Product Description

LF-FMR040YS is a 40W 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 58-114Vdc. The output current can be adjusted via the DIP switch from 200-350mA, in steps of 50mA.

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 040 YS

- Y: conforms to certifications; S: serial number
- 040: rated power of 40W
- F: non-isolated design; MR: indoor LED driver for tri-proof light

Electrical Characteristics

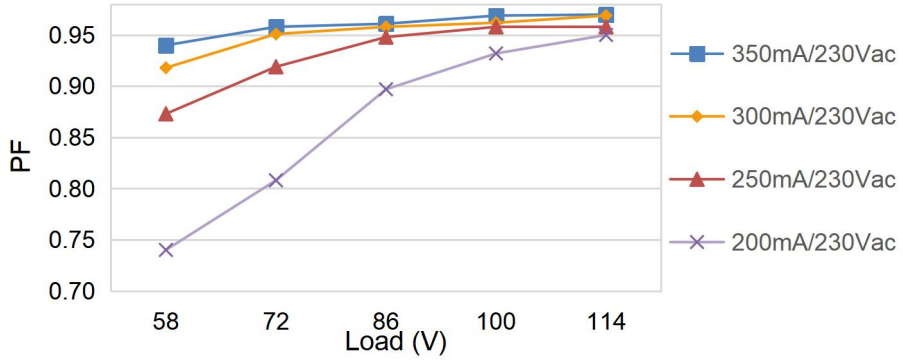
Model		LF-FMR040YS				
Output	Output Voltage	58-114Vdc				
	Output Current	Adjustable via the DIP switch				
		200mA	250mA	300mA	350mA	
	Flicker Index (Modulation Depth)	Conforms to the standard of IEEE1789				
	CIE SVM	≤0.4				
	IEC-Pst	≤1				
	Current Tolerance	±7%				
	Temperature Drift	±10%				
	Start-up Time	<0.5S@230Vac				
Input	AC Input Voltage	220-240Vac (voltage limit: 198-264Vac)				
	DC Input Voltage	180-264Vdc				
	Input Frequency	47Hz-63Hz				
	Input Current	0.3A Max				
	Power Factor	≥0.9				
	THD	≤20%				
	Efficiency	≥88%	≥89%	≥90%	≥90%	
	Inrush Current	≤16A & 170uS @230Vac				
	Load Quantity of What a Circuit Breaker can Support	Circuit Breaker Model	B10	C10	B16	C16
		Quantity (pcs)	33	56	54	90
	Leakage Current	≤0.7mA				
Protection Characteristic	Open Circuit Protection	<250Vdc @input voltage220-240Vac				
		<450Vdc @input voltage180-264Vdc				
	Short Circuit Protection	Hiccup mode (auto-recovery)				

Environment Description	Working Temperature	-30℃~+50℃
	Working Humidity	20-90%RH (no condensation)
	Storage Temperature/ Humidity	-30℃~+ 80℃ (six months under class I environment); 10-95%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≤73℃)
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.	

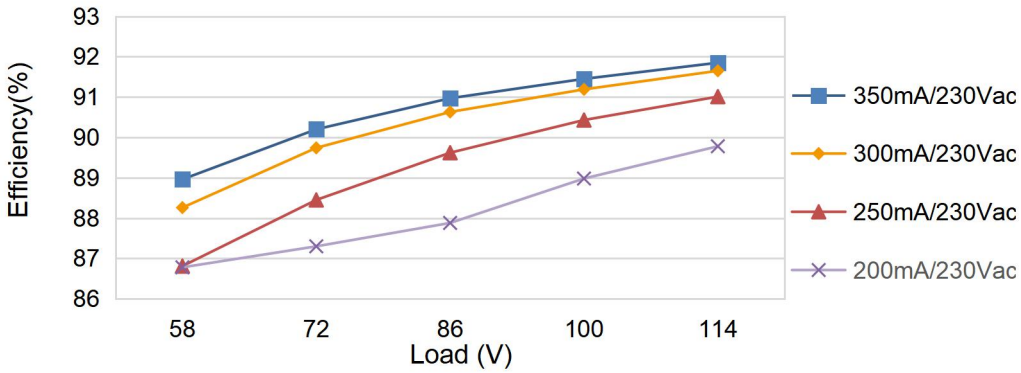
Remark	1. It is recommended that customer should install overvoltage and undervoltage protection devices and surge protection devices in the power supply circuits of the light fixtures to ensure safety before connecting to electricity. 2. As an accessory, the LED driver is not the only factor determining 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℃, humidity of 50%, input voltage of 230Vac and full load.

Product Characteristic Curves

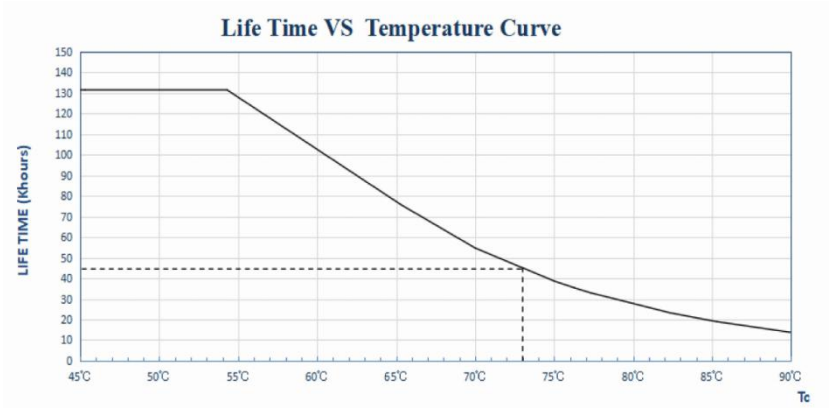
PF Curve



Efficiency Curve



Lifetime Curve



Definition of the Driver's Terminals

INPUT

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

OUTPUT

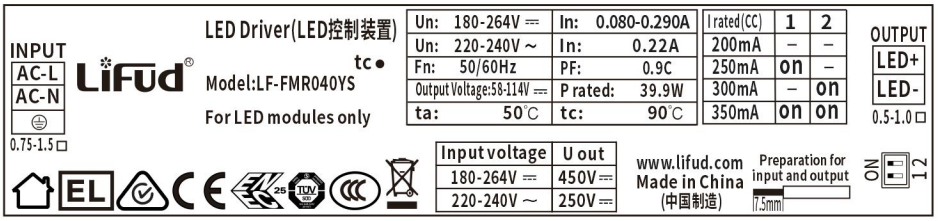
LED+	The driver's positive electrode output
LED-	The driver's negative electrode output

Definition of the Driver's DIP Switch

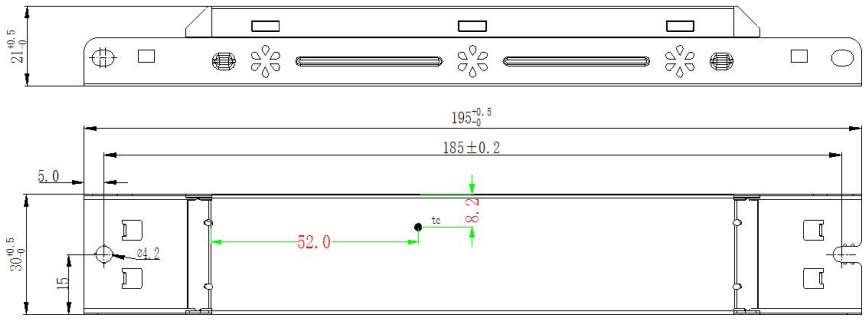
I rated (CC)	1	2
200mA	-	-
250mA	ON	-
300mA	-	ON
350mA	ON	ON

Note: "-" represents the OFF shift.

Label



Structures & Dimensions (Unit: mm)



Package Specifications

Model	LF-FMR040YS
Box Size	385*285*210mm (L*W*H)
Quantity	8 pcs/layer; 6 layers/ctn; 48 pcs/ctn
Weight	0.112 kg/pc; 6.13 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.