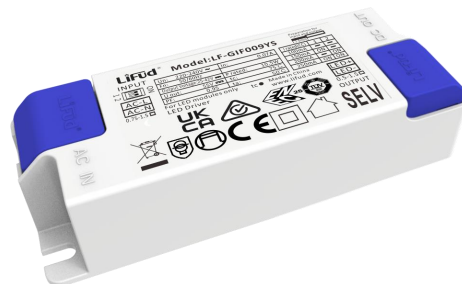


## Features

- Flicker free
- Compact size, high PF, external driver
- IP20
- Suitable for Class II light fixtures
- 5-year warranty (please refer to the warranty condition)



## Applications

· Indoor office lighting · decorative lighting · residential lighting

## Descriptions

LF-GIF009YS is a 9W isolated flicker-free LED driver. Its rated input voltage ranges from 220 to 240Vac and its output current is adjustable from 100 to 250mA via DIP switch with every 50mA as a step.

## Product Model

LF - GIF 009 YS



- Y: complies with certifications; S: serial number
- 009: output power: 9W
- G: isolated design; IF: indoor flicker-free LED driver

## Lifud Technology Co., Ltd.

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## ■ Electrical Characteristics

Model		LF-GIF009YS				
Output	Output Voltage	25-42Vdc				
	Output Current	Adjustable via DIP switch				
		100mA	150mA	200mA	250mA	
	Flicker	Complies with IEEE 1789-2015 standard.				
	CIE SVM	≤0.4				
	IEC-Pst	≤1.0				
	Current Tolerance	± 12%	± 8%		± 5%	
	Temperature Drift	± 10%				
Startup Time	<0.5S					
Input	AC Input Voltage	220-240Vac (voltage limit: 198-264Vac)				
	DC Input Voltage	220-240Vdc (voltage limit: 180-264Vdc)				
	Input Frequency	0/50/60Hz				
	Input Current	0.07A max.				
	PF	≥0.96 <sup>①</sup>				
	THD	<20%				
	Efficiency	≥84% <sup>②</sup>				
	Inrush Current	≤20A <sup>③</sup>				
	Loading Quantities of Circuit Breaker	Model	B10	C10	B16	C16
		Quantity (pcs)	47	55	75	88
	Leakage Current	≤0.7mA				
	Standby Power Consumption	≤0.5W				
Protections	Open Circuit	≤55Vdc				
	Short Circuit	Hiccup mode (auto-recovery)				
Environment Descriptions	Operating Temperature	-30℃ - +50℃				
	Operating Humidity	10-95%RH (no condensation)				
	Storage Temperature/ Humidity	-30℃ - 85℃ (6 months in Class I environment); 0-95%RH (no condensation)				
	Atmospheric Pressure	86-106kPa				

## ■ Electrical Characteristics

Model		LF-GIF009YS				
Output	Output Voltage	25-42Vdc				
	Output Current	135mA	160mA	180mA	220mA	250mA
	Flicker	Complies with IEEE 1789-2015 standard.				
	CIE SVM	≤0.4				
	IEC-Pst	≤1.0				
	Current Tolerance	±8%			±5%	
	Temperature Drift	±10%				
	Startup Time	<0.5S				
Input	AC Input Voltage	220-240Vac (voltage limit: 198-264Vac)				
	DC Input Voltage	220-240Vdc (voltage limit: 180-264Vdc)				
	Input Frequency	0/50/60Hz				
	Input Current	0.07A max.				
	PF	≥0.95 <sup>⑤</sup>				
	THD	<20%				
	Efficiency	≥84% <sup>⑥</sup>				
	Inrush Current	≤20A <sup>⑦</sup>				
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	Storage Temperature/ Humidity	-30℃ - 85℃ (6 months in Class I environment); 0-95%RH (no condensation)				
	Atmospheric Pressure	86-106kPa				

## ■ Electrical Characteristics

Safety & EMC	Certifications	ENEC, CE, CB, UKCA, RCM, 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, 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 UKCA-LVD: EN 61347-1:2015/A1:2021, EN 61347-2-13:2014/A1:2017, EN 62493:2015 RCM:AS 61347.2-13:2018 CCC:GB19510.1-2009, GB19510.14-2009
	EMI	CE-EMC/RCM:EN55015, EN61000-3-2, 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 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
Other Parameters	IP Rating	IP20
	RoHS	RoHS 2.0 (EU) 2015/863
	Warranty	5 years <sup>④</sup>
Testing 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 tester (flicker-free coefficient test) Everfine LFA-3000, etc.	

## ■ Electrical Characteristics

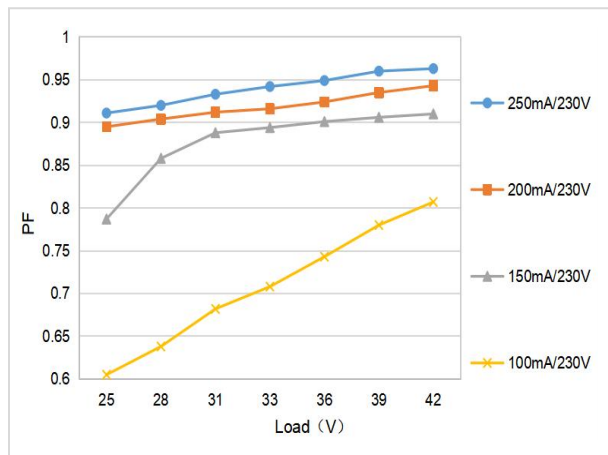
Remarks	<ol style="list-style-type: none"> <li>1. It is recommended that user install over voltage protection, under voltage protection and surge protection devices in the power supply circuits of light fixtures to ensure electricity safety.</li> <li>2. The LED driver used in combination with the end 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>3. The test conditions of the circuit breaker configuration quantity are the same as those of the inrush current.</li> <li>4. 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> </ol>
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Notice:

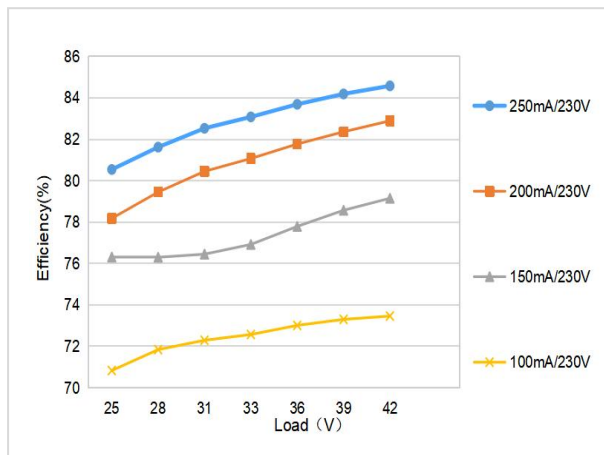
- ①: When the output voltage is 42V and the output current is 250mA, the PF is  $\geq 0.96$
- ②: When the output voltage is 42V and the output current is 250mA, the efficiency is  $\geq 84\%$ .
- ③: @150uS
- ④: 5 years @Tc $\leq 71^{\circ}\text{C}$
- ⑤: When the output voltage is 42V and the output current is 250mA, the PF is  $\geq 0.95$
- ⑥: When the output voltage is 42V and the output current is 250mA, the efficiency is  $\geq 84\%$ .
- ⑦: @150uS

## ■ Product Characteristic Curves

PF Curve

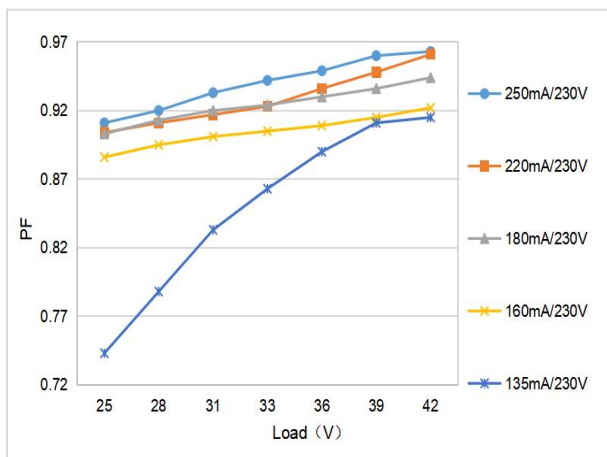


Efficiency Curve

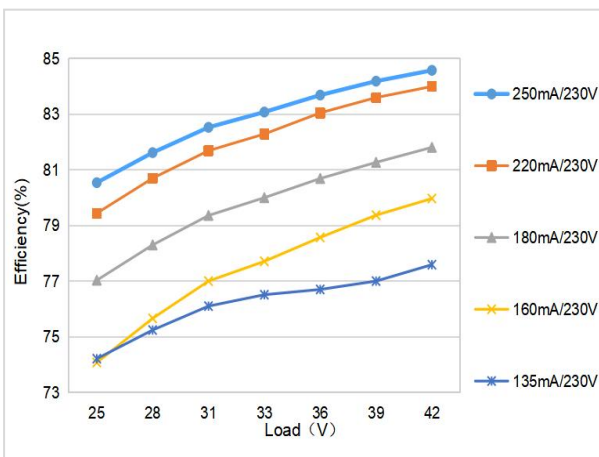


## ■ Product Characteristic Curves

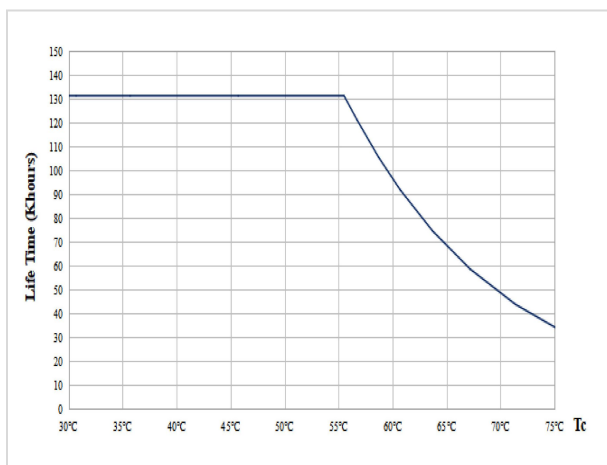
PF Curve



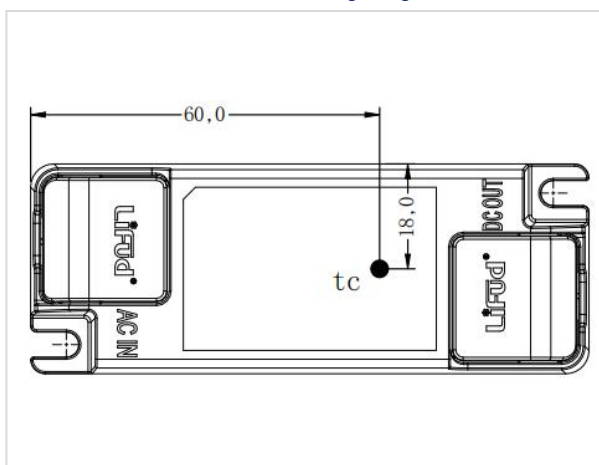
Efficiency Curve



Lifetime Curve



Tc Point Testing Diagram



## ■ Product Definitions

### Product Terminal

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

■ Product Definitions

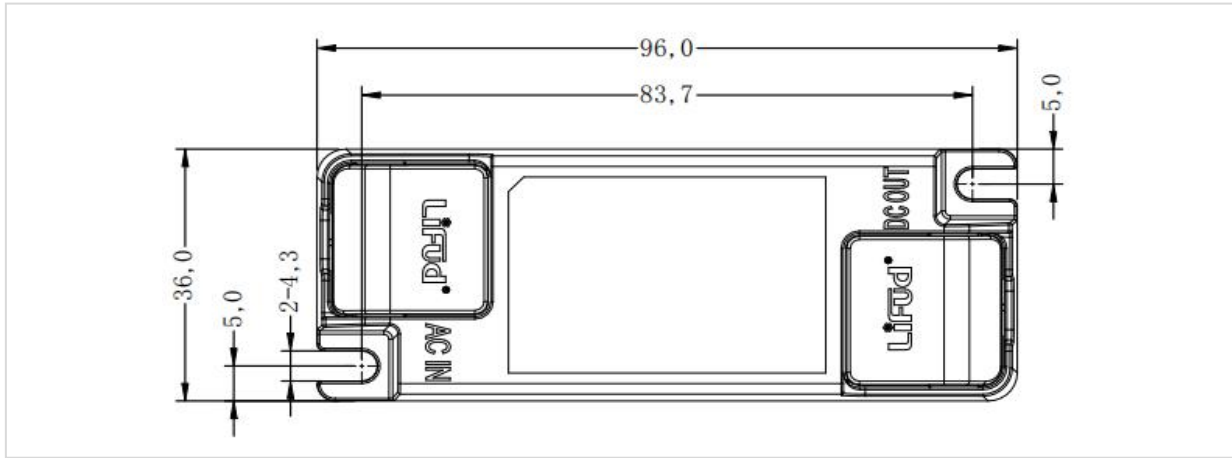
Product DIP Switch

I rated (CC)	1	2
100mA	-	-
150mA	-	ON
200mA	ON	-
250mA	ON	ON

Remark: “-”: shift OFF

■ Structure & Dimensions (unit: mm)

Model	Overall Appearance Dimension (L*W*H)	Center-to-center Spacing of Positioning Hole	Diameter of Positioning Hole
LF-GIF009YS	96*36*24 mm (±0.5mm)	83.7 mm (±0.2mm)	4.3 mm



■ Packaging Specifications

Model	LF-GIF009YS
Carton Size	385*285*210mm (L*W*H)
Quantity	23 pcs/layer; 7 layers/ctn; 161 pcs/ctn
Weight	0.051 ± 5%kg/pc; 8.56 ± 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.