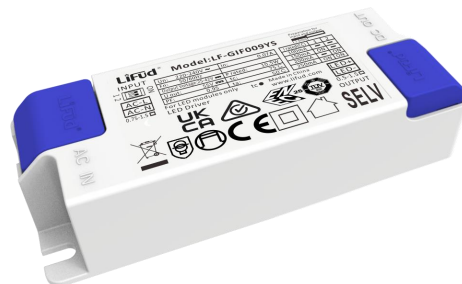


Features

- 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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Website: www.lifud.com

Telephone: +86(0)755 8373 9299

Email: sales@lifud.com

■ Electrical Characteristics

Model		LF-GIF009YS				
Output	Output Voltage	25-42Vdc				
	Output Current	Adjustable via DIP switch				
		100mA	150mA	200mA	250mA	
	Ripple Current (100Hz)	<5%				
	Flicker	Complies with IEEE 1789-2015 standard.				
	CIE SVM	≤0.4				
	IEC-Pst	≤1.0				
	Current Tolerance	± 12%	± 8%			± 7%
	Temperature Drift	± 10%				
Startup Time	<0.5S					
Input	Rated AC Input Voltage	220-240Vac				
	Input Voltage Range	198-264Vac				
	DC Input Voltage	180-264Vdc ^①				
	Input Frequency	0/50/60Hz				
	Input Current	0.07A max.				
	PF	≥0.95 ^②				
	THD	<20%				
	Efficiency	≥84% ^③				
	Inrush Current	≤20A ^④				
	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)				
	Overload	If the maximum load is exceeded by a defined internal limit, the LED Driver turns off the LED output. The driver will recover automatically once the overload is eliminated.				
Environment Descriptions	Operating Temperature	-30°C - +50°C				
	Operating Humidity	10-95%RH (no condensation)				
	Storage Temperature/ Humidity	-30°C - 85°C (6 months in Class I environment); 0-95%RH (no condensation)				
	Atmospheric Pressure	86-106kPa				

■ Electrical Characteristics

Model		LF-GIF009YSxxxxH					
Output	Output Voltage	25-42Vdc					
	Output Current	135mA	160mA	180mA	200mA	220mA	250mA
	Ripple Current (100Hz)	<5%					
	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	Rated AC Input Voltage	220-240Vac					
	Input Voltage Range	198-264Vac					
	DC Input Voltage	220-240Vdc ^⑤					
	Input Frequency	0/50/60Hz					
	Input Current	0.07A max.					
	PF	≥0.95 ^⑥					
	THD	<20%					
	Efficiency	≥84% ^⑦					
	Inrush Current	≤20A ^⑧					
	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)					
	Overload	If the maximum load is exceeded by a defined internal limit, the LED Driver turns off the LED output. The driver will recover automatically once the overload is eliminated.					
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

Surge	L-N	1kV
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: EN61000-4-2,3,4,5,6,11 CCC:GB/T17626.2,3,4,5,6,11
Other Parameters	IP Rating	IP20
	RoHS	RoHS 2.0 (EU) 2015/863
	Tc Max	75°C
	Warranty	5 years ^⑨
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"> 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. 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. 3. The test conditions of the circuit breaker configuration quantity are the same as those of the inrush current. 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.
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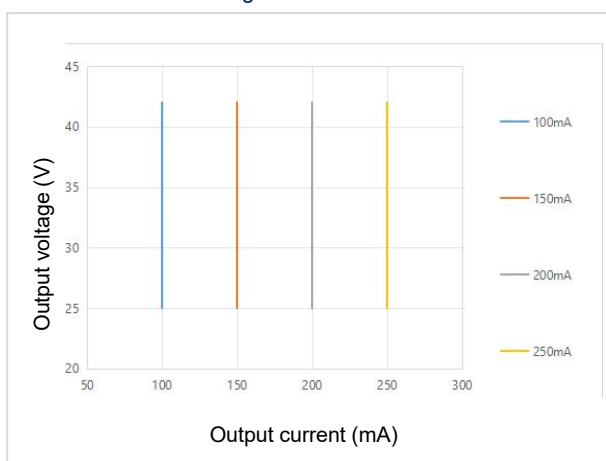
Notice:

- ①: DC input is only for emergency with the maximum time of 90mins.
- ②: When the output voltage is 42V and the output current is 250mA, the PF is ≥ 0.95
- ③: When the output voltage is 42V and the output current is 250mA, the efficiency is $\geq 84\%$.
- ④: @150uS
- ⑤: DC input is only for emergency with the maximum time of 90mins.
- ⑥: When the output voltage is 42V and the output current is 250mA, the PF is ≥ 0.95
- ⑦: When the output voltage is 42V and the output current is 250mA, the efficiency is $\geq 84\%$.
- ⑧: @150uS
- ⑨: 5 years @Tc $\leq 71^{\circ}\text{C}$

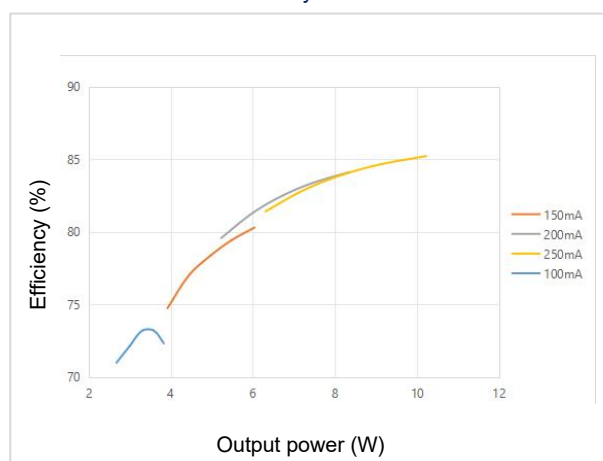
■ Product Characteristic Curves

DIP version

Working Window Curve

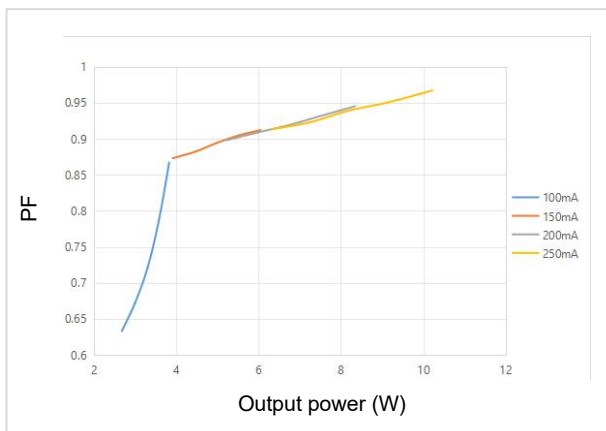


Efficiency Curve

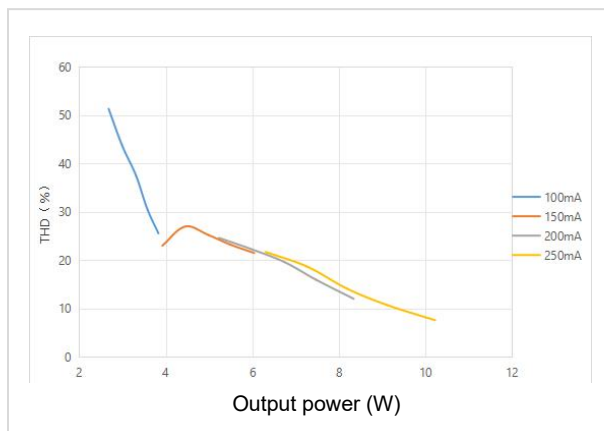


■ Product Characteristic Curves

PF Curve

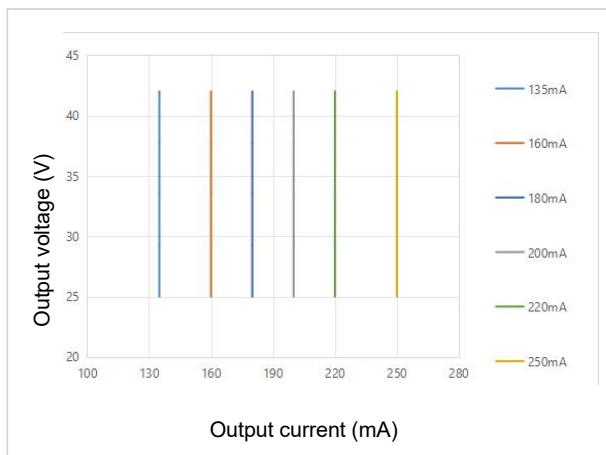


THD Curve

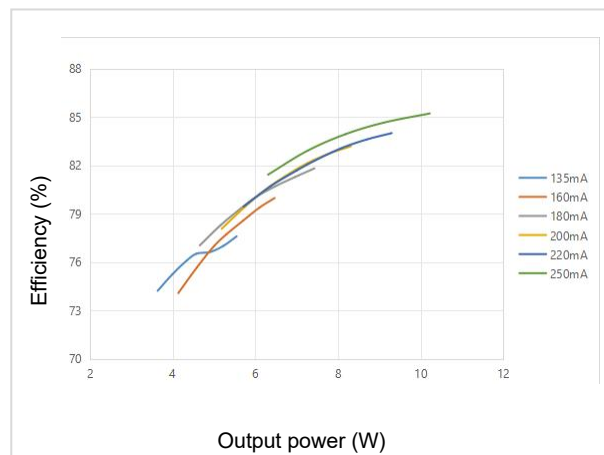


Fixed current version

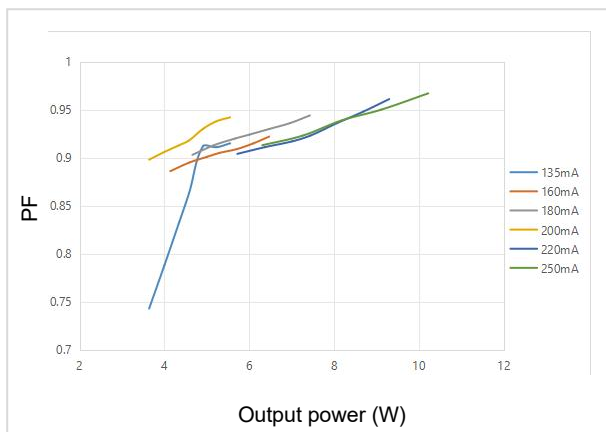
Working Window Curve



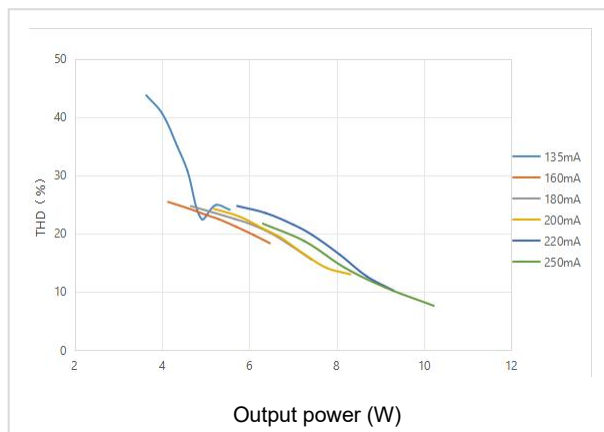
Efficiency Curve



PF Curve



THD Curve



■ Product Definitions

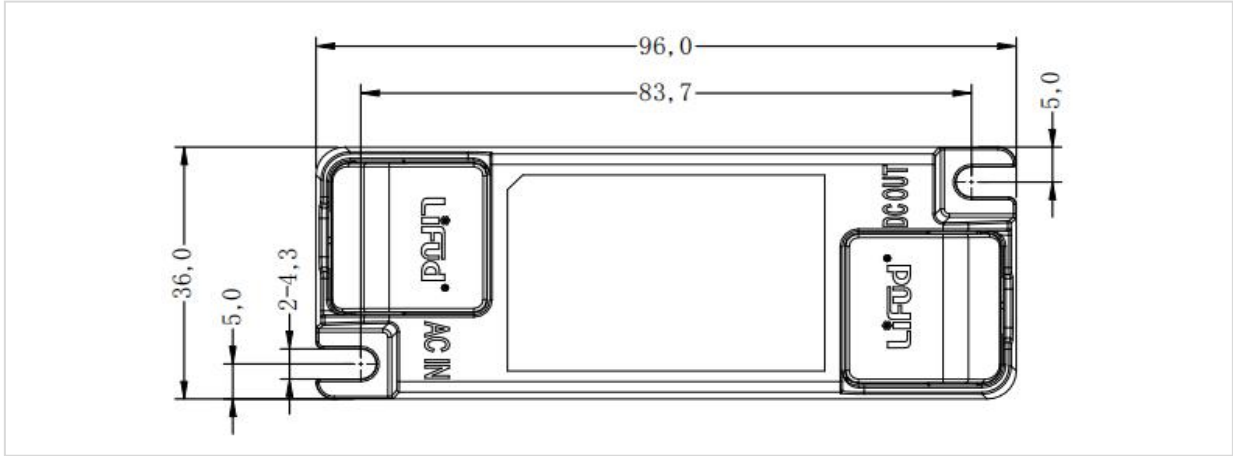
Product DIP Switch

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

Remark: “-”: shift OFF. This table is only for DIP version.

■ 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.