

# **Specification**

Customer's Name:			
Product Mat	erial No. :		
Model:	LF-GOE075YV012A		
Version:	V1.1		

# **Customer Approval**

Examined by	Reviewed by	Approved by

# **LIFUD Approval**

Drafted by	Reviewed by	Approved by

# **Models Chosen by the Customer**

Full model name	Full model name	
Full model name	Full model name	

## E.C. List

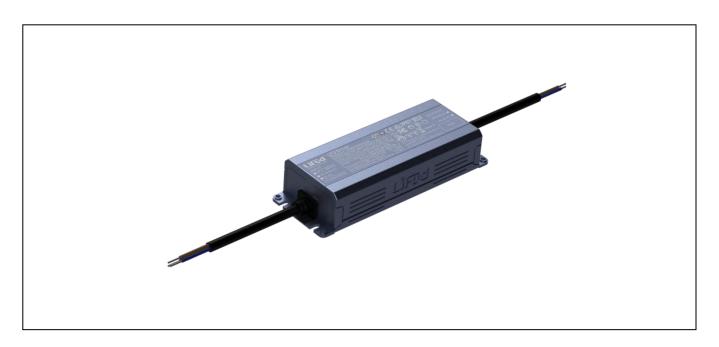
Version	Description of Change	R&D	Date
1.0	Formal release	Li Shuaihua	2019-10-11
1.1	Revised the picture of the product	Li Shuaihua	2019-10-28



**Lifud Technology Co., Ltd.**Building B, Kutto Industrial Park, No.26 Xinhe Road, Xinqiao Street, Bao'an District, Shenzhen, China 518104

www.lifud.com





#### **Product Description**

LF-GOE075YV012A is a 75W constant voltage LED power supply. Its output voltage is adjustable via a potentiometer. Rated input voltage 100-277VAC. Input voltage limit is 90-305V. This product was specifically designed for outdoor LED lighting, LED flood light and lighting engineering.

Super high efficiency and excellent heat-dissipation properties of this product help to extend the product lifetime. Its high power factor makes better use of the power. Its low harmonic interference means low interference with the power grid and the electric devices in the circuit.

It has surge protection, overvoltage protection, short circuit protection and over temperature protection. All-round protection design improves the product stability which helps to save users' maintenance cost.

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

## **Product Feature**

- Efficiency up to 88%
- Input voltage 100-277VAC; THD <15%</li>
- The output voltage / power can be conveniently adjusted via the potentiometer; it simplifies customers' inventory management
- Surge protection: L-N 6KV; L/N-GND 8KV
- All-round protection: overvoltage protection, short circuit protection, over temperature protection & IP67
- Flicker free; percent flicker ≤1%

#### **Application**

- Outdoor LED lighting
- LED flood light
- Lighting engineering



## **Technical Data**

F	ull Model Number	LF-GOE075YV012A
	Output Voltage	11.04-12.96V
	Output Current	6.25A maximum @200-277Vac; 5.0A maximum @100-277Vac
	Ripple Voltage	≤10% @ 50Hz
0	Percent Flicker	≤1% @ 50Hz or 60Hz
Output	Current Tolerance	±2.5%
	Temperature Drift	±5%/25-60℃
	Line Regulation	±1%
	Start-up Time	<0.5s @ 230VAC
	Line Regulation	±1%
	Rated Input Voltage	100-277VAC (voltage limit: 90-305VAC)
	Input Frequency Range	47-63Hz
	Input Current	0.85A Maximum
		≥0.97 / 100VAC @full load
	Power Factor	≥0.95 / 230VAC @full load
		≥0.90 / 277VAC @full load
	Total Harmonic Distortion	≤15% @full load
		≥86% / 100VAC @full load
Input	Efficiency	≥87% / 230VAC @full load
		≥88% / 277VAC @full load
	Inrush Current	≤60A & 500uS @ 230VAC (Maximum)
	Quantity of the same model of power supply that can be configured by a circuit breaker.	Under the condition of 230VAC, the total quantity of the same model of power supply that can be configured by a type-B 16A circuit breaker is 11 pieces.
	Standby Power Consumption	≤2W@230VAC
	Output Short-Circuit Protection	Hiccup mode (auto-recovery)
	Output Open-Circuit Protection	≤16V
	Output Overvoltage Protection	≤16V (disconnect output voltage; auto-recovery)
	Output Overcurrent Protection	≤150% (auto-recovery)
	Working Temperature	-40°C ~ +60°C
Environment Condition	Working Humidity	20-90%RH (no condensation)
	Storage Temperature/Humidity	-40°C ~ 80°C (six months under class I environment); 10-95%RH (no condensation)
	Atmospheric Pressure	86KPa-106KPa
	Vibration	Displacement amplitude: $5Hz \sim 9Hz$ 1.2mm; acceleration amplitude: $9Hz \sim 200Hz$ 1G; sweep-frequency: 1.0oct/min; test time: XYZ, 30 min each; The driver was in operating state and was tested according to system setting.
Safety & Norm	Certificate	CE, CB, ENEC, SAA, RCM, UL, FCC



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, I/P-FG, O/P-FG: 500VDC, >100MΩ
Grounding Resistance	≤100mΩ
Surge Rating	IEC61000-4-5 (L-N: 6kV, L/N-PG: 8kV )
Electrical Fast Transient/Burst	2.2KV (Class B)
Ringing wave	2.5KV (Class B)
Safety Standard	EN 61347-2-13: 2014/A1:2017, EN 61347-1: 2015, EN 62384: 2016 IEC 61347-1:2015, IE61347-2-3: 2014, IEC 61347-2-13: 2014 GB19510.1-2009, GB19510.14-2009, UL8750, AS/NZS 61347-1: 2016
Electromagnetic Interference	Conform to GB17743 / EN55015, EN61000-3-2, CLASS B, FCC Part15
Electromagnetic Susceptibility	EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547, IEC61000-4-13
Electrostatic Discharge (ESD)	Air 8KV; touch 4KV (Class B)

#### Other Statements

	IP Rating	IP67		
Others	RoHS 2.0 (EU) 2015 / 863			
Others	Warranty Condition	5 years (Tc≤75 °C) Please refer to the lifetime curve.		
	Noise Rating	≤20db (Tested in a soundproof room and the noise collector was 10cm away from the driver.)		
Testing Equipment	AC power source: CHROMA6530, digital power meter: CHROMA66202, Oscilloscope: Tektronix DPO3014, DC electronic load: M9712B, LED board, constant temperature and humidity chamber: MQ-1000-3000, lightning surge generator: Everfine EMS61000-5B, rapid group pulse generator: Everfine EMS61000-4A, spectrum analyzer: KH3935, hi-pot tester: TH9201B, light flicker analyzer: LFA-3000, etc.			
Testing Condition	Unless otherwise stated, the parameters of the power factor, THD and efficiency are the test results under the ambient temperature of 25°C and humidity of 50%, AC input of 230V and 100% load.			
	It is recommended that customer should install protection devices for surge and for overvoltage & undervoltage to ensure safety before connecting to electricity.      The BC cases begins and case and other parts of the LED drives inside the LED light fixture result conform to			
Additional Remark	2. The PC cover, housing, end caps and other parts of the LED driver inside the LED light fixture must confo UL94-V0 flammability standard or above.			
3. As an accessory, the LED driver is not the only factor determining the EMC performance of the fixture. The structure and the wiring of the light fixture are also relevant. Thus it's strongly recomm LED light fixture manufacturer re-confirms the EMC of the whole LED light fixture.				

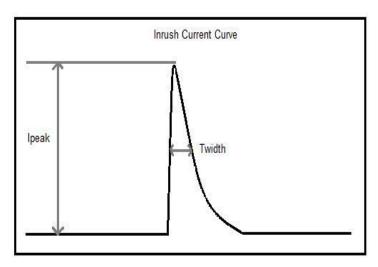
## **Circuit Breaker & Relevant Parameters**

Name	Value	Remark
Surge peak current (Ipeak)	35.8A	Input voltage 230Vac
Surge half-peak time (Twidth)	300µs	Input voltage 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.	11 pcs (max.)	

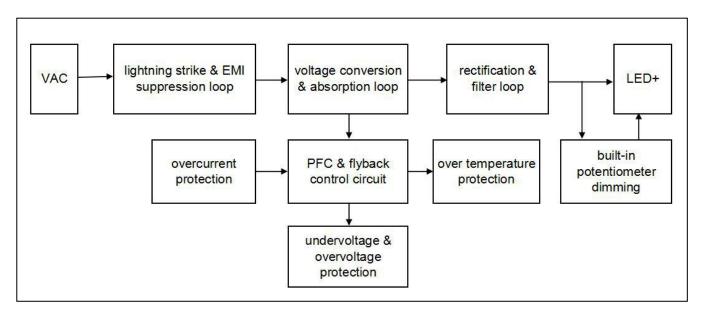


Driver quantities are below if use another type of circuit breaker.

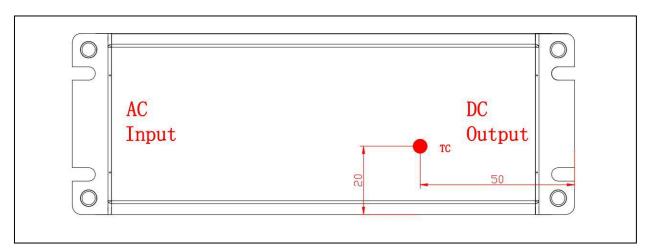
Туре	Rank	Qty of accommodated drivers	Relative conversion ratio
	10A	6 pcs	63%
	13A	8 pcs	81%
В	16A	11 pcs	100% (benchmark)
	20A	13 pcs	125%
	25A	17 pcs	156%
	10A	11 pcs	104%
	13A	14 pcs	135%
С	16A	18 pcs	170%
	20A	22 pcs	208%
	25A	28 pcs	260%



# **Function Diagram**

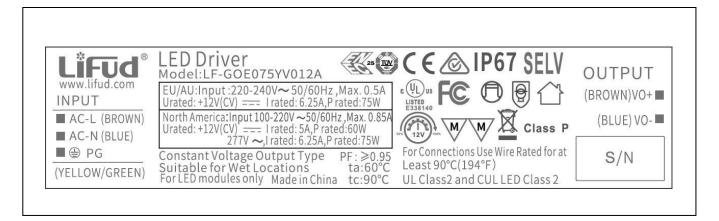


## TC Spot (on the upper cover; unti:mm)

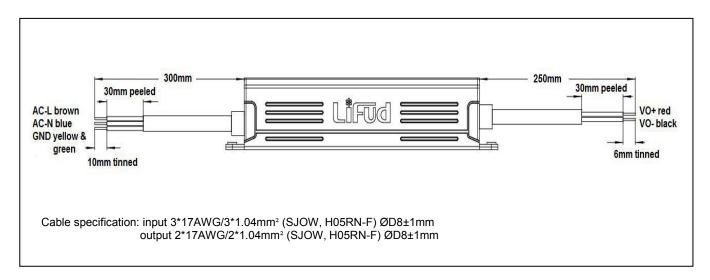




#### Label

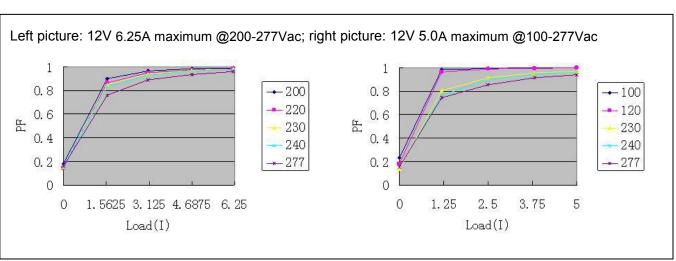


#### **Wiring Diagram**



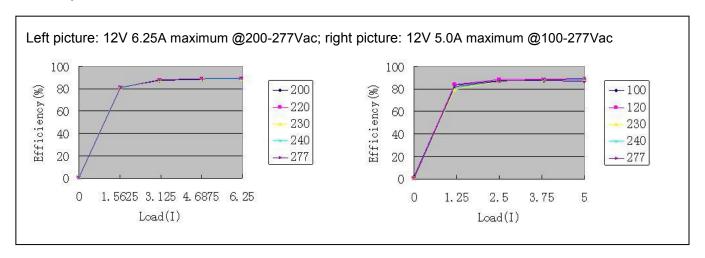
#### **Product Feature Curve**

#### 1. PF curve

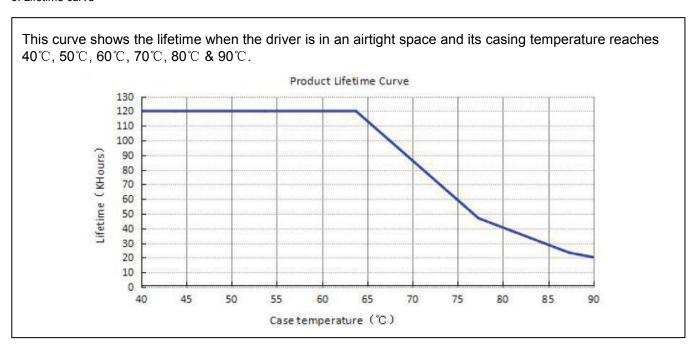




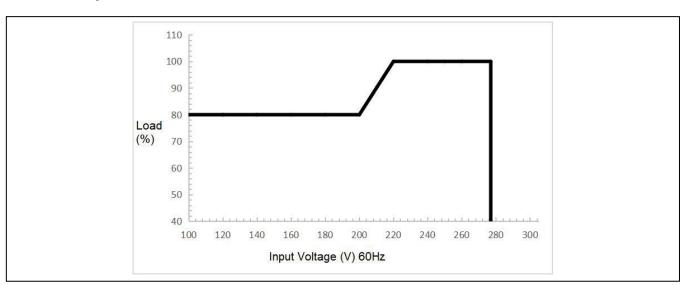
#### 2. Efficiency curve



#### 3. Lifetime curve



#### 4. Load derating curve





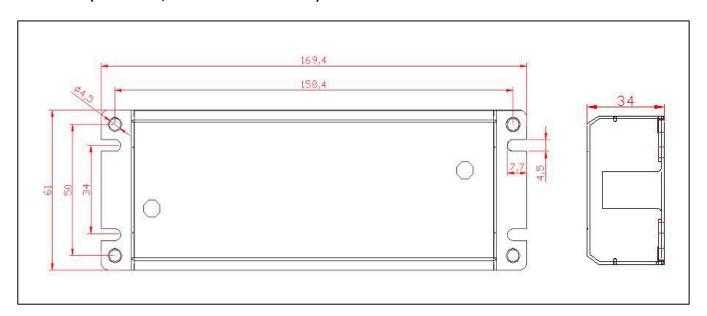
## **Dimming Operation**

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 75W otherwise LIFUD will NOT provide quality assurance.  (Vout * lout = Pout)

It's suggested that the user should use a slotted screwdriver or a Phillips screwdriver to adjust the output voltage 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.

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



#### **Packaging Specification**

Carton dimension	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**

#### 8.1 Transportation

- (1) Transportation means: by means of vehicles, boats and aircraft.
- (2) In transportation, there should be awnings or sun protection. Civilized loading and unloading are required. There should be no severe vibration or impact.

#### 8.2 Storage

- (1) Storage in accordance with the provisions of GB 3873-83.
- (2) Products which have been stored for more than one year must be re-inspected. Use them only after passing the re-inspection.



#### **Attention**

- 9.1 Use this product according to the specifications, please. Otherwise there may be malfunction.
- 9.2 Use luminaires that have not been certified or are not compatible with the drivers may cause fire, explosion or other hazards.
- 9.3 Man-made damage is not covered by warranty.
- 9.4 The withstanding voltage of the aluminium substrate should meet the requirement.

Remark: The final interpretation right of contents of this data sheet belongs to Lifud Technology Co., Ltd.