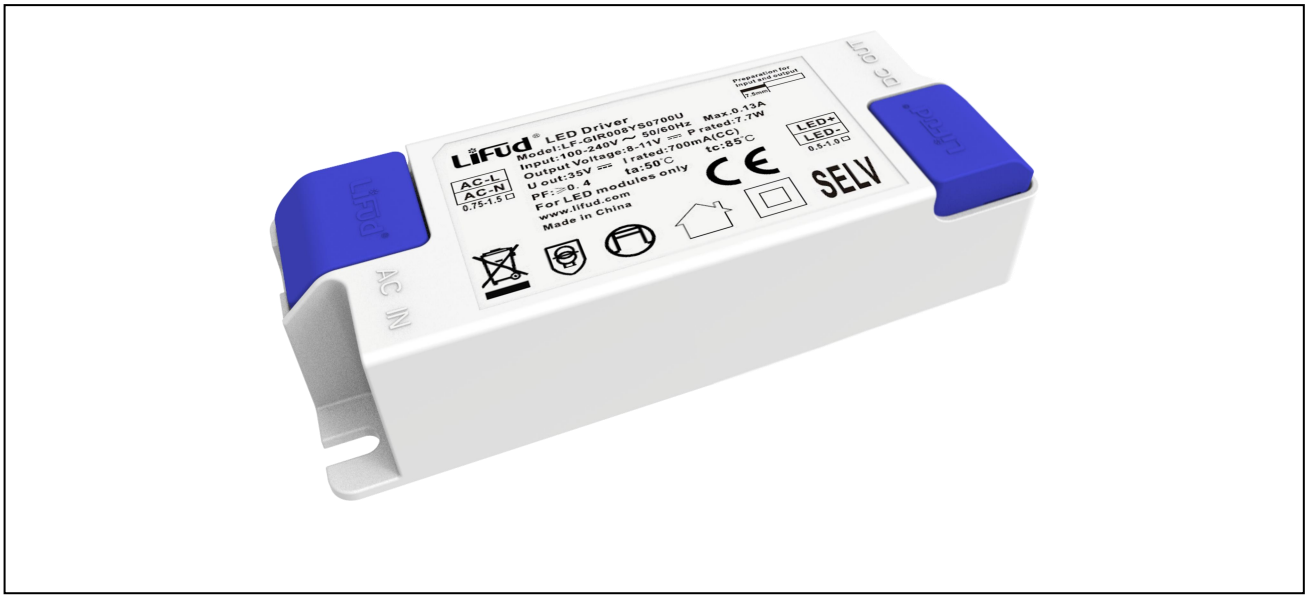


Product Description

LF-GIR008YS0700U is a 8W LED driver. The rated input voltage range is 100-240Vac. The input voltage limit range is 90-264Vac. The output voltage range is 8-11V. It has all-round protections of surge, open circuit and short circuit, which greatly improves the stability of the LED driver.

Features

- Isolated design
- flicker free
- Simple in structure
- High cost performance
- Wide input voltage range: 100-240Vac

Applications

- Indoor office lighting
- Decorative lighting
- Commercial lighting
- Residential lighting

Electrical Characteristics

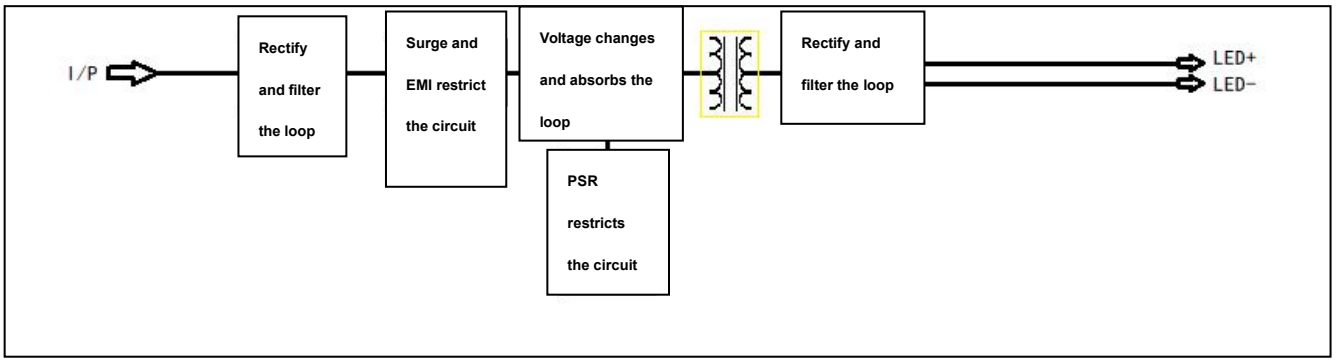
Model		LF-GIR008YS0700U
Output	Output Voltage	8-11V
	Output Current	700mA
	Ripple Current	<1V@230Vac (50HZ)
	Flicker Index	Meets CIE▪SVM (≤0.4%) and IEC▪PST(≤1%) standards
	Current Tolerance	±5%
	Temperature Drift	±10%/50℃
	Output Load Adjustment Rate	±5%
	Start-up Time	<0.5S@230Vac
Input	Input Linear Adjustment Rate	±5%
	Rated Input Voltage	100-240Vac (voltage limit: 90-264Vac)
	Rated DC Input Voltage	120-340Vdc (voltage limit: 110-383Vdc)
	Input Frequency	47Hz-63Hz
	Input Current	0.13A Max@100Vac
	Power Factor	≥0.4@230Vac (full load)
	Efficiency	≥78%@230Vac (full load)
	In-rush Current	≤60A & 200uS @230Vac (Max)
	The Same Model LED Driver Quantities a Circuit Breaker can Support (230Vac)	B16
		93
	Standby Power Consumption	≤1W

Protection Characteristics	Short Circuit	Hiccup mode (auto-recovery)
	Open Circuit	<35V
Environment Descriptions	Working Temperature	-30℃~+50℃
	Working Humidity	20-90%RH (no condensation)
	Storage Temperature/ Humidity	-40℃~+ 80℃ (six months under class I environment); 10-90%RH (no condensation)
	Atmospheric Pressure	86KPa~106KPa
	Vibration	Displacement amplitude: 5Hz~9Hz 1.2mm; Acceleration amplitude: 9HZ-200Hz 1G; Scanning speed: 1.0 OCT/min; Test time: XYZ, 30 minutes each; The working state of the LED driver is tested with the system.
Safety and Electromagnetic Compatibility	Certification	Conforms to CE
	Withstanding Voltage	I/P-O/P: 3.75KV, 5mA, 60S
	Insulation Resistance	I/P-O/P: 500VDC, >100MΩ
	Surge Level	IEC61000-4-5 (L-N: 1KV) Class B
	Group Pulse	1KV (Class B)
	Safety Standards	EN 61347-2-13: 2014/A1: 2017, EN 61347-1: 2015, EN 62384: 2016 IEC 61347-1: 2015, IE61347-2-3: 2014, GB19510.1-2009, GB19510.14-2009.
	EMI	EN55015, EN61000-3-2
	EMS	Conforms to EN61000-4-2, 3, 4, 5, 6, 8,11; EN61547
	EMI (Radiation Inference)	Measured by the down light
	ESD	Air 8KV, touch 4KV (Class B)
Others	IP Rating	IP20
	RoHS	RoHS 2.0 (EU) 2015/863
	Warranty	3 yrs (TC≤80℃) Please see the lifetime curve for details
	Noise Rating	≤25db (Tested in a soundproof room and the noise collector was 10cm away from the driver.)

Test 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.
Test Remarks	Unless otherwise stated, the parameters of the power factor, harmonic and efficiency were test results under the ambient temperature of 25℃, humidity of 50%, input voltage of 230Vac and full load.
Other Remarks	1. It is recommended that customer should install devices for overvoltage protection, undervoltage protection and surge protection to ensure safety before connecting to electricity. 2. The PC cover, housing, 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 re-confirms the EMC of the whole LED light fixture.

RoHs: Restrictions on directives of the use of certain hazardous ingredients in the electrical and electronic equipment

Product function diagram

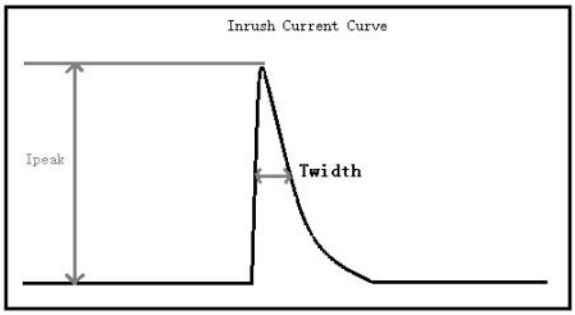


Quantities of the same model LED drivers that a circuit breaker can support

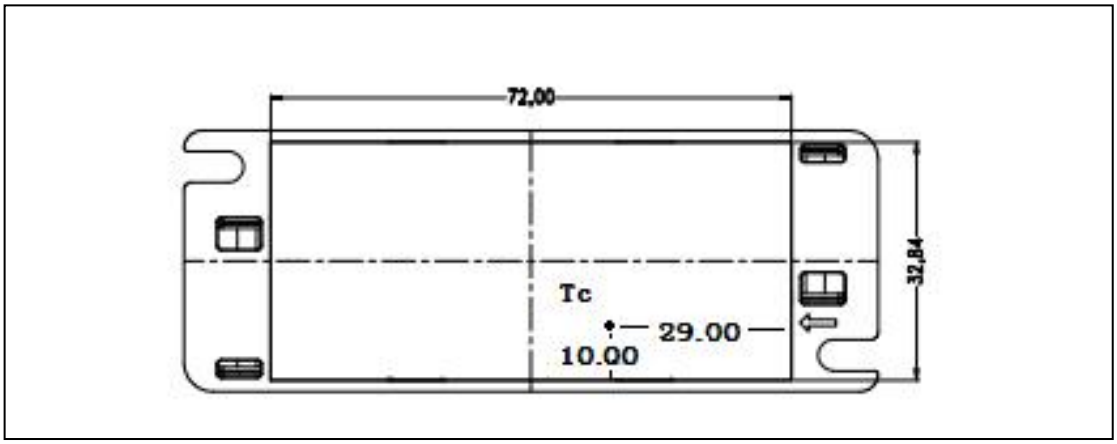
Name	Value of Number	Notes
Surge peak current Ipeak	12.3A	When the input voltage is 230Vac
Surge half peak time Twidth	120μs	When the input voltage is 230Vac, measure the time when Ipeak drops to half.
The number of same model LED drivers Model B 16A circuit breaker can support	93 (Max)	

If other models of circuit breakers are needed, the conversion table is as follows:

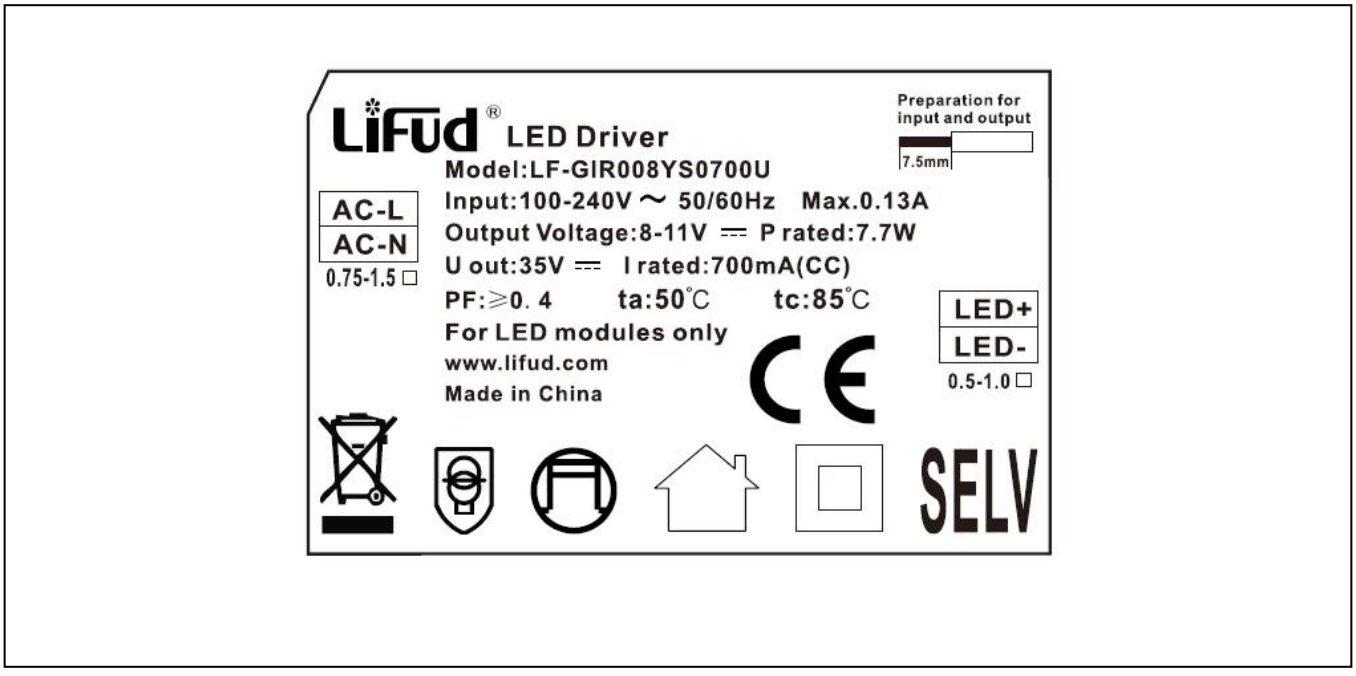
Model	Level	The quantities of LED drivers a circuit breaker can support	Relative conversion ratio
B	10A	58	62%
	13A	75	80%
	16A	93	100% (standard）
	20A	116	125%
	25A	145	156%
C	10A	96	104%
	13A	125	135%
	16A	158	170%
	20A	193	208%
	25A	241	260%



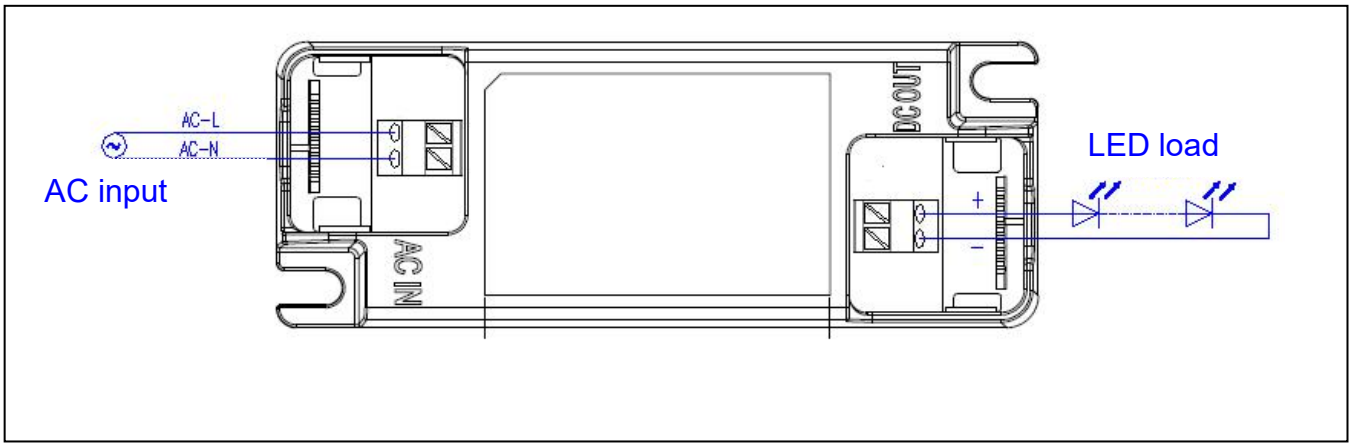
Tc Point showed at the bottom of the casing



Label



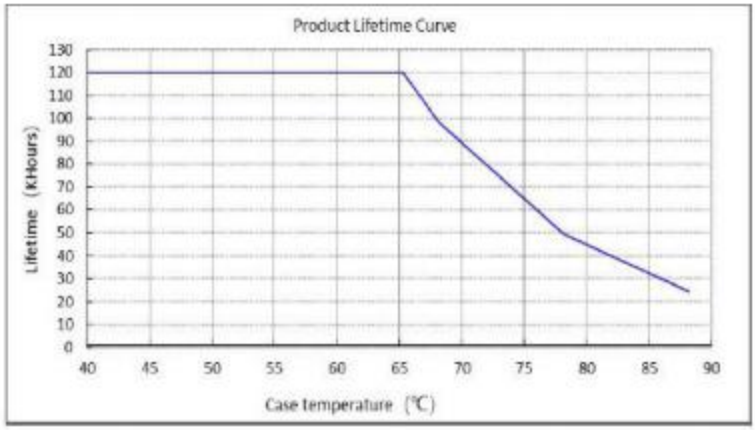
Product Wiring Diagram



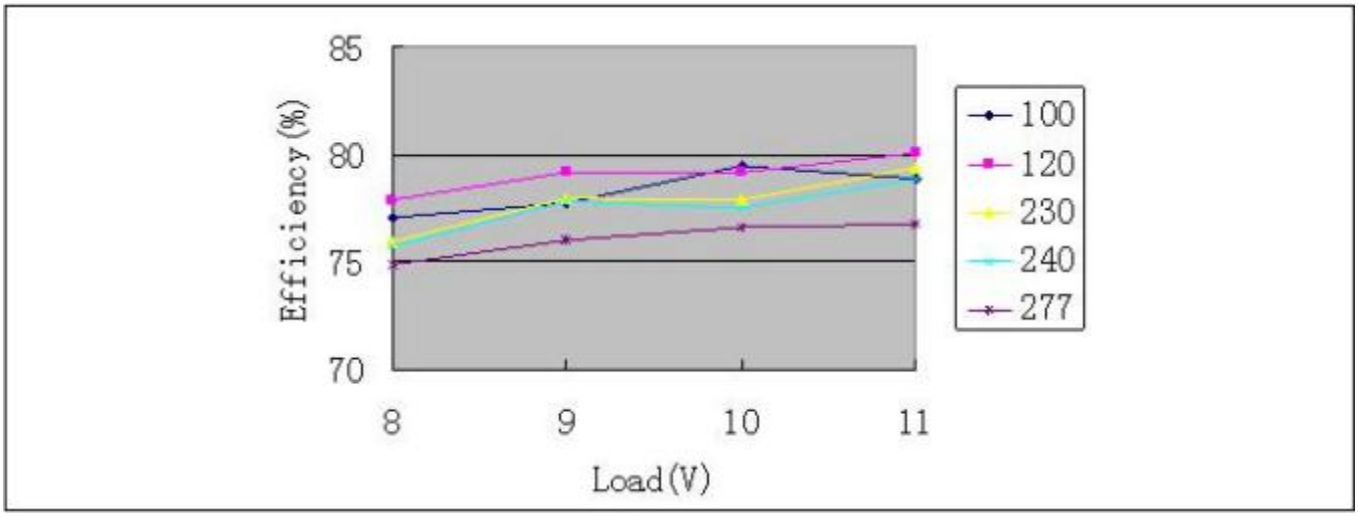
Product Characteristic Curves

1. Lifetime Curve

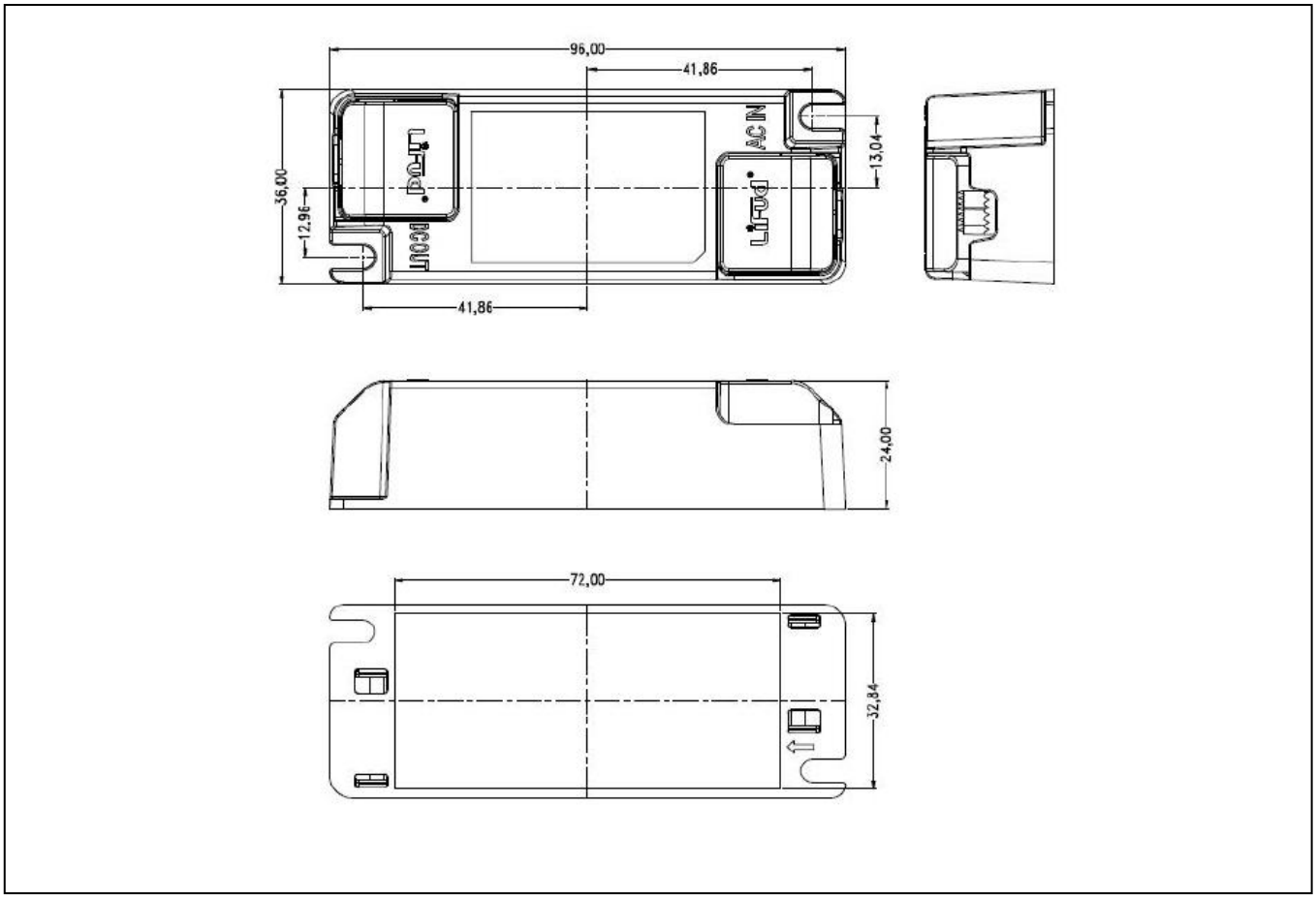
The lifetime of the LED driver is calculated in a closed space when the casing temperature reaches 40℃, 50℃ 60℃, 70℃, 80℃ and 90℃



2. Efficiency Curve



Structures & Dimensions (Unit: mm; tolerance: ±0.5mm)



Package Specifications

Model	LF-GIR008YS0700U
Box Size	385*285*210 mm (L*W*H)
Quantity	20 pcs/layer; 8 layers/ctn; 160 pcs/ctn
Weight	0.052 kg±5/pc; 10kg±5/ctn

Attention

- Please use this product according to its specifications otherwise there may be malfunction.
- Use light fixtures that have not been certified or are not compatible with the LED drivers may cause fire or other hazards.
- Man-made damage, any use beyond the specification and non-original-factory modification are not covered by warranty.

Remark: The final interpretation right of the contents of this data sheet belongs to Lifud Technology Co., Ltd.