

Features

- 0-10V/PWM/Rx dimming
- Built-in active power factor correction function
- Standby power consumption < 0.5W
- Dimming depth ≤ 0.3%
- Isolated, Flicker free
- Over current, short-circuit protection
- IP20; suitable for Class I light fixtures



Applications

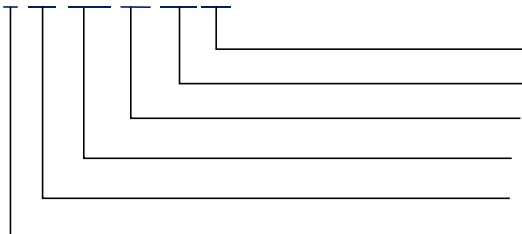
- Indoor office lighting · decorative lighting · commercial lighting · residential lighting

Descriptions

LF-GDE150YV024II is a 150W isolated constant voltage 0-10V/Rx/PWM dimming LED driver. Its input voltage ranges from 220 to 240Vac; output voltage is 24V; output current is 0-6.25A. Mainly for indoor constant voltage led strip.

Product Model

LF-GDE150YV024II



- I: the 2nd generation
- 024: output voltage of 24V
- YV: constant voltage series
- 150: output power of 150W
- DE: 0-10V/Rx/PWM dimming product
- G: isolated circuit

■ Electrical Characteristics

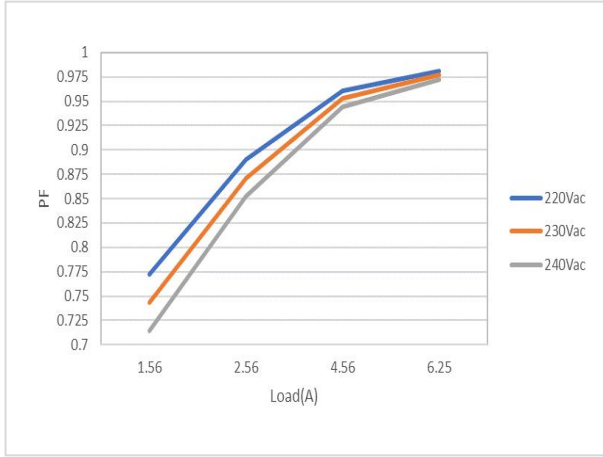
Model		LF-GDE150YV024II				
Output	Output Voltage	24Vdc				
	Output Current	0-6.25A				
	Flicker Index (Modulation Depth)	IEC-Pst \leq 1, CIE SVM \leq 0.4, complies with IEEE Std 1789-2015				
	Ripple Voltage	240mV Max				
	Voltage Tolerance	\pm 3%				
	Temperature Drift	\pm 5%				
	Start-up Time	<2S @230Vac				
Input	AC Input Voltage	220-240Vac (voltage limit: 180-264Vac)				
	DC Input Voltage	220-240Vdc (voltage limit: 180-264Vdc)				
	Input Frequency	0/50/60Hz				
	Input Current	1A Max				
	THD	\leq 10% @230Vac (Max Load)				
	Power Factor	\geq 0.95 @230Vac (Max Load)				
	Efficiency	\geq 93% @230Vac (Max Load)				
	Inrush Current	\leq 60A&350uS@230Vac				
	Load Quantities of Circuit Breaker	Model	B10	C10	B16	C16
		Quantity (pcs)	5	6	8	10
	Leakage Current	\leq 0.7mA				
Standby Power Consumption	\leq 0.5W @230Vac (Dim Signal Off)					
Protection Characteristics	Over-voltage	\leq 33.6V, \geq 25V				
	Over-current	\leq 15A, \geq 9A				
	Short-circuit	Hiccupmode (auto-recovery)				
Environment Descriptions	Operating Temperature	-20°C - +50°C				
	Operating Humidity	20-90%RH (no condensation)				
	Storage Temperature/Humidity	-40°C - +80°C (6 months in Class I environment); 10-90%RH (no condensation)				
	Atmospheric Pressure	86-106KPa				
Safety and Electromagnetic Compatibility	Certifications	TUV-ENEC, CCC, CE, RCM, SAA, CB				
	Withstand Voltage	I/P-O/P: 3.75kV 5mA 60S.I/P-PG:1.5KVac,<5mA 60S.O/P-PG:0.5KVac,<5mA 60S.I/P-DIM:1.5KVac,<5mA 60S;O/P-DIM:0.5.KVac,<5mA 60S;PG-DIM:0.5KVac,<5mA 60S.				
	Insulation Resistance	I/P-O/P: >100M Ω @500Vdc; I/P-PG:>100M Ω @500Vdc; O/P-PG:>100M Ω @500Vdc;I/P-DIM:500VDC,>100M Ω ;O/P-DIM:500VDC,>100M Ω ; PG-DIM:500VDC,>100M Ω				
	Safety Standards	ENEC: EN61347-1:2015, EN 61347-2-13:2014/A1:2017, EN 62384:2016/A1:2009 CCC:GB19510.1-2009, GB19510.14-2009 RCM:AS 61347.2-13:2018 SAA:AS61347.2-13:2018 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/AMD1:2016ERP:EU 2019/2020@2019.12.05				
	EMI	CE-EMC:EN55015, EN61000-3-2, EN61000-3-3 CCC:GB/T17743, GB17625.1, GB17625.2				
	EMS	CE-EMC/RCM:EN61000-4-2,3,4,5(L-N:2KV,L/N-PG:4KV),6,11 CCC:GB/T17626.2,3,4,5,6,1				

■ Electrical Characteristics

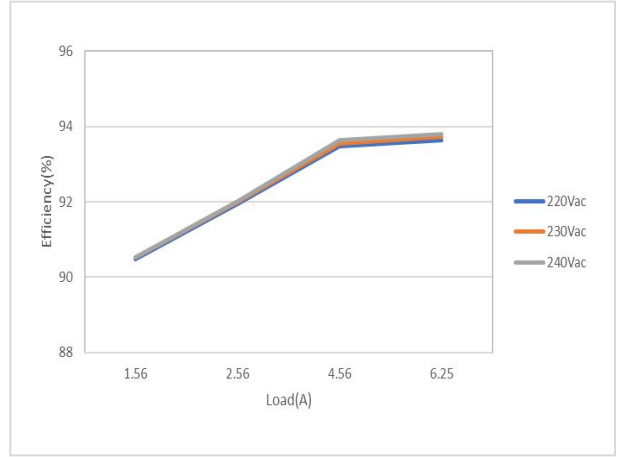
Others	IP Rating	IP20
	RoHS	RoHS 2.0 (EU) 2015/863
	Noise Level	≤29dB (this data is measured in a soundproof room and the noise collector should be 10CM away from LED driver)
	Warranty	5 years (Tc≤75°C)
Test Equipment	AC power source: CHROMA6530, digital power meter: CHROMA66202, oscilloscope: Tektronix 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.	
Test Remark	If there are no special remarks, the above parameters are tested at the ambient temperature of 25°C, humidity of 50%, full load and input voltage of 230Vac/50Hz.	
Additional Remarks	<ol style="list-style-type: none"> 1. It is recommended that user install the 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 total output power during the use of driver CANNOT exceed the rated maximum power, otherwise it cannot be warranted. 	

■ **Product Characteristic Curves**

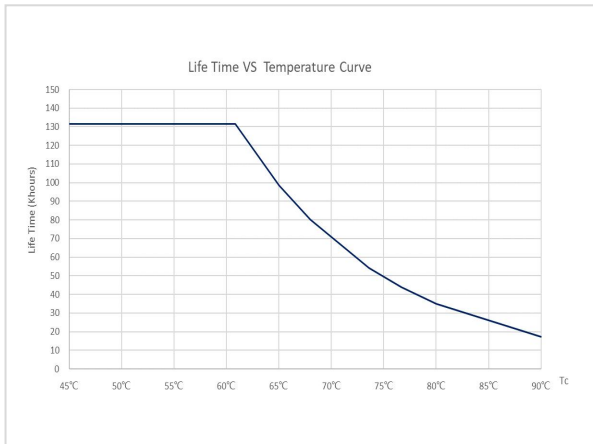
PF Curve



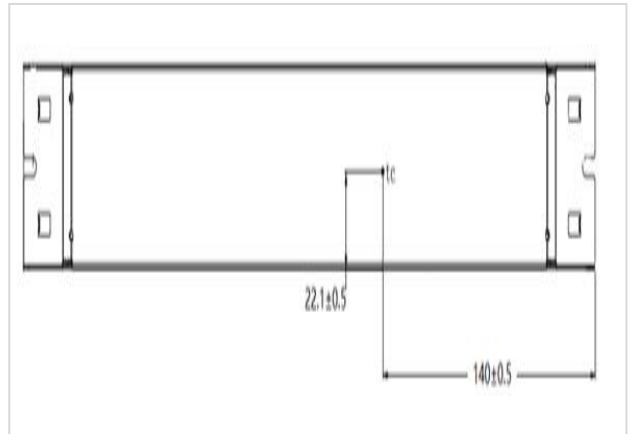
Efficiency Curve



Lifetime Curve



Tc Point Test Diagram



■ **Product Terminals**

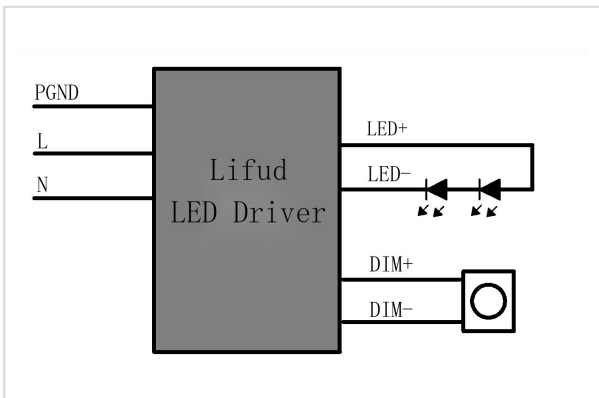
INPUT		OUTPUT	
PGND	Grounding Wire		
AC-L	Input terminal of AC live wire	LED+	Positive electrode output of LED driver
AC-N	Input terminal of AC neutral wire	LED-	Negative electrode output of LED driver
		DIM+	Positive electrode input of 0-10V/PWM/Rx dimming
		DIM-	Negative electrode input of 0-10V/PWM/Rx dimming

■ Dimming Operation Instructions

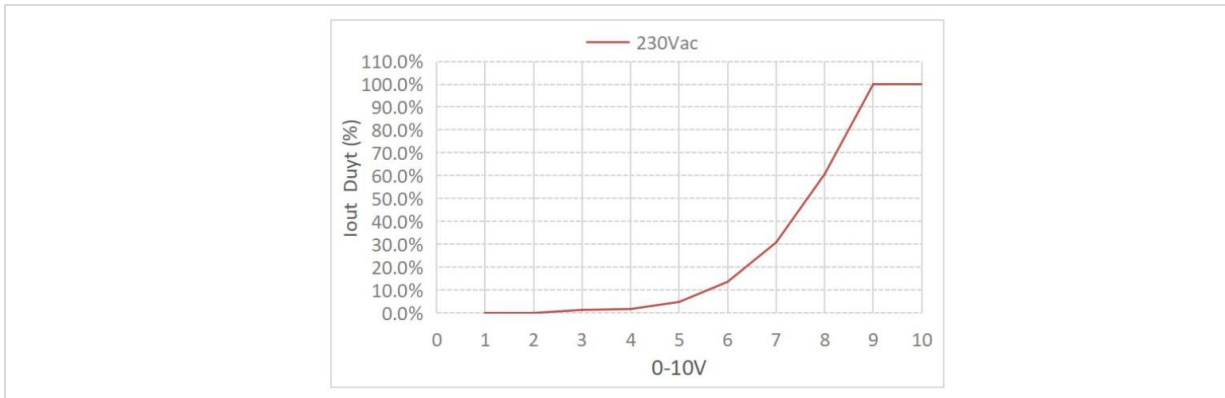
0-10V Dimming Operations

- Connect 0-10V signal to DIM terminal.
- In 0-10V dimming mode, when the input voltage is $0.3V \pm 0.1$, the light turns off; when it's $0.5V \pm 0.1$, the light turns on.
- Dimming depth typical value: $\leq 0.3\%$ (maximum output current).
- DIM+/- (without signal connected): 100% rated current output

Wiring Diagram of 0-10V Dimming



Dimming Curve (logarithmic)

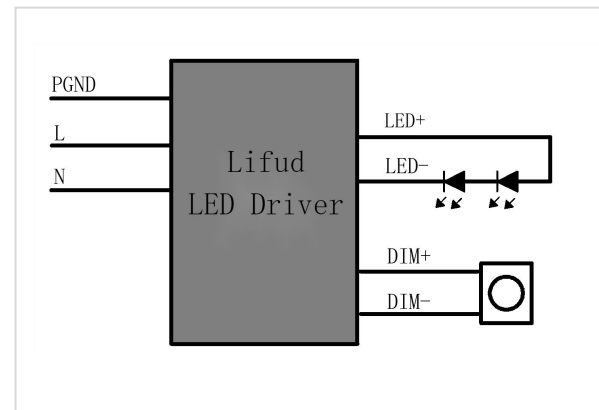


Input: 230Vac; output: 24Vdc/6.25A
 (this data is measured by Lifud 0-10V dimmer and the chart is for reference only)

PWM Dimming Operations

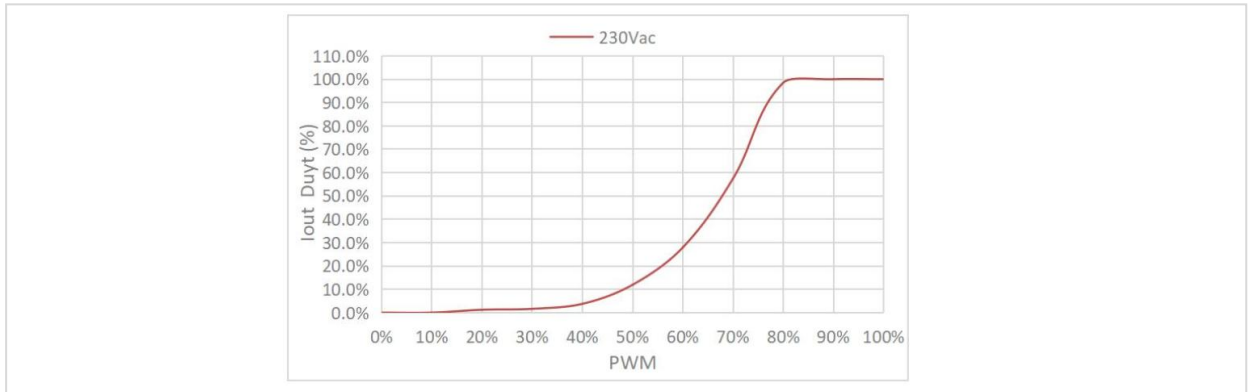
- Connect PWM signal to DIM terminal.
- Dimming depth typical value: $\leq 0.3\%$ (maximum output current).
- Compatible signal range: 500-3000(Hz), amplitude: 9-10(V) 10-12% when light off; 10.5%-13% when light on.
- DIM+/- (without signal connected): 100% rated current

Wiring Diagram of PWM Dimming



■ Dimming Operation Instructions

Dimming Curve (logarithmic)

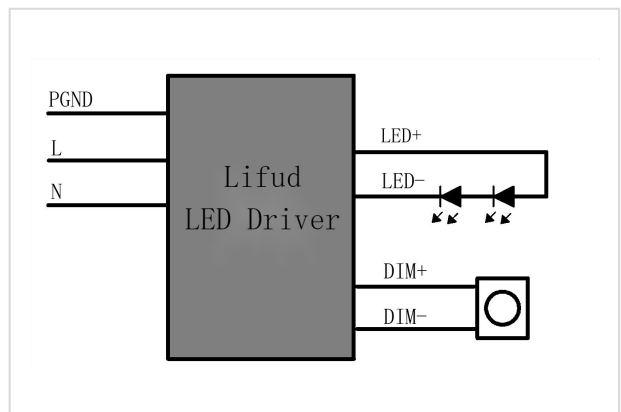


Input: 230Vac; output: 24Vdc/6.25A
 (this data is measured by Lifud PWM signal generator RIGOL and the chart is for reference only)

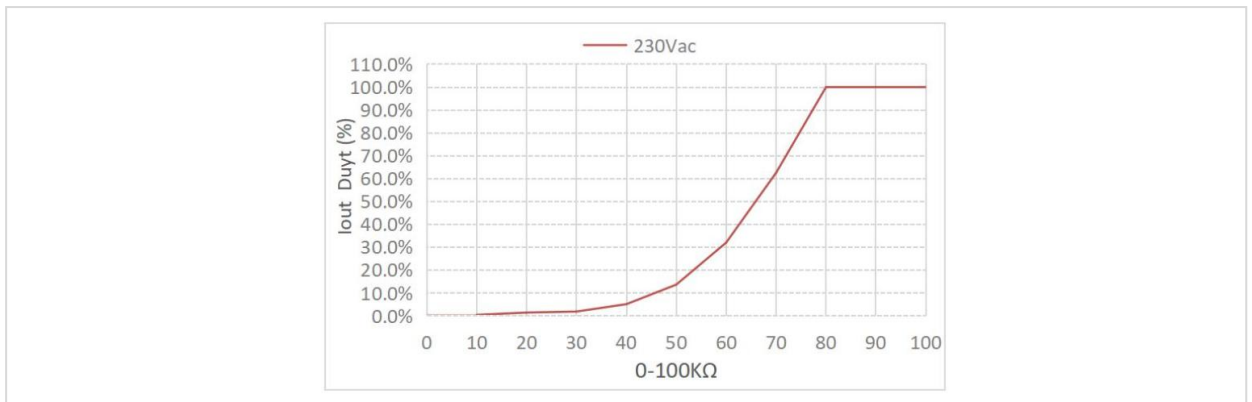
Rx Dimming Operations

- Connect Rx signal to DIM terminal.
- Range: 0-100KΩ. 11 ± 1KΩ when light on; 10 ± 1KΩ when light off.
- Dimming depth typical value: ≤0.3% (maximum output current).
- DIM+/- (without signal connected): 100% rated current

Wiring Diagram of Rx Dimming



Dimming Curve (logarithmic)



Input: 230Vac; output: 24Vdc/6.25mA
 (this data is measured by LEVITON dimmer and the chart is for reference only)

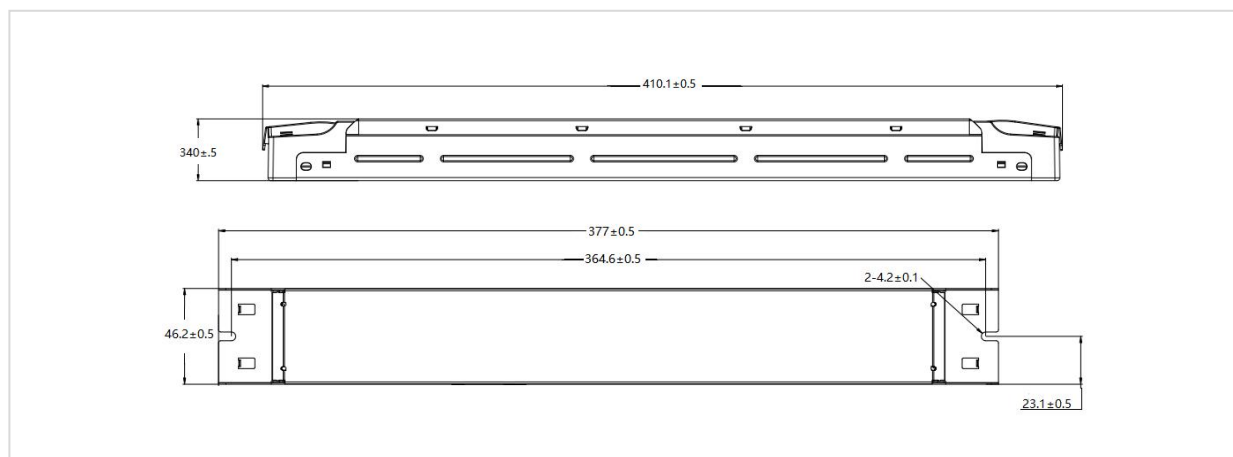
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■ **Structure & Dimensions (unit: mm)**

Product Dimensions

Model	Overall Appearance (L*W*H)	Center-to-center Spacing of Positioning Hole	Diameter of Positioning Hole
LF-GDE150YV024II	40.1*46.2*34mm (±0.5mm)	364.6mm (±0.5mm)	4.2mm (±0.5mm)



■ **Packaging Specifications**

Model	LF-GDE150YV024II
Carton Size	426×319×150 mm (L×W×H)
Quantity	6 pcs/layer; 3 layers/ctn; 18 pcs/ctn
Weight	0.62±0.01 kg/pc; 12.35±0.2 kg/ctn

■ Transportation & 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 Technology Co., Ltd. reserves the right to interpret any contents of this specification.