Product Description

LF-GOE100YV024A 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 90%
- Input voltage range: 100-277VAC; THD <15%
- 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 ≤0.5%
- 5yrs warranty (please refer to the warranty condition.)

Application

- Outdoor lighting
- Flood light
- Landscape Lighting



Product Naming

LF- <u>GOE 100 YV 024A</u>	
	024A:constant output voltage of 24V
	YV: constant voltage series
	100: rated power of 100W
	G: isolated design; OE: outdoor LED driver

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Electrical Characteristics

Full	Model Number	LF-GOE100YV024A	
	Output Voltage	22.08-25.92Vdc (Adjusted via the potentiometer)	
Output	Output Current	4.17A max.@200-277Vac; 3.125A max.@100-277Vac	
	Output Power	100W max.@200-277Vac; 75W max.@100-277Vac	
	Default Setting	24Vdc	
	Percent Flicker (Modulation Depth)	≤0.5% @ 50Hz or 60Hz	
	Ripple Voltage	≤10% @ 50Hz	
	Voltage Tolerance	±2.5%	
	Temperature Drift	±10% / 25-60°C	
	Start-up Time	<1S @ 120VAC; <0.5S @ 230VAC	
	Rated Input Voltage	100-277Vac (limit: 90-305Vac)	
Input	DC Input Voltage	141-391Vdc (limit: 127-431Vdc)	
	Input Frequency	47-63Hz	
	Input Current	1.0A Maximum	
	Power Factor	≥0.97/100VAC @full load; ≥0.95/230VAC @full load; ≥0.90/277VAC @full load	
	THD	≤15%	
	Efficiency	≥86%/100VAC @full load; ≥90%/230VAC @full load; ≥90%/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	≤35V	
reatures	Over Voltage	≤35V (disconnect output voltage; auto-recovery)	
	Over Current	≤150% (auto-recovery)	
	Operating Temperature	-40°C ~ +60°C	
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 Standard Norm EMI	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	
	ЕМІ	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 2.2KV (Class B)		
	Ringing wave	2.5KV (Class B)	
	Electrostatic Discharge (ESD)	Air 8KV; touch 4KV (Class B)	
	IP Rating	IP67	
Othors	RoHS	RoHS 2.0 (EU) 2015 / 863	
Others	Warranty Condition	5 years (Tc≤75 °C)	
	Noise Rating	≤20db (Tested in a soundproof room and the noise collector was 10cm away from the driver.)	
		that customer should install protection devices for surge, for over voltage o ensure safety before connecting to electricity.	
	2. As an accessory, the LED driver is not the only factor determining the EMC perform the LED light fixture. The structure and the wiring of the light fixture are also relevant. strongly recommended the LED light fixture manufacturer re-confirms the EMC of the 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.		
		ated, the parameters above are test results under these conditions: of 25 $^\circ\!C$, humidity of 50%, 100% load and input voltage of 230Vac.	

Circuit Breaker & Relevant Parameters

Name	Value	Remark
Surge peak current (Ipeak)	49.8A	Input voltage of 230Vac
Surge half-peak time (Twidth)	350µs	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	6pcs (max.)	

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

Туре	Rank	Qty of accommodated drivers	Relative conversion ratio
	10A	3 pcs	63%
	13A	4 pcs	81%
В	16A	6 pcs	100% (benchmark)
	20A	7 pcs	125%
	25A	9 pcs	156%
	10A	6 pcs	104%
	13A	8 pcs	135%
С	16A	10 pcs	170%
	20A	12 pcs	208%
	25A	15 pcs	260%



Product Characteristic Curves

■ PF Curve







24V 4.17A max@200-277Vac

<u>Liffud</u> 莱福德

92 90

88

84

82

80

78

1.05

2.10

Load(A)

Efficiency(%) 86 ---- 200Vac

---- 230Vac

---- 277Vac

Efficiency Curve





24V 4.17A max@200-277Vac

3.15

4.17

Derating Curve



■ Lifetime Curve



Dimming Operation

Built-in potentiometer dimming (changing constant voltage)

Feature	Min	Rated	Мах	Remark
The output range of the built-in potentiometer dimming	22VDC	-	26VDC	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





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



Tc Spot (on the top of the housing)

Packaging Specification

Model	LF-GOE100YV024A	
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.