## Features

- Metal casing design
- High performance, high efficiency and high PF
- Suitable for emergency lighting
- Suitable for Class I light fixtures
- 5-year warranty (please refer to the warranty condition)



## Applications

· Indoor office lighting · decorative lighting · commercial lighting · residential lighting

## Descriptions

LF-FMR080YS is a 60-80W non-isolated constant current LED driver with metal casing design. It has features of high PF and high efficiency. Its rated input voltage range is 220-240Vac and its output voltage range is 170-230Vdc. The output current can be adjusted via a DIP switch from 200 to 350mA, in steps of 50mA.

## Product Model

LF-FMR 080 YS

- Y: conforms to certifications; S: serial number
- 080: maximum output power: 80W
- F: non-isolated design; MR: tri-proof light series

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## ■ Electrical Characteristics

| Model | | LF-FMR080YS | | | | |
|---|---|---|---|---|---|---|
| **Output** | Output Voltage | 170-230Vdc | | | | |
| | Output Current | Adjustable output current via a DIP switch | | | | |
| | | 200mA | 250mA | 300mA | 350mA | |
| | Flicker | ≤ 0.5% (IEEE 1789) | | | | |
| | CIE SVM | ≤0.4 | | | | |
| | IEC-Pst | ≤1 | | | | |
| | Current Tolerance | ±5% | | | | |
| | Temperature Drift | ±10% | | | | |
| | Startup Time | <0.5S | | | | |
| **Input** | Input Voltage | 220-240Vac (input voltage limit: 200-264Vac) | | | | |
| | DC Input Voltage | 180-264Vdc | | | | |
| | Input Frequency | 47Hz-63Hz | | | | |
| | Input Current | 0.5A max. | | | | |
| | PF | ≥0.9 | ≥0.92 | ≥0.94 | ≥0.95 | |
| | THD | ≤20% | | | | |
| | Efficiency | ≥91% | ≥91% | ≥92% | ≥93% | |
| | Inrush Current | ≤36A@180uS@230Vac | | | | |
| | Loading Quantities of Circuit Breaker | Model | B10 | C10 | B16 | C16 |
| | | Quantity (pcs) | 12 | 20 | 19 | 32 |
| | Leakage Current | ≤0.5mA | | | | |
| | Standby Power Consumption | / | | | | |
| **Protection Characteristics** | Open Circuit | <450V | | | | |
| | Short Circuit | Hiccup mode (auto-recovery) | | | | |
| **Environment Descriptions** | Operating Temperature | -30℃ - +50℃ | | | | |
| | Operating Humidity | 20-95%RH (without condensation) | | | | |
| | Storage Temperature/ Humidity | -30℃ - 80℃ (6 months in Class II environment); 0-95%RH (without condensation) | | | | |
| | Atmospheric Pressure | 86-106kPa | | | | |

## ■ Electrical Characteristics

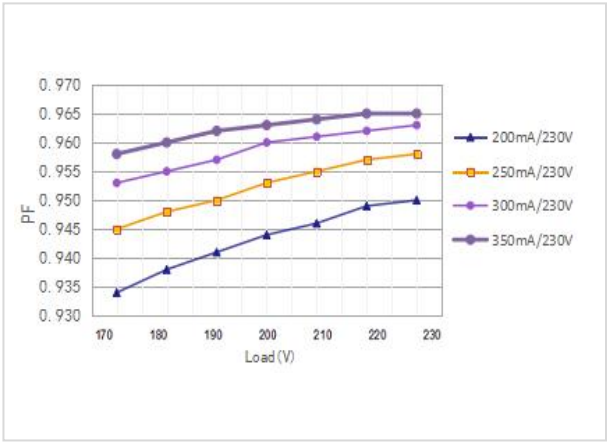
| | | |
|---|---|---|
| **Safety & EMC** | Certifications | ENEC, CE, CB, CCC, RCM, SAA and EL |
| | Withstand Voltage | I/P-PG: 1.5kV 5mA 60S |
| | Insulation Resistance | I/P-FG O/P-FG: >100MΩ@500Vdc |
| | Safety Standards | ENEC: EN61347-1:2015, EN61347-2-13: 2014/A1: 2017, EN62384 2016/A1: 2009<br>CE-LVD: EN61347-2-13: 2014/A1: 2017, EN61347-1: 2015, EN62493: 2015<br>CB: IEC61347-1: 2015, IEC61347-2-3: 2014, IEC 61347-2-13: 2014/AMD1: 2016<br>RCM: AS 61347.2-13: 2018<br>EL: IEC61347-2-13: 2014 Annex J<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, L/N-PG: 2kV), 6, 11<br>CCC: GB/T17626.2, 3, 4, 5 (lightning strike 1kV, L/N-PG: 2kV), 6, 11 |
| **Other Parameters** | IP Rating | IP20 |
| | RoHS | RoHS 2.0 (EU) 2015/863 |
| | Warranty | 5 yrs (Tc≤75℃) |
| **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: EEC SE7440, flicker tester (flicker-free coefficient test) Everfine LFA-3000, etc. | |
| **Test Remark** | If there are no special remarks, the above parameters are tested at the ambient temperature of 25℃, humidity of 50%, full load and input voltage of 230Vac/50Hz. | |

## ■ Electrical Characteristics

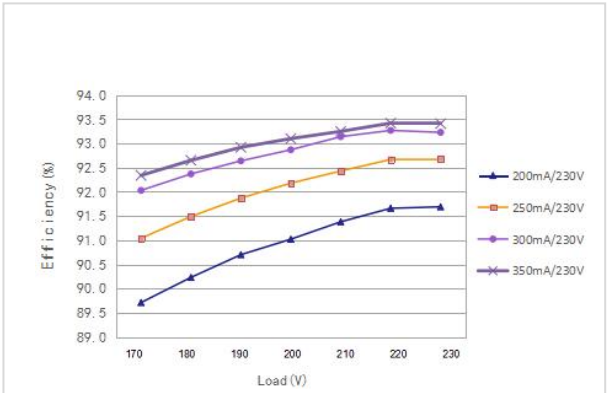
| | |
|---|---|
| **Remarks** | 1. It is recommended that user install the over voltage protection, under voltage protection and surge protection devices in the power supply circuits of light fixtures to ensure electricity safety.<br>2. The LED driver used in combination with the end device is one of 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. Thus, the manufacturer of LED light fixture should re-confirm the EMC of the whole light fixture before the whole light fixture is finished.<br>3. The test conditions of the circuit breaker configuration quantity are the same as those of the inrush current.<br>4. The PC cover, casing and end cap for assembling the LED driver in the light fixture must meet the fire rating of UL94-V0 or above. |

## ■ Product Characteristic Curves

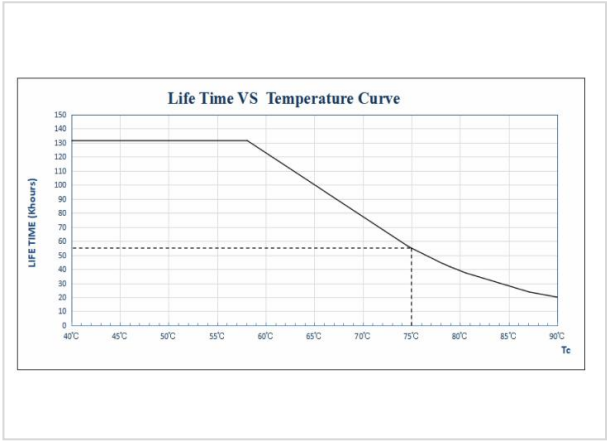
PF Curve



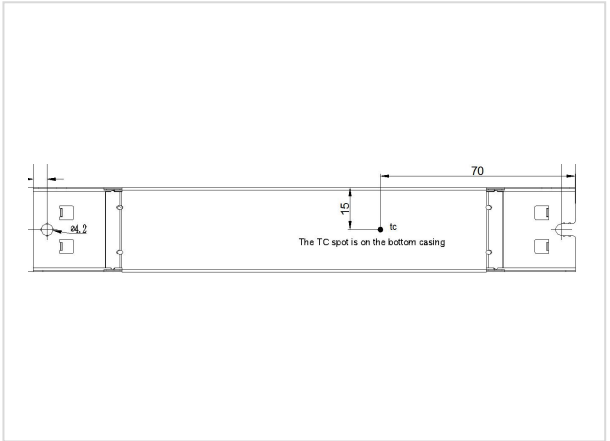

Efficiency Curve




Lifetime Curve




Tc Spot Test Diagram



## ■ Product Definitions

### Product Terminals

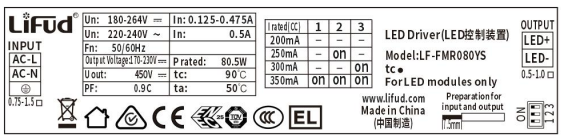
| INPUT | |
|---|---|
| AC-L | Input terminal of AC live wire |
| AC-N | Input terminal of AC neutral wire |
| ⏚ | Earth wire |

| OUTPUT | |
|---|---|
| LED+ | Positive Electrode Output of LED Driver |
| LED- | Negative Electrode Output of LED Driver |

### Product DIP Switch

| I rated (CC) | 1 | 2 |
|---|---|---|
| 200mA | OFF | OFF |
| 250mA | OFF | ON |
| 300mA | OFF | OFF |
| 350mA | ON | ON |

## ■ Label

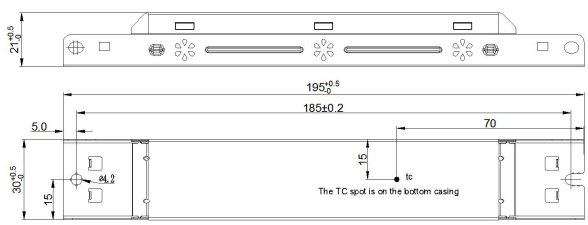



## ■ Structure & Dimensions (unit: mm)

### Product Definitions

| Model | Overall Appearance (L*W*H) | Distance Between 2 Positioning Holes | Diameter of Positioning Holes |
|---|---|---|---|
| LF-FMR080YS | 195*30*21mm | 185mm | 4.2mm |

### Structure Diagram



## ■ Packaging Specifications

| Model | LF-FMR080YS |
|---|---|
| Carton Size | 385*285*210mm (L*W*H) |
| Quantity | 8 pcs/layer；6 layers/ctn；48 pcs/ctn |
| Weight | 0.160 kg/pc; 7.98 kg/ctn |

## ■ Transportation & Storage

### 1. Transportation

- Suitable transportation means: vehicles, boats and aeroplanes.
- In transit, it is necessary to prepare awnings for rain or sun protection. Moreover, please keep civilized loading and unloading to prevent the vibration or impact of LED driver as much as possible.

### 2. Storage

- The storage of LED driver shall conform to the standard of Class I environment. When using LED drivers which have been stored for more than 6 months, please re-test them firstly. Do not use them unless they are tested to be qualified.

## Cautions

- Please use Lifud LED driver according to its parameters in the specification, otherwise the LED driver may malfunction.
- Using any incompatible light fixtures or those that have not been certified may cause fire, explosion or other risks.
- Man-made damage is beyond the scope of Lifud warranty service.

Remark: Lifud Tecnology Co., Ltd. reserves the right to interpret any contents of this specification.