

LF-FMR040YSIII

FMR*YSIII non-SELV 1-driver with 4-output current | Constant Current - Non dimmable



Product family features

- Low THD<15%@full load
- Rated input voltage: 220-240Vac
- Ta: -30°C~+60°C
- Ripple current<5%
- Suitable for Class I light fixtures
- 5 years guarantee



Product family benefits

- Output current adjustable via DIP switch in 4 shifts
- Super high efficiency
- Linear metal casing with 21mm housing height
- Long lifetime and high reliability
- Flicker free
- Non-SELV output

Typical applications

- For linear light and tri-proof light
- For office, commercial, decorative and retail lighting

Product parameters

- Output current 200/250/300/350mA
- Output power 9-40W
- Input voltage 198-264Vac
- Output voltage 40-130Vdc
- Efficiency 91%

Electrical data

Input data

| | |
|---|----------------------------|
| Rated supply voltage | 220 ... 240V |
| AC voltage range | 198 ... 264V |
| Mains frequency | 0/50/60Hz |
| Input voltage DC | 180 ... 264V ¹⁾ |
| Power factor | ≥0.95 |
| Efficiency in max. power | 91% ²⁾ |
| THD | ≤15% |
| Input current | 0.30A Max |
| Inrush current | 32A ³⁾ |
| Loading no. on circuit breaker 10 A (B) | 13 |
| Loading no. on circuit breaker 10 A (C) | 21 |
| Loading no. on circuit breaker 16 A (B) | 21 |
| Loading no. on circuit breaker 16 A (C) | 35 |
| Loading no. on circuit breaker 20 A (C) | 43 |
| Loading no. on circuit breaker 20 A (C) | 54 |
| Protective conductor current | ≤0.7mA |

Output data

| | |
|--------------------------------|---|
| Nominal output voltage | 40... 130V ⁴⁾ |
| Nominal output current | 200/250/300/350mA ⁵⁾ |
| Default output current | 350mA |
| Current set | DIP switch (please see the DIP switch definition) |
| Maximum output power | 40W |
| Nominal output power | 9... 40W |
| Output ripple current (100 Hz) | <5% |
| Flicker | Comply with IEEE Std 1789-2015 |
| CIE SVM | ≤0.4 |
| IEC-Pst | ≤1 |
| Output current tolerance | ±5% |
| Temperature tolerance | ±10% |
| Starting time | <0.5S |

Safety

| | |
|-------------------------------|------------------------------|
| Withstanding voltage | I/P-PG: 1.6kV&5mA&60S; |
| Surge capability (L-N) | 1kV |
| Surge capability (L/N-Ground) | 2kV |
| Insulation resistance | I/P-PG O/P-PG: >100MΩ@500VDC |
| Guarantee | 5 years ⁶⁾ |

1) DC input is only for emergency

2) @full load

3) t =190μs

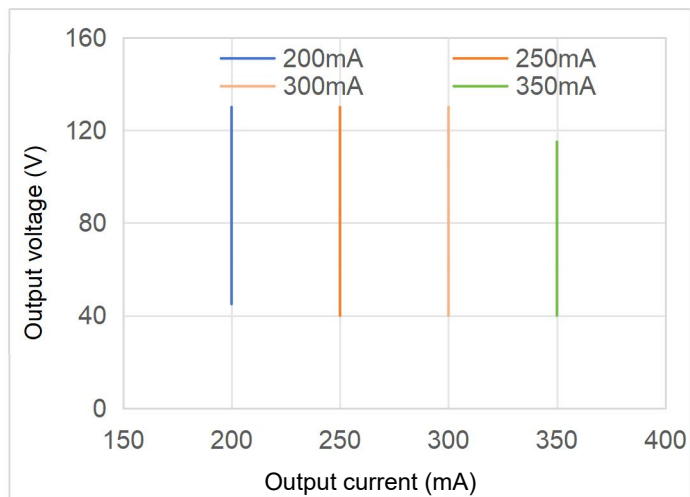
4) Please refer to the operating window about the relationship between output voltage and output current.

5) Fixed current version optional

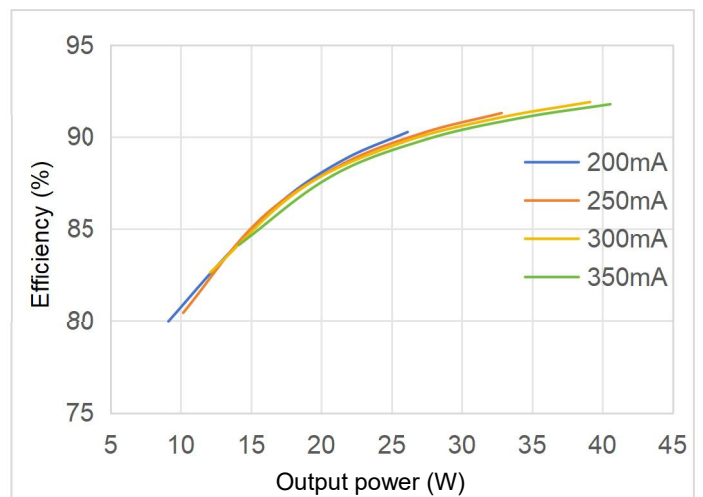
6) 5 years @Tc≤ 81°C

Characteristic diagram

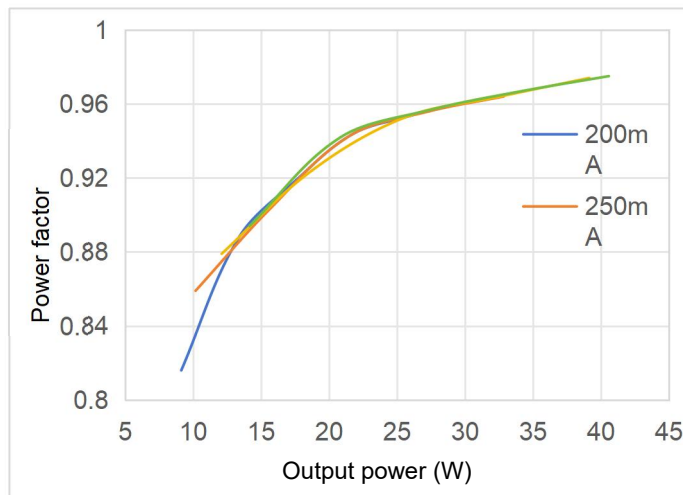
Operating Window



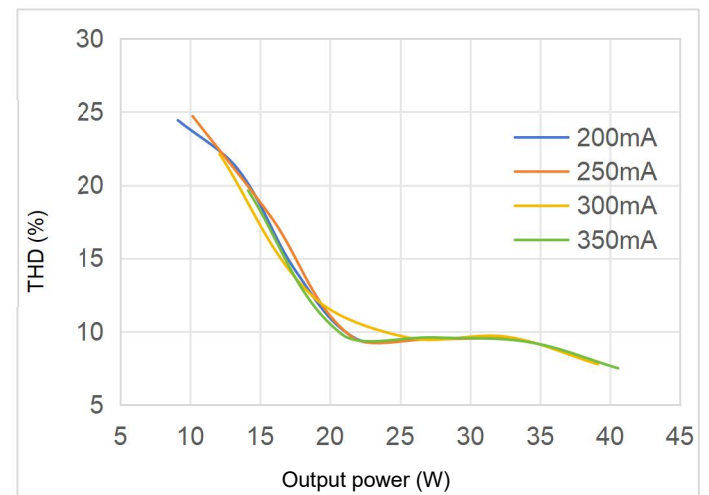
Typical Efficiency vs Load



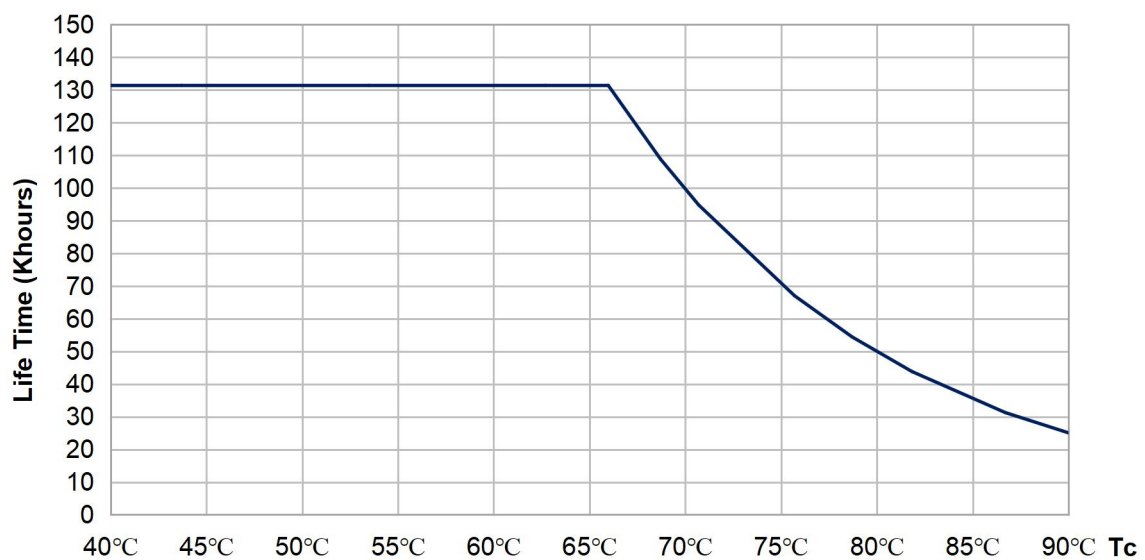
Typical Power Factor vs Load



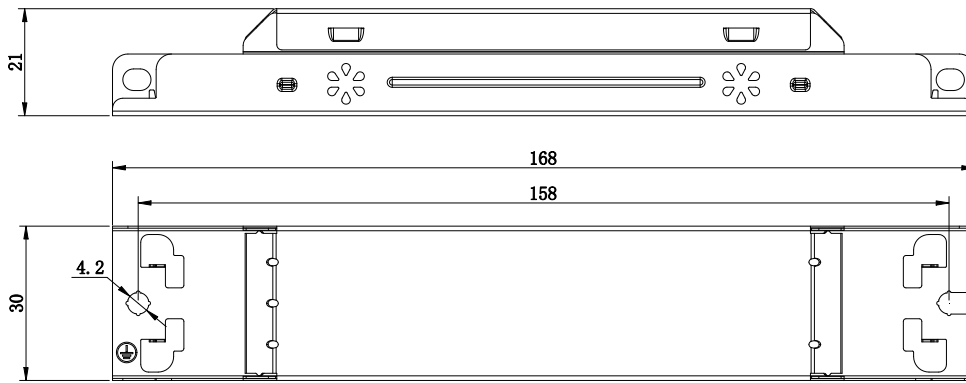
Typical THD vs Load



Lifespan



Dimensions



| | |
|---|-----------------------------|
| Mounting hole spacing, length | 158.0mm |
| Mounting hole diameter | 4.2mm |
| Product weight | 110.0g |
| Cable cross-section, input side | 0.5 ... 1.5 mm ² |
| Cable cross-section, output side | 0.5 ... 1.5 mm ² |
| Wire preparation length, input side | 7 ... 8mm |
| Wire preparation length, output side | 7 ... 8mm |
| Length | 168.0mm |
| Width | 30.0mm |
| Height | 21.0mm |

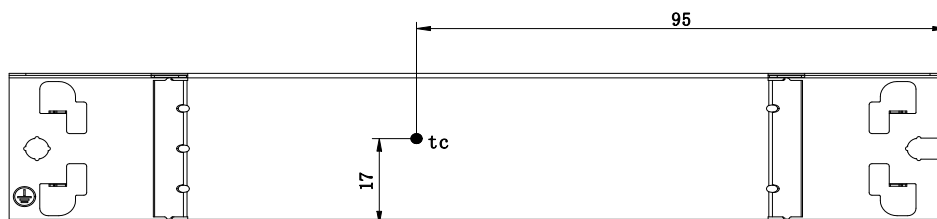
Colors & materials

| | |
|------------------------|-------------------------------|
| Casing material | Color coated galvanized sheet |
| Casing color | White |

Temperature & operating conditions


| | |
|---|---|
| Ambient temperature range | -30°C - +60°C |
| Maximum temperature at Tc test point | 85°C |
| Temperature range at storage | -30°C - +80°C (6 months in Class I environment) |
| Humidity range at storage | 20-95%RH(no condensation) |
| Humidity during operation | 20-90%RH(no condensation) |
| RoHS | RoHS 2.0 (EU) 2015/863 |

Tc test point



Note: this diagram is the front view and Tc point is on the front side of the driver.

Product Terminal

| Input | | Output | |
|---|-----------------------|-------------|---|
| AC-L | AC live wire input | LED+ | Positive electrode output of LED driver |
| AC-N | AC neutral wire input | LED- | Negative electrode output of LED driver |
|  | Earth wire | | |

DIP switch Terminal

| Output current | Output voltage | DIP switch 1 | DIP switch 2 |
|----------------|----------------|--------------|--------------|
| 200mA | 40-130Vdc | - | - |
| 250mA | 40-130Vdc | - | ON |
| 300mA | 40-130Vdc | ON | - |
| *350mA | 40-115Vdc | ON | ON |

Note: "-": shift OFF. "*": default current. DIP when power on is NOT allowed. Please disconnect the AC power before DIP.

Capabilities

| | |
|--|----------------------|
| Dimmable | - |
| Over heating protection | - |
| Overload protection | - |
| Short-circuit protection | Automatic reversible |
| No-load protection | <200V |
| Suitable for fixtures with prot. class | I |
| Control interface | - |
| Number of channels | 1 channel |

Programming

| | |
|-----------------------|---|
| Programmer | - |
| DALI Control Software | - |
| APP | - |

Certificates & standards

| | |
|--------------------|---|
| Approval marks | ENEC, UKCA, CE, CB, EL, RCM, SAA, EAC, CCC |
| Standards | GB 19510.1-2009, GB 19510.14-2009 IEC/EN 61347-2-13, IEC/EN 61347-1, IEC/EN 62493 IEC/EN 62384 IEC/EN 61347-2-13 Annex J AS 61347.1, AS 61347.2.13 TP TC 004/2011+TP TC 020/2011 |
| EMC | GB 17625.1-2022, GB/T 17743-2021 EN 55015, EN 61547, EN 61000-3-2,3 |
| Type of protection | IP20 |

Logistical Data

| Product | Packaging unit (Pieces/Unit) | Dimensions (L*W*H) | Volume | Gross weight |
|----------------|---------------------------------|--------------------|-----------------------|--------------|
| LF-FMR040YSIII | 84 | 385mm*285mm*210mm | 23.04 dm ³ | 9.85kg±5% |

Test equipment & condition

Test Equipment

AC power source: CHROMA6530, digital power meter: CHROMA66205, 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.

If there are no special remarks, the above parameters are tested at the ambient temperature of 25°C, humidity of 50%, maximum output power and input voltage of 230Vac/50Hz.

Additional information

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.

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.

3. Configure the quantity of circuit breakers based on inrush current and time.

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.

Transportation & storage

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.

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.

Disclaimer

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.

Lifud Technology Co., Ltd. reserves the right to interpret any contents of this specification.