

Product Description

LF-GIR013YSxxxxH is an isolated constant current LED driver with external assembly. The maximum output power is 13W. It has small size, suitable for spot light, down light, panel light, etc.



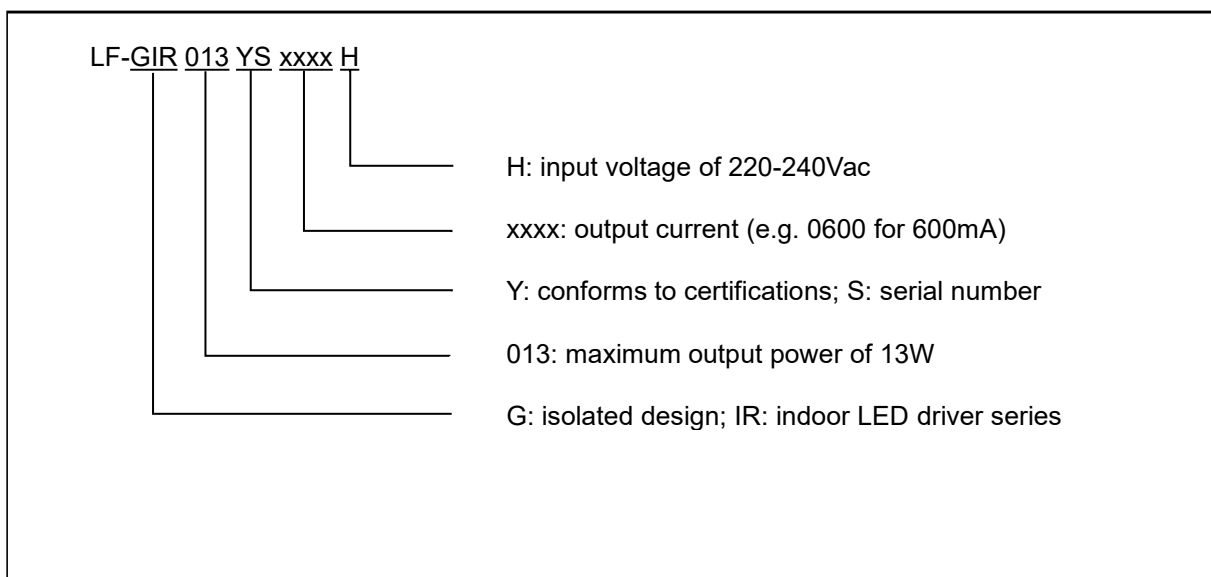
Features

- Flicker free
- Conforms to the latest harmonic current emissions standard: IEC 61000-3-2:2018+A1: 2020
- Conforms to the ERP standard: (EU) 2019/2020@2019.12.05
- 5-year warranty (Please refer to the warranty condition.)
- Suitable for Class II light fixtures

Applications

- Indoor office lighting
- Decorative lighting

Product Naming



Electrical Characteristics 1

Model		LF-GIR013YSxxxxH				
Output	Output Voltage	25-42V			25-38V	
	Output Current	250mA	300mA		350mA	
	Flicker Index (Modulation Depth)	Conforms to the standard of IEEE 1789				
	CIE SVM	≤0.4				
	IEC-Pst	≤1				
	Current Tolerance	±7%				
	Temperature Drift	±10%				
	Start-up Time	<0.5S				
Input	Input Voltage	220-240Vac (voltage limit: 198-264Vac)				
	Input Frequency	47Hz-63Hz				
	Input Current	0.15A Max				
	DF	≥0.7				
	Efficiency	≥83%	≥84%		≥84%	
	Inrush Current	≤9A @ 120uS @220Vac				
	Load Quantity Carried by the Circuit Breaker	Circuit Breaker Model	B10	C10	B16	C16
		Quantity (pcs)	30	60	50	90
	Leakage Current	≤0.7mA				
	Standby Power Consumption	<0.5W				
Protection Characteristics	Open Circuit Protection	<80V				
	Short Circuit Protection	Hiccup mode (auto-recovery)				
Environment Description	Operating Temperature	-30℃~+50℃				
	Operating 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					

Electrical Characteristics 2

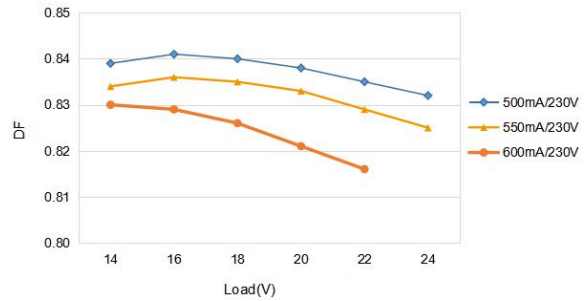
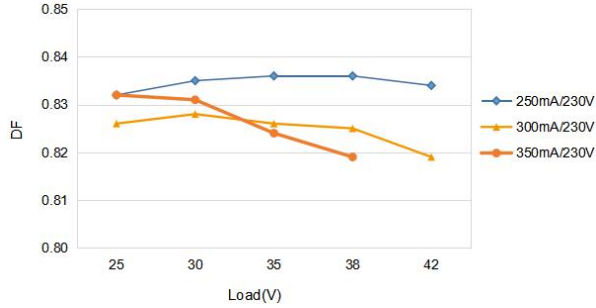
Model		LF-GIR013YSxxxxH				
Output	Output Voltage	14-24V			14-22V	
	Output Current	500mA	550mA		600mA	
	Flicker Index (Modulation Depth)	Conforms to the standard of IEEE 1789				
	CIE SVM	≤0.4				
	IEC-Pst	≤1				
	Current Tolerance	±7%				
	Temperature Drift	±10%				
	Start-up Time	<0.5S				
Input	Input Voltage	220-240Vac (voltage limit: 198-264Vac)				
	Input Frequency	47Hz-63Hz				
	Input Current	0.15A Max				
	DF	≥0.7				
	Efficiency	≥83%				
	Inrush Current	≤9A @ 120uS @220Vac				
	Load Quantity Carried by the Circuit Breaker	Circuit Breaker Model	B10	C10	B16	C16
		Quantity (pcs)	30	60	50	90
	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℃~+50℃				
	Operating 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					

Other Characteristics

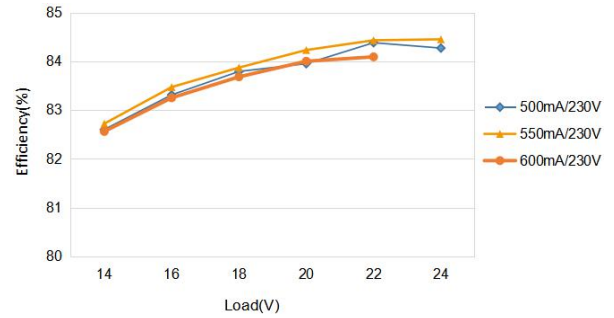
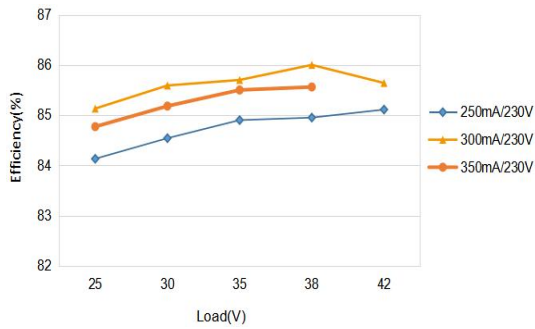
Safety & Electromagnetic Compatibility	Certifications	TUV, CCC, RCM, CE, CB, SAA
	Withstanding Voltage	I/P-O/P: 3.75KVac/5mA/60S
	Insulation Resistance	I/P-O/P: >100MΩ @ 500Vdc
	Safety Standards	CE-LVD: EN 61347-2-13: 2014/A1: 2017, EN 61347-1: 2015, EN 62493: 2015 CB: IEC 61347-1:2015, IEC61347-2-3:2014, IEC 61347-2-13: 2014/AMD1:2016 RCM: AS 61347.2-13: 2018 CCC: GB19510.1-2009, GB19510.14-2009
	EMI	CE-EMC/RCM: EN55015, EN61000-3-2: 2019, 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	2011/65/EU&2015/863/EU
	Warranty Condition	5 yrs (Tc≤70℃)
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: EEC SE7440, flicker-free tester (flicker-free coefficient tester), Everfine LFA-3000, etc.	
Remarks	<ol style="list-style-type: none"> 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. 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. 3. The test conditions of the circuit breaker configuration quantity are the same as those of the inrush current test. 4. Unless otherwise stated, the parameters above were test results under the ambient temperature of 25℃, humidity of 50%, input voltage of 220Vac/50Hz and full load. 	

Product Characteristic Curves

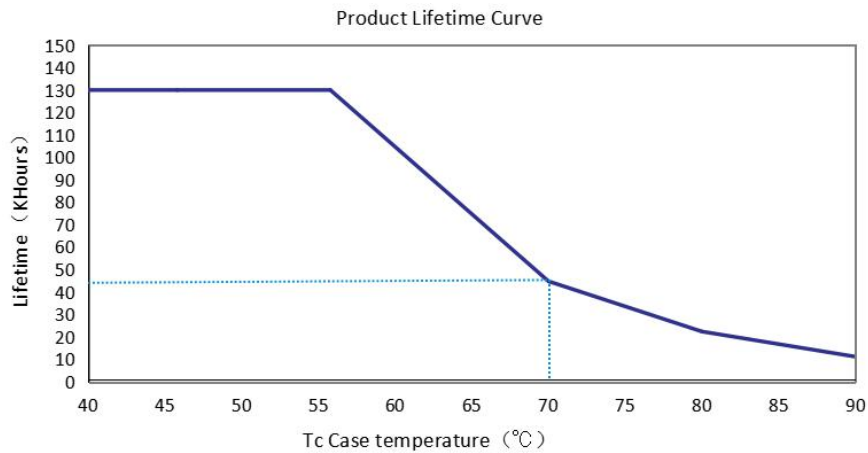
■ DF Curves



■ Efficiency Curves



■ Lifetime Curve



Definition of Terminals

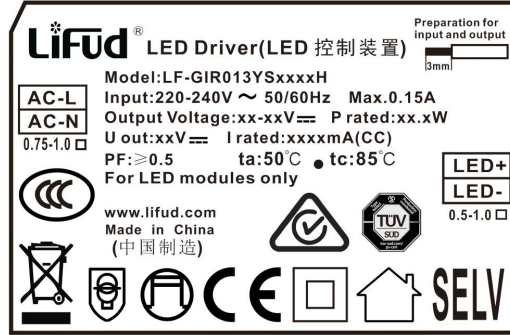
INPUT

AC-L	Input terminal of AC live wire
AC-N	Input terminal of AC neutral wire

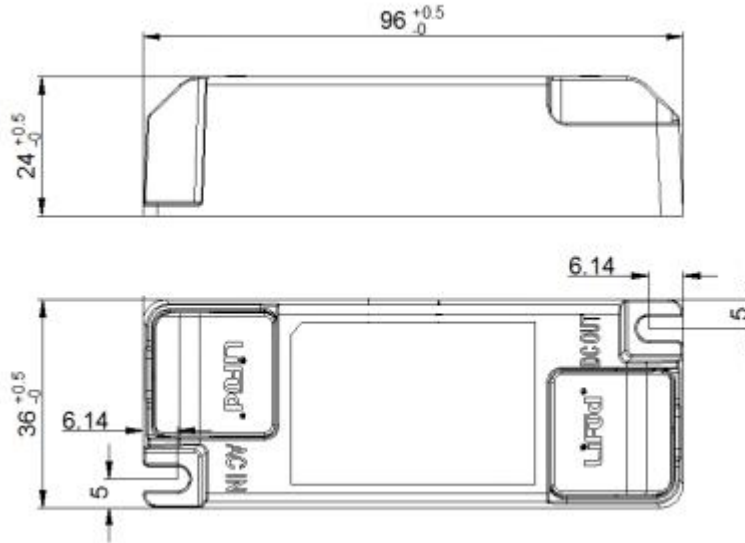
OUTPUT

LED+	Positive electrode output of the driver
LED-	Negative electrode output of the driver

Label



Dimensions (unit: mm)



Packaging Specifications

Model	LF-GIR013YSxxxxH
Packaging Dimensions	385*285*210 mm (L*W*H)
Quantities	20 pcs/layer; 8 layers/ctn; 160 pcs/ctn
Weights	0.048 kg/pc; 9.2 kg/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.