

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: office, commercial, residential and decorative lighting.

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

Certifications:



2. Technical data

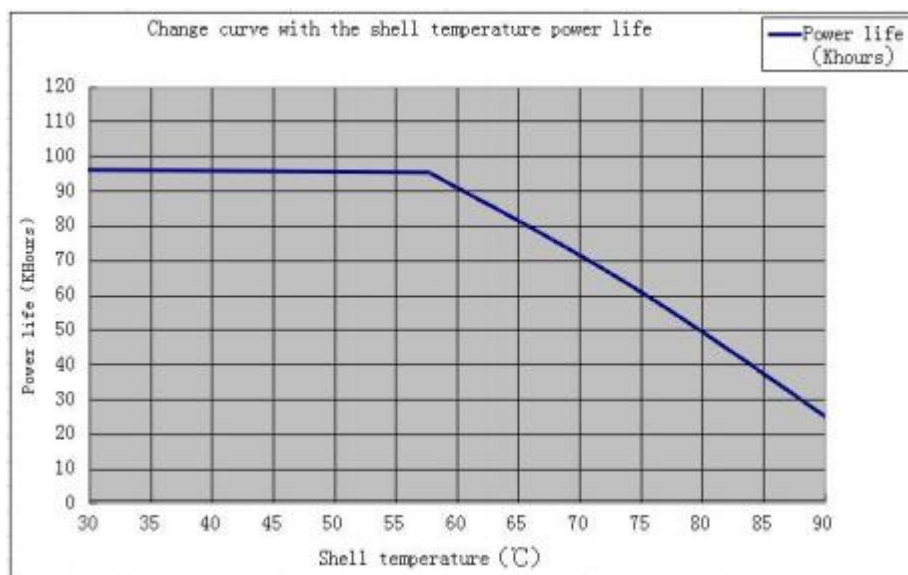
	Full model number	LF-GIR030YK 0550U	LF-GIR030YK 0600U	LF-GIR030YK 0650U	LF-GIR030YK 0700U	LF-GIR030YK 0750U
Output	Output voltage	27-42 VDC	27-42 VDC	27-42 VDC	27-42 VDC	27-42 VDC
	Output current	550mA	600mA	650mA	700mA	750mA
	Ripple voltage	≤5V				
	Current tolerance	±5%				
	Start-up time	100Vac <1S, 230Vac <0.5S, 277Vac <0.5S				
	Temperature drift	±10%				
	Output linear adjustment rate	±5%				
Input	Input linear adjustment rate	±5%				
	Input voltage	100-240 Vac, 277 Vac (voltage limit: 90-305Vac)				
	Frequency	47Hz-63Hz or 0Hz				
	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
Protective features	In-rush current (peak /duration)	<60A/350uS@230Vac				
	Typ. power input on stand-by	<1W				
	Open circuit	Open-circuit voltage<55V				
Environment condition	Short circuit	Hiccup mode (auto-recovery)				
	Working temperature	-30℃~ +50℃				
	Working humidity	20-90%RH (no condensation)				
	Storage temperature/humidity	-40℃ ~ +80℃ (6 months under the class I environment); 10-90%RH (no condensation)				
	Atmospheric pressure	86-106KPa				
Safety and norms	Certifications	UL, FCC, CE, CB				
	Hi-pot test	I/P-O/P: 3.75KVac, <5mA				
	Insulation resistance	I/P-O/P: 500VDC, >100MΩ				
	Surge level	According to IEC61000-4-5(L-N: 1KV)				
	EMI	According to EN55015, EN61000-3-2, FCC Part15				
	EMS	According to EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547				
Others	Packing (weight)	Net weight: 120g/pc; 66pcs/carton; 8.5KG/carton. Carton size: 385*285*210mm (LxWxH).				
	IP level	IP20				
	Warranty condition	5 years (Tc ≤75℃)				

Model	LF-GIR030YK	Series	AC100-277V typical plastic case
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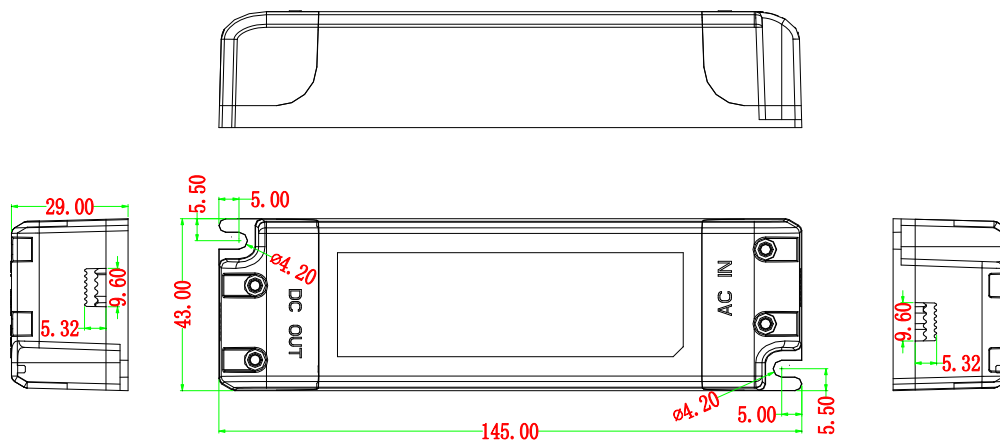
Testing equipment	AC power source: CHROMA66530, digital power meter: CHROMA66202, Oscilloscope: Tektronix DPO3014, DC electronic load: M9712B, LED board, constant temperature and humidity chamber, lightning surge generator: Everfine EMS61000-5B, rapid group pulse generator: Everfine EMS61000-4A, spectroanalyzer: KH3935, hi-pot tester: TH9201B, flicker-free tester (flicker-free coefficient tester) 60N-01, etc.
Test conditions	The parameters above including the power factor, THD, efficiency are all tested under the ambient temperature 25℃ and humidity 50%, AC input 230V and 90% output load.
Additional 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. The PC cover, casing, end caps and other parts of the LED driver inside the LED light fixture must conform to UL94-V0 flammability standard or above. 3. 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 should re-confirm the EMC of the whole LED light fixture.

3. 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.



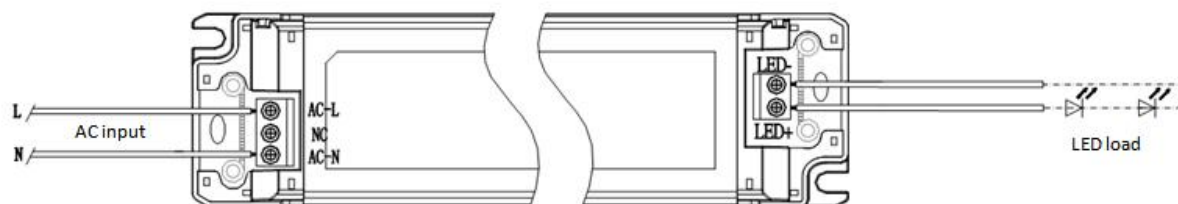
4. Dimensions (unit: mm)



Note: The outer diameter of the wire: $5.7\text{mm} \leq \phi \leq 8\text{mm}$

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5. Wire connection diagram



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