

Features

- Flicker-free
- High efficiency; high PF
- IP20
- Suitable for Class I light fixtures
- 5-year warranty (please refer to the warranty condition)



Applications

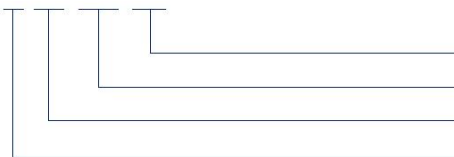
· indoor-office lighting · decorative lighting · commercial lighting

Descriptions

LF-FMR040YS is a 40W constant current LED driver. Its input voltage ranges from 220 to 240Vac. Its output current is adjustable from 200 to 350mA via DIP switch with every 50mA as a step. It is suitable for Class I light fixtures like tri-proof light and linear light.

Product Model

LF - F MR 040 YS



- Y: complies with certifications; S: serial number
- 040: output power: 40W
- MR: indoor metal casing tri-proof light
- F: non-isolated design

■ Electrical Characteristics

Model		LF-FMR040YS				
Output	Output Voltage	58-114Vdc				
	Output Current	200mA	250mA	300mA	350mA	
	Flicker Index	Complies with IEEE Std 1789-2015				
	CIE SVM	≤0.4				
	IEC-Pst	≤1				
	Current Tolerance	±7%				
	Temperature Drift	±10%				
	Start-up Time	<0.5S@230Vac				
Input	Input Voltage	220-240Vac (voltage limit: 198-264Vac)				
	DC Input Voltage	180-264Vdc				
	Input Frequency	50-60Hz(47-63Hz)				
	Input Current	0.3A Max				
	PF	≥0.9@230Vac&full load				
	THD	≤20%				
	Efficiency	≥88%	≥89%	≥90%		
	Inrush Current	≤30A&190uS@230Vac				
	Loading Quantities of Circuit Breaker	Model	B10	C10	B16	C16
		Quantity (pcs)	22	22	35	35
Leakage Current	≤0.7mA					
Protection Characteristics	Open Circuit	≤250Vdc				
	Short Circuit	Hiccup mode(auto-recovery)				
Environment Descriptions	Operating Temperature	-30°C - +50°C				
	Operating Humidity	10-95%RH (no condensation)				
	Storage Temperature/ Humidity	-30°C - +85°C (6 months in Class I environment); 0-95%RH (no condensation)				
	Atmospheric Pressure	86-106kPa				

■ Electrical Characteristics

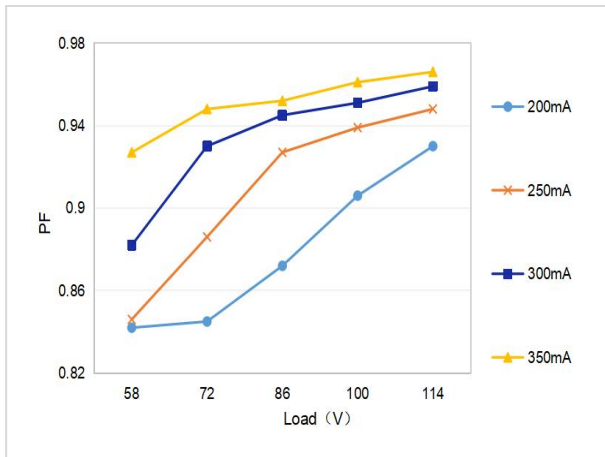
Safety & EMC	Certifications	EL、ENEC、CE、CB、UKCA、RCM、CCC
	Withstand Voltage	I/P-FG: 1.6kV&5mA&60S
	Insulation Resistance	I/P-FG O/P-FG: >100MΩ@500Vdc
	Safety Standards	ENEC:EN 61347-2-13:2014/A1:2017, EN 61347-1:2015/A1:2021 EN IEC62384:2020 CE-LVD:EN 61347-2-13:2014/A1:2017, EN 61347-1:2015/A1:2021 CB:IEC61347-1:2015, IEC61347-1:2015/AMD1:2017, IEC61347-2-13:2014 IEC61347-2-13:2014/AMD1:2016 UKCA-LVD:EN 61347-1:2015/A1:2021, EN 61347-2-13:2014/A1:2017, EN 62493:2015 EL:EN IEC 61347-2-13 Annex J CCC:GB 19510.1-2009, GB 19510.14-2009
	EMI	CE-EMC/RCM:EN55015, EN61000-3-2, EN61000-3-3 UKCA-EMC:EN IEC 55015:2019/A11:2020, EN 61547:2009, EN IEC 61000-3-2:2019/A1:2021, EN 61000-3-3:2013/A2:2021 EL:EN IEC 61347-2-13 Annex J 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
Other Parameters	IP Rating	IP20
	RoHS	RoHS 2.0 (EU) 2015/863
	Warranty	5 years (Tc≤82°C)
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°C, humidity of 50%, full load and input voltage of 230Vac/50Hz.	

■ **Electrical Characteristics**

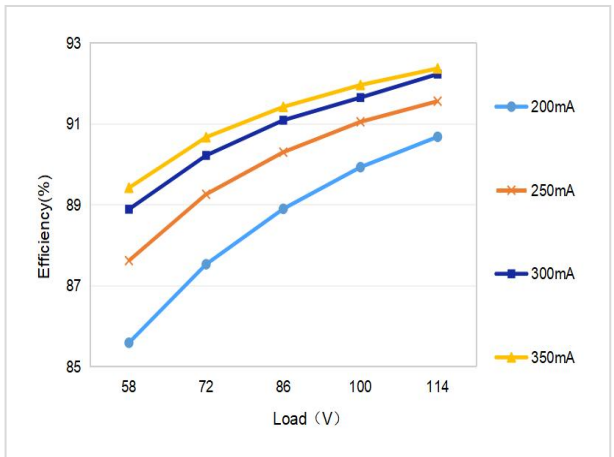
Additional Remarks	<ol style="list-style-type: none"> 1. It is recommended that user install the over voltage protection, under voltage protection and surge protection devices in the power supply circuits of light fixtures to ensure electricity safety. 2. The LED driver used in combination with the end 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. The test conditions of the circuit breaker configuration quantity are the same as those of the inrush current. 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. 5. It is recommended to install double-pole switch at AC input terminal. If user uses the single-pole switch, make sure to connect it to wire L (live wire), otherwise the afterglow of light fixture would be incurred after the AC is disconnected. 6. Because there is parasitic capacitance between LEDs and the PCBA, and the PCBA (the light fixture) is grounding, there will be a slight flicker at the moment of AC power on. It's normal for non-isolated products, if you want to avoid the slight flicker, please replace it with our isolated products.
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■ **Product Characteristic Curves**

PF Curve

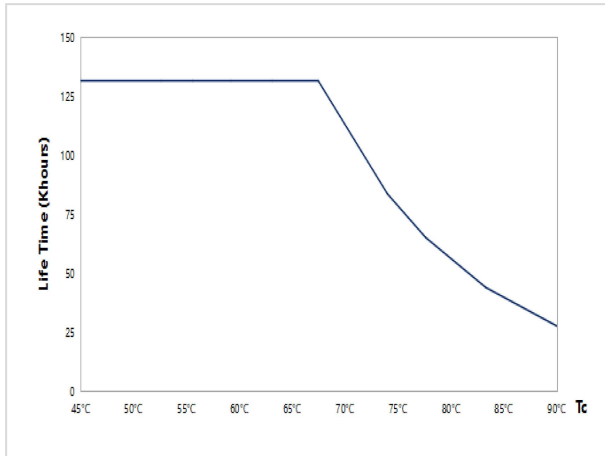


Efficiency Curve

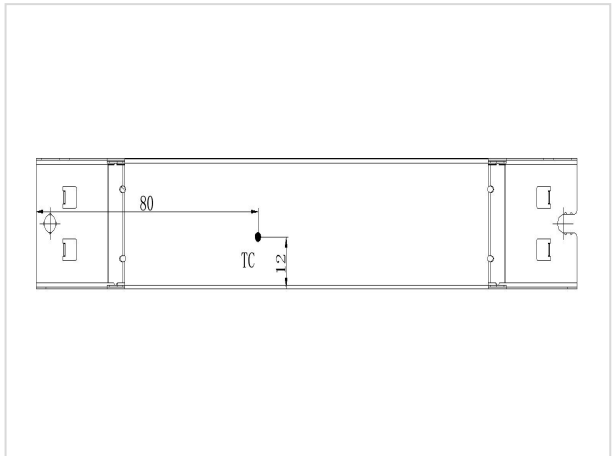


■ **Product Characteristic Curves**

Lifetime Curve



Tc Point Testing Diagram



■ **Product Definitions**

Product Terminal

INPUT	
AC-L	AC live wire input
AC-N	AC neutral wire input
	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	-	-
250mA	ON	-
300mA	-	ON
350mA	ON	ON

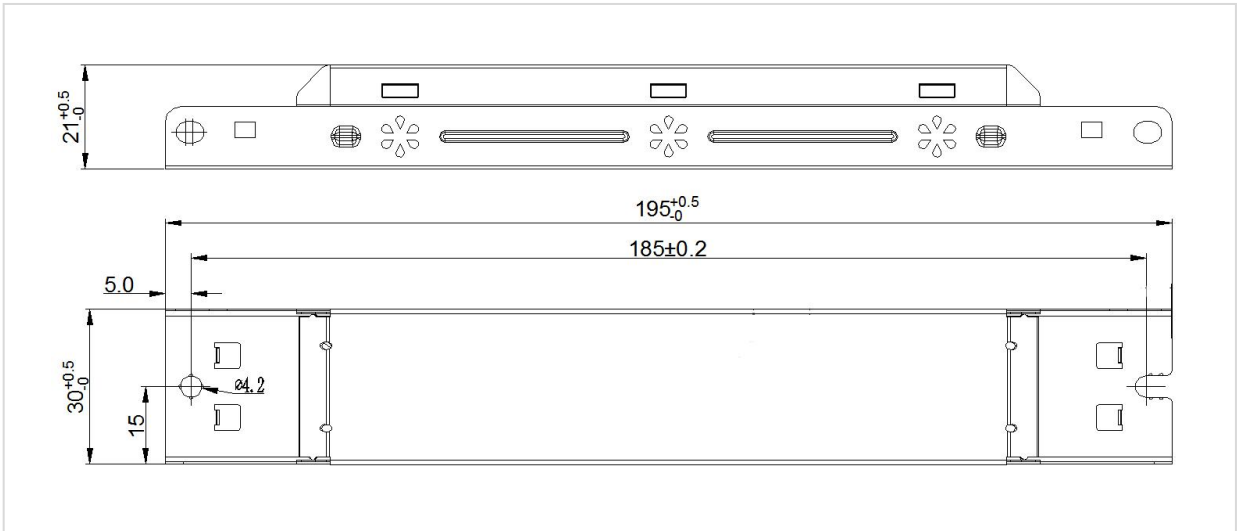
Remark: "-": shift OFF

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

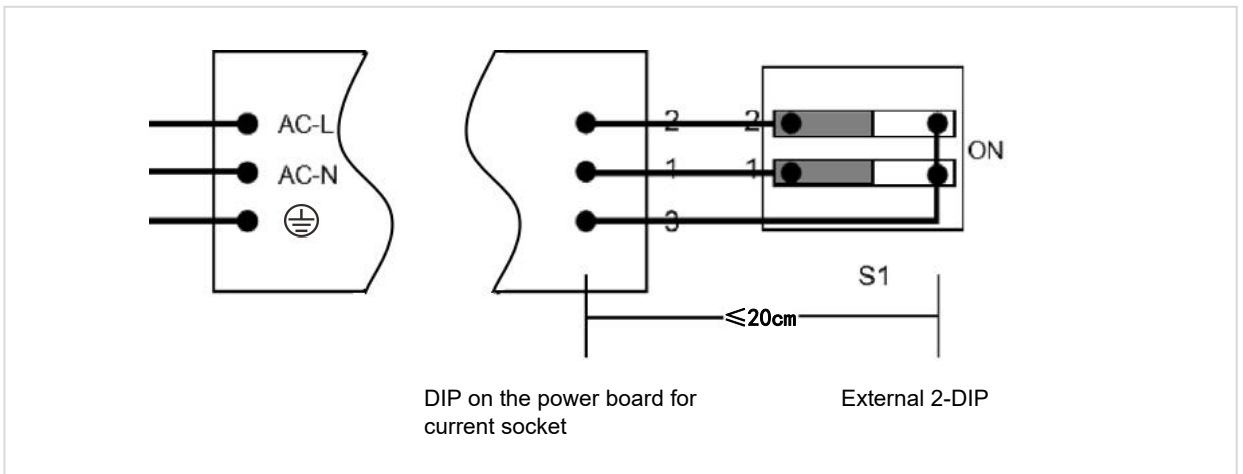
Product Dimensions

Model	Overall Appearance (L*W*H)	Distance Between 2 Positioning Holes (L)	Diameter of Positioning Hole (D)
LF-FMR040YS	195*30*21 mm (±0.5mm)	185 mm (±0.2mm)	4.2 mm

Structure Diagram



■ **External DIP Wiring Diagram**



·Remark: The pin pitch of the power output terminal 3 - PIN terminal is 2.54mm, which is for external DIP. Terminal 3 is common terminal. The maximum distance between output terminal 3 - PIN terminal should be within 20cm (if it's more than 20cm, the current accuracy may be inaccurate). The specific wiring diagram is as shown above.

■ Packaging Specifications

Model	LF-FMR040YS
Carton Size	385*285*210mm (L*W*H)
Quantity	8 pcs/layer; 6 layers/ctn; 48 pcs/ctn
Weight	0.11 kg/pc; 6.16 kg/ctn

■ Transportation and 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 Technology Co., Ltd. reserves the right to interpret any contents of this specification.