

1. Product description



Isolated LED driver suitable for class II LED luminaires.

Category: typical AC100-277V plastic case series.

Product properties: active PFC, high performance, high efficiency, low THD.

Application: commercial, residential and decorative lighting.

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

Certifications:



2. Technical data

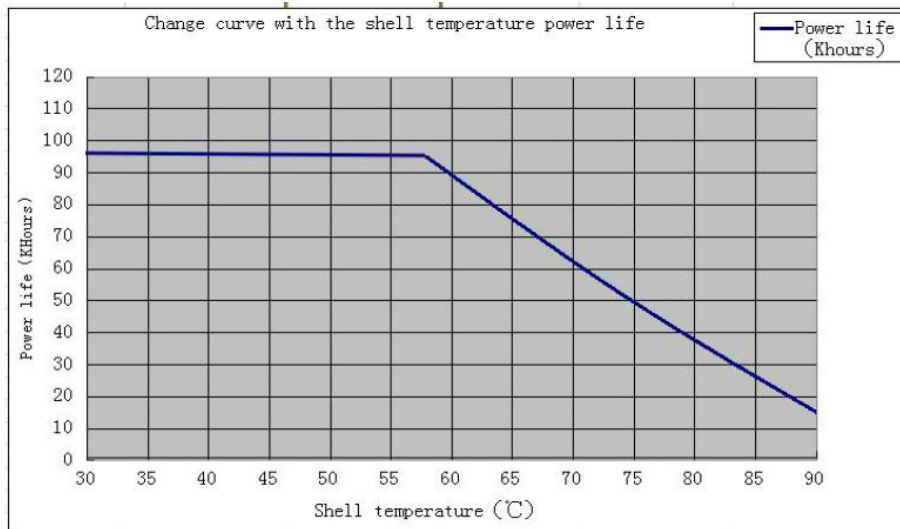
	Full model number	LF-GIR050YK1200U	LF-GIR050YK1300U	
Output	Output voltage	27-42 VDC	27-42 VDC	
	Output current	1200mA	1300mA	
	Ripple current	<450mA		
	Ripple voltage	≤5V		
	Current tolerance	±5%		
	Time to light	100Vac <1S, 230Vac <0.5S, 277Vac <0.5S		
	Temperature drift	±10%		
	Output Line regulation	±5%		
Input	Input Line regulation	±5%		
	Input voltage	100-240 Vac, 277 Vac (Max input voltage: 90-305Vac)		
	Frequency	47Hz-63Hz or 0Hz		
	Input current	0.75A Max		
	Power factor		≥0.97/100Vac	≥0.97/100Vac
			≥0.94/230Vac	≥0.95/230Vac
			≥0.90/277Vac	≥0.94/277Vac
	THD	≤18%		
	Efficiency		≥88%/100Vac	≥88%/100Vac
		≥88%/230Vac	≥88%/230Vac	
		≥87%/277Vac	≥87%/277Vac	
In-rush current (peak /duration)	I<60A/350uS@230Vac			
Typ. power input on stand-by	Pin<1W			
Protective features	No-load	Max. output voltage (no-load voltage) 55V		
	Short-circuit	Hiccup mode (auto-recovery)		
Environment condition	Working temperature	-30°C ~ +50°C		
	Working humidity	20-90%RH (no condensation)		
	Storage temperature/humidity	-40°C ~ +80°C (6 months under the class I environment); 10-90%RH (no condensation)		
	Atmospheric pressure	86-106KPa		
Safety and norms	Certifications	UL, FCC, ENEC, RCM, CE, CB		
	Hi-pot test	I/P-O/P: 3.75KVac, <5mA		
	Insulation resistance	I/P-O/P: 500VDC, >100MΩ		
	Surge level	Comply with IEC61000-4-5(L/N: 1KV)		
	EMI	Comply with EN55015, EN61000-3-2.		
	EMS	Comply with EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547.		
Others	Packing (weight)	Carton size: 385*285*210 mm (L*W*H); Net weight: 190g/pc; 8.54KG/ctn; Quantity: 8 PCS/layer, 5 layer/ctn, 40 PCS/ctn		
	IP level	IP20		
	Warranty condition	5 years (Max. case temperature must not exceed 70°C).		
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, flicker-free tester (flicker-free coefficient tester) 60N-01, etc.			

Model	LF-GIR050YK	Series	AC100-277V typical plastic case
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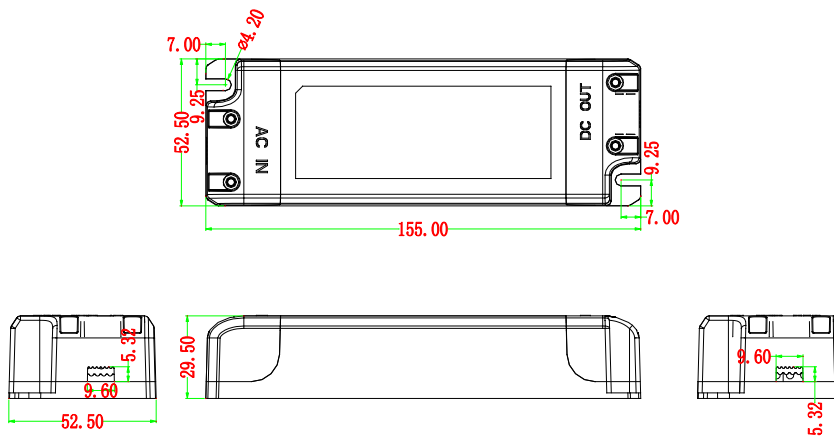
Test conditions	The parameters above including the power factor, THD, efficiency are all tested under the ambient temperature 25°C and humidity 50%, AC input 230V and 90% output load.
Additional Remark	<ol style="list-style-type: none"> In the power supply circuit, it is recommended that the customer should install an over-under-voltage protection and surge protection device to ensure the safety of using electricity. The PC cover, shell, end caps used together with the LED driver inside the LED lamp must meet the UL94V-0 fire rating level or above. As a part of the LED lamp, the LED driver is not the only factor determining the EMC performance of the LED lamp. And the EMC performance is also related to the LED lamp's structure and the wire routing. Thus we strongly recommend the manufacturer of the finished LED lamp must re-confirm the EMC of the LED lamps.

3. Product Referenced Lifetime Curve

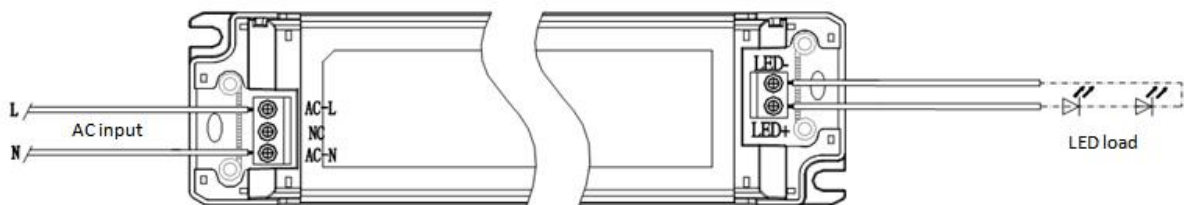
The curve below illustrates the driver's lifetime data when the LED driver's Max. case temperature reaches 40°C, 50°C, 60°C, 70°C, 80°C, 90°C.



4. Dimensional Drawing (unit: mm)



5. Wire Connection Diagram:



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