

1. Product Description



Electric type: isolated LED driver suitable for class II light fixtures

Category: typical AC100-277V plastic case series

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

Application: commercial, indoor office, residential and decorative lighting.

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

Certifications:

2. Electrical Specifications

	Full model number	LF-GIR040YK0800 U	LF-GIR040YK0850 U	LF-GIR040YK0900 U	LF-GIR040YK0950 U	LF-GIR040YK1000 U	LF-GIR0440YK1050 U	
Output	Output voltage	27-42 VDC	27-42 VDC	27-42 VDC	27-42 VDC	27-42 VDC	27-42 VDC	
	Output current	800mA	850mA	900mA	950mA	1000mA	1050mA	
	Ripple voltage	≤5V						
	Current accuracy	±5%						
	Startup time	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	50/60Hz						
	Input current	0.7A Max						
	Power factor		≥0.97/100Vac	≥0.97/100Vac	≥0.97/100Vac	≥0.97/100Vac	≥0.97/100Vac	≥0.97/100Vac
			≥0.93/230Vac	≥0.94/230Vac	≥0.94/230Vac	≥0.96/230Vac	≥0.96/230Vac	≥0.96/230Vac
			≥0.90/277Vac	≥0.91/277Vac	≥0.91/277Vac	≥0.95/277Vac	≥0.95/277Vac	≥0.95/277Vac
	THD	≤18%						
	Efficiency		≥88%/100Vac	≥88%/100Vac	≥88%/100Vac	≥88%/100Vac	≥88%/100Vac	≥88%/100Vac
			≥88%/230Vac	≥88%/230Vac	≥88%/230Vac	≥89%/230Vac	≥89%/230Vac	≥88%/100Vac
		≥87%/277Vac	≥87%/277Vac	≥87%/277Vac	≥88%/277Vac	≥88%/277Vac	≥87%/100Vac	
In-rush current	<80A/350uS@230Vac							
No load power consumption	<1W							
Protective features	Open-circuit protection	Open circuit voltage <55V						
	Short-circuit protection	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	TUV, RCM, CE, CB, GS, UL, FCC						
	Withstanding voltage	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, FCC Part15						
EMS	Comply with EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547.							
Others	Packing (weight)	Packaging dimensions: 385*285*210 mm (L*W*H); Weights: 150g±5%/pcs; 10.8kg±5%/ctn. Quantities: 66pcs/ctn						
	IP level	IP20						
	Warranty condition	5 years (Tc≤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-GIR040YK	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	<p>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.</p> <p>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.</p> <p>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.</p>

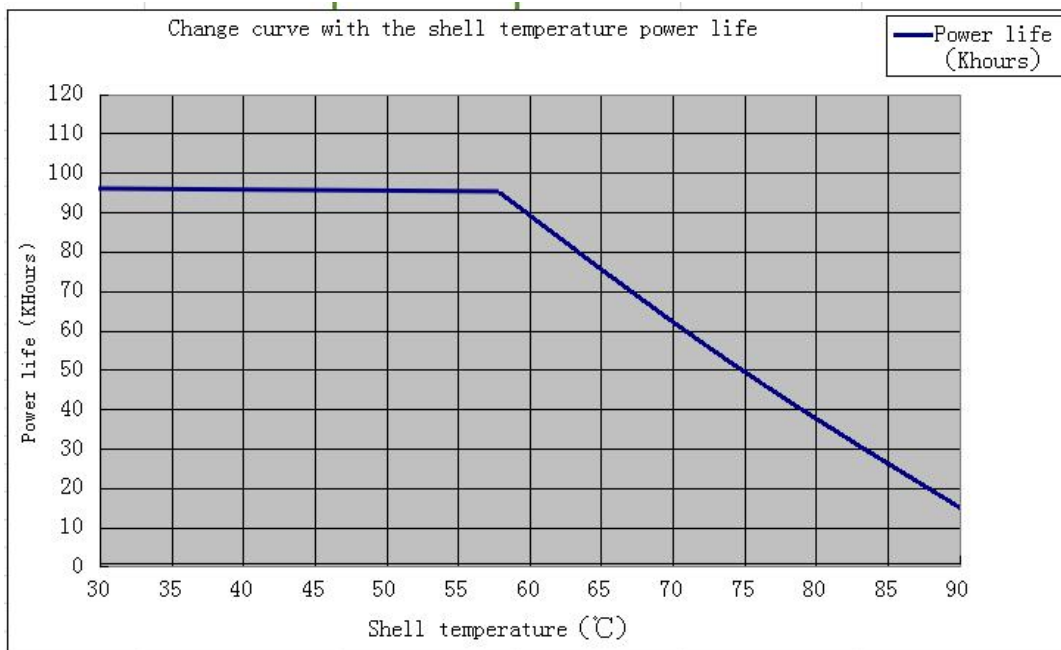
	Full model number	LF-GIR040YK0700U	LF-GIR040YK1200U	
Output	Output voltage	40-55 VDC	24-35 VDC	
	Output current	700mA	1200mA	
	Ripple voltage	<5.5V	<4V	
	Current accuracy	±5%		
	Startup time	100Vac <1S , 230Vac <0.5S , 277Vac <0.5S		
	Temperature drift	±10%		
	Output Line regulation	±5%		
Input	Input Line regulation	±5%		
	Input voltage	100-240 Vac, 277 Vac (Max input voltage: 90-305Vac)		
	Frequency	47Hz-63Hz		
	Input current	0.7A Max		
	Power factor	≥0.97/100Vac	≥0.97/100Vac	≥0.97/100Vac
		≥0.93/230Vac	≥0.94/230Vac	≥0.94/230Vac
		≥0.90/277Vac	≥0.91/277Vac	≥0.91/277Vac
	THD	≤20%		
	Efficiency	≥86%/100Vac	≥86%/100Vac	≥86%/100Vac
		≥88%/230Vac	≥88%/230Vac	≥88%/230Vac
≥87%/277Vac		≥87%/277Vac	≥87%/277Vac	
In-rush current	<80A/350uS@230Vac			
No load power consumption	<1W			
Protective features	Open-circuit protection	Open circuit voltage <70V	Open circuit voltage <50V	
	Short-circuit protection	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	Comply with CE, no certifications		
	Withstanding voltage	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, FCC Part15		
EMS	Comply with EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547.			
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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, flicker-free tester (flicker-free coefficient tester) 60N-01, etc.			

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Additional Remark	<ol style="list-style-type: none"> 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. 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. 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.

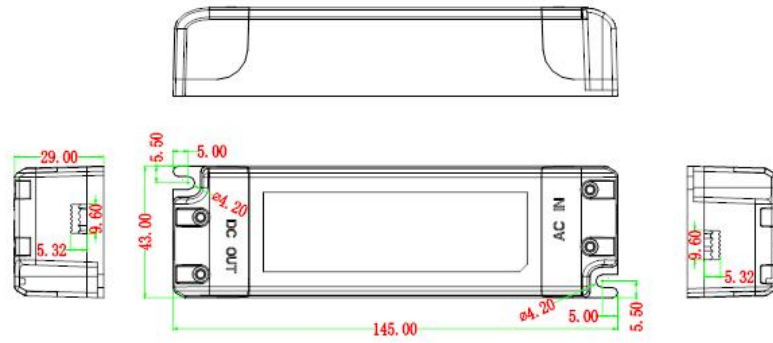
3. Product Referenced Lifetime Curve

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

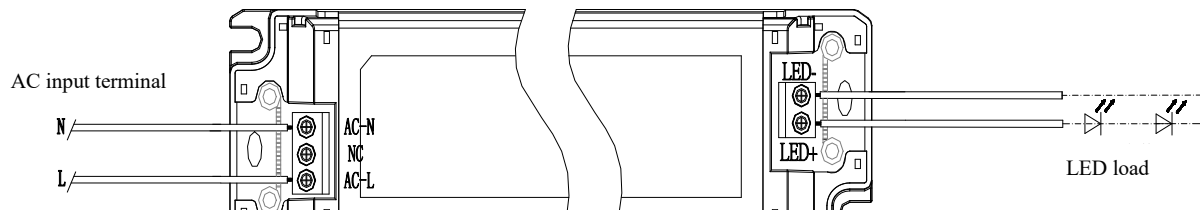


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4. Structure & Dimensions (Unit: mm):



5. Wiring Diagram:



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