

## 1. Product description

Type: Isolated LED driver ( for class I LED luminaires)

Category: AC100-120V, UL Triac dimmable series

Product properties: active PFC, high efficiency, low THD.

Application: commercial, residential and decorative lighting.

Warranty: 5 years (please refer to the warranty condition).

**Certifications:** UL, FCC

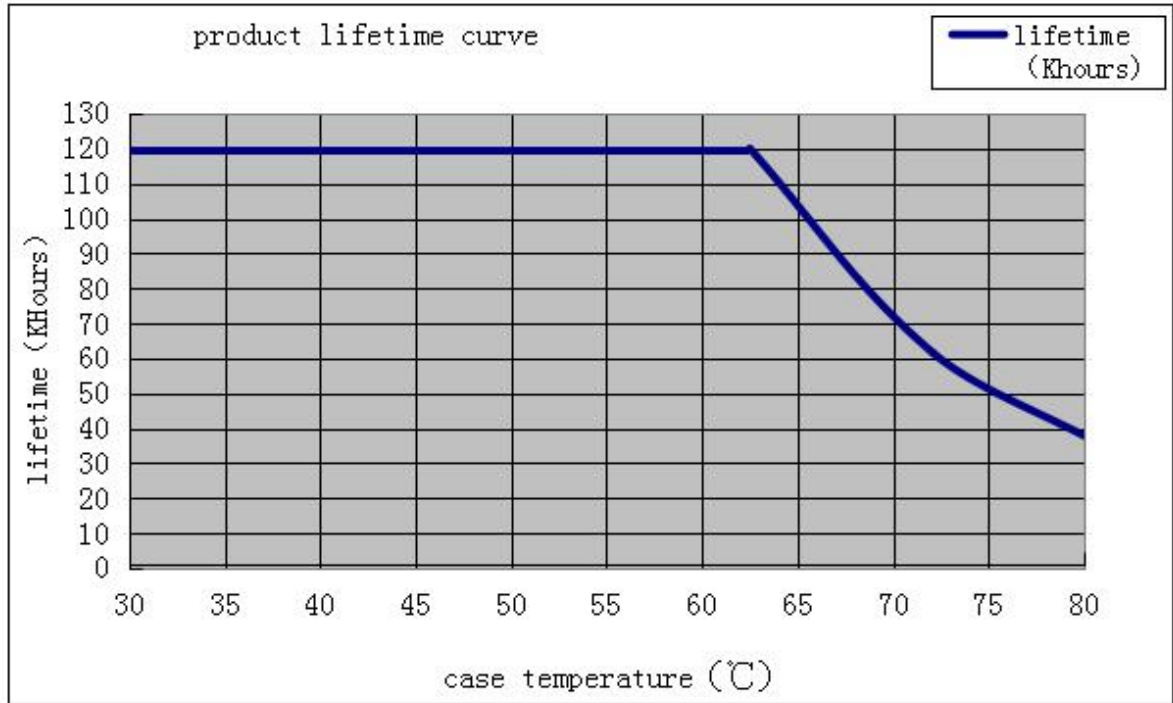
## 2. Technical data

	Full model number	LF-GDE012YD0200L	LF-GDE012YD0250L	LF-GDE012YD0300L
<b>Output</b>	Output voltage	25-40 VDC		
	Output current	200mA	250mA	300mA
	Ripple voltage	≤4V		
	Current tolerance	±6% @ AC120V		
	Time to light	100Vac <1S		
	Temperature drift	±10%		
	Output Line regulation	±5%		
<b>Input</b>	Input Line regulation	±5%		
	Input voltage	100-120Vac (limit voltage: 100-140VAC)		
	Frequency	60Hz		
	Input current	0.2A Max		
	Power factor	≥0.9/120Vac	≥0.9/120Vac	≥0.9/120Vac
	THD	≤20%		
	Efficiency	≥83%/120Vac	≥83%/120Vac	≥83%/120Vac
	In-rush current (peak /duration)	<60A/350uS@120Vac		
	Typ. power input on stand-by	Pin<1W		
<b>Protective features</b>	No-load	Max. output voltage (no-load voltage) 55V		
	Short-circuit	Hiccup mode (auto-recovery)		
<b>Environment condition</b>	Working temperature	-30°C ~ +50°C		
	Working humidity	20-90%RH (no condensation)		
	Storage temperature/humidity	-40°C ~ +80°C (6 months under the class I environment); 10-90%RH (no condensation)		
	Atmospheric pressure	86-106KPa		
<b>Safety and norms</b>	Certifications	UL, FCC compliant (certificates are coming soon)		
	Hi-pot test	I/P-O/P:3.75KVac,<5mA 60S;		
	Insulation resistance	I/P-O/P,I/P-FG,O/P-FG:500VDC,>100MΩ		
	Surge level	Compliant with IEC61000-4-5 (L/N: 1KV)		
	EMI	Compliant with FCC-PART-15B		
	EMS	Compliant with EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547.		
<b>Others</b>	Packing (weight)	Carton size: 385*285*210 mm (L*W*H); Net weight: 73.6g±5%/pc; 5.0KG±5%/ctn; Quantity: 12 PCS/layer, 5 layer/ctn, 60 PCS/ctn		
	IP level	IP20		
	Warranty condition	5 years (Max. case temperature must not exceed 75°C).		
<b>Testing equipment</b>	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: TH9201B, flicker-free tester (flicker-free coefficient tester) 60N-01, etc.			
<b>Test conditions</b>	The parameters above including the power factor, THD, efficiency are all tested under the ambient temperature 25°C and humidity 50%, AC input 120V and 90% output load.			
<b>Additional Remark</b>	<ol style="list-style-type: none"> <li>In the power supply circuit, it is recommended that the customer should install an over-under-voltage protection and surge protection device to ensure the safety of using electricity.</li> <li>The PC cover, shell, end caps used together with the LED driver inside the LED lamp must meet the UL94V-0 fire rating level or above.</li> <li>As a part of the LED lamp, the LED driver is not the only factor determining the EMC performance of the LED lamp. And the EMC performance is also related to the LED lamp's structure and the wire routing. Thus we strongly recommend the manufacturer of the finished LED lamp must re-confirm the EMC of the LED lamps.</li> </ol>			

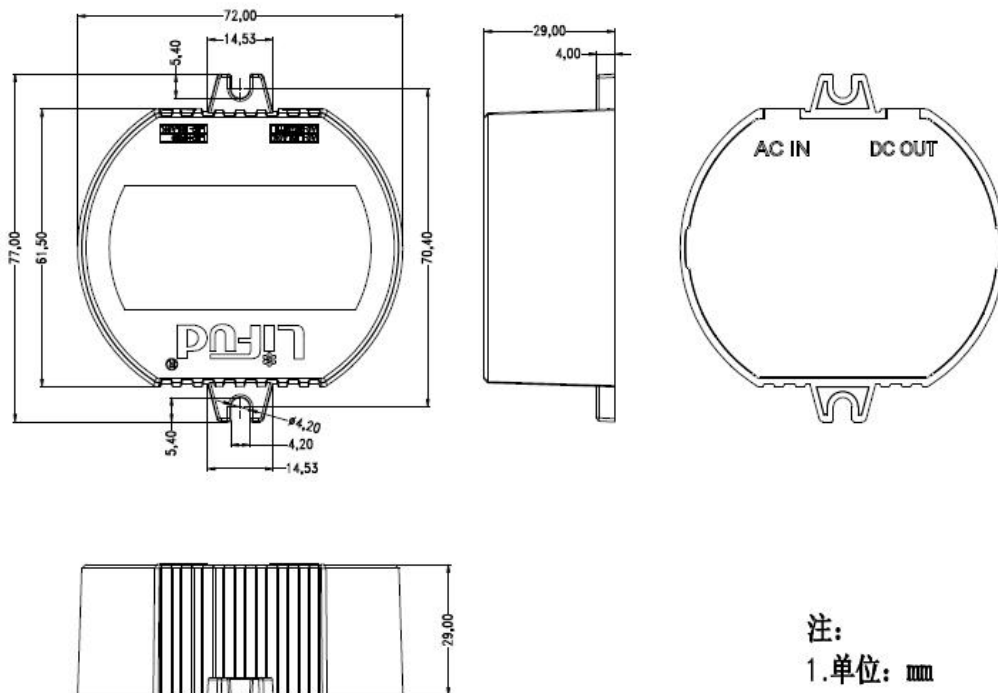
<b>Model</b>	LF-GDE012YD	<b>Series</b>	AC100-120V Triac Dimmable Series
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### 3. Product Referenced Lifetime Curve

The curve below illustrates the driver's lifetime data when the LED driver's Max. case temperature reaches 40°C, 50°C, 60°C, 70°C.

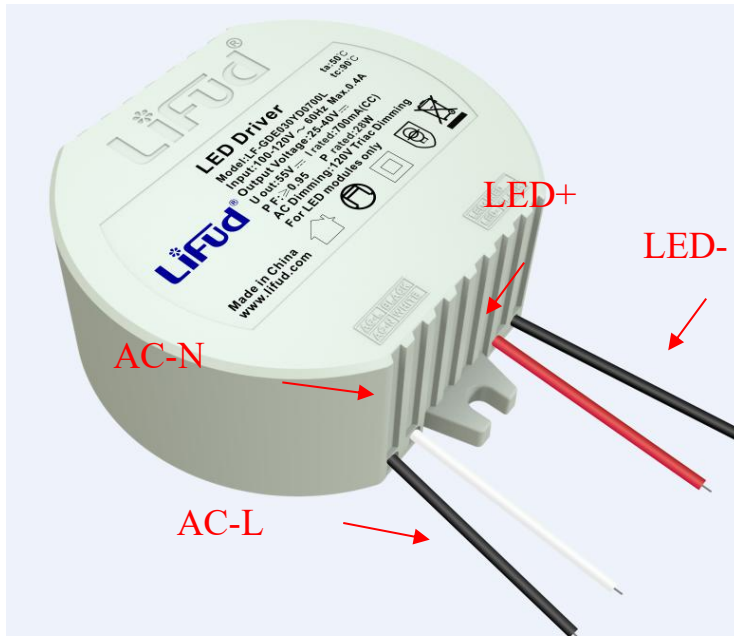


### 4. Dimensional Drawing (unit: mm)



注：  
1.单位：mm

**5. Wire Connection Diagram:**



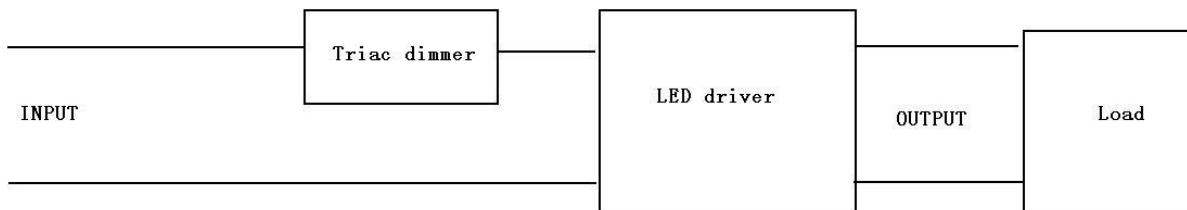
**Input wire:** UL1015 No.18 multi-stand wire, Black AC-L and White AC-N ,total length of 300mm ± 10mm, exposed 250mm ± 10 mm, tail stripping dip tin 10mm ± 2mm

**Output wire:** UL3239 NO.22 silicone wire, Red LED+ and Black LED-, total length 160mm ± 10mm, exposed 130mm ± 10mm , Tail stripping dip tin (3mm ± 1mm positive tolerance)

**6. Function Instructions:**

(1) Dimming function description:

Diagram:

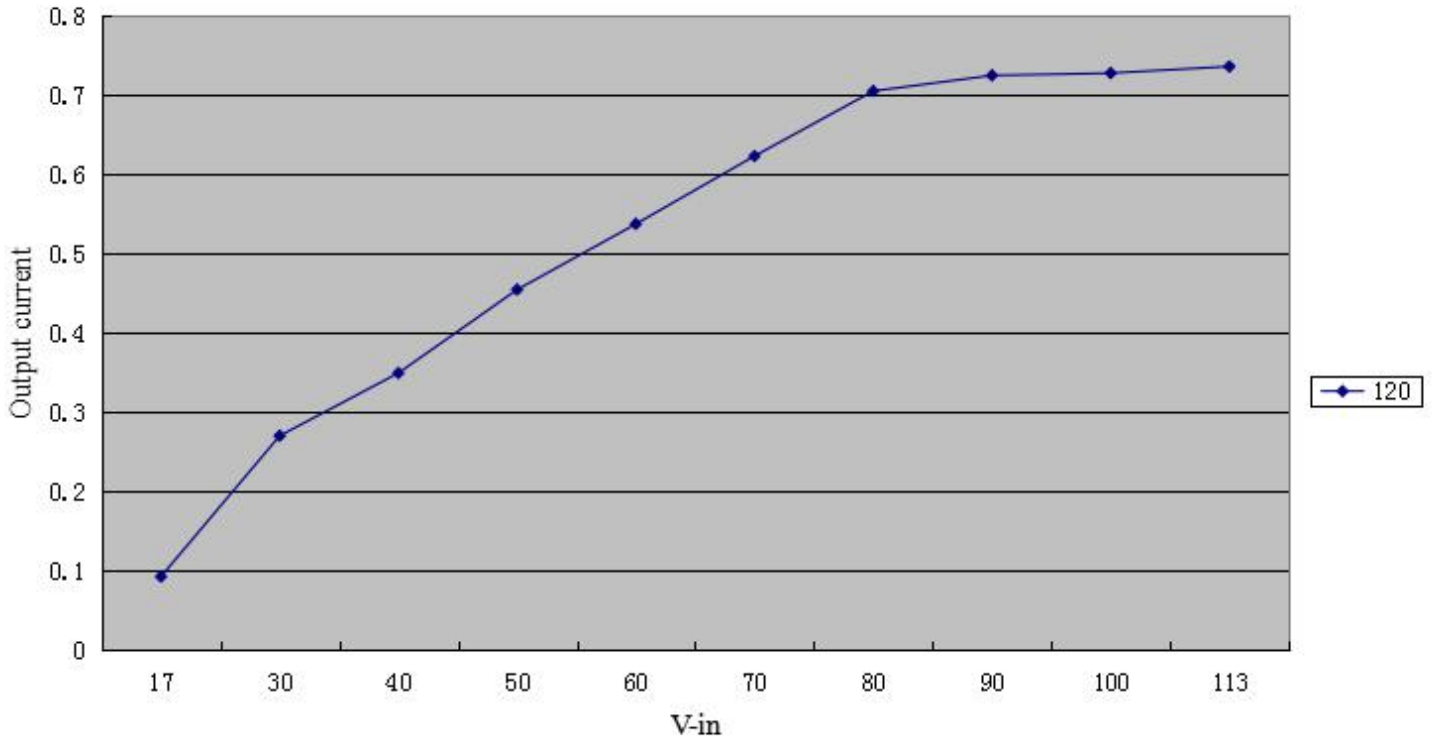


**(2) Compatible Triac Dimmers and Dimming Curve**

LUTRON Model:MACL-153M  
LEVITON Model:TBL03

<b>Model</b>	LF-GDE012YD	<b>Series</b>	AC100-120V Triac Dimmable Series
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Dimming Curve (Triac Dimmer TBL03)



Dimming Curve (Triac Dimmer MACL-153M)

