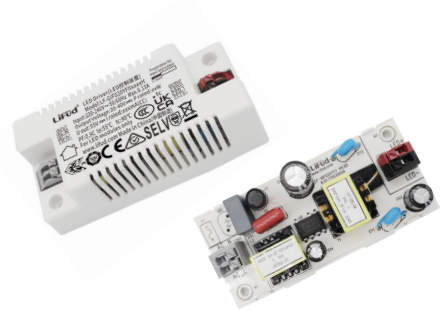


**Features**

- High PF; low THD
- Ta: 55°C
- Flicker free
- IP20
- Suitable for Class II light fixtures
- 5-year warranty (please refer to the warranty condition)



**Applications**

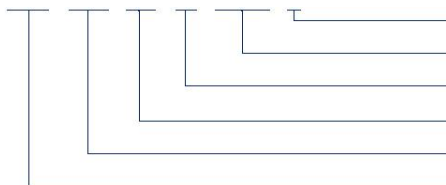
· Commercial lighting · indoor office lighting · decorative lighting · residential lighting

**Descriptions**

LF-GIF020YFIxxxxH is a 14-20W constant current LED driver featuring flicker-free effect and high PF. Its input voltage ranges from 220 to 240Vac and output current from 350 to 500mA. It is suitable for split-type LED track light (installing inside the integrated track light or down light is forbidden) and its ambient temperature shall NOT exceed 55°C. It has 2 selectable versions: full external casing version & bare board + fixed bottom casing version.

**Product Model**

LF - GIF 020 YF II xxxx H



- H: input voltage: 220-240Vac
- xxxx: output current (e.g. 0500: 0500mA)
- II: the 2nd gen.
- Y: complies with certifications; F: serial number
- 020: output power: 20W
- G: isolated design; IF: indoor flicker-free LED driver

### ■ Electrical Characteristics

Model		LF-GIF020YFIxxxxH				
Output	Output Voltage	30-40Vdc				
	Output Current	350mA	400mA	450mA	500mA	
	Flicker Index	Complies with IEEE 1789 standard.				
	CIE SVM	≤0.4				
	IEC-Pst	≤1.0				
	Current Tolerance	±5%				
	Temperature Drift	±10%				
	Startup Time	<0.5S				
Input	Input Voltage	220-240Vac (voltage limit: 200-264Vac)				
	Input Current	0.13A max.				
	PF	≥0.9				
	THD	≤20%				
	Efficiency	≥85.5%	≥86%	≥86.5%	≥87%	
	Inrush Current	≤20A&150uS				
	Loading Quantities of Circuit Breaker	Model	B10	C10	B16	C16
		Quantity (pcs)	16	16	26	26
	Leakage Current	≤0.7mA				
	Standby Power Consumption	<0.5W				
Protections	Open Circuit	Open-circuit voltage ≤55Vdc				
	Short Circuit	Hiccup mode (auto-recovery)				
Environment Descriptions	Operating Temperature	-30°C - +55°C & Tc≤90°C				
	Operating Humidity	0-95%RH (no condensation)				
	Storage Temperature/ Humidity	-30°C - +80°C (6 months in Class I environment); 0-95%RH (no condensation)				
	Atmospheric Pressure	86-106kPa				

### ■ Electrical Characteristics

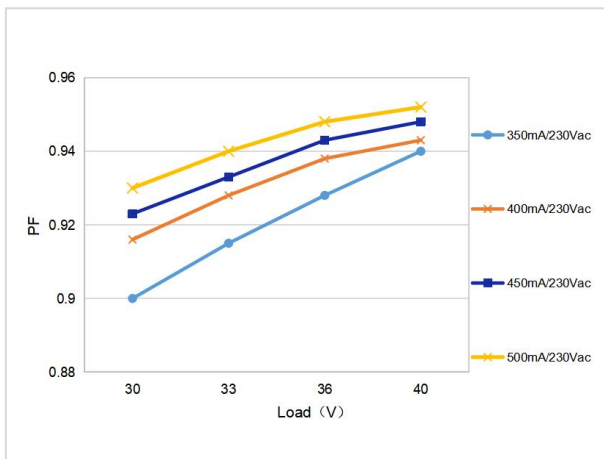
<b>Safety &amp; EMC</b>	Certifications	TUV-ENEC, CE, CB, RCM, UKCA, CCC
	Withstanding Voltage	I/P-O/P: 3.75kV&5mA&60S
	Insulation Resistance	I/P-O/P: >100MΩ@500Vdc
	Safety Standards	ENEC: EN61347-1: 2015, EN61347-2-13: 2014/A1: 2017, EN62384 2016/A1: 2009 CE-LVD: EN61347-2-13: 2014/A1: 2017, EN61347-1: 2015, EN62493: 2015 CB: IEC61347-1: 2015, IEC61347-2-3: 2014, IEC 61347-2-13: 2014/AMD1: 2016 RCM: AS61347.2-13: 2018 CCC: GB19510.1-2009, GB19510.14-2009 UKCA-LVD: EN61347-1: 2015/A1: 2021, EN61347-2-13: 2014/A1: 2017, EN62493: 2015
	EMI	CE-EMC/RCM: EN55015, EN61000-3-2, EN61000-3-3 CCC: GB/T17743, GB17625.1, GB17625.2 UKCA-EMC: EN IEC 55015: 2019/A11: 2020, EN 61547: 2009, EN IEC 61000-3-2: 2019/A1: 2021, EN 61000-3-3: 2013/A2: 2021
	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
<b>Other Parameters</b>	IP Rating	IP20
	RoHS	RoHS 2.0 (EU) 2015/863
	Warranty	5 years (Tc ≤77°C)
<b>Testing Equipment</b>	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: EEC SE7440, flicker tester (flicker-free coefficient test) Everfine LFA-3000, etc.	

■ **Electrical Characteristics**

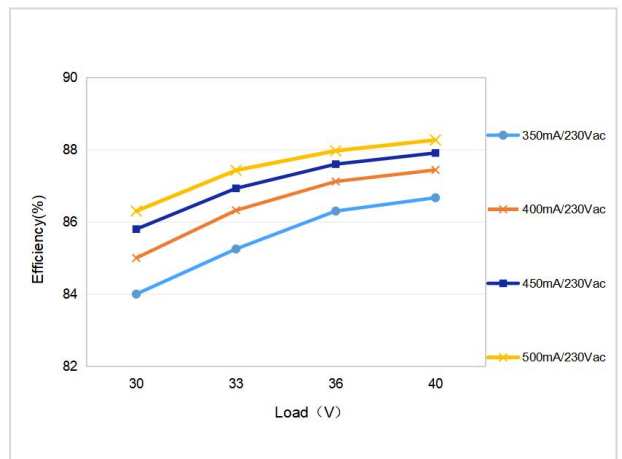
<b>Testing Remark</b>	If there are no special remarks, the above parameters are tested at the ambient temperature of 25°C, humidity of 50%, full load and input voltage of 230Vac.
<b>Additional Remarks</b>	<ol style="list-style-type: none"> <li>1. It is recommended that user install over voltage protection, under voltage protection and surge protection devices in the power supply circuits of light fixtures to ensure electricity safety.</li> <li>2. 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.</li> <li>3. 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.</li> <li>4. The test conditions of the circuit breaker configuration quantity are the same as those of the inrush current.</li> <li>5. The diameter of the positioning hole on the bottom casing of LED driver is <math>\Phi 3.5\text{mm}</math>. It is well-advised to use the screw with 5mm head diameter and M3 outer diameter when using the full external casing version; the screw with 6mm head diameter and M3 outer diameter when using the bare board + fixed bottom casing version.</li> <li>6. Do not install the driver inside any integrated track light or down light.</li> <li>7. The ambient temperature (<math>T_a</math>) of the driver shall not exceed 55°C and casing temperature (<math>T_c</math>) not exceed 90°C.</li> </ol>

■ **Product Characteristic Curves**

PF Curve

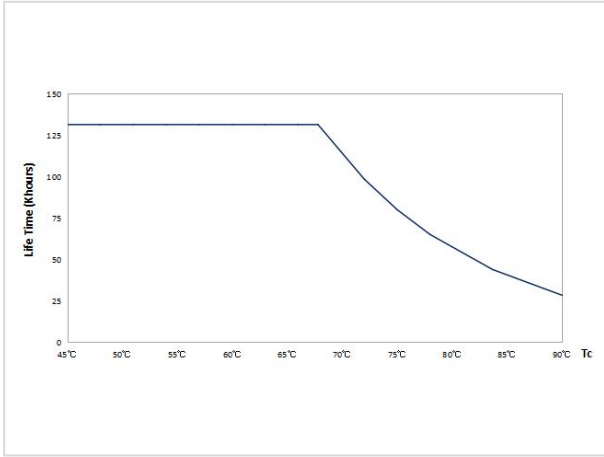


Efficiency Curve

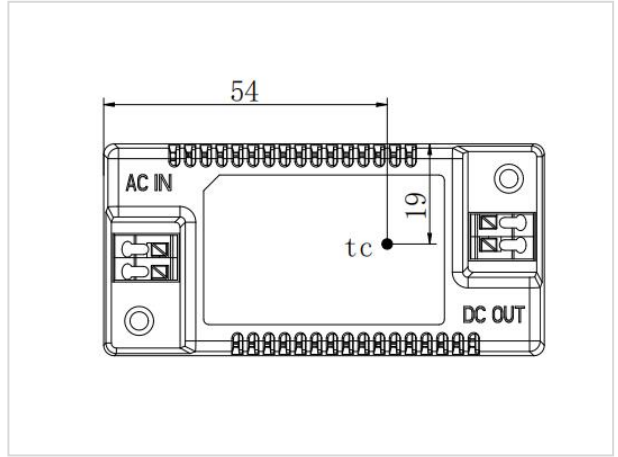


■ **Product Characteristic Curves**

Lifetime Curve



Tc Point Testing Diagram



■ **Product Definitions**

Product Terminal

INPUT		OUTPUT	
AC-N	Input terminal of AC neutral wire	LED+	Positive electrode output of LED driver
AC-L	Input terminal of AC live wire	LED-	Negative electrode output of LED driver

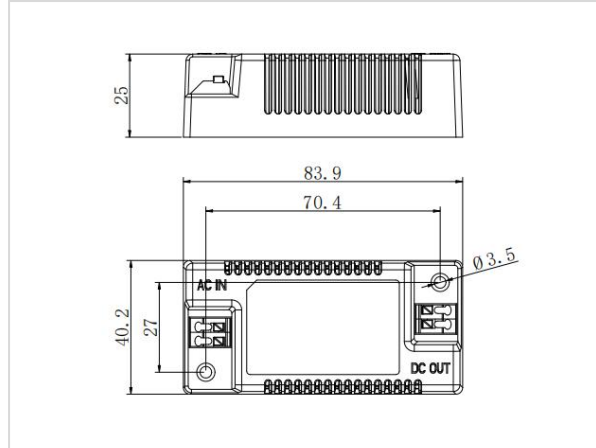
■ **Structure & Dimensions (unit: mm)**

Full external casing version

Model	Overall Appearance (L*W*H)	Distance Between 2 Positioning Holes	Diameter of Positioning Hole
LF-GIF020YFIxxxxH	83.9*40.2*25 mm	70.4*27 mm	3.5 mm

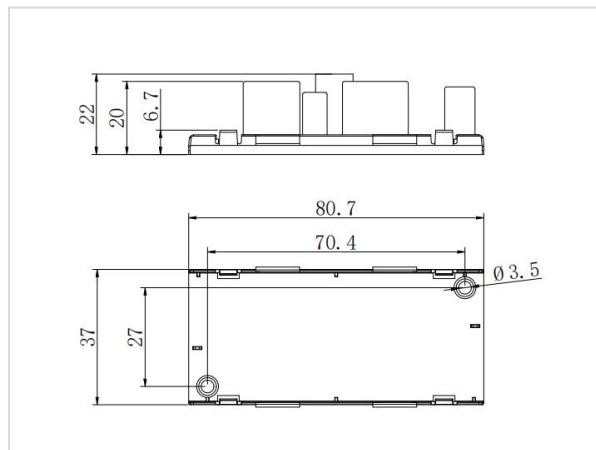
■ **Structure & Dimensions (unit: mm)**

Full external casing version



Bare board + fixed bottom casing version

Model	Overall Appearance (L*W*H)	Distance Between 2 Positioning Holes	Diameter of Positioning Hole
LF-GIF020YFIxxxxH	80.7*37*22 mm	70.4*27 mm	3.5 mm



■ **Packaging Specifications**

Full external casing version

Model	LF-GIF020YFIxxxxH
Carton Size	385*285*210mm (L*W*H)
Quantity	17 pcs/layer; 7 layers/ctn; 119 pcs/ctn
Weight	0.06 ± 5% kg/pc; 7.76 ± 5% kg/ctn

Bare board + fixed bottom casing version

Model	LF-GIF020YFIxxxxH
Carton Size	385*285*210mm (L*W*H)
Quantity	15 pcs/layer; 6 layers/ctn; 90 pcs/ctn
Weight	0.044 ± 5% kg/pc; 5.0 ± 5% kg/ctn

■ **Transportation and Storage**

**1. Transportation**

- 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 of LED driver as much as possible.

**2. Storage**

- The storage of LED driver shall conform to the standard of Class I environment. When using LED drivers which have been stored for more than 6 months, please re-test them firstly. Do not use them unless they are tested to be qualified.

**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.

Remark: Lifud Tecnology Co., Ltd. reserves the right to interpret any contents of this specification.