

Product Description

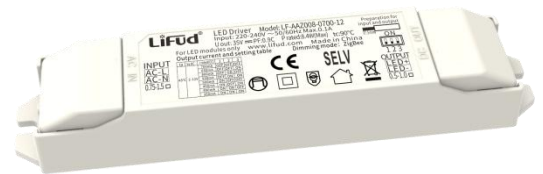
LF-AAZ008-0700-12 series is an 8W constant current LED driver with the function of Zigbee dimming. The input voltage range is 198-264Vac. The output current can be adjusted via the DIP switch from 350mA to 700mA, in steps of 50mA.

Features

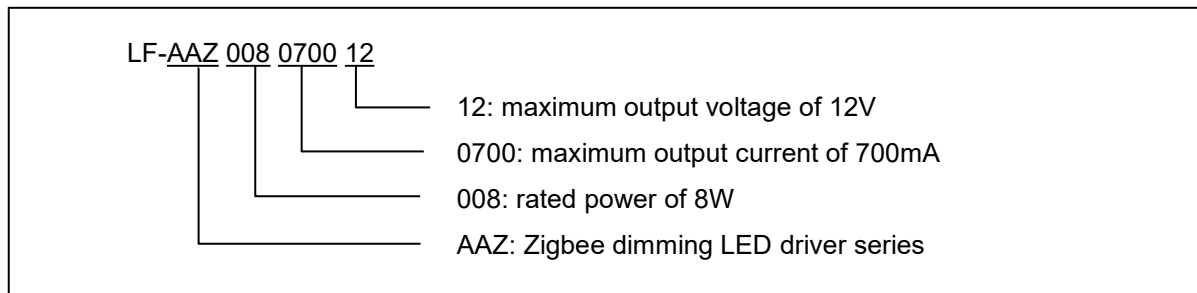
- Constant current output and the adjustable output current via the DIP switch, in steps of 50mA
- Suitable for Class II light fixtures
- Standby power consumption <0.5W
- Zigbee dimming
- 5-year warranty (Please refer to the warranty condition.)

Applications

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



Naming



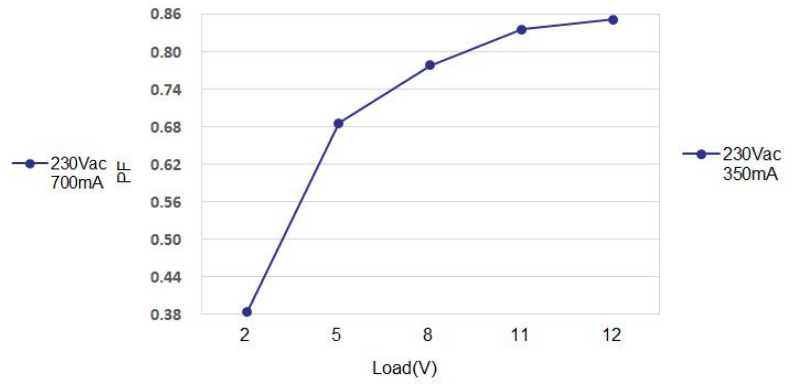
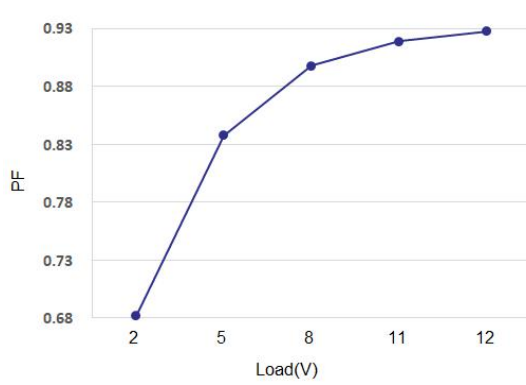
Electrical Characteristics

| Model | | LF-AAZ008-0700-12 | | | | | | | | |
|----------------------------|---|--|-------|-------|--------|--------|-------|-------|-------|--|
| Output | Output Voltage | 2-12V | | | | | | | | |
| | Output Current | 350mA | 400mA | 450mA | 500mA | 550mA | 600mA | 650mA | 700mA | |
| | Flicker Index | ≤1% Conforms to the standard of flicker free (IEEE Std 1789-2015) | | | | | | | | |
| | Current Tolerance | ±5% | | | | | | | | |
| | Dimming Depth | ≤1% | | | | | | | | |
| | Temperature Drift | ±10% | | | | | | | | |
| | Start-up Time | <1S @230Vac | | | | | | | | |
| Input | Input Voltage | 220-240Vac (voltage limit: 198-264Vac) | | | | | | | | |
| | DC Input Voltage | 180-280Vdc | | | | | | | | |
| | Input Frequency | 47Hz-63Hz | | | | | | | | |
| | Input Current | 0.1A Max | | | | | | | | |
| | Power Factor | ≥0.84 | ≥0.86 | ≥0.88 | ≥0.88 | ≥0.89 | ≥0.9 | ≥0.9 | ≥0.91 | |
| | THD | ≤15% @230Vac (DC 12V full load) | | | | | | | | |
| | Efficiency | ≥75.5% | ≥76% | ≥77% | ≥77.5% | ≥77.5% | ≥78% | ≥78% | ≥78% | |
| | Inrush Current | ≤19A & 1.5uS @230Vac (Max) | | | | | | | | |
| | Load Quantity Carried by the Circuit Breaker | Circuit Breaker Model | B10 | | C10 | | B16 | | C16 | |
| | | Quantity (pcs) | 66 | | 66 | | 106 | | 106 | |
| | Leakage Current | ≤0.7mA | | | | | | | | |
| Standby Power Consumption | ≤0.5W (when the DIM OFF signal of APP is effective) | | | | | | | | | |
| Protection Characteristics | Open Circuit | <35V | | | | | | | | |
| | Short Circuit | Hiccup mode (auto-recovery) | | | | | | | | |
| Environment Descriptions | Operating Temperature | -20℃~+45℃ | | | | | | | | |
| | Operating Humidity | 20-90%RH (no condensation) | | | | | | | | |
| | Storage Temperature/ Humidity | -30℃~+ 80℃ (six months under class I environment); 10-90%RH (no condensation) | | | | | | | | |
| | Atmospheric Pressure | 86KPa~106KPa | | | | | | | | |

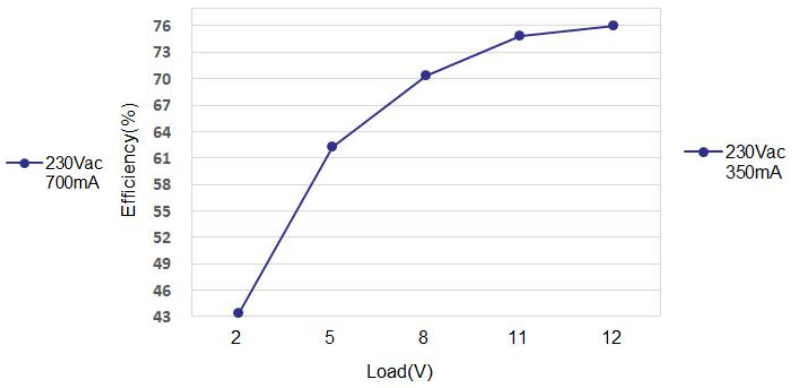
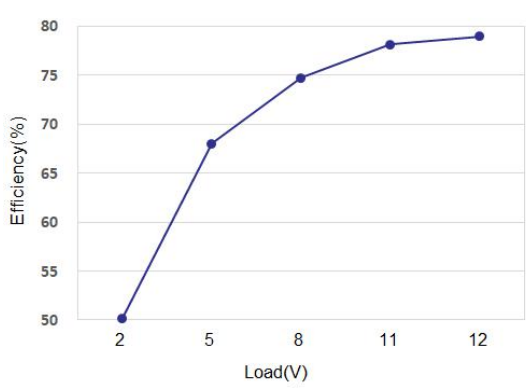
| | | |
|--|---|---|
| Safety and Electromagnetic Compatibility | Certifications | CE |
| | Withstanding Voltage | I/P-O/P: 3.75KV 5mA 60S |
| | Insulation Resistance | I/P-O/P: >100MΩ @500Vdc |
| | Safety Standards | CE-LVD: EN 61347-2-13: 2014/A1: 2017, EN 61347-1: 2015, EN62493: 2015 |
| | EMI | CE-EMC/RCM: EN55015, EN61000-3-2, EN61000-3-3 |
| | EMS | CE-EMC/RCM: EN61000-4-2, 3, 4, 5 (lightning strike 1KV), 6, 11 |
| Others | IP Rating | IP20 |
| | RoHS | RoHS 2.0 (EU) 2015/863 |
| | Warranty Condition | 5 yrs (Tc<72°C) |
| | Noise Level | ≤29dBA (It is tested in a quiet room and the noise collector should be tested 10CM from the LED driver) |
| Remarks | <p>1. It is recommended that customer should install overvoltage and undervoltage protection devices and surge protection devices in the power supply circuits of the light fixtures to ensure safety before connecting to electricity.</p> <p>2. When the DIP switch is used to adjust the output current, please disconnect the AC input first to ensure that the LED driver is not energized.</p> <p>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</p> <p>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.</p> <p>5. Unless otherwise stated, the parameters above are test results under the conditions of ambient temperature of 25°C, humidity of 50%, Zigbee signal input, 100% load, maximum output current, and input voltage of 230Vac.</p> | |

Characteristic Curves

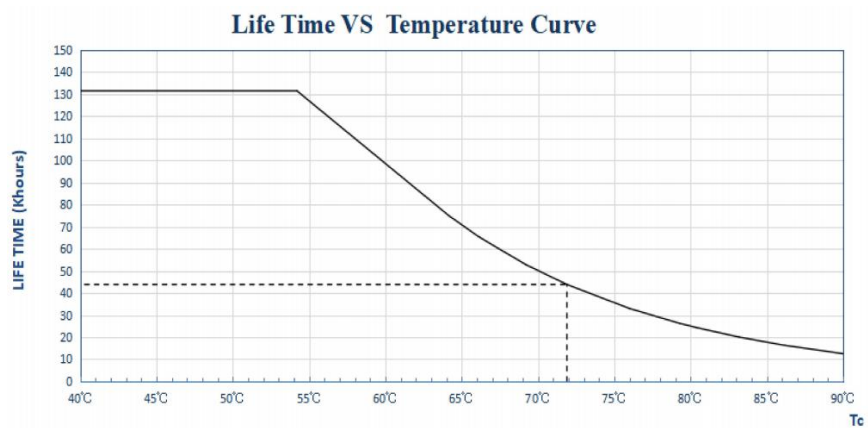
PF Curves



Power Curves



Lifetime Curve



Operations of Dimming

■ Terminals of the LED driver

INPUT

| | |
|------|-----------------------|
| AC-L | AC live wire input |
| AC-N | AC neutral wire input |

OUTPUT

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

■ Definitions of Terminals

| Vo DC | I rated (CC) | 1 | 2 | 3 |
|-------|--------------|-----|-----|-----|
| 2-12V | 700mA | OFF | OFF | OFF |
| | 650mA | OFF | OFF | ON |
| | 600mA | OFF | ON | OFF |
| | 550mA | OFF | ON | ON |
| | 500mA | ON | OFF | OFF |
| | 450mA | ON | OFF | ON |
| | 400mA | ON | ON | OFF |
| | 350mA | ON | ON | ON |

■ Zigbee Dimming Operation System Diagram



■ Zigbee Dimming Operation Instruction

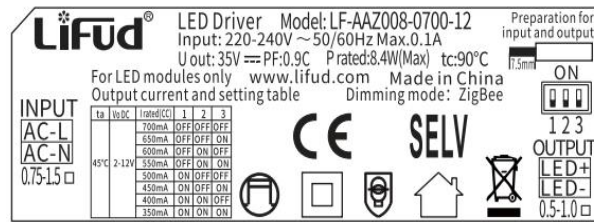
- The standard of Zigbee 3.0 protocol is used and the LED driver is compatible with Tuya gateway certified by ZigBee Alliance.
- Network access effective distance: with Tuya wireless gateway, the distance is about 40m; with Tuya wired gateway, the distance is about 30m (measured in barrier-free condition).
- Control distance: with Tuya wireless gateway, the distance is about 50m; with Tuya wired gateway, the distance is about 30m (measured in barrier-free condition).
- The number of gateway for matching the LED driver: A gateway can be matched with about 20 LED drivers (Measured by Tuya wireless gateway in barrier-free condition)
- When a device that has been connected to the network joins a new gateway, the network needs to be disconnected.

- Operations for Network connection and disconnection: If the AC input terminal of the LED driver is continuously on/off for 5 times (within 5S), and the luminaire turns on and off alternately for 3 times, it indicates that network connection or disconnection is successful. You can then search for devices in the new gateway.
- Output current range of the LED driver:

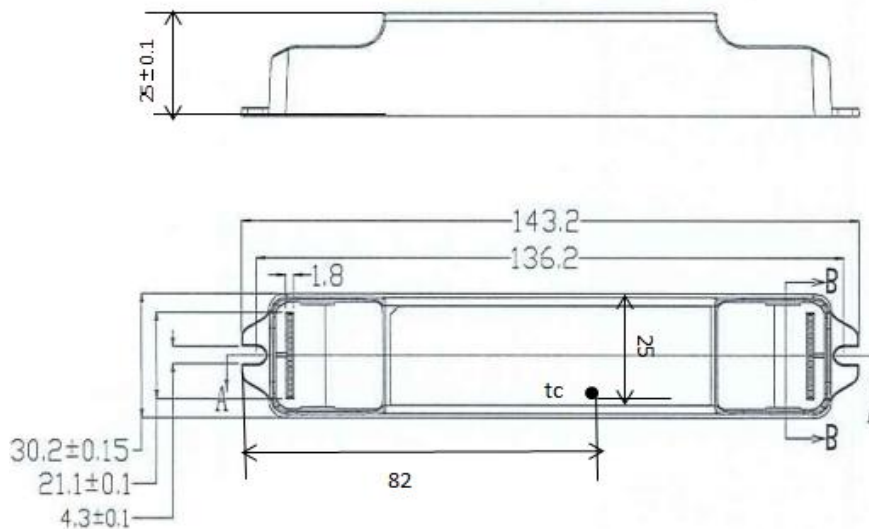
| Wireless Dimming Value | Output Current |
|------------------------|---|
| 0% | The LED light is off |
| 1%-100% (Uo MAX) | Dimming Frequency: 3.2kHz; PWM varies from 1% to 100%; Output current range: 5mA-700mA (Take 700mA as an example) |

Note: The inner wall material and installation method of light fixtures will affect the transmission distance. The corresponding control distance can be extended by the relay function.

Label



Dimensions (unit: mm)



Packaging Specifications

| | |
|--------------------|--|
| Model | LF-AAZ008-0700-12 |
| Packaging Box Size | 385*285*210 mm (L*W*H) |
| Quantities | 12 pcs/layer; 7 layers/ctn; 84 pcs/ctn |
| Weights | 0.0635kg/pc; 5.85±5% kg/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.