

## 1. Product description



**Type:** Isolated LED driver suitable 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

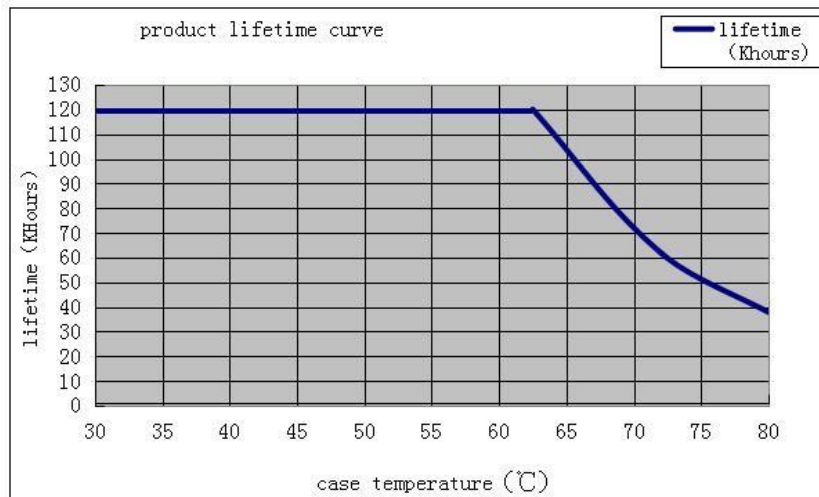
	Full model number	LF-GDE030YD0650L	LF-GDE030YD0700L	LF-GDE030YD0750L
<b>Output</b>	Output voltage	25-40VDC		
	Output current	650mA	700mA	750mA
	Ripple voltage	<4.2V		
	Current tolerance	±6%@AC120V		
	Time to light	100Vac<1S		
	Temperature drift	±10%		
	Output Line regulation	±5%		
<b>Input</b>	Input Line regulation	±5%		
	Input voltage	100-120Vac (limit voltage: 100-140Vac)		
	Frequency	47Hz-63Hz		
	Input current	0.4A 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-	<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		
	Hi-pot test	I/P-O/P:3.75KVac,<5mA 60S		
	Insulation resistance	I/P-O/P:500VDC,>100MΩ		
	Surge level	Comply with IEC61000-4-5(L-N:1KV)		
	EMI	Comply with FCC-PART-15B		
	EMS	Comply 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: 120g±5%/pc; 9.04KG±5%/ctn; Quantity: 12 PCS/layer, 5 layer/ctn, 60 PCS/ctn		
	IP level	IP20		
	Warranty condition	5 years (Tc≤75°C)		

<b>Model</b>	LF-GDE030YD	<b>Series</b>	UL Triac Dimmable Series
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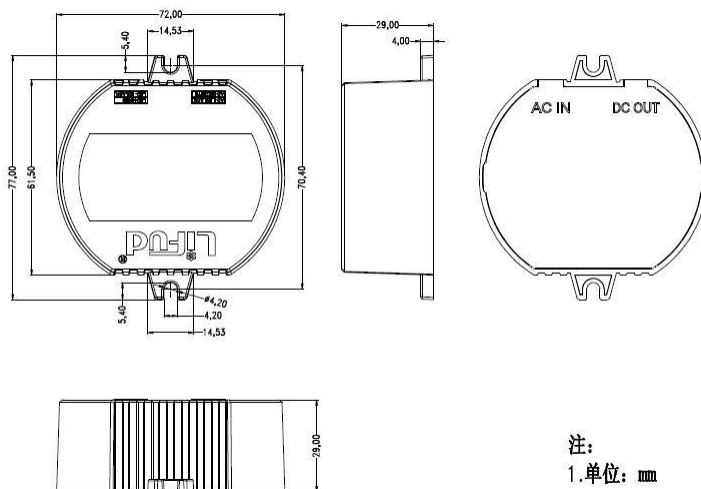
<b>Testing equipment</b>	AC power source: CHROMA6530, digital power meter: CHROMA66202, Oscilloscope: Tektronix DPO3014, DC electronic load: M9712B, LED board, constant temperature and humidity chamber, lightning surge generator: Everfine EMS61000-5B, rapid group pulse generator: Everfine EMS61000-4A, 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>1. 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>2. 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>3. 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>

### 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, 80°C.

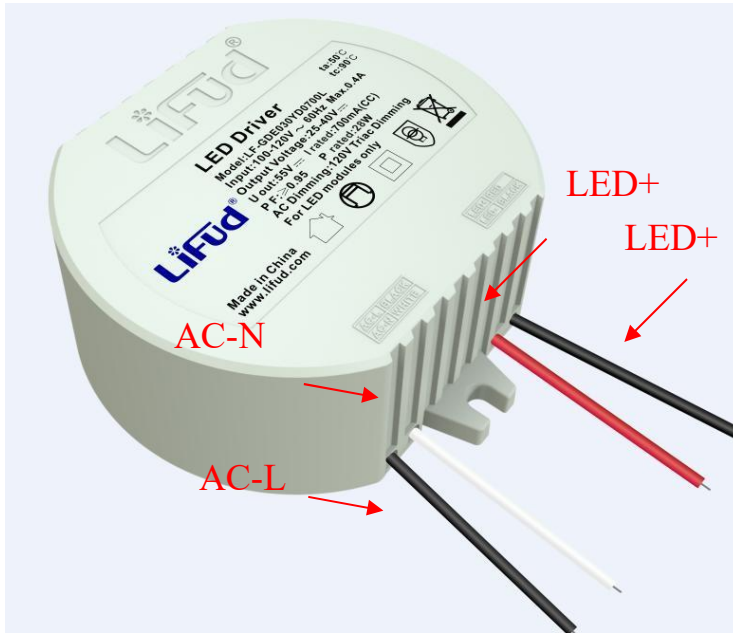


### 4. Dimensional Drawing (unit: mm)



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**5. Wire Connection Diagram:**



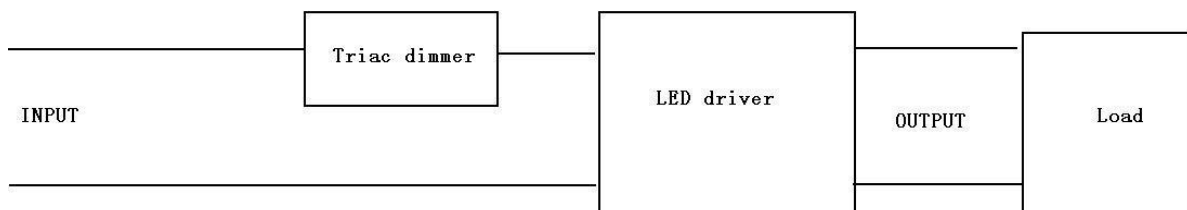
**Input wire:** UL1015 No.18 multi-stand wire, Black AC-L and White AC-N ,total length of 300mm ± 10mm, exposed 250mm ± 10mm, tail stripping dip tin 10mm ± 2mm

**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. Instructions:**

(1).Dimming function description:

Diagram:

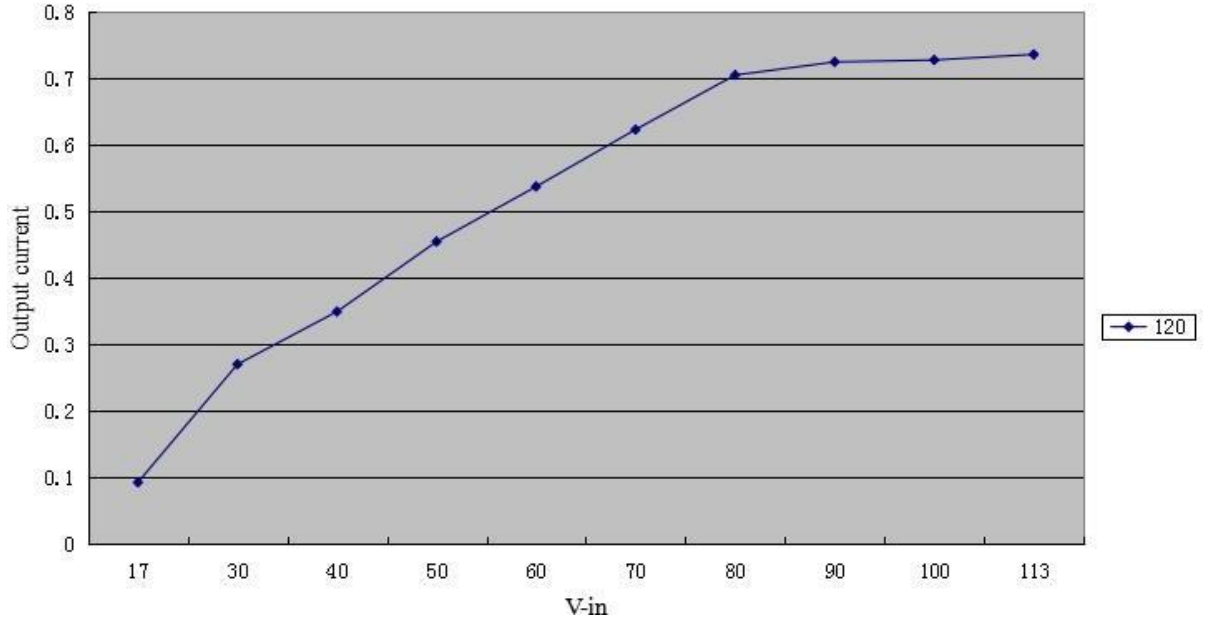


(2). Compatible Triac Dimmers and Dimming Curve

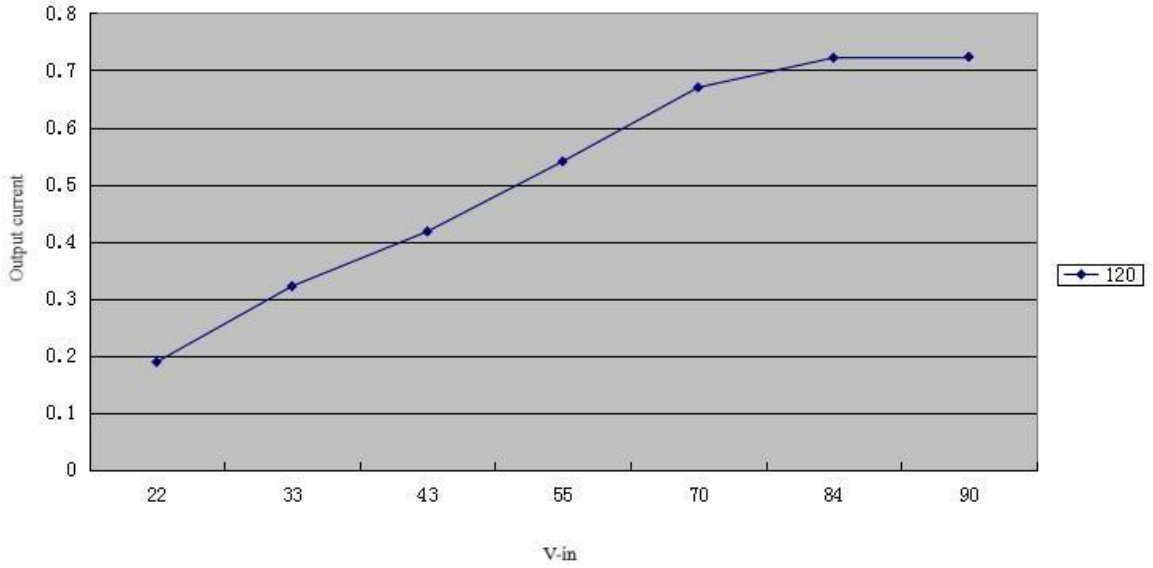
LUTRON Model:MACL-153M  
LEVITON Model:TBL03

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Dimming Curve (Triac Dimmer TBL03)



Dimming Curve (Triac Dimmer MACL-153M)



<b>Model</b>	LF-GDE030YD	<b>Series</b>	UL Triac Dimmable Series
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