

## Product Description

LF-GIR018YSxxxxH is an isolated constant current LED driver with maximum output power of 18W. It has compact size, external assembly, high efficiency and is suitable for spot light, down light, etc.

## Features

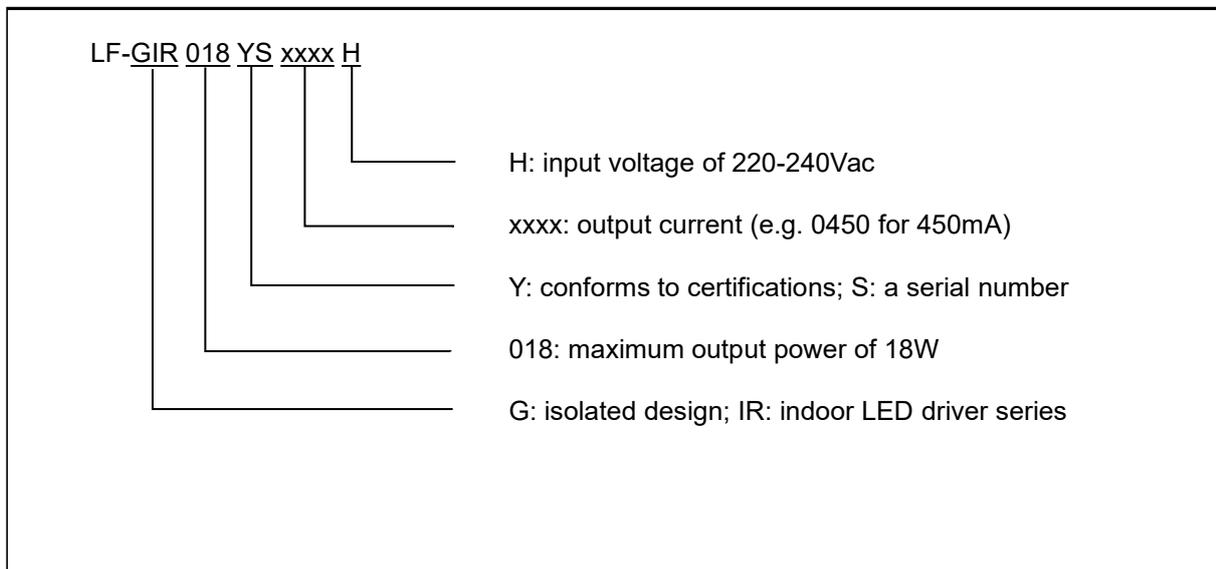
- High cost performance
- Flicker free
- High efficiency
- 5-year warranty (Please refer to the warranty condition.)
- Conforms to the latest harmonic current emissions standard: IEC 61000-3-2: 2019/A1: 2021
- Conforms to the ERP standard: (EU) 2019/2020@2019.12.05
- Suitable for Class II light fixtures



## Applications

- Indoor office lighting
- Decorative lighting

## Product Naming



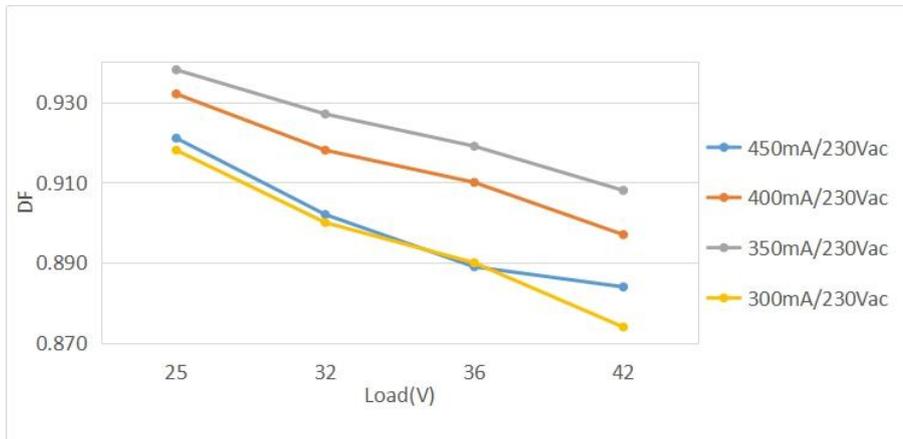
**Electrical Characteristics**

Model		LF-GIR018YSxxxxH				
Output	Output Voltage	25-42V <sup>①</sup>				
	Output Current	300mA	350mA	400mA	450mA	
	Flicker Index (Modulation Depth)	Conforms to the standard of IEEE 1789-2015				
	CIE SVM	≤0.4				
	IEC-Pst	≤1				
	Current Tolerance	±5%				
	Temperature Drift	±10%				
	Start-up Time	<0.5S				
Input	Input Voltage	220-240Vac (voltage limit: 198-264Vac)				
	Input Frequency	50/60Hz				
	DF	> 0.7				
	Input Current	0.22A Max.				
	Efficiency	≥85%	≥86%			
	Inrush Current	≤20A@100uS@220Vac				
	Load Quantity Carried by the Circuit Breaker	Circuit Breaker Model	B10	C10	B16	C16
		Quantity (pcs)	30	30	48	48
	Leakage Current	≤0.7mA				
Standby Power Consumption	≤0.5W					
Protection Characteristics	Open Circuit Protection	<63V				
	Short Circuit Protection	Hiccup mode (auto-recovery)				
Environment Descriptions	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					

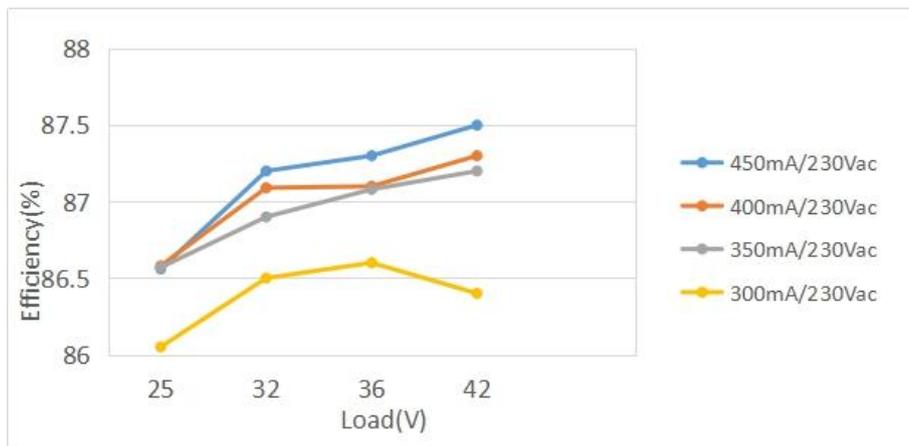
Safety & Electromagnetic Compatibility	Certifications	ENEC <sup>②</sup> 、TUV、CCC、RCM、UKCA、CE、CB
	Withstanding Voltage	I/P-O/P: 3.75KVac/5mA/60S
	Insulation Resistance	I/P-O/P: >100MΩ@500Vdc
	Safety Standards	ENEC: EN61347-1:2015, EN 61347-2-13:2014/A1:2017, EN 62384 2016/A1:2009 CE-LVD: EN 61347-2-13:2014/A1:2017, 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 61347.2-13:2018 UKCA-LVD:EN 61347-1:2015/A1:2021, EN 61347-2-13:2014/A1:2017 EN 62493:2015 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≤80℃)
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, withstanding voltage tester: EEC SE7440, flicker tester (flicker-free coefficient test) Everfine LFA-3000, etc.	
Remarks	<ol style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>3. The test conditions of the circuit breaker configuration quantity are the same as those of the inrush current test.</li> <li>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.</li> <li>5. In addition, the driver's operating voltage range (25-42V<sup>①</sup>) can meet the latest standard 61000-3-2: 2019/A1: 2021. The output voltage range 30-42Vdc is for LED drivers with 350mA output current, 400mA output current and 450mA output current, and the output voltage range 33-42Vdc is for LED driver with 300 mA output current.</li> <li>6. ②LF-GIR018YS0300H has no ENEC certification.</li> </ol>	

## Product Characteristic Curves

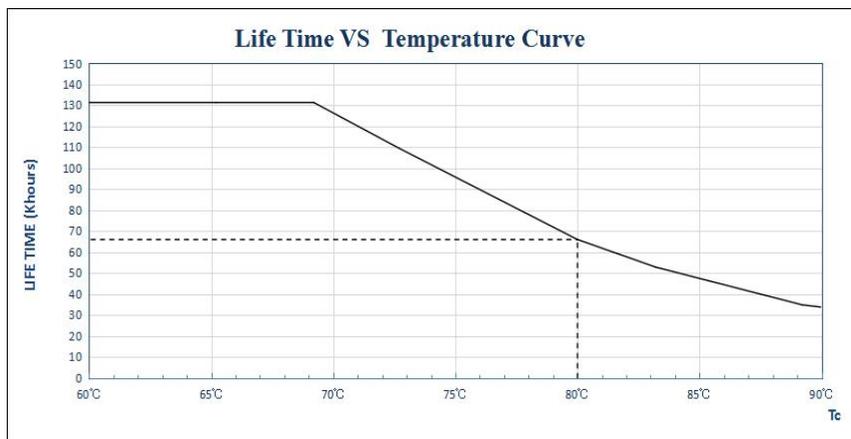
### ■ DF Curve



### ■ Efficiency Curve



### ■ Lifetime Curve



**Definition of Terminals**

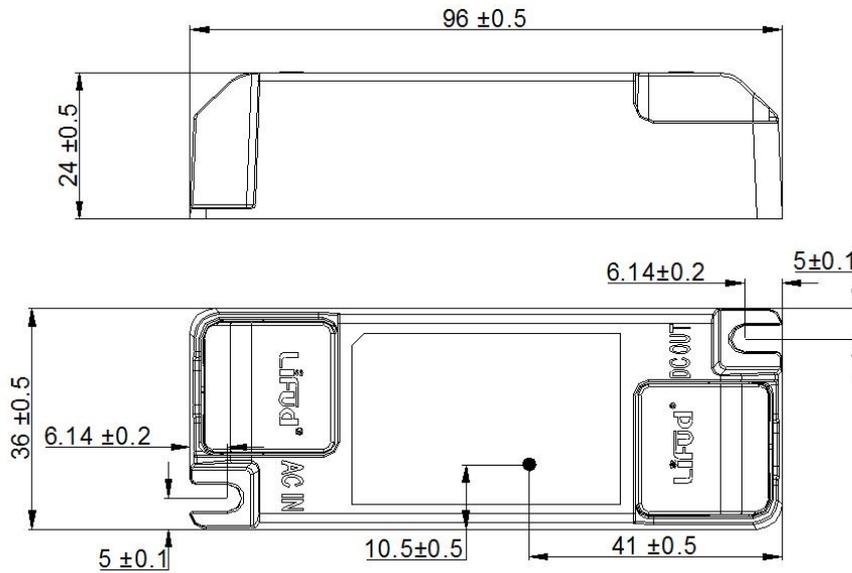
**INPUT**

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

**Dimensions (unit: mm)**



**Packaging Specifications**

Model	LF-GIR018YSxxxxH
Packaging Dimensions	385*285*210 mm (L*W*H)
Quantities	23 pcs/layer; 7 layers/ctn; 161 pcs/ctn
Weights	0.055 kg $\pm 5\%$ /pc; 8.27 kg $\pm 5\%$ /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.