

# **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

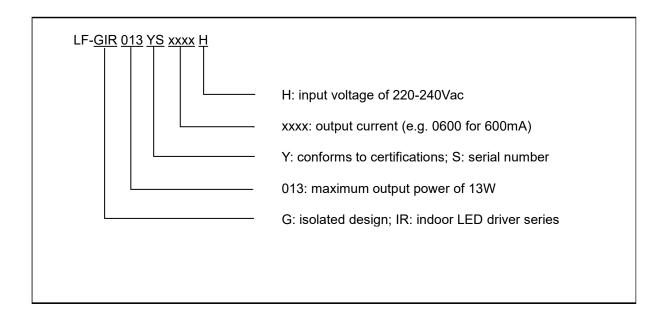


- Flicker free
- Conforms to the latest harmonic current emissions standard: IEC 61000-3-2:2018+A1: 2020
- Conforms to the ERP standard: (EU) 2019/2020@2019.12.05
- 5-year warranty (Please refer to the warranty condition.)
- Suitable for Class II light fixtures

## Applications

- Indoor office lighting
- Decorative lighting

### **Product Naming**





# **Electrical Characteristics 1**

Model		LF-GIR013YSxxxxH					
	Output Voltage	25-42V		25-38V			
	Output Current	250mA	300mA		350mA		
	Flicker Index (Modulation Depth)	Conforms to the standard of IEEE 1789-2015					
Output	CIE SVM	≤0.4					
	IEC-Pst	≤1					
	Current Tolerance	±7%					
	Temperature Drift	±10%					
	Start-up Time	<0.5S					
	Input Voltage	220-240Vac (voltage limit: 198-264Vac)					
	Input Frequency	50/60Hz					
	Input Current	0.15A Max					
	DF	≥0.7					
	Efficiency	≥83%	≥84% ≥8		84%		
Input	Inrush Current	≤9A @ 120uS @220Vac					
	Load Quantity	Circuit Breaker Model	B10	C10	B16	C16	
	Carried by the Circuit Breaker	Quantity (pcs)	30	60	50	90	
	Leakage Current	≤0.7mA					
	Standby Power Consumption	<0.5W					
Protection	Open Circuit Protection	<80V					
Characteristics	Short Circuit Protection	Hiccup mode (auto-recovery)					
	Operating Temperature	-30℃~+50℃					
Environment	Operating Humidity	20-90%RH (no condensation)					
Description	Storage	-40℃~+ 80℃ (six months under class I environment);					
	Temperature/Humidity	10-90%RH (no condensation)					
	Atmospheric Pressure	86KPa~106KPa					



# **Electrical Characteristics 2**

Model		LF-GIR013YSxxxxH					
	Output Voltage	14-24V			14-22V		
	Output Current	500mA	550mA		600mA		
	Flicker Index (Modulation Depth)	Conforms to the standard of IEEE Std 1789-2015					
Output	CIE SVM	≤0.4					
	IEC-Pst	≤1					
	Current Tolerance	±7%					
	Temperature Drift	±10%					
	Start-up Time	<0.5S					
	Input Voltage	220-240Vac (voltage limit: 198-264Vac)					
	Input Frequency	50/60Hz					
	Input Current	0.15A Max					
	DF	≥0.7					
	Efficiency	≥83%					
Input	Inrush Current	≤9A @ 120uS @220Vac					
	Load Quantity Carried by the Circuit Breaker	Circuit Breaker Model Quantity (pcs)	B10 30	C10 60	B16 50	C16 90	
	Leakage Current	≤0.7mA			I		
	Standby Power Consumption	≤0.5W					
Protection	Open Circuit Protection	<55V					
Characteristics	Short Circuit Protection	Hiccup mode (auto-recovery)					
	Operating Temperature	-30℃~+50℃					
Environment	Operating Humidity	20-90%RH (no condensation)					
Description	Storage Temperature/Humidity	-40℃~+ 80℃ (six months under class I environment); 10-90%RH (no condensation)					
	Atmospheric Pressure	86KPa~106KPa					



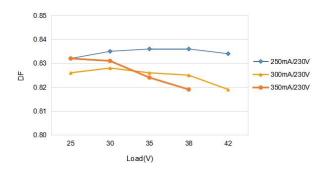
# Other Characteristics

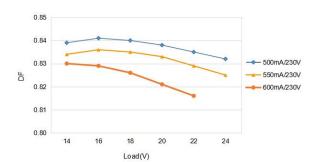
	Certifications	ENEC、TUV、CE、CB、SAA、RCM、UKCA、CCC		
	Withstanding Voltage	nding Voltage I/P-O/P: 3.75KVac/5mA/60S		
	Insulation Resistance	I/P-O/P: >100MΩ @ 500Vdc		
Safety & Electromagnetic Compatibility	Safety Standards	ENEC: EN61347-1:2015, EN 61347-2-13:2014/A1:2017, EN 62384 2016/A1:2009 CE-LVD: EN 61347-2-13:2014/A1:2017, EN 61347-1:2015, EN 62493:2015 UKCA-LVD:EN 61347-1:2015/A1:2021, EN 61347-2-13:2014/A1:2017 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	CCC:GB/T17743, GB17625.1, GB17625.2 CE-EMC/RCM:EN55015, EN61000-3-2:2019, EN61000-3-3 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		
	IP Rating	IP20		
Others	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			
Remarks	<ol> <li>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.</li> <li>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.</li> <li>The test conditions of the circuit breaker configuration quantity are the same as those of the inrush current test.</li> <li>Unless otherwise stated, the parameters above were test results under the ambient temperature of 25°C, humidity of 50%, input voltage of 220Vac/50Hz and full load.</li> </ol>			



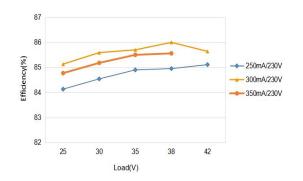
# **Product Characteristic Curves**

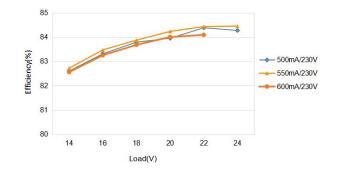
#### ■ DF Curves



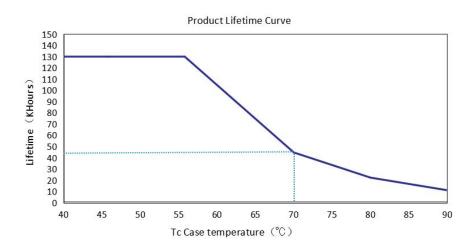


#### Efficiency Curves





#### Lifetime Curve



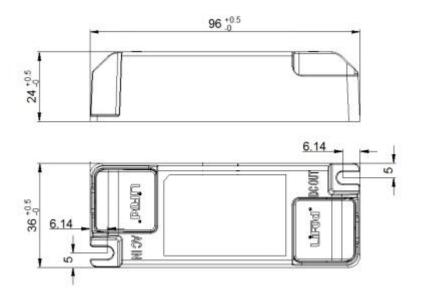


# **Definition of Terminals**

	0011		
	AC-L	Input terminal of AC live wire	LED
	AC-N	Input terminal of AC neutral wire	LED-

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

# Dimensions (unit: mm)



# **Packaging Specifications**

Model	LF-GIR013YSxxxxH
Packaging Dimensions	385*285*210 mm (L*W*H)
Quantities	23 pcs/layer; 7 layers/ctn; 161 pcs/ctn
Weights	0.048 kg/pc; 7.1 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.