

Product Description

LF-GIF028YF is a 28W isolated constant current flicker-free LED driver. It features compact size, built-in design, high efficiency, high PF and Ta 55°C. It is suitable for split-type LED track light (any integrated track light or down light is forbidden) and its ambient temperature shall NOT exceed 55°C. Its output current is adjustable via a built-in DIP switch in 4 shifts, including 550mA, 600mA, 650mA and 700mA.

Features

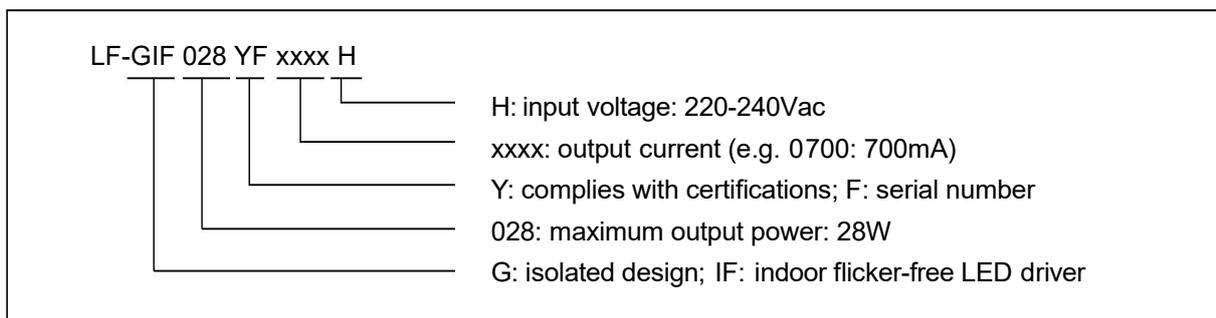
- Flicker free
- High efficiency
- 5-year warranty (please refer to the warranty condition)
- Suitable for Class II light fixtures



Applications

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

Product Naming



Electrical Characteristics

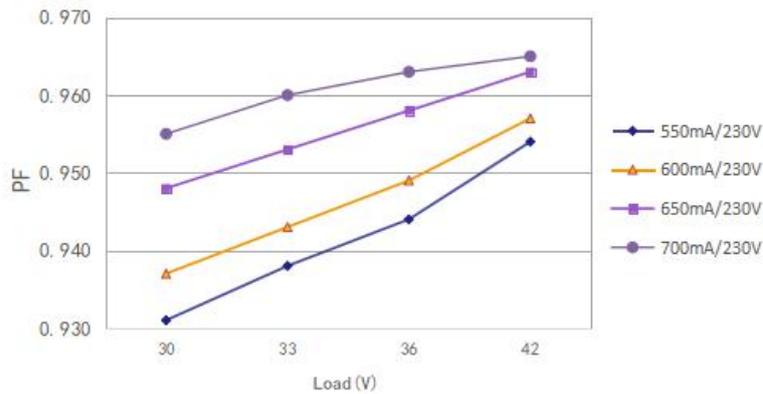
| Model | | LF-GIF028YF | | | | |
|----------------------------|---|--|-------|-------|-------|-----|
| Output | Output Voltage | 30-42Vdc | | | | |
| | Output Current | 550mA | 600mA | 650mA | 700mA | |
| | Flicker (Modulation depth) | <0.5% | | | | |
| | IEC-Pst | ≤1 | | | | |
| | CIE SVM | ≤0.4 | | | | |
| | Current Tolerance | ±5% | | | | |
| | Temperature Drift | ±10% | | | | |
| | Start-up Time | <0.5S | | | | |
| Input | AC Input Voltage | 220-240Vac (voltage limit: 200-264Vac) | | | | |
| | Input Frequency | 47Hz-63Hz | | | | |
| | Input Current | 0.18A max. | | | | |
| | Power Factor | ≥0.94 | ≥0.94 | ≥0.95 | ≥0.95 | |
| | THD | ≤20% | | | | |
| | Efficiency | ≥90% | | | | |
| | Inrush Current | ≤18A&150uS@230Vac | | | | |
| | Load Quantity Carried by the Circuit Breaker | Circuit Breaker Model | B10 | C10 | B16 | C16 |
| | | Quantity (pcs) | 30 | 50 | 48 | 80 |
| | Leakage Current | ≤0.7mA | | | | |
| | Standby Power Consumption | <0.5W | | | | |
| Protection Characteristics | Open Circuit Protection | <55V | | | | |
| | Short Circuit Protection | Hiccup mode (auto-recovery) | | | | |

| | | |
|--|--|---|
| Environment Descriptions | Operating Temperature | -30℃ - +55℃ & Tc ≤90℃ |
| | Operating Humidity | 20-90%RH (no condensation) |
| | Storage Temperature/Humidity | -40℃ - +80℃ (six months under class I environment); 10-90%RH (no condensation) |
| | Atmospheric Pressure | 86kPa~106kPa |
| Safety & Electromagnetic Compatibility | Certifications | TUV-ENEC, CE, CB, RCM, SAA, CCC |
| | Withstanding Voltage | I/P-O/P: 3.75kVac/5mA/60S |
| | Insulation Resistance | I/P-O/P: >100MΩ@500Vdc |
| | Safety Standards | ENEC: EN61347-1: 2015, EN 61347-2-13: 2014/A1: 2017, EN 62384: 2016/A1: 2009; CE-LVD: EN 61347-2-13: 2014/A1: 2017, EN 61347-1: 2015, EN 62493: 2015; CB: IEC 61347-1: 2015, IEC61347-2-3: 2014, IEC 61347-2-13: 2014/AMD1: 2016; RCM: AS 61347.2-13:018 CCC: GB19510.1-2009, GB19510.14-2009 |
| | EMI | CE-EMC/RCM: EN55015, EN61000-3-2, EN61000-3-3 CCC:GB/T17743, GB17625.1, GB17625.2 |
| | EMS | CE-EMC/RCM: EN61000-4-2, 3, 4, 5 (lightning strike 1kV), 6, 11 CCC: GB/T17626.2, 3, 4, 5 (lightning strike 1kV), 6, 11 |
| Others | IP Rating | IP20 |
| | RoHS | RoHS 2.0 (EU) 2015/863 |
| | Warranty Condition | 5 yrs (Tc<78℃) |
| Test Equipment | AC power source: CHROMA6530, digital power meter: CHROMA66202, Oscilloscope: Tektronix DPO3014, DC electronic load: M9712B, LED board, constant temperature and humidity chamber, lightning surge generator: Everfine EMS61000-5B, rapid group pulse generator: Everfine EMS61000-4A, spectroanalyzer: KH3935, hi-pot tester: TH9201B, flicker tester (flicker-free coefficient test) 60N-01, etc. | |

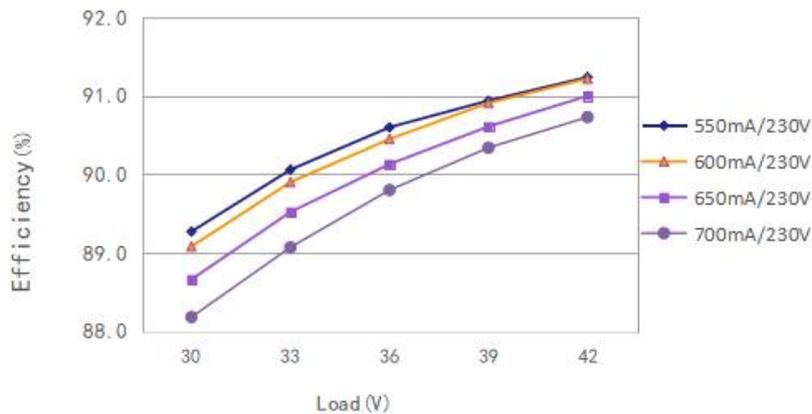
| | |
|---------|--|
| Remarks | <ol style="list-style-type: none"> 1. It is recommended that customer should install overvoltage and undervoltage protection devices and surge protection devices in the power supply circuits of the light fixtures to ensure safety before connecting to electricity. 2. As 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. 3. The test conditions of the circuit breaker configuration quantity are the same as those of the inrush current test. 4. Do not install the driver inside the integrated track light or down light. 5. The ambient temperature (T_a) of the driver shall not exceed 55°C and casing temperature (T_c) not exceed 90°C. 6. Unless otherwise stated, the parameters above are test results under these conditions: ambient temperature 25°C, humidity 50%, input voltage 230Vac/50Hz and 100% load. |
|---------|--|

Characteristic Curves

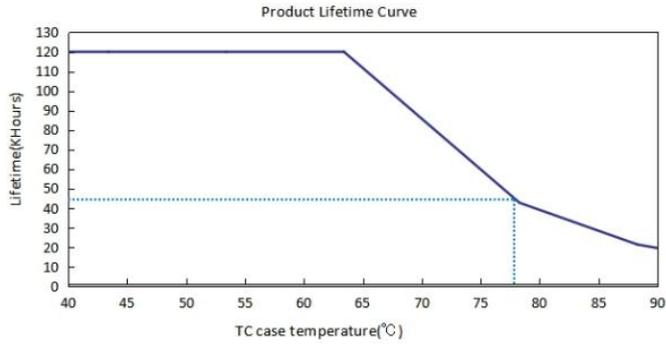
■ PF Curve



■ Efficiency Curve



■ Lifetime Curve



Definitions of Terminals

INPUT

| | |
|------|-----------------------------------|
| AC-L | Input terminal of AC live wire |
| AC-N | Input terminal of AC neutral wire |

OUTPUT

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

Labels



Built-in DIP switch version

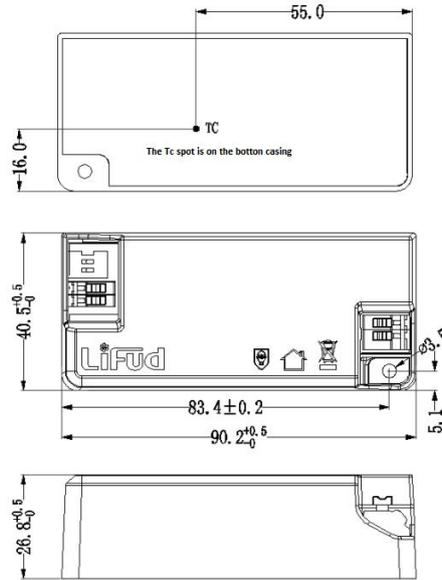


No DIP switch version

Adjustable Current Shift Table (via DIP switch)

| Irated (CC) | 1 | 2 |
|-------------|----|----|
| 550mA | ON | ON |
| 600mA | ON | — |
| 650mA | — | ON |
| 700mA | — | — |

Structure & Dimensions (unit: mm)



Packaging Specifications

| | |
|----------------------|---|
| Model | LF-GIF028YF |
| Packaging Dimensions | 385*285*210 mm (L*W*H) |
| Quantities | 17 pcs/layer; 7 layers/ctn; 119 pcs/ctn |
| Weights | 80±5 g/pc; 11±0.6 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 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.