

# **Product Description**

LF-GOE100YV012A is a 100W constant voltage LED power supply, specifically designed for outdoor lighting, flood light and landscape lighting. Rated input voltage: 100-277VAC (limit: 90-305V). Super high efficiency and excellent heat-dissipation properties of this product help to extend the product lifetime. It also has ultra high power factor and extremely low THD.

All-round protections including surge protection, over voltage protection, short circuit protection and over temperature protection greatly improve the product stability.

The output voltage can be conveniently adjusted via the potentiometer at the bottom of the driver so as to meet diverse demands.

#### **Feature**

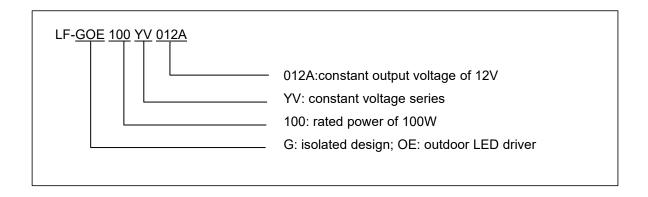
- Efficiency up to 88%
- Input voltage range: 100-277VAC; THD <15%</li>
- The output voltage can be conveniently adjusted via the potentiometer, simplifying the inventory management
- Surge protection: L-N: 6KV; L/N-GND 8KV
- All-round protections: over voltage protection, short circuit protection, over temperature protection and IP67
- Flicker free; percent flicker ≤1%
- 5yrs warranty (please refer to the warranty condition.)

# **Application**

- Outdoor lighting
- Flood light
- Landscape Lighting



# **Product Naming**





# **Electrical Characteristics**

Full Model Number		LF-GOE100YV012A		
	Output Voltage	11.04-12.96Vdc (Adjusted via the potentiometer)		
	Output Current	8.34A max.@200-277Vac; 6.25A max.@100-277Vac		
	Output Power	100W max.@200-277Vac; 75W max.@100-277Vac		
	Default Setting	12Vdc		
Output	Percent Flicker	≤1% @ 50Hz or 60Hz		
	Ripple Voltage	≤10% @ 50Hz		
	Voltage Tolerance	±2.5%		
	Temperature Drift	±5% / 25-60℃		
	Start-up Time	<1s @ 120VAC; <0.5s @ 230VAC		
	Rated Input Voltage	100-277Vac (limit: 90-305Vac)		
	DC Input Voltage	141-391Vdc (limit: 127-431Vdc)		
	Input Frequency	47-63Hz		
	Input Current	1.0A Maximum		
Input	Power Factor	≥0.97/100VAC @full load; ≥0.95/230VAC @full load; ≥0.90/277VAC @full load		
	THD	≤15%		
	Efficiency	≥86%/100VAC @full load; ≥87%/230VAC @full load; ≥88%/277VAC @full load		
	Inrush Current	≤60A & 500uS		
	Leakage Current	≤0.7mA		
	Surge Protection	L-N: 6KV; L/N-GND: 8KV		
	Short-Circuit	Hiccup mode (auto-recovery)		
Protection Features	Open-Circuit	≤16V		
	Over Voltage	≤16V (disconnect output voltage; auto-recovery)		
	Over Current	≤150% (auto-recovery)		
	Operating Temperature	-40℃ ~ +60℃		
Environment	Operating Humidity	20-90%RH (no condensation)		
Condition	Storage Temperature/Humidity	-40°C ~ +80°C (six months under class I environment); 10-90%RH (no condensation)		
	Atmospheric Pressure	86KPa-106KPa		

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	Certificate	TUV-ENEC, CCC, CE, RCM, UL(Class P), CCC, SAA, CB	
	Withstand Voltage	I/P-O/P: 3.75KV, 5mA, 60s; I/P-FG: 1.5kV 5mA 60S; O/P-FG: 0.5kV 5mA 60S	
	Insulation Resistance	I/P-O/P: >100MΩ@500VDC	
Safety & Norm	Safety Standard	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, IE61347-2-3:2014, IEC 61347-2-13:2014/AMD1:2016 RCM: AS 61347.2-13:2018 CCC: GB19510.1-2009, GB19510.14-2009 UL: UL8750, CSA 250.13	
	EMI	CE-EMC/RCM: EN55015, EN61000-3-2, EN61000-3-3 CCC: GB/T17743, GB17625.1, GB17625.2 FCC: PART 15B	
	EMS	CE-EMC/RCM: EN61000-4-2,3,4,5,6,11 CCC: GB/T17626.2,3,4,5,6,11	
	EFTB	2.5KV (Class B)	
	Ringing wave	2.5KV (Class B)	
	Electrostatic Discharge (ESD)	Air 8KV; touch 4KV (Class B)	
	IP Rating	IP67	
Otherna	RoHS	RoHS 2.0 (EU) 2015 / 863	
Others	Warranty Condition	5 years (Tc≤72 °C)	
	Noise Rating	≤20db (Tested in a soundproof room and the noise collector was 10cm away from the driver.)	
	It is recommended that customer should install protection devices for surge, for over voltage and for undervoltage 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.		
Additional Remark	3. It's suggested that the user should use a slotted screwdriver or a Philips screwdriver to adjust the output current in case the potentiometer is damaged. The screwdriver with a 2mm slot head is recommended. Torque is NO higher than 0.5KNM. Make sure the insulation of the screwdriver is good enough.		
	4. The total output power of the light fixture should NOT exceed the maximum rated output power of the driver.		
	5. Unless otherwise stated, the parameters above are test results under these conditions: ambient temperature of 25°C, humidity of 50%, 100% load and input voltage of 230Vac.		

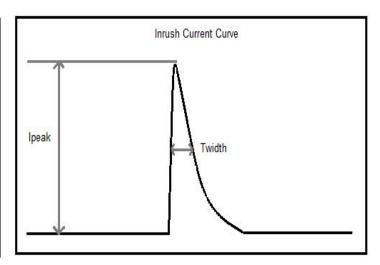


# **Circuit Breaker & Relevant Parameters**

Name	Value	Remark
Surge peak current (Ipeak)	41A	Input voltage of 230Vac
Surge half-peak time (Twidth)	224µs	Input voltage of 230Vac. Measure the time for Ipeak to drop to its half value.
Quantity of the same model of driver that can be configured by a type-B 16A circuit breaker	14 pcs (max.)	

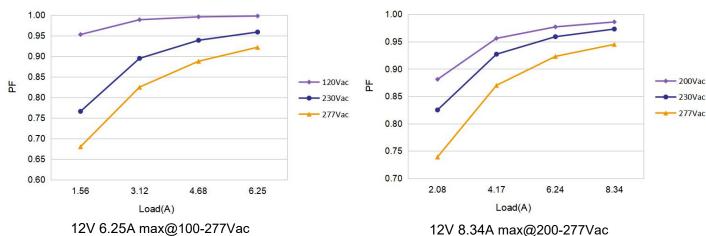
Driver quantities are below if use another type of circuit breaker.

Туре	Rank	Qty of accommodated drivers	Relative conversion ratio
	10A	8 pcs	63%
	13A	11 pcs	81%
В	16A	14 pcs	100% (benchmark)
	20A	17 pcs	125%
	25A	21 pcs	156%
	10A	14 pcs	104%
	13A	18 pcs	135%
С	16A	22 pcs	170%
	20A	29 pcs	208%
	25A	36 pcs	260%



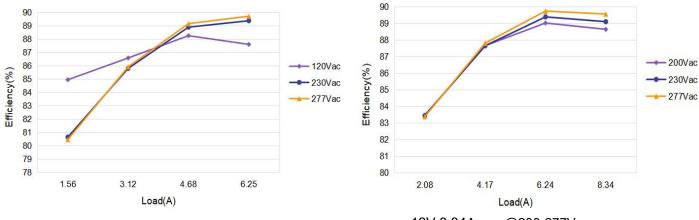
# **Product Characteristic Curves**

#### **■ PF Curve**





### **■** Efficiency Curve



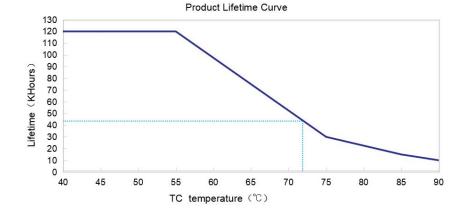
12V 6.25A max@100-277Vac

12V 8.34A max@200-277Vac

# **■** Derating Curve



#### **■** Lifetime Curve



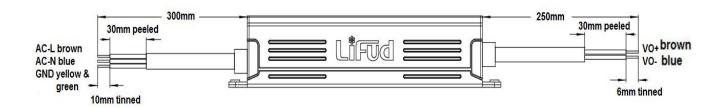


# **Dimming Operation**

#### ■ Built-in potentiometer dimming (changing constant voltage)

Feature	Min	Rated	Max	Remark
The output range of the built-in potentiometer dimming	11VDC	-	13VDC	The total output power of the light fixture should NOT exceed 100W/75W otherwise LIFUD will NOT provide quality assurance. (Vout * lout = Pout)

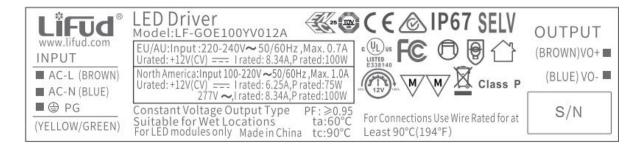
# **Wiring Diagram**



Cable specification: input 3\*17AWG/3\*1.04mm² (SJOW, H05RN-F) ØD8.2±1mm output 2\*17AWG/2\*1.04mm² (SJOW, H05RN-F) ØD7.7±1mm

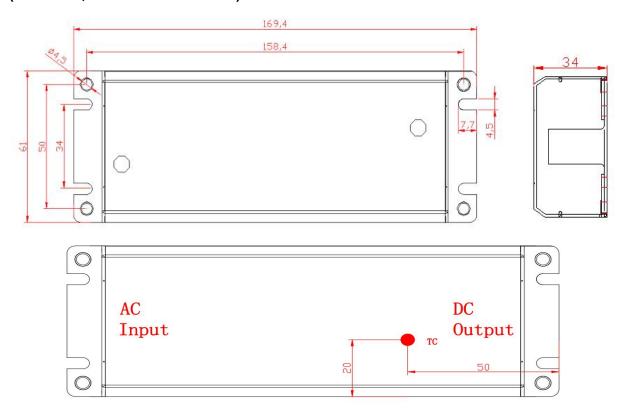
# Label

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# Dimensions (unit: mm, tolerance: +0.5mm)



Tc Spot (on the top of the housing)

# **Packaging Specification**

Model	LF-GOE100YV012A	
Carton Size	420*300*210mm (L*W*H)	
Quantity	6 pcs/layer; 4 layers/ctn; 24 pcs/ctn	
Weight	0.7Kg±5%/pc; 17Kg±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.