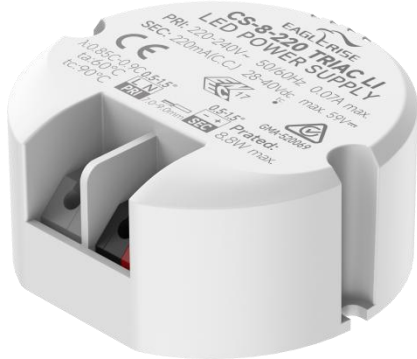


8W Triac Dimming power supply



■ 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: 80%
- 5 years warranty
- IP20

Applications

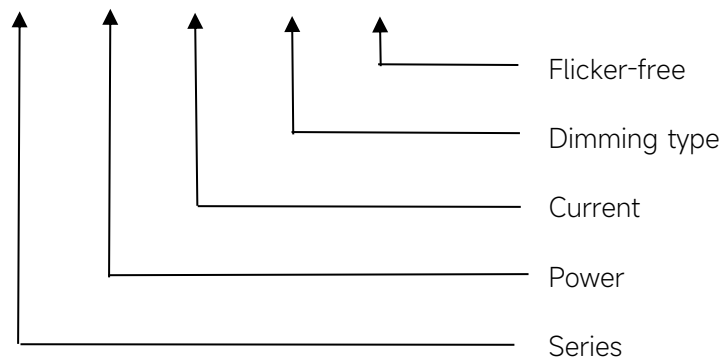
- LED panel, LED down light

◆ Description

CS-8-XXX TRIAC LI is a 8W constant current LED driver that operates from 198-264Vac input with 100-220mA output current. With it's compact dimensions from $\Phi 56 \times 25.5$ 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-8-XXX TRIAC LI



◆ Specification

Output	Constant Current (mA)	100	120	150	180	200	220
	Voltage Range(VDC)	28-40					
	Unload voltage Max.	59VDC					
	Current Accuracy	±9%	±7%			±5%	
	Output HF current ripple(≥1KHz)	±5%					
	Output LF current ripple(≤120Hz)	±5%					
	SVM	≤0.4					
	Pst	≤1					
	Efficiency(Typ.)	78%	80%@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	0.85C				0.9C	
	Input Current max (mA)	30	36	45	55	60	70
	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	10%					
	Dimming current range	10 ~ 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	Φ56 x 25.5mm					
	material	PC					

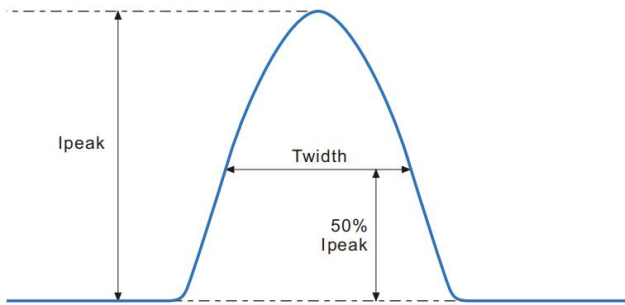
Standards	Safety	GB19510. 1, GB19510. 14;IEC61347- 1, IEC61347-2- 13;EN61347- 1, EN61347-2-13; EN62384
	EMC	GB/T17743, GB17625. 1;EN55015, EN61000-3-2, EN61000-3-3, EN61547;EN61000-4-5;EN61000-4-2,3,4,5,6,8,11, EN61547
	Energy Efficiency	Erp2.0 EU 2019/2020
	RoHS	RoHS (2011/65/EU) (EU)2015/863
Note	<p>1.All parameters not specially mentioned are measured at 230VAC input , full load and 25°C of ambient temperature.</p> <p>2.Ripple & Noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uF & 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-8-100 TRIAC LI	100	28-40	59	4
2	CS-8-120 TRIAC LI	120			4.8
3	CS-8-150 TRIAC LI	150			6
4	CS-8-180 TRIAC LI	180			7.2
5	CS-8-200 TRIAC LI	200			8
6	CS-8-220 TRIAC LI	220			8.8

◆ Inrush Current

I_{peak}	Twidth	B10	B16	B20	C10	C16	C20
1.98A	43.2 μ s	114pcs	182pcs	228pcs	114pcs	182pcs	228pcs

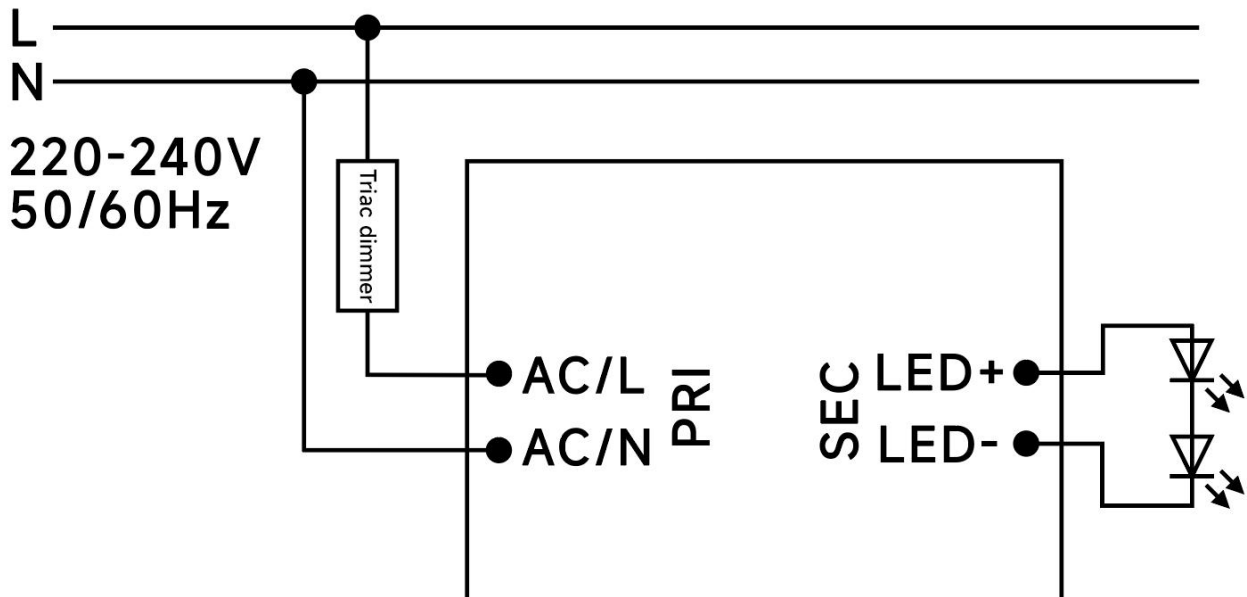


Remarks:

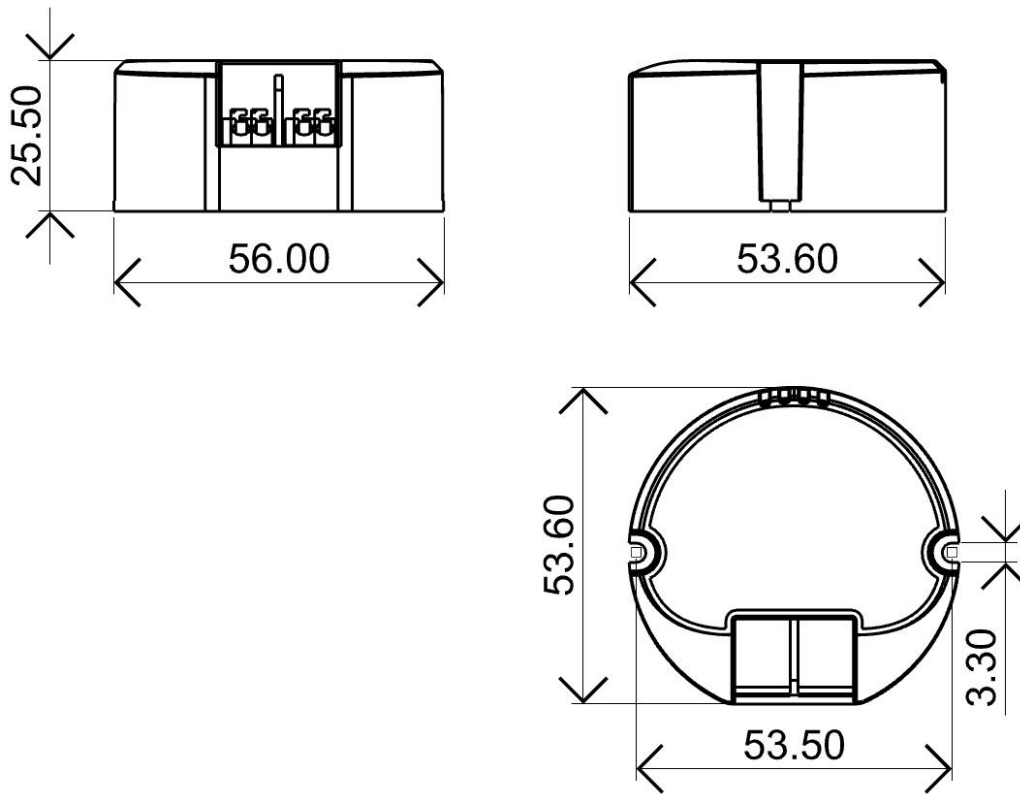
1.The number of drives mounted under different MCBs in the table is the maximum value. Please do not exceed this number during installation.

2.Different brands and models of miniature circuit breakers, the number of drives mounted will be slightly different.

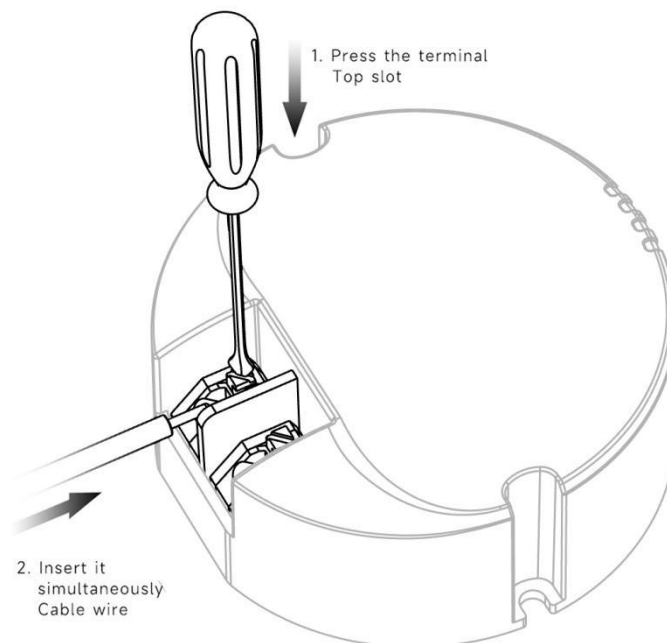
◆ Wiring diagram



◆ **2D diagram**



Terminal



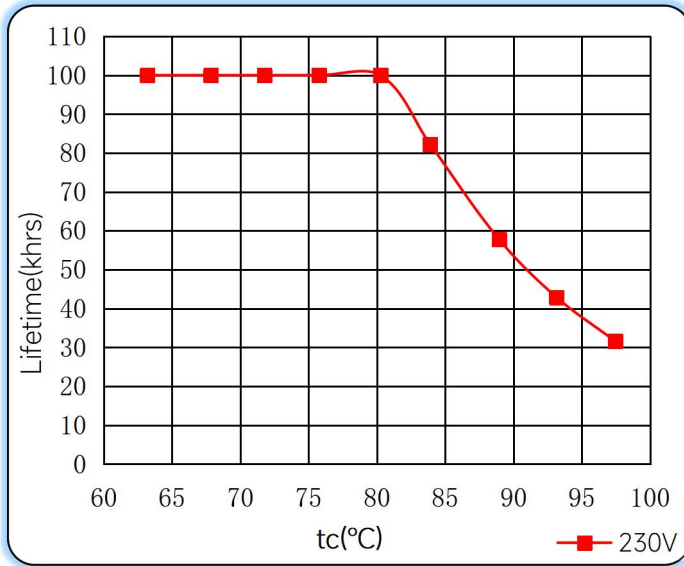
◆ Wiring & Connections

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

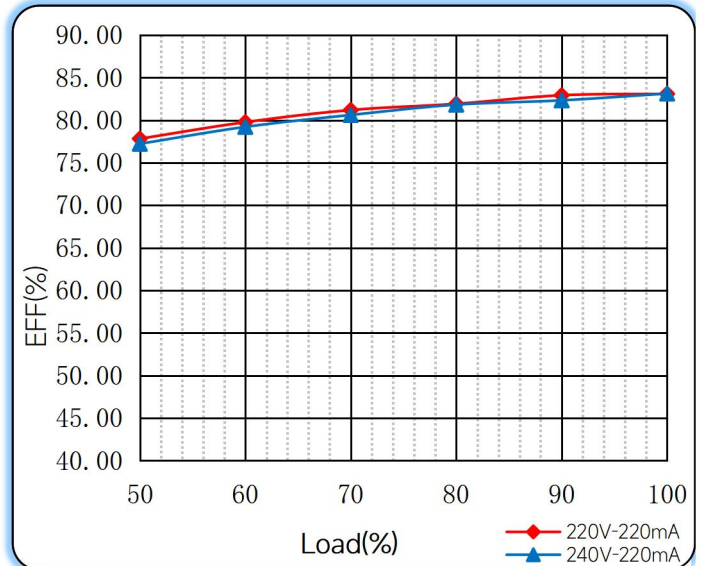
Note: Solid wire is risky to use on an angled terminal. Stranded wire is recommended for this kind of use.

◆ **Curve for CS-8-XXX TRIAC LI, I_o=220mA**

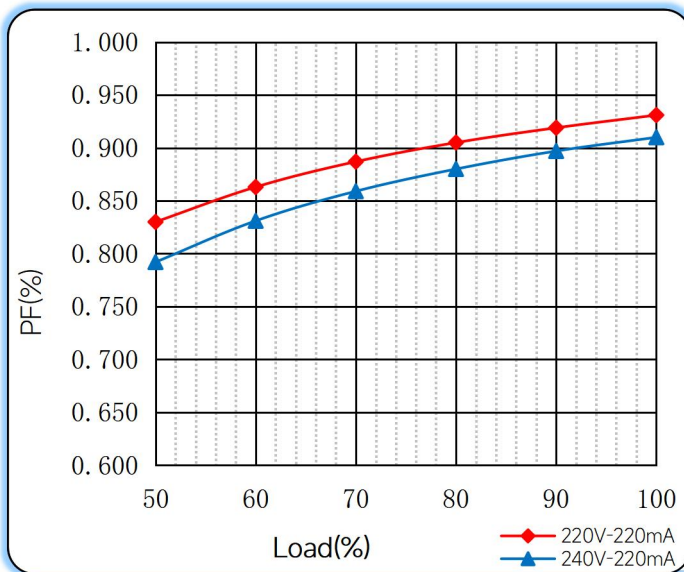
Lifetime vs. Temperature Curve



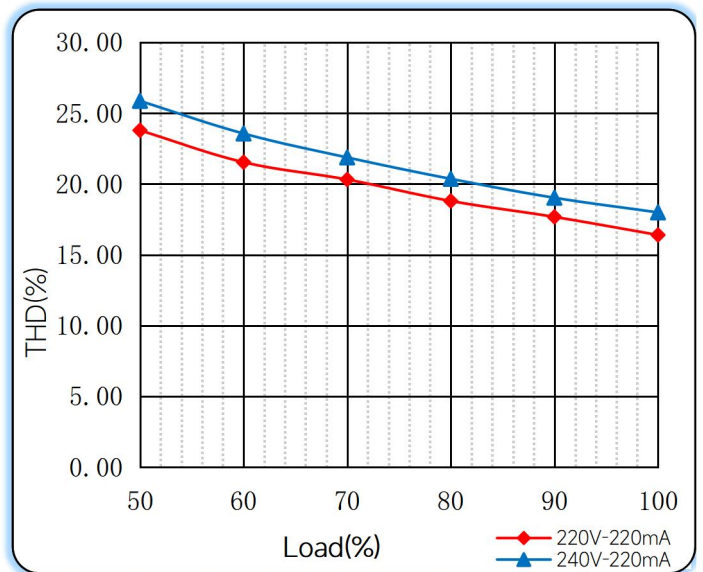
Efficiency vs. Load



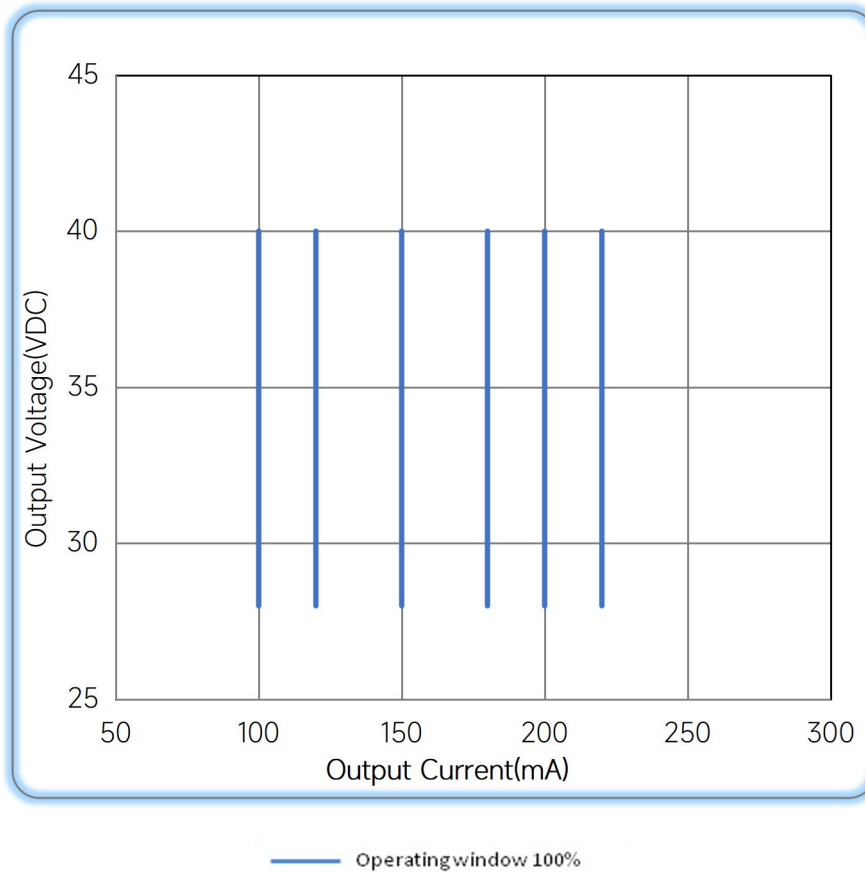
Power Factor Characteristics



THD vs. Load



◆ Operating window



◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2024/04/01
Power Factor	≥0.9	0.95	B	2024/07/26
Efficiency(Typ.)	80%@100mA	78%@100mA	C	2024/11/06
Current Accuracy	±5%@180mA	±7%@180mA	D	2025/03/13

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

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EAGLERISE



Manual