

### **Features**

- · Constant voltage output
- · Built-in active PFC function
- · Supports Triac dimming
- · Compatible with leading and trailing edge dimmers
- Dimming depth ≤1%
- High efficiency (typical value ≥88%)
- Flicker free during the whole process of dimming
- All-round protections: over voltage protection, over load protection, short circuit protection and over temperature protection
- IP20
- 5-year warranty (please refer to the warranty condition)



# **Applications**

Horticultural lighting · indoor office lighting · decorative lighting · commercial lighting · residential lighting

### **Descriptions**

LF-GAT150-6250-24 is a 150W constant voltage Triac dimmable LED driver with 0-100% dimming range. Its rated input voltage ranges from 198 to 253Vac; its output voltage is 24Vdc and its maximum output current is 6.25A. It has high efficiency and low THD. It is suitable for indoor constant voltage LED strip light, etc.

#### **Product Model**

LF - GAT 150 - 6250 - 24

- 24: output voltage: 24V
- 6250: maximum output current: 6250mA
- 150: maximum output power: 150W
- GAT: CV Triac dimmable LED driver series

Lifud Technology Co., Ltd.

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# **■ Electrical Characteristics**

Model		LF-GAT150-6250-24				
Output	Output Current	6250mA max.				
	Output Voltage	DC 24V				
	Output Power	150W max.				
	Flicker Index	IEC-Pst ≤1, CIE SVM ≤0.4 Complies with flicker-free standard (IEEE Std 1789-2015)				
	Voltage Tolerance	24V±0.5V				
	Temperature Drift	±10%				
Input	Input Voltage	220-240Vac (voltage limit: 198-253Vac)				
	DC Input Voltage	176-280Vdc				
	Input Frequency	47-63Hz				
	Input Current	1.2A max.				
	PF	≥0.95@230Vac full load				
	Efficiency	≥88%@230Vac@24V full load				
	Inrush Current	≤70A & 600uS@230Vac				
	Loading Quantities of Circuit Breaker	Model	B10	C10	B16	C16
		Quantity (pcs)	5	5	8	8
	Leakage Current	<0.5mA				
	Surge	L-N: 1kV				
Protections	Open Circuit	Open-circuit voltage ≤30Vdc				
	Short Circuit	Hiccup mode (auto-recovery)				
Environment Descriptions	Operating Temperature	-20°C~+45°C				
	Operating Humidity	20-90%RH (without condensation)				
	Storage Temperature/ Humidity	-30°C - 60°C (6 months in Class I environment); 10-95%RH (without condensation)				
	Atmospheric Pressure	86-106kPa				



# **■ Electrical Characteristics**

Safety and EMC	Certifications	TUV-ENEC, CE, CB, RCM, CCC		
	Withstanding Voltage	I/P-O/P: 3.75kVac, <5mA, 60S		
	Insulation Resistance	I/P-O/P: >100MΩ@500Vdc		
	Safety Standards	ENEC: EN61347-1:2015, EN61347-2-13: 2014/A1: 2017, EN62384 2016/2009 CE-LVD: EN61347-2-13: 2014/A1: 2017, EN61347-1: 2015, EN62493: 20 SAA: AS61347.2-13: 2018 CB: IEC61347-1: 2015, IEC61347-2-3: 2014, IEC 61347-2-13: 2014/AMD1: 2016 CCC: GB19510.1-2009, GB19510.14-2009		
	EMI	CE-EMC/RCM: EN55015, EN61000-3-2, EN61000-3-3 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		
	ESD	Air 8kV, touch 4kV (Class B)		
Other Parameters	IP Rating	IP20		
	RoHS	RoHS 2.0 (EU) 2015/863		
	Warranty Condition	5 years (Tc ≤84°C)		
Testing Equipment	Digital power meter: CHROMA66202, oscilloscope: Tektronix DPO3014, DC electronic load: M9712B, LED board, constant temperature and humidity chamber; Everfine EMS61000-5B: Everfine EMS61000-4A, spectroanalyzer: KH3935, withstanding voltage tester: TH9201B, flicker tester (flicker-free coefficient test) 60N-01, etc.			
Testing Remarks	The above parameters are tested at the ambient temperature of 25°C, humidity of 50%, full load and input voltage of 230Vac without any special remarks.			



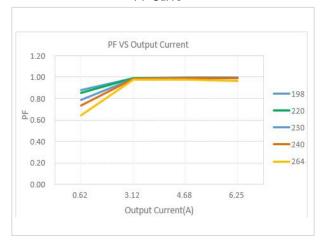
### **■** Electrical Characteristics

## Additional Remarks

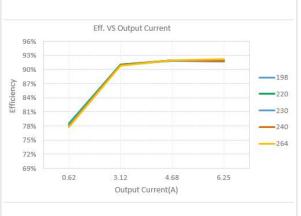
- 1. It is recommended that our client install over voltage protection, under voltage protection and surge protection devices in the power supply circuits of light fixtures to ensure electricity safety.
- 2. The PC shade, casing and plug for assembling the LED driver in the light fixture must meet the fire rating of UL94-V0 or above.
- 3. The LED driver used in combination with the end device is one of the accessories in the whole light fixture, and its EMC 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 performance of LED driver before the whole light fixture is finished.

### ■ Product Characteristic Curves

#### PF Curve



### Efficiency Curve









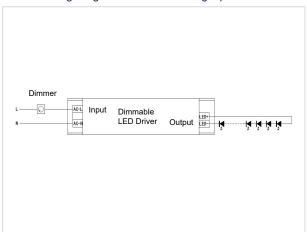
# ■ Dimming Operation Instructions

#### **Product terminals**

INPUT				
AC-L	Input terminal of AC live wire			
AC-N	Input terminal of AC neutral wire			

OUTPUT			
LED+	Positive electrode output of LED driver		
LED-	Negative electrode output of LED driver		

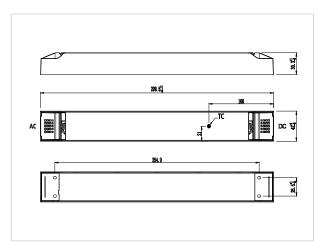
### Wiring Diagram of Triac Dimming Operation



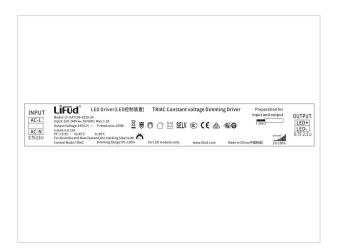


# ■ Structure & Dimensions (unit: mm)

Appearance Dimensions



#### ■ Label





### ■ Packaging Specifications

Model	LF-GAT150-6250-24
Carton Size	385*285*210 mm (L*W*H)
Quantity	6 pcs/layer; 5 layers/ctn; 30 pcs/ctn
Weight	0.49 kg/pc; 14.8 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.