

Features

- · Flicker free
- · High efficiency; high PF
- IP20
- · 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

Descriptions

LF-FMR080YS(H) is an 80W constant current LED driver. Its input voltage ranges from 220 to 240Vac and output current is adjustable from 350 to 550mA via DIP switch. It is suitable for Class I light fixtures, including tri-proof light, linear light, etc.

Product Model

LF - F MR 080 YS (H)

(H): high current output (vs FMR080YS)

Y: complies with certifications; S: serial number

080: output power: 80W

MR: indoor metal casing tri-proof light

F: non-isolated design



■ Electrical Characteristics

Model		LF-FMR080YS(H)							
	Output Voltage	90-200V	90-200V	90-200V	90-188V	90-177V	90-168V	90-160V	90-145V
	Output Current	Adjustable via DIP switch							
		350mA	375mA	400mA	425mA	450mA	475mA	500mA	550mA
	Flicker Index	Complies with IEEE Std 1789-2015							
Output	CIE SVM	≤0.4							
	IEC-Pst	≤1							
	Current Tolerance	±5%							
	Temperature Drift	±10%							
	Start-up Time	<0.5S							
	Input Voltage	220-240Vac (voltage limit: 198-264Vac)							
	DC Input Voltage	180-264Vdc							
	Input Frequency	0/50/60Hz							
	Input Current	0.55A max.							
	PF	≥0.9							
Input	THD	≤20%							
	Efficiency	≥93%							
	Inrush Current	≤60A&180uS							
	Loading Quantities	Model	Е	310	C10		B16	C16	
	of Circuit Breaker	Quantity	(pcs) 1	5	15		24	24	
	Leakage Current	≤0.7mA							
Protection	Open Circuit	<250V Auto-recovery							
Characteristics	Short Circuit								
Environment Descriptions	Operating Temperature	-30°C - +50°C							
	Operating Humidity	20-95%RH (no condensation)							
	Storage Temperature/ Humidity	-30°C - +80°C (6 months in Class I environment); 10-95%RH (no condensation)							
	Atmospheric Pressure	86-106kPa							



■ Electrical Characteristics

	Certifications	ENEC, CE, CB, RCM, UKCA, EL, CCC	
Safety & EMC	Withstand Voltage	I/P-PG: 1.6kV 5mA 60S	
	Insulation Resistance	I/P-PG O/P-PG: >100MΩ@500Vdc	
	Safety Standards	ENEC: EN61347-2-13: 2014/A1: 2017, EN61347-1: 2015/A1: 2021, EN IEC 62384: 2020 CE-LVD: EN61347-2-13: 2014/A1: 2017, EN61347-1: 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 IEC61347-2-13: 2013 Annex J CCC: GB 19510.1-2009, GB19510.14-2009	
	ЕМІ	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 L-N: 1kV, L/N-PG: 2kV), 6, 11 CCC: GB/T17626.2, 3, 4, 5 (lightning strike L-N: 1kV, L/N-PG: 2kV), 6, 11	
	IP Rating	IP20	
Other Parameters	RoHS	RoHS 2.0 (EU) 2015/863	
	Warranty	5 years (Tc≤84°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.		



Additional

Remarks

■ Electrical Characteristics

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.

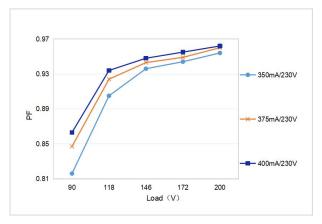
- 2. The LED driver used in combination with the end device is one of the accessories of the whole light fixture, and the EMC of the whole light fixture is not only susceptible to the driver itself, but to the LED light fixture and the whole light fixture's wiring. Thus, the manufacturer of LED light 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.

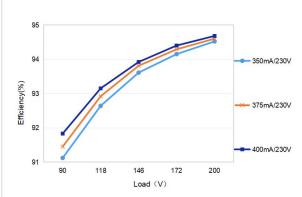
- 5. It is well-advised that the withstanding voltage of LEDs and aluminum substrates >3kV.
- 6. It is recommended to install double-pole switch at AC input terminal. If user uses the single-pole switch, make sure to connect it to wire L (live wire), otherwise the afterglow of light fixture would be incurred after the AC is disconnected.
- 7. There exists stray capacitance between LED light fixture and aluminum substrate, and the light fixture will have transient slight brightness the moment the mains is connected and the aluminum substrate is connected to the earth (the whole light fixture connected to the earth). This is of no abnormalities for a non-isolated LED driver. And if the above issue needs to be avoided, please replace the non-isolated with the isolated.

■ Product Characteristic Curves

PF Curve 1



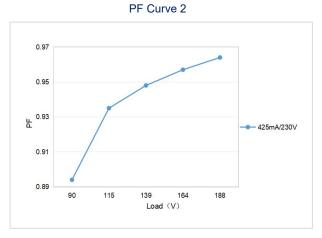
Efficiency Curve 1



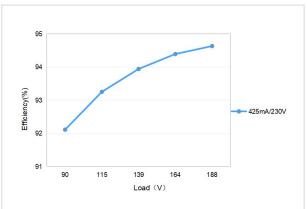


■ Product Characteristic Curves

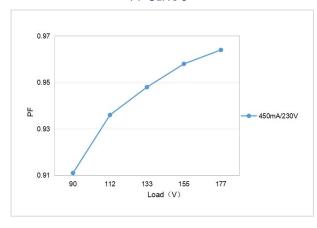




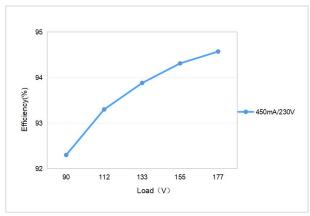
Efficiency Curve 2



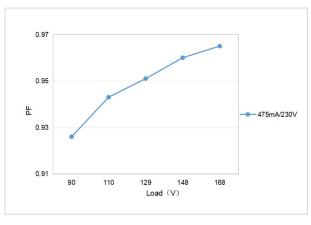
PF Curve 3



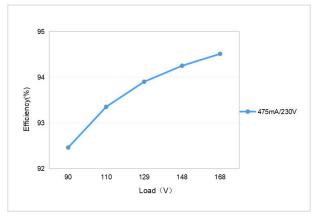
Efficiency Curve 3



PF Curve 4



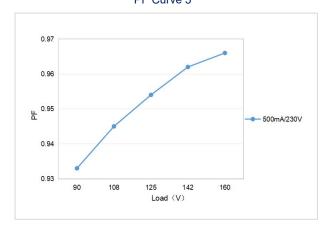
Efficiency Curve 4



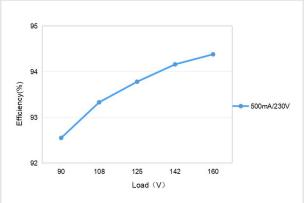


■ Product Characteristic Curves

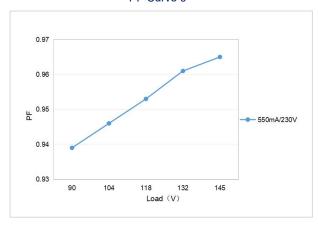
PF Curve 5



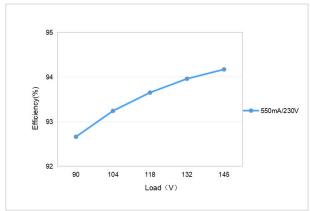
Efficiency Curve 5



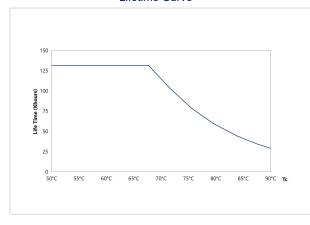
PF Curve 6



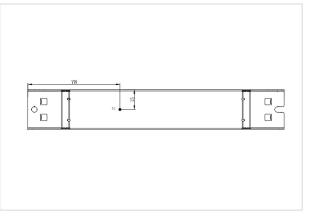
Efficiency Curve 6



Lifetime Curve



Tc Point Test Diagram





■ Product Definitions

Product Terminals

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	3
350mA (90-200Vdc)	-	-	-
375mA (90-200Vdc)	ON	-	-
400mA (90-200Vdc)	-	ON	-
425mA (90-188Vdc)	ON	ON	-
450mA (90-177Vdc)	-	-	ON
475mA (90-168Vdc)	ON	-	ON
500mA (90-160Vdc)	-	ON	ON
550mA (90-145Vdc)	ON	ON	ON

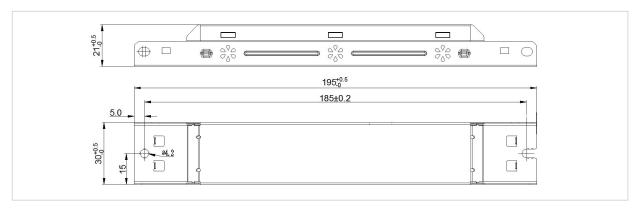
Remark: "-": shift OFF

■ Structure & Dimensions (unit: mm)

Product Dimensions

Model	Overall Appearance (L*W*H)	Distance Between 2 Positioning Holes (L)	Diameter of Positioning Hole (D)
LF-FMR080YS(H)	195*30*21 mm (±0.5mm)	185 mm (\pm 0.2mm)	4.2 mm

Structure Diagrams





■ Packaging Specifications

Model	LF-FMR080YS(H)
Carton Size	385*285*210mm (L*W*H)
Quantity	8 pcs/layer; 6 layers/ctn; 48 pcs/ctn
Weight	0.122 kg/pc; 6.8 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.