Specification

Customer's Name: _____

Customer's Part No.: _____

Product Model No.: LF-FMR040YB

Version No.: V1.2

Customer Confirmation

Examination	Review	Approve

LIFUD Confirmation

Drafting	Review	Approve
Lin Kaifan	Liao Xinggao	Zhong Chunlin

Model Numbers Chosen by Customer

Full model No.		**Full model No.**	
Full model No.		**Full model No.**	

E.C. List

Version	Change Description	Engineer	Date
1.0	initial version	Lin Kaifan	2018-09-21
1.1	Added certificates	Lin Kaifan	2019-01-21
1.2	Revised dimensional drawing	Lin Kaifan	2019-02-25

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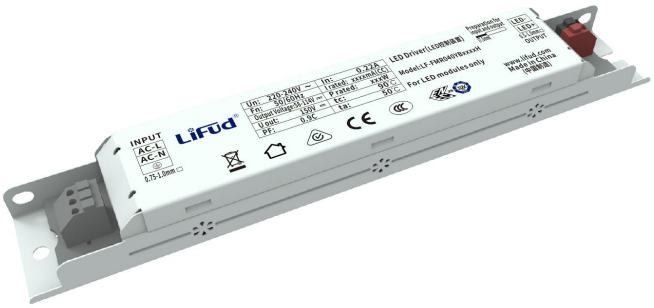
深圳莱福德科技股份有限公司
LIFUD TECHNOLOGY CO., LTD.

1. Product Description



Electrical type: Non-Isolated Driver for Class I & Class II LED light fixture

Function description: AC220-240V, linear type

Feature: active PFC, high PF, high efficiency, low THD

Application: industrial lighting, commercial lighting, residential lighting

Warranty: 5 years (Please refer to the warranty condition.)

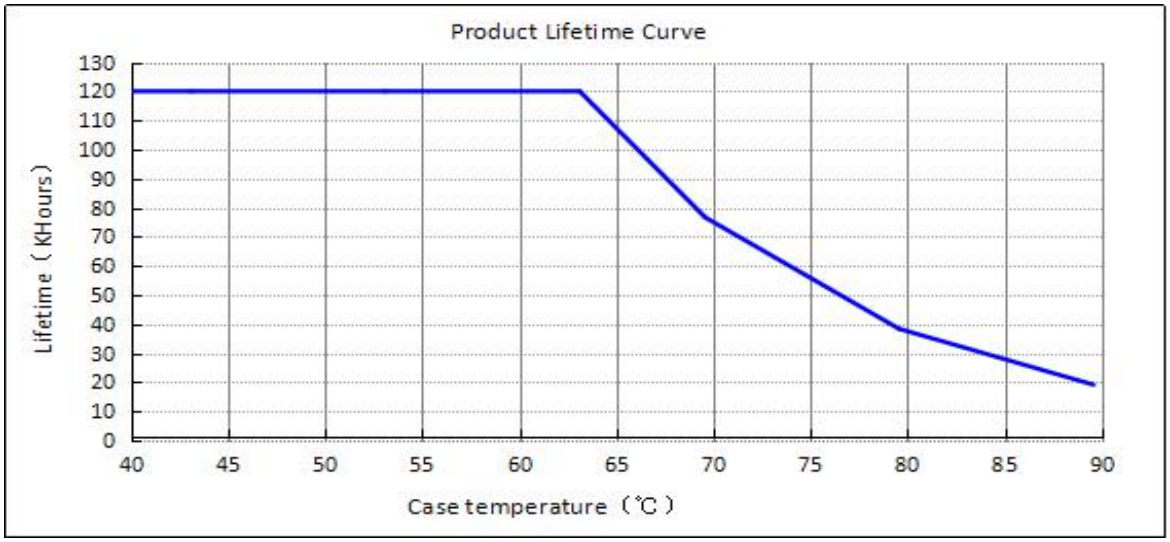
2. Technical Data

	Full Model Number	LF-FMR040YB0350H	LF-FMR040YB0300H	LF-FMR040YB0250H	LF-FMR040YB0200H
Output	Output Voltage	58-114Vdc			
	Output Current	350mA	300mA	250mA	200mA
	Ripple Voltage	< 11V			
	Current Tolerance	±5%			
	Time to Light	230Vac <0.5S			
	Temperature Drift	±10%			
	Line Regulation	±5%			
Input	Line Regulation	±5%			
	Rated Input Voltage	220-240Vac, Max.: 198-264Vac			
	Frequency	47Hz-63Hz			
	Input Current	0.3A Max			
	Power Factor	≥0.95/198Vac			
		≥0.93/230Vac			
		≥0.90/264Vac			
	THD	≤20%			
	Efficiency	≥91%/198Vac	≥91%/198Vac	≥91%/198Vac	≥90%/198Vac
		≥91%/230Vac	≥91%/230Vac	≥91%/230Vac	≥90%/230Vac
		≥91%/264Vac	≥91%/264Vac	≥91%/264Vac	≥90%/264Vac
	In-Rush Current	I<60A/350uS@230Vac			
	Stand-by Power	<0.5W			
Protective Feature	No-Load	Max. output voltage (no-load voltage) 150V			
	Short-Circuit	Hiccup mode (auto-recovery)			
Environment Condition	Working Temperature	-30℃ ~ +50℃			
	Working Humidity	20-90%RH (no condensation)			
	Storage Temperature/Humidit	-40℃ ~ +80℃ (6 months under the class I environment); 10-90%RH (no condensation)			
	Atmospheric Pressure	86-106KPa			
Safety & Norm	Certificate	ENEC, CE, CB, RCM,CCC			
	Hi-Pot Test	I/P-PG: 1.6KVac, <5mA, 60S			
	Insulation Resistance	I/P-PG, O/P-PG: 500VDC, >100MΩ			
	Surge Level	Meet standards of IEC61000-4-5 (L-N:1KV, L-PG: 2KV, N-PG: 2KV)			
	EMI	Meet standards of EN55015, EN61000-3-2			
	EMS	Meet standards of EN61000-4-2,3,4,5,6,8,11; EN61547			
Others	Packing (Weight)	Carton size: 39 x 29 x 21 cm (L*W*H); Net weight: 140g±5%/pc; 6.0KG±5%/ctn; 48pcs/ctn			
	IP Level	\			
	Warranty Condition	5 years (Max. case temperature must not exceed 78℃.)			

Devices Used for Test	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, fast group pulse generator: Everfine EMS61000-4A, Spectrum analyzer: KH3935, hi-pot tester: TH9201B, stroboscope meter (percent flicker tester) 60N-01, etc.
Testing Condition	Unless otherwise stated, the electrical parameters above, including the power factor, THD and efficiency, are tested under the ambient temperature 25℃ and humidity 50%, input 230Vac and 90% load.
Supplement Description	1. It is recommended that customers install an over & under voltage protection and surge protection devices in the fixture's power supply loop to ensure safe use of electricity. 2. The PC cover, outer housing, end caps and other accessory used for assembling the LED driver in the LED light fixture must conform to the fire rating of UL94 V-0 and above. 3. The driver is used as a component of the whole fixture and used with other lighting components (LED board, wires, heat sinks, etc). Because the EMC performance is affected by the led fixtures and the wiring, the manufacturer of LED fixture needs to re-evaluate the whole device's EMC.

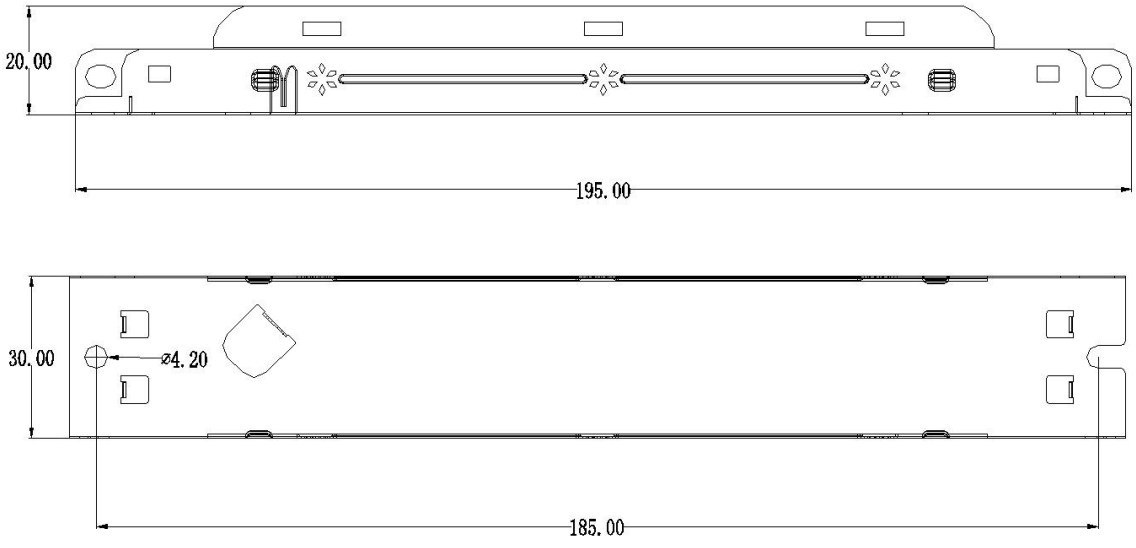
3. Product Lifetime Curve

The curve below illustrates the driver's lifetime data when the LED driver's Max. case temperature reaches 65℃, 70℃, 75℃, 80℃ and 85℃.

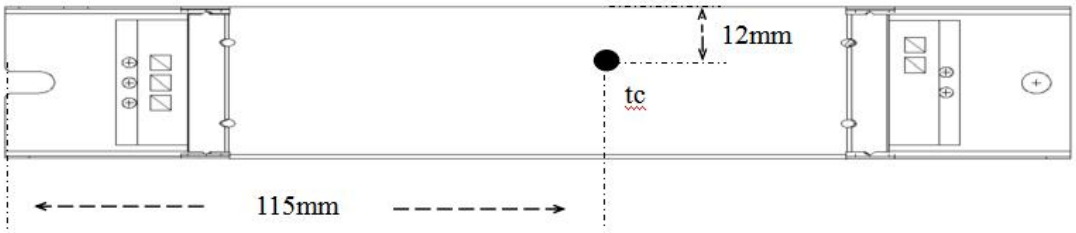


4. Dimensional Drawing with Tc Point (Unit: mm; Tolerance: +0.5mm)

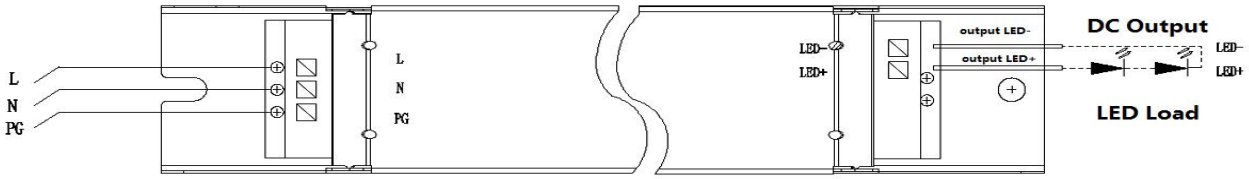
4.1 Dimension drawing



4.2 Tc point (the bottom side of the driver)



5. Wiring Diagram:



Remark:

(1) The input earth wire of the Class I light fixture connects to the PG terminal. When the LEDs and the aluminum substrate are in a closed circuit, the LEDs and the aluminum substrate must be capable of withstanding more than 3KV high voltage.

(2) For the Class II light fixture, there is no need to connect the PG terminal.