

LF-GIR003YKxxxxU

GIR*U SELV Wide Voltage LED Driver | Constant Current - Non Dimmable



Product family features

- Flicker free
- Ultra-quiet operation
- IP20
- Ta range: -30 - +45 °C
- 5 years guarantee
- Lifetime up to 100,000h



Product family benefits

- Compact volume: compatible with 35mm hole
- High cost performance
- SELV output

Typical applications

- For indoor down light
- For spotlight, wall light

Product parameters

- Output current 350/700mA
- Output power 0.875-3.15W
- Input voltage 108-305Vac
- Output voltage 2.5-9Vdc
- Efficiency 71%

Electrical data

Input data

Rated input voltage	120 ... 277V
Input voltage AC	108 ... 305V
Mains frequency	50/60Hz
Displacement factor	>0.5
Power factor	/
Efficiency	≥71% ¹⁾ ≥60% ¹⁾
THD	/
Input current	0.1A Max
Inrush current	20A ²⁾
Loading number on circuit breaker 10 A (B)	37
Loading number on circuit breaker 10 A (C)	62
Loading number on circuit breaker 16 A (B)	60
Loading number on circuit breaker 16 A (C)	102
No-load consumption	≤0.5W
Protective conductor current	≤0.7mA

Output data

Nominal output voltage	2.5... 9V	2.5... 3V
Nominal output current	350mA	700mA
Maximum output power	3.15W	
Nominal output power	0.875...3.15W	
Output ripple current (100 Hz)	<5%	
Flicker	According to IEEE Std 1789-2015	
CIE SVM	≤0.4	
IEC-Pst	≤1	
Current tolerance	±7%	
Temperature tolerance	±10%	
Start-up time	<0.5S	

Safety

Withstanding voltage	I/P-O/P: 3.75kV&5mA&60S
Surge capability (L-N)	L-N: 1kV
Surge capability (L/N-Ground)	-
Insulation resistance	I/P-O/P: >100MΩ@500Vdc
Lifetime	Up to 100,000 hours ³⁾
Guarantee	5 years ⁴⁾

1) @full load

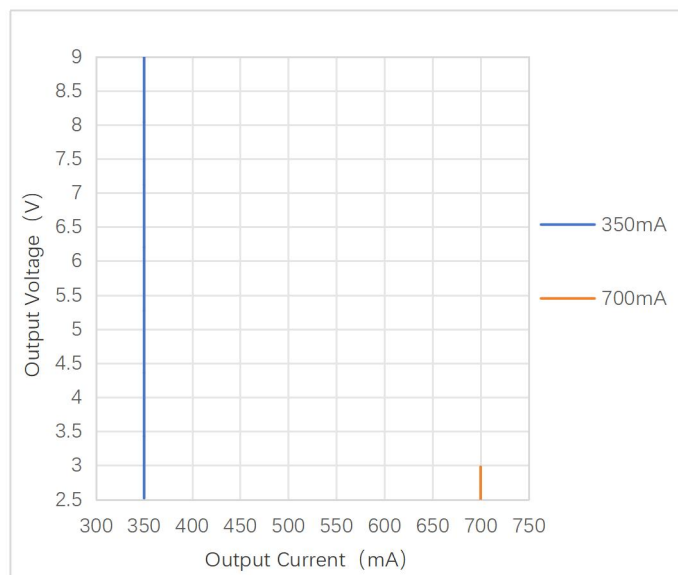
2) t=108μs

3) For details, please refer to the service life table

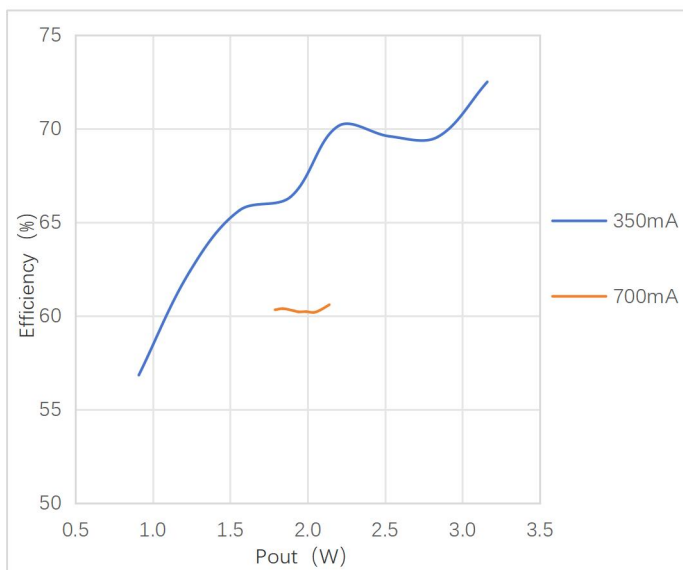
4) 5 years@Tc≤75°C

Characteristic diagrams

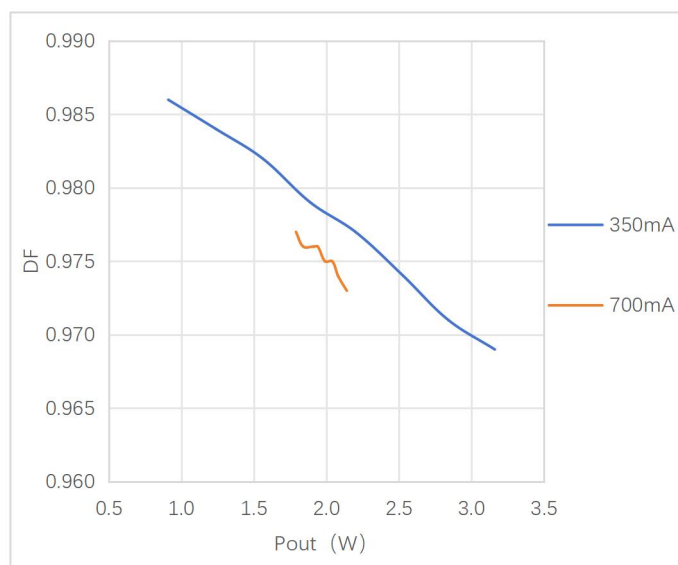
Operating Window



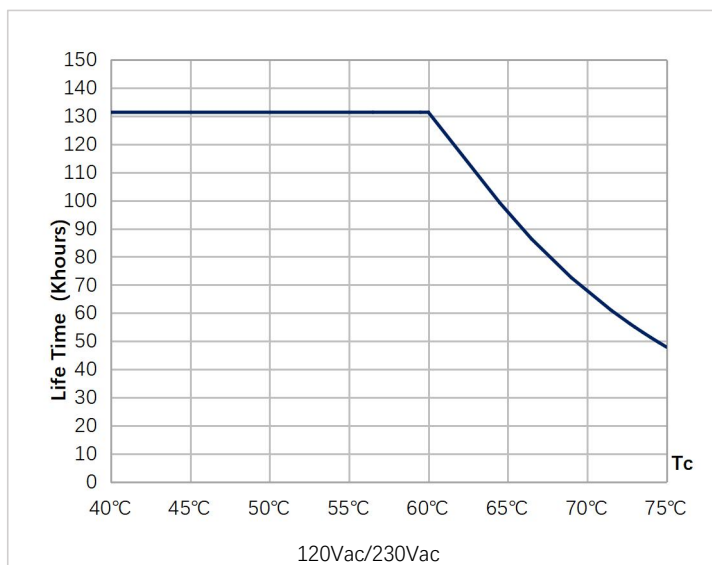
Typical Efficiency vs Load



Typical Displacement Factor vs Load



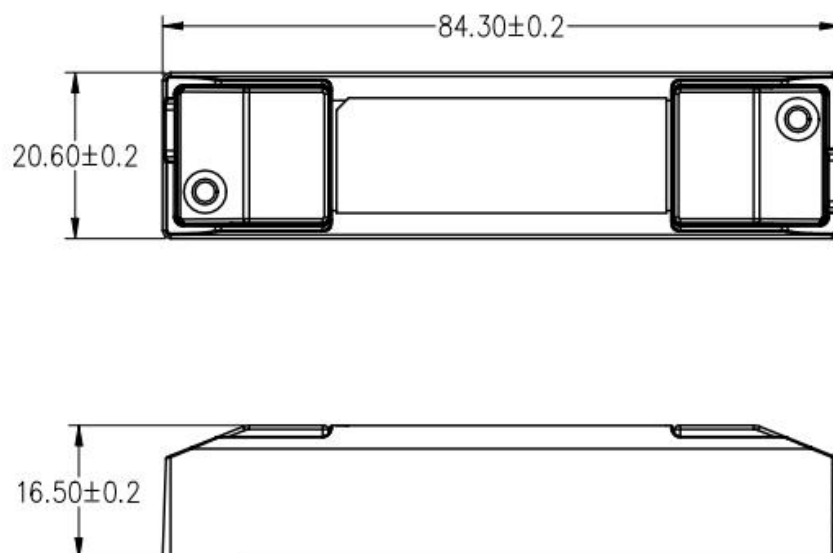
Lifespan



Service life

Model	I _{out}	P _{out}	T _a	35°C	45°C
LF-GIR003YKxxxxU	350mA	3.15W	T _c	56°C	66°C
			Lifetime	>100,000h	>50,000h

Dimensions (Unit: mm)



Mounting hole spacing, length	/
Positioning hole diameter	/
Product weight	24g $\pm$ 5%
Cable cross-section, input side	0.75 ... 1.5 mm ²
Cable cross-section, output side	0.5 ... 1.5 mm ²
Cable outer diameter, input side	3.5mm*5.5mm
Cable outer diameter, output side	3.5mm*5.5mm
Wire preparation length, input side	7 ... 8mm
Wire preparation length, output side	7 ... 8mm
Length	84.3 $\pm$ 0.2mm
Width	20.6 $\pm$ 0.2mm
Height	16.5 $\pm$ 0.2mm

Colors & materials

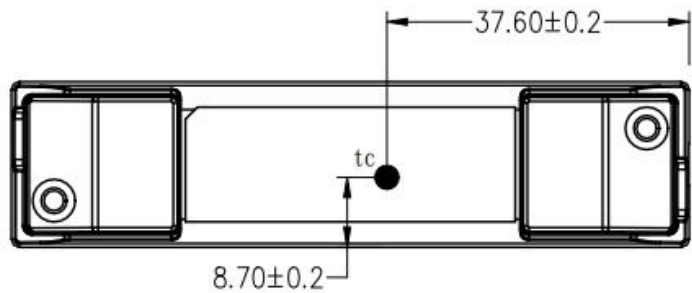
Casing material	PC
Casing color	White

Temperature & operating conditions

Ambient temperature range	-30 ... +45°C
Maximum temperature at t _c test point	75°C
Temperature range at storage	-30 ... +80°C (6 months in Class I environment)
Humidity range at storage	10-90%RH (no condensation)

Humidity during operation	20-90%RH
RoHS	RoHS 2.0 (EU) 2015/863

Tc test point (Unit: mm)



Note: The picture is a front view, and the Tc point is on the front of the product.

Product terminal

Input		Output	
AC-L	AC live wire input	LED+	Positive terminal output of LED driver
AC-N	AC neutral wire input	LED-	Negative terminal output of LED driver

Capabilities

Dimmable	-
Over-temperature protection	-
Overload protection	-
Short circuit protection	Self-recovery
No-load protection	<25V ⁵⁾
Input overvoltage protection	-
Suitable for fixtures with prot. class	II
Control interface	-
Output interface	1 channel

Programming

Programming device	-
DALI control software	-
APP	-

Certificates & standards

Approval marks	CCC, ENEC, CB, RCM
Standards	IEC/EN 61347-2-13, IEC/EN 61347-1, IEC/EN 62493 IEC/EN 62384 AS 61347.1, AS 61347.2.13

EMC	EN 55015, EN 61547, EN 61000-3-2,3
Type of protection	IP20
5) 350mA@<25V, 700mA@<12V	

Logistical data

Product	Packaging unit (Pieces/Unit)	Dimensions (L*W*H)	Volume	Gross weight
LF-GIR003YKxxxxU	352	385mm*285mm*210mm	23.04 dm ³	8.68kg±5%

Test equipment & condition

Test equipment	AC power source: CHROMA6530, digital power meter: CHROMA66205, 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: EEC SE7440, flicker tester (flicker-free coefficient test): Everfine LFA-3000, etc.
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If there are no special remarks, the above parameters are tested at the ambient temperature of 25℃, humidity of 50%, maximum output load and input voltage of 230Vac/50Hz.

Additional information

1. It is recommended that user install the over voltage protection, under voltage protection and surge protection devices in the power supply circuits of light fixtures to ensure electricity safety.
2. The LED driver used in combination with the end device is one of the accessories of the whole light fixture, and the EMC of the whole light fixture is not only susceptible to the driver itself, but to the LED light fixture and the whole light fixture's wiring. Thus, the manufacturer of LED light fixture should re-confirm the EMC of the whole light fixture before the whole light fixture is finished.
3. The number of LED drivers that can be connected to a circuit breaker and the inrush current are tested under the same conditions.
4. The PC cover, casing and end cap for assembling the LED driver in the light fixture must meet the fire rating of UL94-V0 or above.

Transportation & storage

Suitable transportation means: vehicles, boats and aeroplanes.

In transit, it is necessary to prepare awnings for rain or sun protection. Moreover, please keep civilized loading and unloading to prevent the vibration or impact on LED driver as much as possible.

The storage of LED driver shall conform to the standard of Class I environment.

1. When using the products which have been stored for more than 6 months, please re-test their electrical parameters firstly by powering on. Do not use them unless they are tested to be qualified.

2. When using the products which have been stored for 6 to 12 months, please run them on power for more than 2 hours firstly.

3. When using the products which have been stored for more than 12 months, please conduct an actual assessment of quality risks firstly. Direct use is not recommended.

Cautions

Please use Lifud LED driver according to its parameters in the specification, otherwise the LED driver may malfunction.

Using any incompatible light fixtures or those that have not been certified may cause fire, explosion or other risks.

Man-made damage is beyond the scope of Lifud warranty service.

Disclaimer

Subject to change without notice. Errors and omissions excepted. Always make sure to use the most recent release.

Lifud Technology Co., Ltd. reserves the right to interpret any content of this specification.