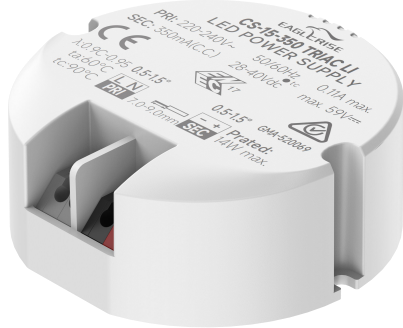


## 15W Triac Dimming power supply



■ Approve



### Features

- For luminaries of protection Class II, SELV, Built-in
- Input Voltage: 220-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor: 0.95
- Efficiency: 82%
- 5 years warranty
- IP20

### Applications

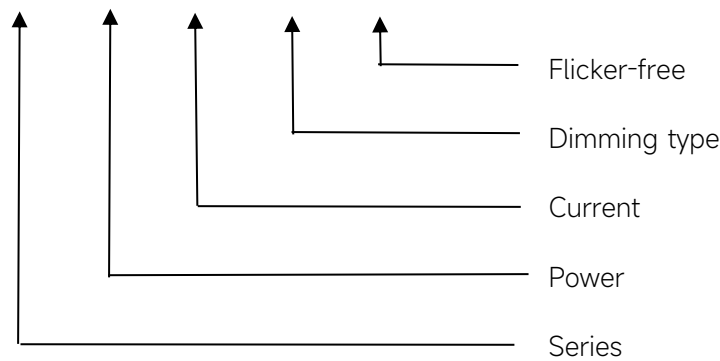
- LED panel, LED down light

### ◆ Description

CS-15-XXX TRIAC LI is a 15W constant current LED driver that operates from 198-264Vac input with 250-350mA output current. With its compact dimensions from  $\Phi 65 \times 25$  mm it is easy to integrate in LED panel, pendant light and down light products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

### ◆ Model code

#### CS-15-XXX TRIAC LI



## ◆ Specification

	Constant Current (mA)	250	280	300	350
Output	Voltage Range(VDC)	28-40			
	Unload voltage Max.	59VDC			
	Current Accuracy	±5%			
	Output HF current ripple(≥1KHz)	±5%			
	Output LF current ripple(≤120Hz)	±5%			
	SVM	≤0.4			
	Pst	≤1			
	Efficiency(Typ.)	≥82%@Full load,230V			
	Input	Rated input voltage	220-240VAC		
Range of input voltage		198-264VAC			
Maximum voltage		300VAC@1 h maximum,unit might not operate in this abnormal condition			
Frequency(Hz)		50/60 Hz			
Displacement factor		≥0.9			
Power Factor		0.95			
Input Current max (mA)		80	85	90	110
Start-up time		< 0.5S			
No Load Power		≤0.5W			
THD (Typ.)		<25%			
Dimming		Dimming	YES		
	Dimming mode	Triac, Leading edge & trailing edge dimmable			
	Dimming depth	8%			
	Dimming current range	8 ~ 100%			
Protection	Over Load Protection	103-130% YES/Auto Resume			
	Over Voltage Protection	59VDC YES/Auto Resume			
	Short circuit Protection	YES/Auto Resume			
capability	Surge capability (L-N)	1KV			
	Surge capability (L/N-Ground)	NA			
Environment	Operating Temperature	-20°C~+60°C			
	Humidity	20%-90%RH			
	Tc	90°C			
	Storage Temperature	-25°C~+80°C			
	Life time	> 50000h@Tc=85°C			
	Noise	≤30dB(A)@20cm			
Surface	Dimension	Φ65 x 25mm			
	material	PC			

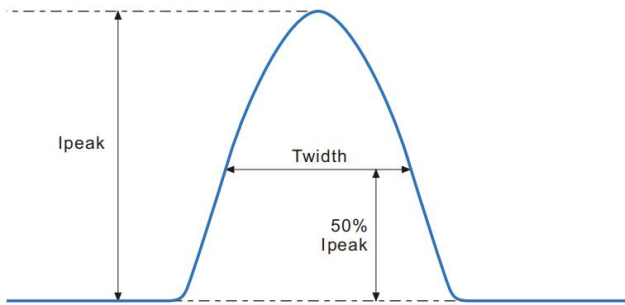
Standards	Safety	GB19510. 1, GB19510. 14;IEC61347- 1, IEC61347-2- 13;EN61347- 1, EN61347-2-13; EN62384
	EMC	GB/T17743, GB17625. 1;EN55015, EN61000-3-2, EN61000-3-3, EN61547;EN61000-4-5;EN61000-4-2,3,4,5,6,8,11, EN61547
	Energy Efficiency	Erp2.0 EU 2019/2020
	RoHS	RoHS (2011/65/EU) (EU)2015/863
Note	<p>1.All parameters not specially mentioned are measured at 230VAC input , full load and 25°C of ambient temperature.</p> <p>2.Ripple &amp; Noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uF &amp; 47 uF parallel capacitor.</p> <p>3.The over-temperature protection of the product is provided by the IC.</p> <p>4.All Eaglerise power supply are complied with EMI regulations. Since they are belong to component and will be installed inside system enclosure. When they are integrated into a system, the EMI characteristics of the system must be re-verified again.</p>	

## ◆ Model list

Number	Model number	Output			
		Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)
1	CS-15-250 TRIAC LI	250	28-40	59	10
2	CS-15-280 TRIAC LI	280			11.2
3	CS-15-300 TRIAC LI	300			12
4	CS-15-350 TRIAC LI	350			14

**◆ Inrush Current**

$I_{peak}$	$T_{width}$	B10	B16	B20	C10	C16	C20
1.86A	<b>52.8<math>\mu</math>s</b>	72pcs	116pcs	145pcs	72pcs	116pcs	145pcs

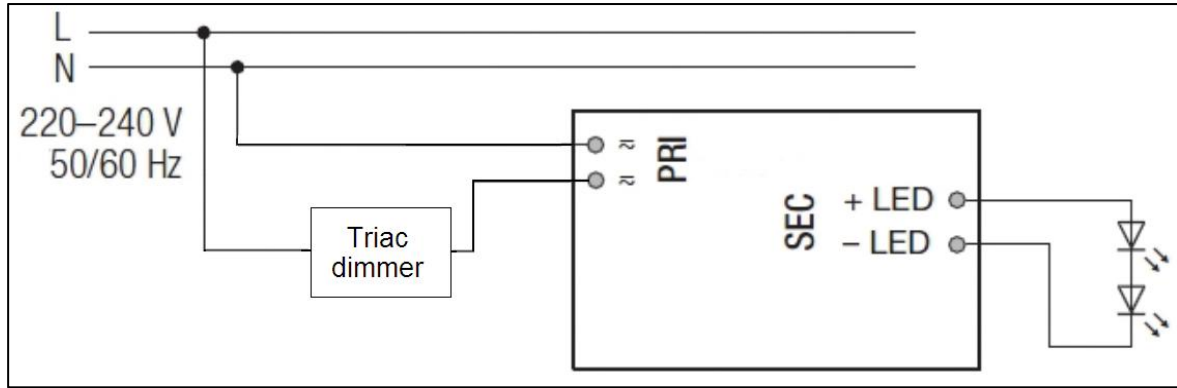


Remarks:

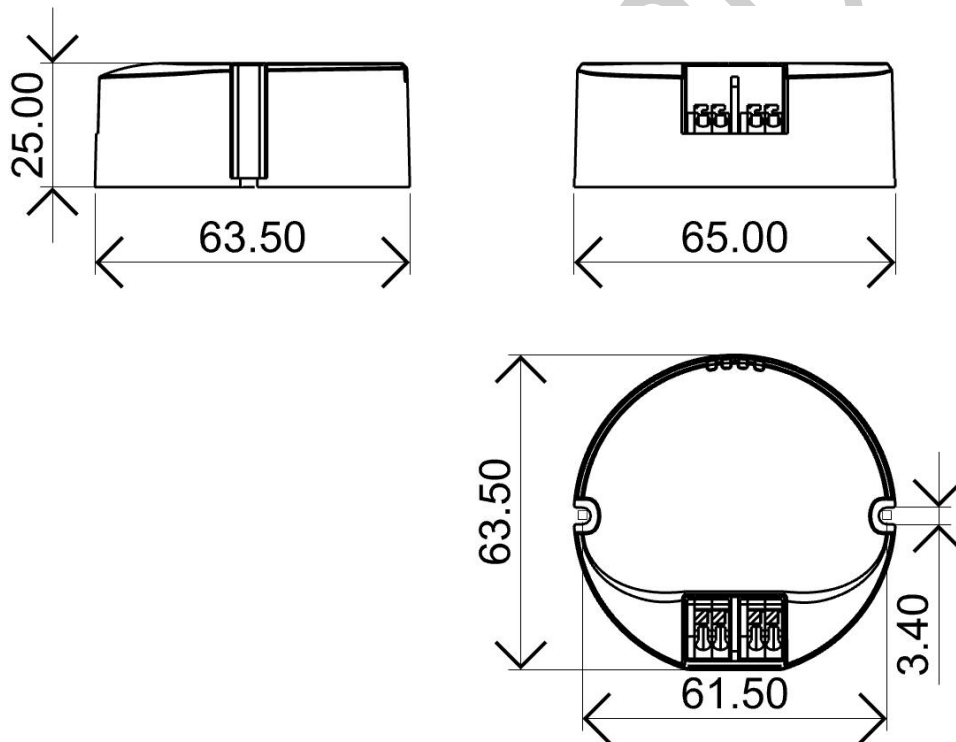
- 1.The number of drives mounted under different MCBs in the table is the maximum value. Please do not exceed this number during installation.
- 2.Different brands and models of miniature circuit breakers, the number of drives mounted will be slightly different.

Preliminary

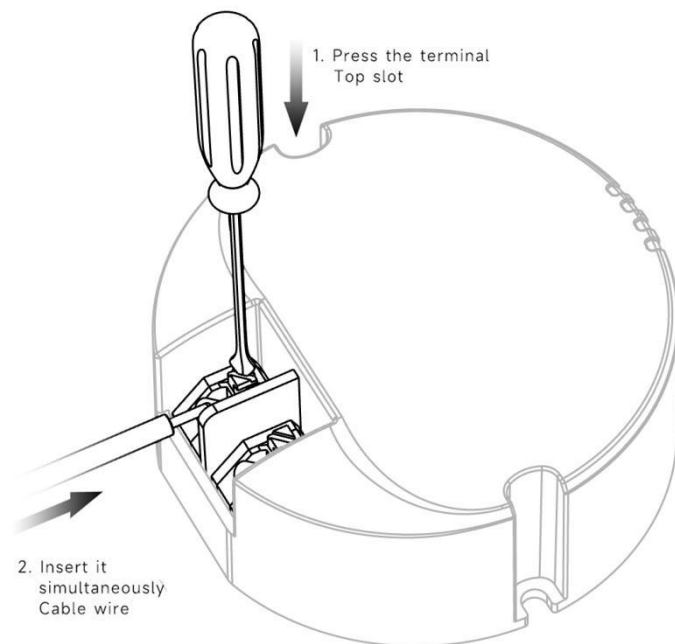
◆ **Wiring diagram**



◆ **2D diagram**



**Terminal**



Preliminary

## ◆ Wiring & Connections

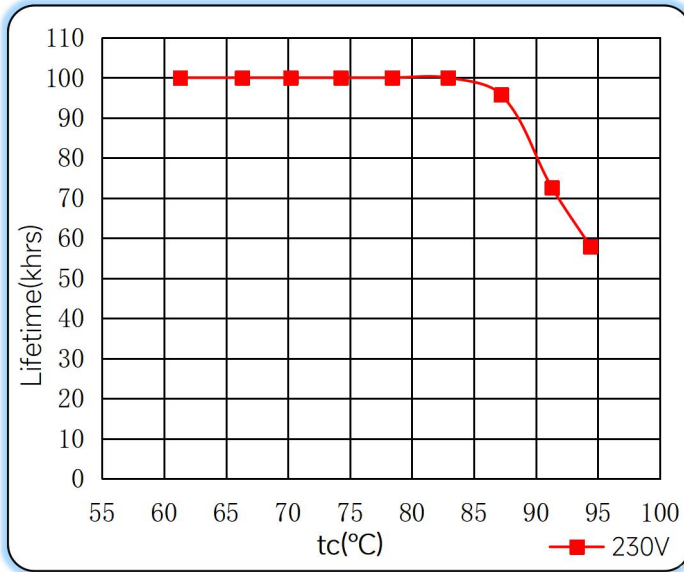
	Specification item	Value (Unit )
Input	Input wire cross-section	0.5...1.5 mm <sup>2</sup>
	Input wire gauge.	16...20 AWG
	Input wire strip length	7...9mm
Output	Output wire cross-section	0.5...1.5 mm <sup>2</sup>
	Output wire gauge.	16...20 AWG
	Output wire strip length	7...9mm

Note: Solid wire is risky to use on an angled terminal. Stranded wire is recommended for this kind of use.

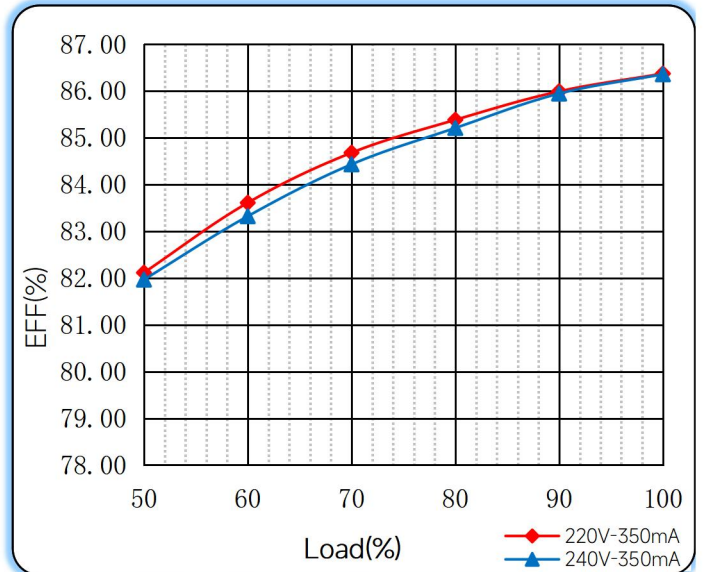
Preliminary

◆ **Curve for CS-15-XXX TRIAC LI, I<sub>o</sub>=350mA**

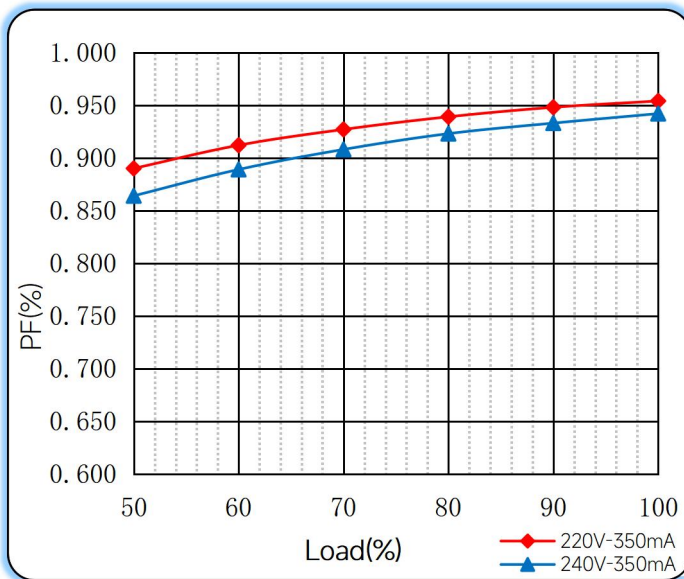
Lifetime vs. Temperature Curve



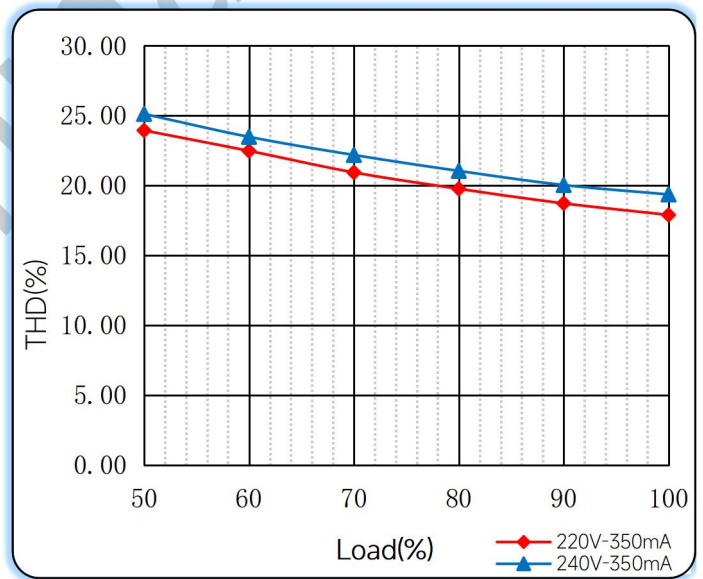
Efficiency vs. Load



Power Factor Characteristics

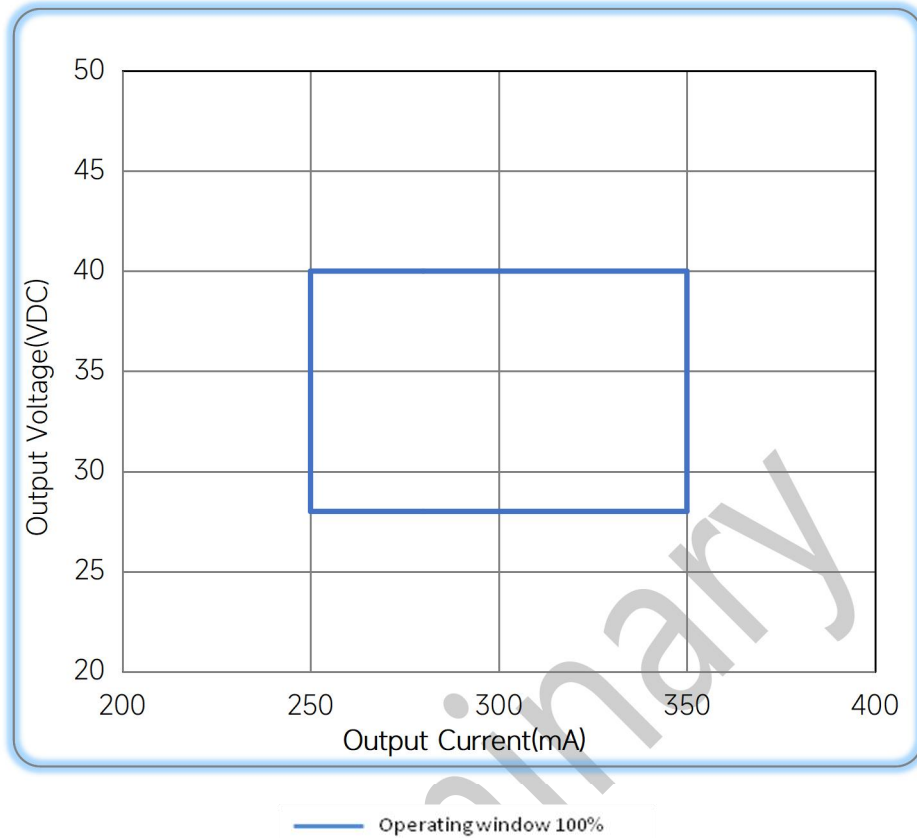


THD vs. Load





◆ **Operating window**



◆ **Revision Updates**

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2024/04/01
Power Factor	≥0.95	0.95	B	2024/07/26

Remark: The final interpretation of the contents of the specification belongs to Eaglerise Electric & Electronic (China) Co., Ltd.

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EAGLERISE



Manual