

Product Description

LF-FMR020YSxxxxH is a 20W non-isolated flicker-free constant current LED driver. It has a metal casing, high power factor and high efficiency. The rated input voltage range is 220-240Vac. The output voltage range is 25-57Vdc. The output current range is 200-350mA.

Features

- EU standard, metal casing
- High performance, high efficiency, high power factor
- 5-year warranty (Please refer to the warranty condition.)
- Suitable for Class I light fixtures

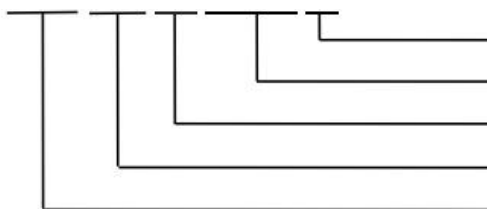
Applications

- Indoor office lighting
- Decorative lighting
- Commercial lighting



Product Naming

LF - FMR 020 YS xxxx H



H: input voltage of 220-240Vac

xxxx: rated output current, e.g. 0350: 350mA

Y: conforms to certifications: S: serial number

020: rated power of 20W

F: non-isolated design; MR: indoor LED driver for tri-proof light

Electrical Characteristics

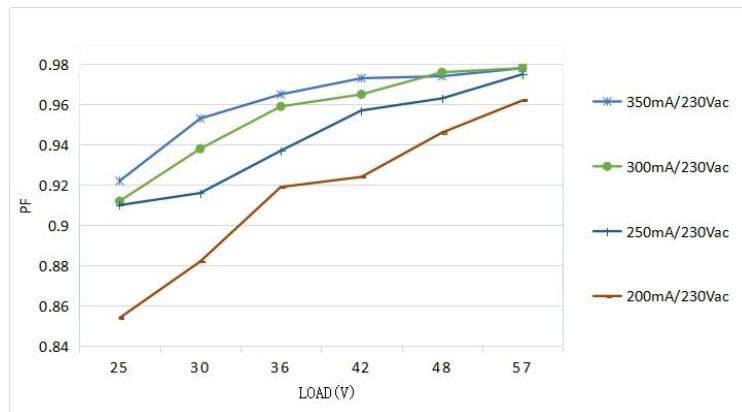
Model		LF-FMR020YSxxxxH				
Output	Output Voltage	25-57Vdc				
	Output Current	200mA	250mA	300mA	350mA	
	Percent Flicker (Modulation Depth)	Conforms to the standard of IEEE1789				
	CIE SVM	≤0.4				
	IEC-Pst	≤1.0				
	Current Tolerance	±7%				
	Temperature Drift	±10%				
	Start-up Time	<0.5S@220Vac				
Input	AC Input Voltage	220-240Vac (voltage limit: 198-264Vac)				
	DC Input Voltage	180-264Vdc				
	Input Frequency	47Hz-63Hz				
	Input Current	0.12A				
	Power Factor	>0.9@230Vac				
	THD	<20%				
	Efficiency	≥82%	≥84%	≥85%	≥85%	
	Inrush Current	≤14A & 150uS @230Vac (Max)				
	Leakage Current	≤0.7mA				
	Load Quantity of What a Circuit Breaker can Support	Circuit Breaker Model	B10	C10	B16	C16
Quantity (pcs)		40	67	65	108	
Protection Characteristics	Open Circuit Protection	<150Vdc @input voltage220-240Vac				
		<450Vdc @input voltage180-264Vdc				
	Short Circuit Protection	Hiccup mode (auto-recovery)				

Environment Description	Working Temperature	-30°C~+50°C
	Working Humidity	20-90%RH (no condensation)
	Storage Temperature/ Humidity	-30°C~+80°C (six months under class I environment); 10-90%RH (no condensation)
	Atmospheric Pressure	86KPa~106KPa
Safety and Electromagnetic Compatibility	Certification	ENEC, CE, CB, RCM, CCC, SAA, EL
	Withstanding Voltage	I/P-FG: 1.6KV 5mA 60S
	Insulation Resistance	I/P-FG O/P-FG: >100MΩ@500VDC
	Safety Standard	ENEC: EN61347-1:2015, EN 61347-2-13: 2014/A1: 2017, EN62384: 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, IEC61347-2-13: 2014/AMD1: 2016 RCM: AS 61347.2-13: 2018 EL: IEC 61347-2-13: 2014 Annex J 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 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
Others	IP Rating	IP20
	RoHS	RoHS 2.0 (EU) 2015/863
	Warranty	5 yrs (TC≤70°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: TH9201B, flicker-free tester (flicker-free coefficient tester) 60N-01, etc.	

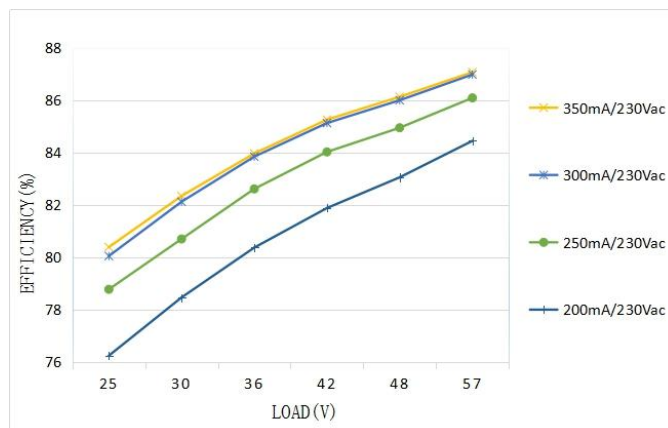
Remark	<ol style="list-style-type: none"> 1. It is recommended that customer should install overvoltage and undervoltage protection devices and surge protection devices in the power supply circuits of the light fixtures to ensure safety before connecting to electricity. 2. As an accessory, the LED driver 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 re-confirms the EMC of the whole LED light fixture. 3. The test conditions of the circuit breaker configuration quantity are the same as that of the inrush current test. 4. Unless otherwise stated, the parameters of the power factor, harmonic and efficiency were test results under the ambient temperature of 25°C, humidity of 50%, input voltage of 230Vac/50Hz and full load.
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Product Characteristic Curves

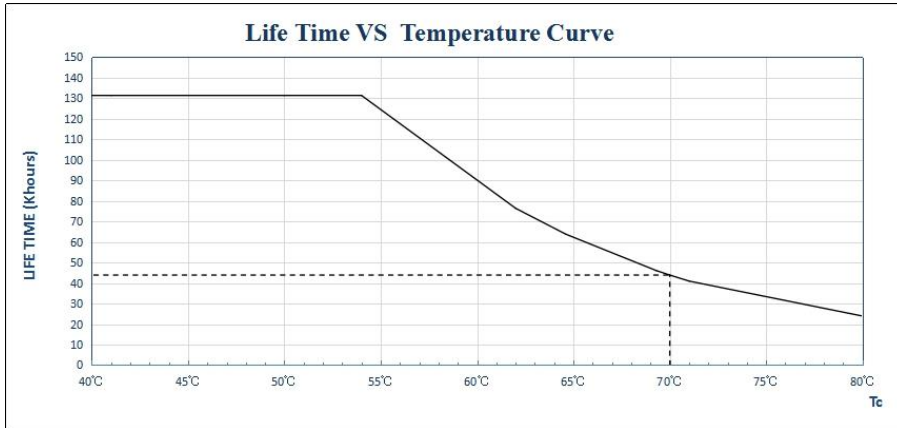
PF Curve



Efficiency Curve



Lifetime Curve



Definition of the Driver's Terminals

INPUT

AC-L	AC live wire
AC-N	AC neutral wire
	Grounding wire

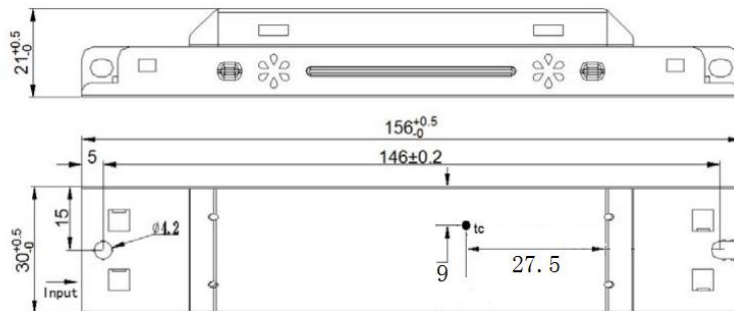
OUTPUT

LED+	The driver's positive electrode output
LED-	The driver's negative electrode output

Label

Lifud [®] INPUT AC-L AC-N 0.75-1.5 □	Un: 180-264V ~ In: 0.044-0.150A Un: 220-240V ~ In: 0.12A Fr: 50/60Hz I rated: xxxmA(CC) Output Voltage: 25-57V ~ Prated: xxxW PF: 0.9C ta: 50°C	LED Driver(LED控制装置) tc ● (7.5mm) Model: LF-FMR020YSxxxxH For LED modules only www.lifud.com Made in China (中国制造)	Preparation for input and output OUTPUT LED+ LED- 0.5-1.0 □
	Input voltage U out 180-264V ~ 450V ~ 220-240V ~ 150V ~		

Structures & Dimensions (Unit:



Package Specifications

Model	LF-FMR020YSxxxxH
Box Size	385*285*210mm (L*W*H)
Quantity	12 pcs/layer; 6 layers/ctn; 72 pcs/ctn
Weight	0.093 kg/pc; 6.76 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 the 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.