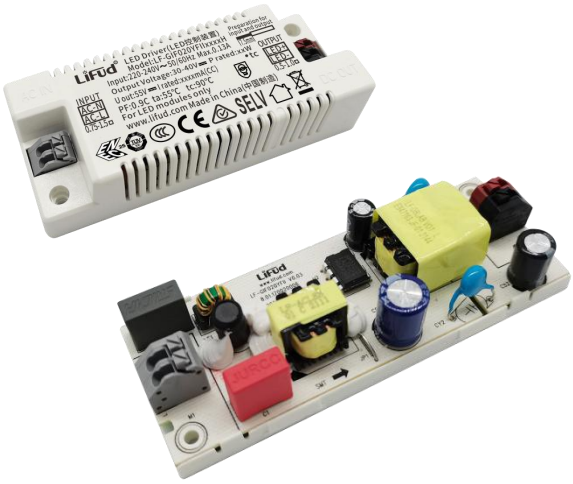
Product Description

LF-GIF020YFIIxxxxH is a 14-20W isolated constant current LED driver. It can work under Ta of 55℃ and has two types: LED driver with external casing and bare board LED driver with bottom casing. The input voltage range is 220-240Vac. The output voltage range is 30-40Vdc. The output current range is 350-500mA.

Features



- Built-in assembly
- Flicker free
- Ta: 55℃
- High efficiency and low THD
- 5-year warranty (Please refer to the warranty condition.)
- Suitable for Class Ⅱ light fixture

Applications

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

Product Naming

LF-GIF 020 YF II xxxx H

- H: input voltage of 220-240Vac
- xxxx: output current, e.g. 0500: 500mA
- II: the second generation of the same series
- Y: conforms to certifications; F: serial number
- 020: rated power of 20W
- G: isolated; IF: indoor flicker-free LED driver series

Electrical Characteristics

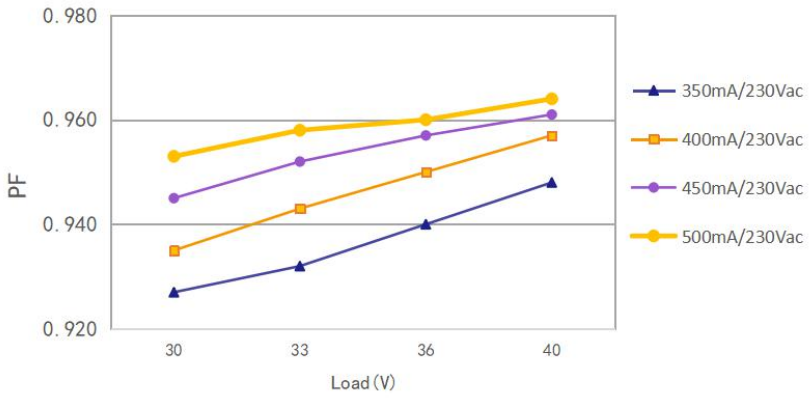
Model		LF-GIF020YFIIxxxxH			
Output	Output Voltage	30-40Vdc			
	Output Current	350mA	400mA	450mA	500mA
	Flicker Index (Modulation depth)	<0.5%			
	CIE SVM	≤0.4			
	IEC-Pst	≤1.0			
	Current Tolerance	±5%			
	Temperature Drift	±10%			
	Start-up Time	<0.5S			
Input	AC Input Voltage	220-240Vac (limit: 200-264Vac)			
	Input Frequency	47Hz-63Hz			
	Input Current	0.13A Max			
	Power Factor	≥0.9			
	THD	≤20%			
	Efficiency	≥85.5%	≥86%	≥86.5%	≥87%
	Inrush Current	≤20A & 150uS			
	Load Quantity Carried by the Circuit Breaker	Circuit Breaker Model	B10	C10	B16	C16
		Quantity (pcs)	39	65	62	104
	Leakage Current	≤0.7mA			
	Standby Power Consumption	<0.5W			
Protection Characteristics	Open Circuit Protection	<55V			
	Short Circuit Protection	Hiccup mode (auto-recovery)			

Environment Description	Operating Temperature	-30℃~+55℃
	Operating Humidity	0-95%RH (no condensation)
	Storage Temperature/Humidity	-30℃~+ 80℃ (six months under class I environment); 0-95%RH (no condensation)
	Atmospheric Pressure	86KPa~106KPa
Safety & Electromagnetic Compatibility	Certifications	TUV-ENEC, CE, CB, CCC, RCM
	Withstanding Voltage	I/P-O/P: 3.75KV & 5mA & 60S
	Insulation Resistance	I/P-O/P: >100MΩ @ 500Vdc
	Safety Standards	ENEC: EN61347-1: 2015, EN 61347-2-13: 2014/A1: 2017, EN 62384: 2016/A1: 2009; CE-LVD: EN 61347-2-13: 2014/A1: 2017, EN 61347-1: 2015, EN 62493: 2015; CB: IEC 61347-1: 2015, IEC61347-2-3: 2014, IEC 61347-2-13: 2014/AMD1: 2016; RCM: AS 61347.2-13:018 CCC: GB19510.1-2009, GB19510.14-2009
	EMI	CE-EMC/RCM: EN55015, EN61000-3-2, EN61000-3-3 CCC:GB/T17743, GB17625.1, GB17625.2
	EMS	CE-EMC/RCM: EN61000-4-2, 3, 4, 5 (lightning strike 1KV), 6, 11 CCC: GB/T17626.2, 3, 4, 5 (lightning strike 1KV), 6, 11
Others	IP Rating	IP20
	RoHS	RoHS 2.0 (EU) 2015/863
	Warranty Condition	5 yrs (Tc<74℃)
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.	

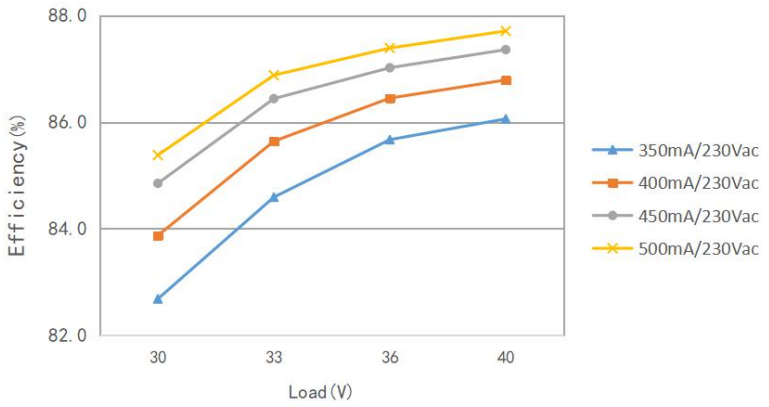
Remarks	1. It is recommended that customer should install overvoltage and undervoltage protection devices and surge protection devices in the power supply circuits of the light fixtures to ensure safety before connecting to electricity. 2. The PC cover, casing, end caps and other parts of the LED driver 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. 4. The test conditions of the circuit breaker configuration quantity are the same as those of the inrush current test. 5. Unless otherwise stated, the parameters above are test results under these conditions: ambient temperature 25℃, humidity 50%, input voltage 230Vac(50Hz) and 100% load. 6. The location hole on the bottom casing of the LED driver is Φ3.5mm. It is recommended to use screw with head diameter of 5mm and outer diameter of M3 for LED driver with external casing and screw with head diameter of 6mm and outer diameter of M3 for bare board LED driver with bottom casing. 7. Do not place the LED driver in the track head.

Characteristic Curves

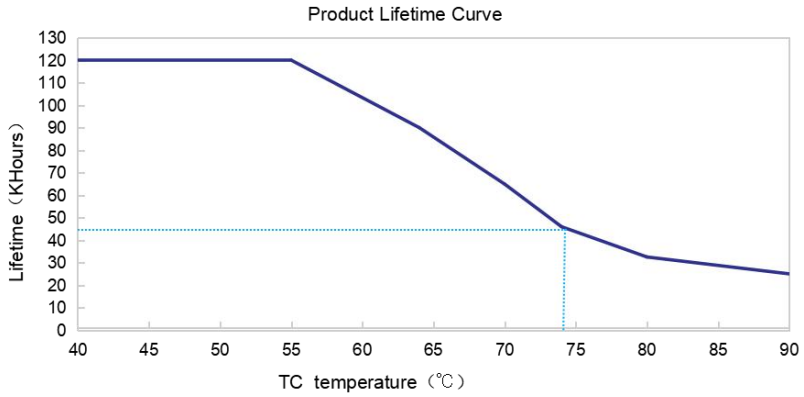
■ PF Curve



■ Efficiency Curve



■ **Lifetime Curve**



Definitions of Terminals

INPUT

AC-N(gray terminal)	Input terminal of AC neutral wire
AC-L(gray terminal)	Input terminal of AC live wire

OUTPUT

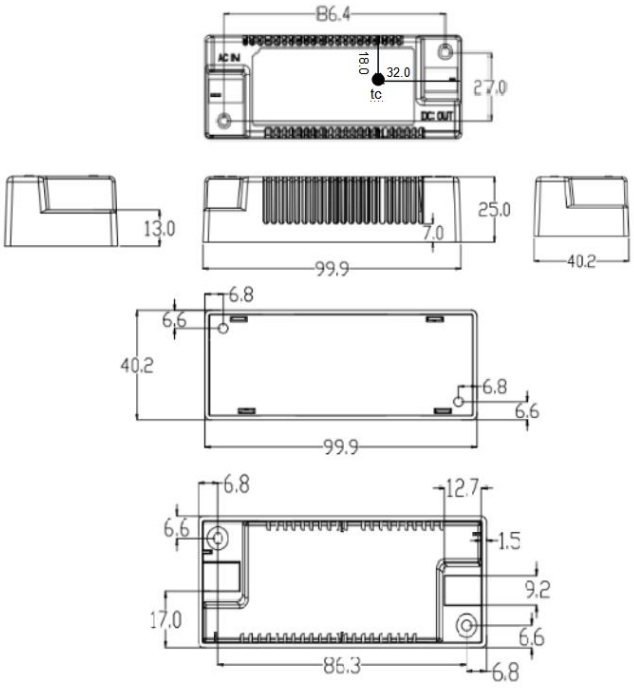
LED+(red terminal)	Positive electrode output of the driver
LED-(black terminal)	Negative electrode output of the driver

Labels

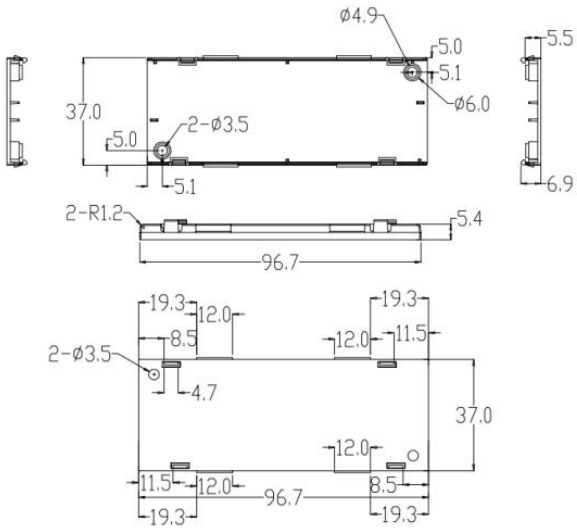
LED driver with external casing

Bare board LED driver with bottom casing

Structure & Dimensions (Unit: mm)



LED driver with external casing



Bare board LED driver with bottom casing

Packaging Specifications

■ **LED driver with external casing**

Model	LF-GIF020YFIIxxxxH
Packaging Dimensions	385*285*210 mm (L*W*H)
Quantities	14 pcs/layer; 7 layers/ctn; 98 pcs/ctn
Weights	0.056 kg±5%/pc; 6.5kg±5%/ctn

■ **Bare board LED driver with bottom casing**

Model	LF-GIF020YFIIxxxxH
Packaging Dimensions	385*285*210 mm (L*W*H)
Quantities	15 pcs/layer; 6 layers/ctn; 90 pcs/ctn
Weights	0.044 kg±5%/pc; 5.7kg±5%/ctn

Transportation & Storage

■ **Transportation**

- Suitable transportation means: vehicles, boats and aircraft.
- During transportation, there should be awnings for rain protection and sun protection. Civilized loading and unloading are required. There should be no severe vibration or impact.

■ **Storage**

- Storage in accordance with the provisions of Class I environment. For products which have been stored for more than six months, they mustn't be used until they pass the re-inspection.

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.