

**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**

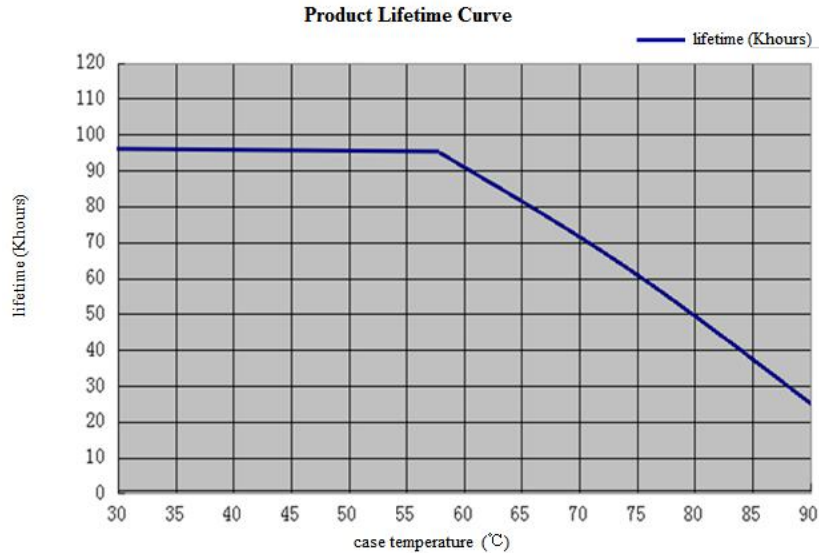
	Full model number	LF-GIR030YK 0550U	LF-GIR030YK 0600U	LF-GIR030YK 0650U	LF-GIR030YK 0700U	LF-GIR030YK 0750U	
<b>Output</b>	Output voltage	27-42 VDC	27-42 VDC	27-42 VDC	27-42 VDC	27-42 VDC	
	Output current	550mA	600mA	650mA	700mA	750mA	
	Ripple current	≤300mA					
	Ripple voltage	≤5V					
	Current tolerance	±5%					
	Time to light	100Vac <1S, 230Vac <0.5S, 277Vac <0.5S					
	Temperature drift	±10%					
	Output Line regulation	±5%					
<b>Input</b>	Input Line regulation	±5%					
	Input voltage	100-240 Vac, 277 Vac (Max input voltage: 90-305Vac)					
	Frequency	47Hz-63Hz					
	Input current	0.7A Max					
	Power factor		≥0.97/100Vac	≥0.97/100Vac	≥0.97/100Vac	≥0.97/100Vac	≥0.97/100Vac
			≥0.93/230Vac	≥0.93/230Vac	≥0.94/230Vac	≥0.94/230Vac	≥0.95/230Vac
			≥0.90/277Vac	≥0.90/277Vac	≥0.90/277Vac	≥0.91/277Vac	≥0.92/277Vac
	THD	≤18%					
	Efficiency		≥88%/100Vac	≥88%/100Vac	≥88%/100Vac	≥88%/100Vac	≥88%/100Vac
			≥87%/230Vac	≥87%/230Vac	≥88%/230Vac	≥88%/230Vac	≥88%/230Vac
		≥86%/277Vac	≥86%/277Vac	≥86%/277Vac	≥86%/277Vac	≥86%/277Vac	
In-rush current (peak /duration)	I<60A/350uS@230Vac						
Typ. power input on stand-by	Pin<1W						
<b>Protective features</b>	No-load	Max. output voltage (no-load voltage) 55V					
	Short-circuit	Hiccup mode (auto-recovery)					
<b>Environment condition</b>	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					
<b>Safety and norms</b>	Certifications	UL, FCC, ENEC, TUV_GS, CE, CB, RCM, SAA					
	Hi-pot test	I/P-O/P: 3.75KVac, <5mA, 60S					
	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.					
<b>Others</b>	Packing (weight)	Net weight: 120g±5%/pc; 66pcs/carton; 8.7KG±5%/carton. Carton size: 39 x 29 x 21 cm (L xWxH).					
	IP level	IP20					
	Warranty condition	5 years (Max. case temperature must not exceed 75°C).					
<b>Testing equipment</b>	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.						

<b>Model</b>	LF-GIR030YK	<b>Series</b>	AC100-277V typical plastic case
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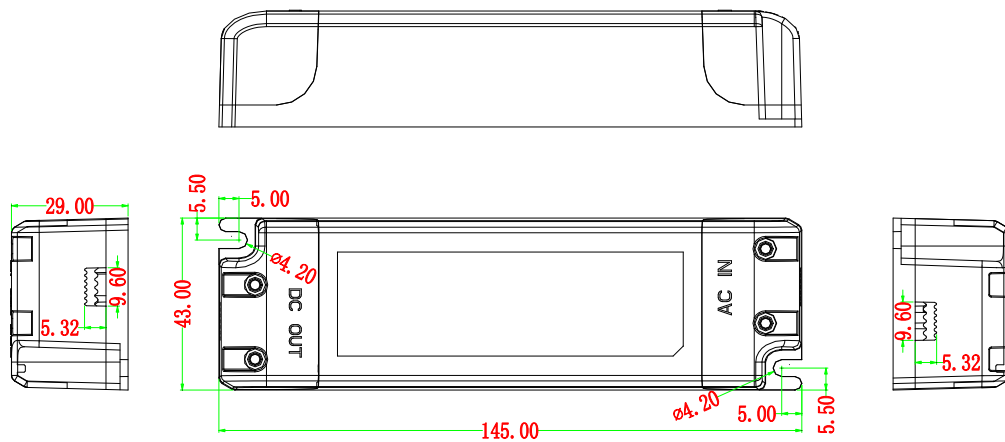
<b>Test conditions</b>	The parameters above including the power factor, THD, efficiency are all tested under the ambient temperature 25°C and humidity 50%, AC input 230V and 90% output load.
<b>Additional Remark</b>	<ol style="list-style-type: none"> <li>1. In the power supply circuit, it is recommended that the customer should install an over-under-voltage protection and surge protection device to ensure the safety of using electricity.</li> <li>2. 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.</li> <li>3. 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.</li> </ol>

### 3. Product Referenced Lifetime Curve

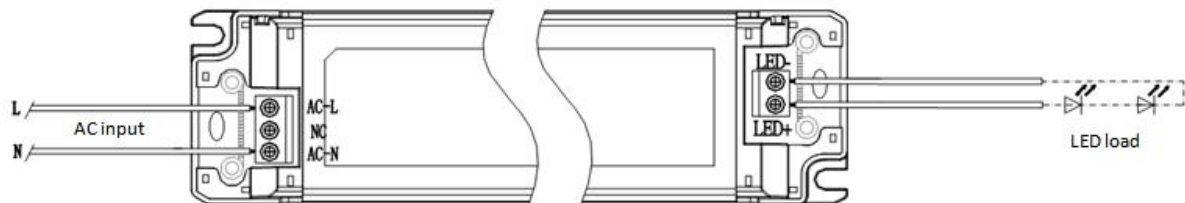
The curve below illustrates the driver's lifetime data when the LED driver's Max. case temperature reaches 40°C, 50°C, 60°C, 70°C, 80°C, 90°C.



### 4. Dimensional Drawing (unit: mm)



### 5. Wire Connection Diagram:



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