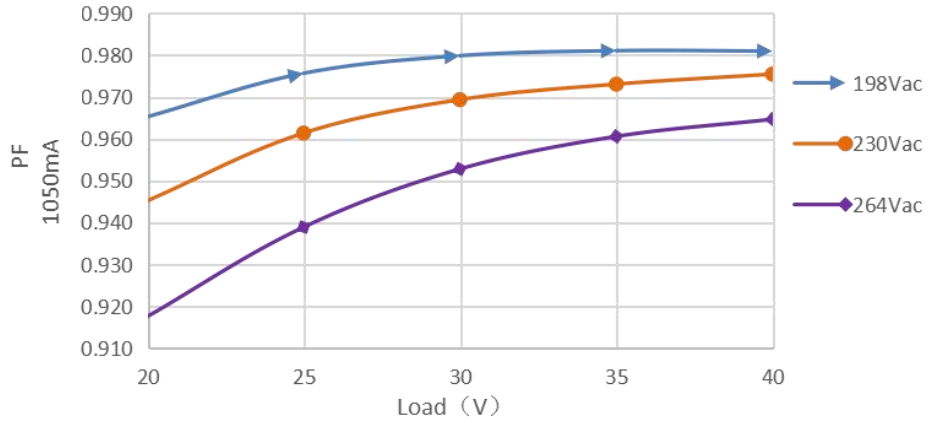
## Electrical Characteristics

| Model                     |  | LF-AAA040A1050-42  |       |       |       |       |       |       |       |       |        |        |       |       |
|---------------------------|--|--|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|
| Output                    | Output Voltage (DC)                          | 9-42V  |       |       |       |       |       |       |       |       |        | 9-40V  | 9-38V | 12±1V |
|                           | Output Current                               | Adjustable via DIP switch  |       |       |       |       |       |       |       |       |        |        |       |       |
|                           |  | Please refer to the DIP Switch Table   |       |       |       |       |       |       |       |       |        |        |       |       |
|                           |  | 550mA  | 600mA | 650mA | 700mA | 750mA | 800mA | 850mA | 900mA | 950mA | 1000mA | 1050mA | 50mA  |       |
|                           | Flicker Index                                | IEC-Pst ≤1, CIE SVM ≤0.9, Modulation Depth ≤1%<br>Conforms to the flicker-free standard (IEEE Std 1789-2015) |       |       |       |       |       |       |       |       |        |        |       |       |
|                           | Ripple Current                               | <10% (rated current)   |       |       |       |       |       |       |       |       |        |        | /     |       |
|                           | Current Tolerance                            | ±5% (20-42V); ±10% (9-20V)   |       |       |       |       |       |       |       |       |        |        |       |       |
|                           | Temperature Drift                            | ±10%   |       |       |       |       |       |       |       |       |        |        |       |       |
| Start-up Time             | <0.5S@230Vac                                 |  |       |       |       |       |       |       |       |       |        |        |       |       |
| Input                     | Input Voltage                                | 220-240Vac (voltage limit: 198-264Vac)   |       |       |       |       |       |       |       |       |        |        |       |       |
|                           | DC Input Voltage                             | 180-260Vdc   |       |       |       |       |       |       |       |       |        |        |       |       |
|                           | Input Frequency                              | 47Hz-63Hz  |       |       |       |       |       |       |       |       |        |        |       |       |
|                           | Input Current                                | 0.3A max.  |       |       |       |       |       |       |       |       |        |        |       |       |
|                           | Power Factor                                 | ≥0.9@230Vac  |       |       |       |       |       |       |       |       |        |        | /     |       |
|                           | THD  | ≤15%@230Vac (full load)  |       |       |       |       |       |       |       |       |        |        |       |       |
|                           | Efficiency                                   | ≥84%   | ≥85%  | ≥86%  |       |       |       |       |       |       |        |        | /     |       |
|                           | Inrush Current                               | ≤60A&260uS@230Vac  |       |       |       |       |       |       |       |       |        |        |       |       |
|                           | Load Quantity Carried by the Circuit Breaker | Circuit Breaker Model  | B10   |       |       | C10   |       |       | B16   |       |        | C16    |       |       |
|                           |  | Quantity (pcs)   | 25    |       |       | 40    |       |       | 40    |       |        | 64     |       |       |
|                           | Leakage Current                              | ≤0.5mA   |       |       |       |       |       |       |       |       |        |        |       |       |
| Standby Power Consumption | ≤0.5W (When the DIM OFF signal is effective) |  |       |       |       |       |       |       |       |       |        |        |       |       |
| Protections               | Open Circuit                                 | <59V   |       |       |       |       |       |       |       |       |        |        |       |       |
|                           | Short Circuit                                | Constant current mode  |       |       |       |       |       |       |       |       |        |        |       |       |
| Environment Descriptions  | Working Temperature                          | -20℃ - +45℃  |       |       |       |       |       |       |       |       |        |        |       |       |
|                           | Working Humidity                             | 20-90%RH (no condensation)   |       |       |       |       |       |       |       |       |        |        |       |       |
|                           | Storage Temperature/Humidity                 | -30℃ - 60℃ (six months under class I environment);   |       |       |       |       |       |       |       |       |        |        |       |       |
|                           |  | 10-95%RH (no condensation)   |       |       |       |       |       |       |       |       |        |        |       |       |
| Atmospheric Pressure      | 86KPa~106KPa                                 |  |       |       |       |       |       |       |       |       |        |        |       |       |

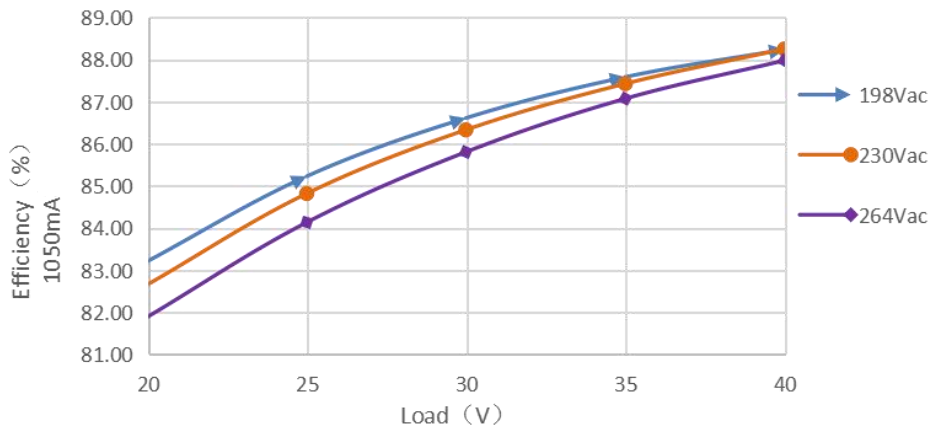
|  |  |   |
|--|--|---|
| Safety &<br>Electromagnetic<br>Compatibility | Certifications   | TUV-ENEC, CCC, RCM, CE, CB  |
|  | Withstanding Voltage   | I/P-O/P: 3.75kV 5mA 60S   |
|  | Insulation Resistance  | I/P-O/P: >100MΩ@500Vdc  |
|  | Safety Standards   | ENEC: EN61347-1: 2015, EN 61347-2-13: 2014/A1: 2017,<br>EN 62384: 2016/A1: 2009<br>CE-LVD: EN 61347-2-13: 2014/A1: 2017, EN 61347-1: 2015,<br>EN 62493: 2015<br>RCM: AS 61347.2-13: 2018<br>CB: IEC 61347-1: 2015, IEC61347-2-3: 2014,<br>IEC 61347-2-13: 2014/AMD1: 2016<br>CCC: GB19510.1-2009, GB19510.14-2009 |
|  | EMI  | CE-EMC/RCM: EN55015, EN61000-3-2, EN61000-3-3<br>CCC:GB/T17743, GB17625.1, GB17625.2  |
|  | EMS  | CE-EMC/RCM: EN61000-4-2, 3, 4, 5 (lightning strike 1kV), 6, 11<br>CCC: GB/T17626.2, 3, 4, 5 (lightning strike 1kV), 6, 11   |
| Others                                       | IP Rating  | IP20  |
|  | RoHS   | RoHS 2.0 (EU) 2015/863  |
|  | Warranty   | 5 yrs (Tc≤78.5°C)   |
|  | Noise Level  | ≤ 29dBA   |
| Remarks                                      | <ol style="list-style-type: none"> <li>1. It is recommended that customer should install over voltage, under voltage and surge protection devices in the power supply circuits of the light fixtures to ensure safety before connecting to electricity.</li> <li>2. When adjusting the output current via the DIP switch, please disconnect input AC power supply first so as to use the DIP switch without the input AC power supply connected.</li> <li>3. The PC cover, casing, end caps and other parts of the LED driver inside the LED light fixture must conform to UL94-V0 flammability standard or above.</li> <li>4. As an accessory, the LED driver is not the only factor determining the EMC performance of the LED light fixture. The structure and the wiring of the light fixture are also relevant. Thus it's strongly recommended the LED light fixture manufacturer should re-confirm the EMC of the whole LED light fixture.</li> <li>5. Unless otherwise stated, the parameters above are test results under these conditions: ambient temperature 25°C, humidity 50%, 100% load, maximum output current and input voltage 230Vac.</li> </ol> |   |

**Product Characteristic Curves**

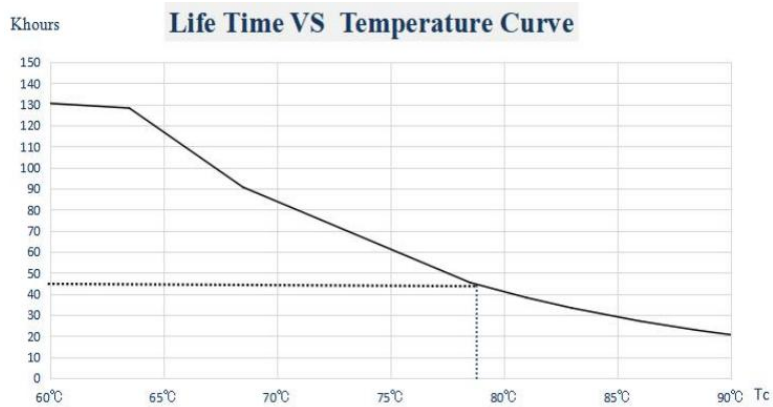
■ **PF Curve**



■ **Efficiency Curve**



■ **Lifetime Curve**



## Dimming Operation Instructions

### ■ Product Terminals

#### INPUT

|      |  |
|------|--|
| 12V  | 12V+ terminal  |
| DIM+ | Positive electrode input of 0-10V/PWM/Rx dimming               |
| DIM- | Negative electrode input of 0-10V/PWM/Rx dimming/12V- terminal |
| AC-N | Input terminal of AC neutral wire                              |
| AC-L | Input terminal of AC live wire                                 |

#### OUTPUT

|      |   |
|------|---|
| LED+ | Positive electrode output of the driver |
| LED- | Negative electrode output of the driver |

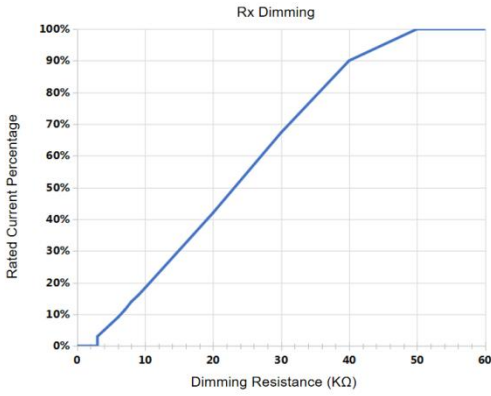
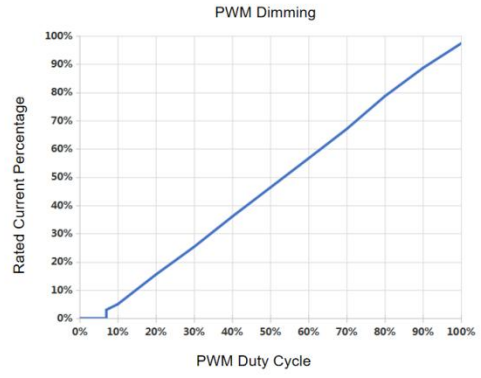
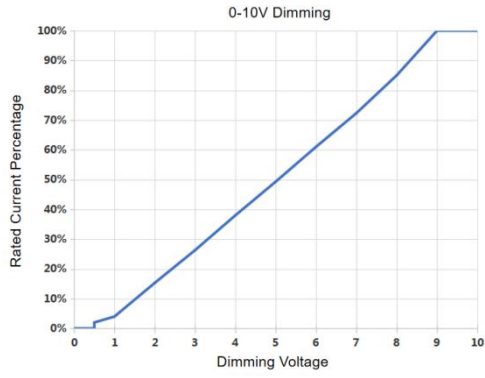
### ■ DIP Switch Table

| Vo DC  | I rated (CC) | 1   | 2   | 3   | 4   |
|--------|--------------|-----|-----|-----|-----|
| 9--38V | 1050mA       | OFF | OFF | OFF | OFF |
| 9--40V | 1000mA       | OFF | OFF | OFF | ON  |
| 9--42V | 950mA        | OFF | OFF | ON  | OFF |
| 9--42V | 900mA        | OFF | OFF | ON  | ON  |
| 9--42V | 850mA        | OFF | ON  | OFF | OFF |
| 9--42V | 800mA        | OFF | ON  | OFF | ON  |
| 9--42V | 750mA        | OFF | ON  | ON  | OFF |
| 9--42V | 700mA        | OFF | ON  | ON  | ON  |
| 9--42V | 650mA        | ON  | OFF | OFF | OFF |
| 9--42V | 600mA        | ON  | OFF | OFF | ON  |
| 9--42V | 550mA        | ON  | OFF | ON  | OFF |

Remark: Except the settings mentioned in the table above, other DIP switch settings are default to be the maximum current 1050mA.

### ■ Operation Instructions of 0-10V/PWM/Rx Dimming

- Connect 0-10V, PWM or Rx signal to the DIM terminal; the positive electrode connects to DIM+ and the negative electrode to DIM-.
- In 0-10V dimming mode, when the input voltage is less than 0.3V, the light turns off. When it's more than 0.5V, the light turns on ( $\pm 0.2V$  is acceptable).
- Minimum dimming depth of 0-10V dimming: 0.1%.
- Dimming depth of PWM dimming: 0.1%.
- Dimming depth of Rx dimming: 0.1% (with a 50K $\Omega$  potentiometer)
- DIM terminal (vacant): 100% rated output current



**Label**

**LIFUD**<sup>®</sup> LED Driver(LED控制装置) Model: LF-AAA040A1050-42  
 Input: 220-240V ~ 50/60Hz Max.0.3A  
 U out: 59V PF:>0.9C P rated:40W(Max) tc:90°C  
 For Australia and New Zealand,the marking label with  
 Auxiliary power supply output 12V,0.05A,0.6W

**INPUT**  
 12V  
 DIM+  
 DIM-  
 AC-N  
 AC-L  
 0.75-1.5□  
 Dimmable  
 0.1%-100%

**Output current and setting table**

| Ta   | %DC   | I rated(C) | 2   | 3   | 4   |
|------|-------|------------|-----|-----|-----|
| 45°C | 9-38V | 1050mA     | OFF | OFF | OFF |
|      | 9-40V | 1000mA     | OFF | OFF | ON  |
|      | 9-42V | 950mA      | OFF | OFF | ON  |
|      | 9-42V | 900mA      | OFF | OFF | ON  |
|      | 9-42V | 850mA      | OFF | ON  | OFF |
|      | 9-42V | 800mA      | OFF | ON  | ON  |
|      | 9-42V | 750mA      | OFF | ON  | OFF |
|      | 9-42V | 700mA      | OFF | ON  | ON  |
|      | 9-42V | 650mA      | ON  | OFF | OFF |
|      | 9-42V | 600mA      | ON  | OFF | ON  |
|      | 9-42V | 550mA      | ON  | OFF | ON  |

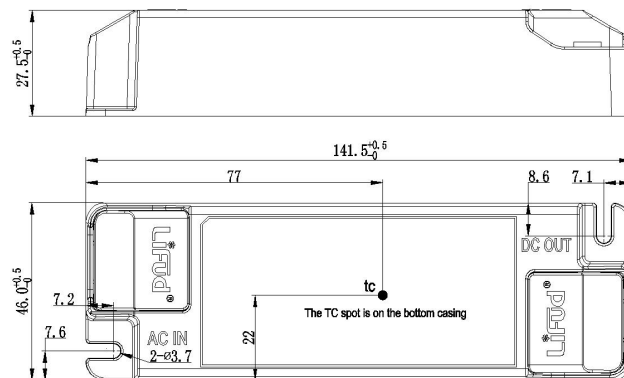
**Control Mode:0-10V&Resistance&PWM**

Preparation for input and output  
 17.5mm  
 For LED modules only  
 www.lifud.com  
 Made in China  
 (中国制造)

**OUTPUT**  
 LED+  
 LED-  
 0.5-1.0 □

CCC, RoHS, CE, SELV, and other certification logos are present at the bottom.

**Structure & Dimensions (unit: mm)**



## Packaging Specifications

|                      |  |
|----------------------|--|
| Model                | LF-AAA040A1050-42                      |
| Packaging Dimensions | 385*285*210 mm (L*W*H)                 |
| Quantities           | 10 pcs/layer; 6 layers/ctn; 60 pcs/ctn |
| Weights              | 0.135 kg/pc; 8.6 kg±5%/ctn             |

## Transportation & Storage

### ■ Transportation

- Suitable transportation means: vehicles, boats and aircraft.
- During transportation, there should be awnings for rain protection and sun protection. Civilized loading and unloading are required. There should be no severe vibration or impact.

### ■ Storage

- Storage in accordance with the provisions of the Class I environment. For products which have been stored for more than six months, they mustn't be used until they pass the re-inspection.

## Attention

- Please use this product according to its specifications otherwise there may be malfunction.
- Use light fixtures that have not been certified or are not compatible with the LED drivers may cause fire or other hazards.
- Man-made damage, any use beyond the specification and non-original-factory modification are not covered by warranty.

Remark: The final interpretation right of the contents of this data sheet belongs to Lifud Technology Co., Ltd.