

Specification

Customer: _____

Product Material No.: _____

Model No.: LF-GMR045YV

Version: V1.2

Customer Approval

Examination	Review	Approve

LIFUD Approval

Drafting	Review	Approve
Li Shuaihua	Xiao Hong	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	Tang Xiangmao	2018-07-10
1.1	Updated company address.	Zhou Zhiqiang	2018-11-07
1.2	Added parameters of 12V output and end caps.	Zhou Zhiqiang	2019-02-21

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Model	LF-GMR045YV	Series	Linear Constant Voltage LED Driver
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1. Product Description



Isolated LED Driver for Class I LED Light Fixture

Category: AC220-240V, flicker free

Property: high PF, high efficiency, low THD, flicker coefficient $\leq 1\%$

Application: indoor office lighting, commercial lighting & decorative lighting

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

Certificate: TUV-CE, CB, RCM, SAA, CCC

2. Technical Data

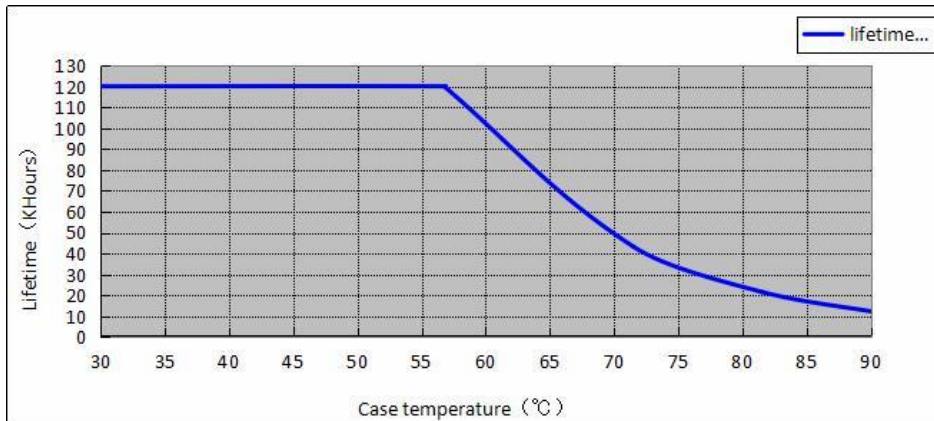
	Full Model Number	LF-GMR045YV024A	LF-GMR045YV012A
Output	Output Voltage	24VDC	12VDC
	Output Current	1875mA max.	3750mA max.
	Ripple Voltage	< 1V	
	Voltage Tolerance	24 \pm 0.5V	12 \pm 0.3V
	Time to Light	<0.5S @230Vac	
	Temperature Drift	$\pm 10\%$	
	Line Regulation	$\pm 5\%$	
Input	Line Regulation	$\pm 5\%$	
	Rated Input Voltage	AC: 220-240Vac (Limit voltage: 200-264Vac)	
	Frequency	47Hz-63Hz	
	Input Current	0.35A Max	
	Power Factor	$\geq 0.94/200Vac$	
		$\geq 0.95/230Vac$	
		$\geq 0.94/264Vac$	
	THD	$\leq 20\%$	
	Efficiency	$\geq 88\%/200Vac$	
		$\geq 88\%/230Vac$	
$\geq 88\%/264Vac$			
In-Rush Current	<60A/350uS@230Vac		
Stand-by Power	$\leq 1W@230Vac$		
Protective Feature	Over-Voltage	$\leq 35V$ (Cut off output voltage. Auto-recovery.)	$\leq 16V$ (Cut off output voltage. Auto-recovery.)
	Over-Load	108%-150% (auto-recovery)	
	Short-Circuit	Hiccup mode (auto-recovery)	
Environment Condition	Working Temperature	-30 $^{\circ}C$ ~ +50 $^{\circ}C$	
	Working Humidity	20-90%RH (no condensation)	
	Storage Temperature/Humidit	-40 $^{\circ}C$ ~ +80 $^{\circ}C$ (6 months under the class I environment); 10-90%RH (no condensation)	
	Atmospheric Pressure	86-106KPa	
Safety & Norm	Certificate	TUV-CE, CB, RCM, SAA, CCC	
	Hi-Pot Test	I/P-O/P: 3.75KVac, <5mA 60S; I/P-FG: 1.6KVac, <5mA 60S; O/P-FG: 0.5KVac, <5mA 60S	
	Insulation Resistance	I/P-O/P, I/P-FG, O/P-FG: 500VDC, >100M Ω	
	Surge Rating	Meet standards of IEC61000-4-5 (L-N:1KV; L/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: 33 x 32 x 21 cm (L*W*H); Net weight: 205g $\pm 5\%$ /pc; 13.4KG $\pm 5\%$ /ctn; 63pcs/ctn	
	IP Rating	IP20	
	Warranty Condition	5 years (Max. case temperature must not exceed 70 $^{\circ}C$)	

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Testing 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, stroboscope (flicker coefficient 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°C and humidity 50%, input 230Vac and 90% load.
Additional Remark	<ol style="list-style-type: none"> 1. It is recommended that the customer install an over-under-voltage protection and surge protection device 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 luminaire 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 light fixtures and the wiring, the manufacturer of light fixture needs to re-evaluate the whole device's EMC.

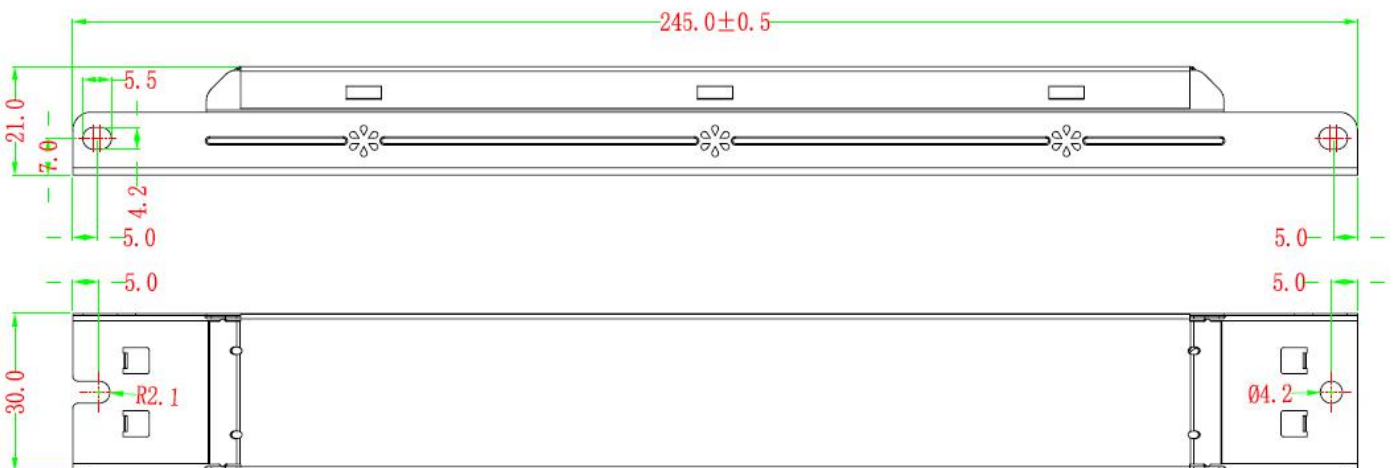
3. Product Lifetime Curve

The curve below illustrates the driver's lifetime data when the LED driver's Max. case temperature reaches 40°C, 50°C, 60°C, 70°C and 80°C.



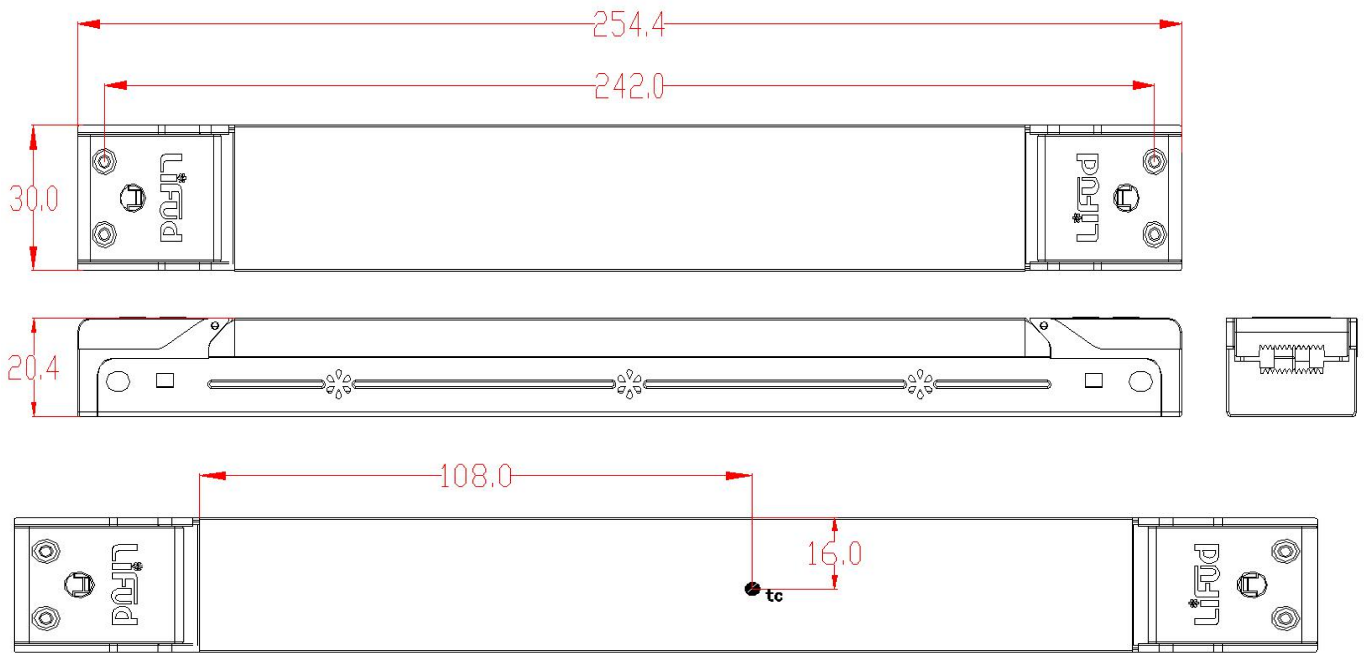
4. Dimensional Drawing (Unit: mm; Tolerance: +0.5mm)

4.1 Dimension of the Housing

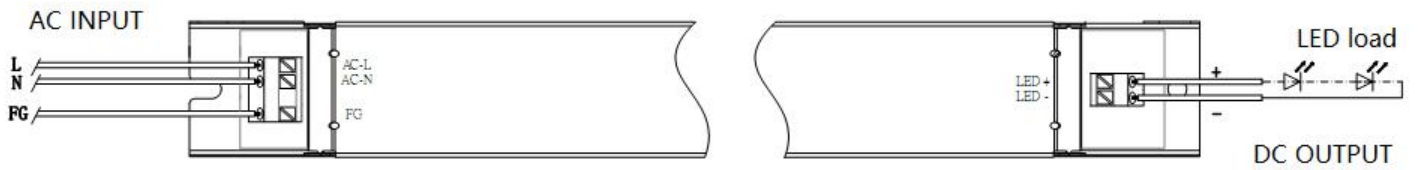


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4.2 Dimension of the Housing & the End Caps



5. Wiring Diagram:



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