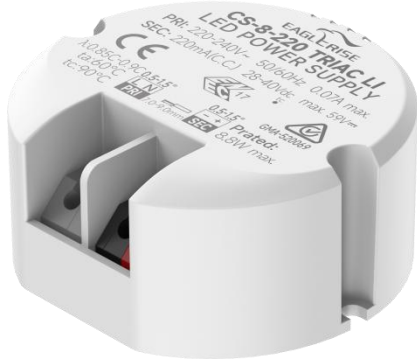


8W Triac Dimming power supply



■ 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

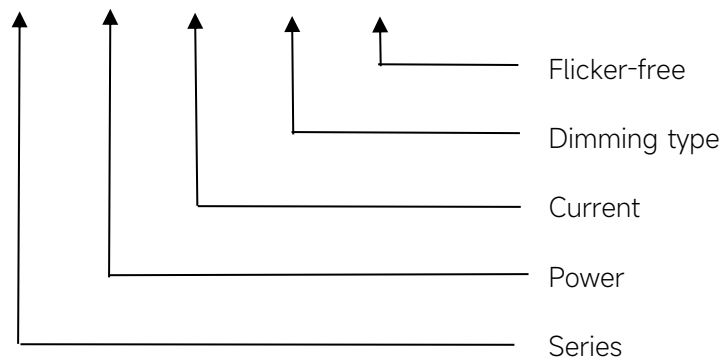
- LED panel, LED down light

◆ 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					

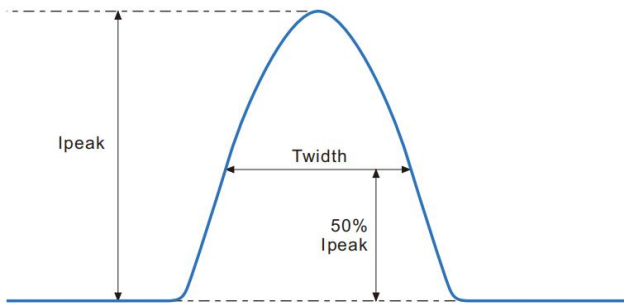
Standards	Safety	GB19510. 1, GB19510. 14;IEC61347- 1, IEC61347-2- 13;EN61347- 1, EN61347-2-13; EN62384
	EMC	GB/T17743, GB17625. 1;EN55015, EN61000-3-2, EN61000-3-3, EN61547;EN61000-4-5;EN61000-4-2,3,4,5,6,8,11, EN61547
	Energy Efficiency	Erp2.0 EU 2019/2020
	RoHS	RoHS (2011/65/EU) (EU)2015/863
Note	<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

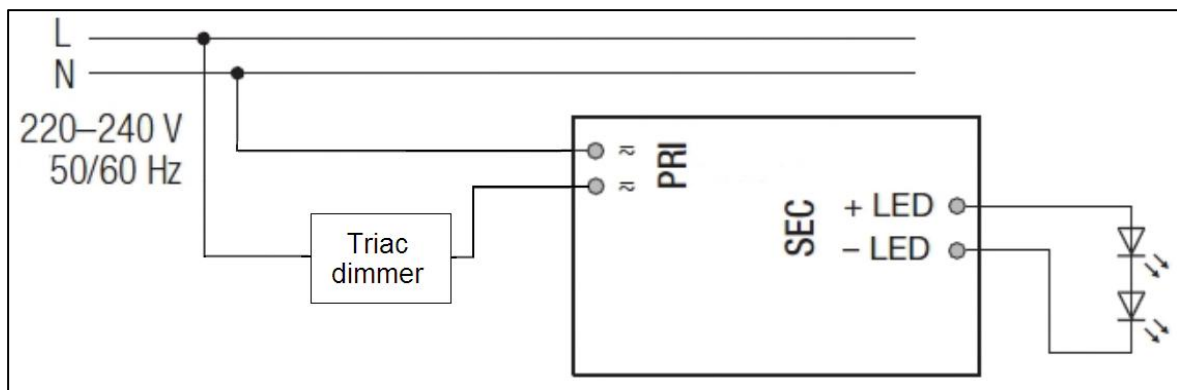
I_{peak}	Twidth	B10	B16	B20	C10	C16	C20
1.98A	43.2 μ s	114pcs	182pcs	228pcs	114pcs	182pcs	228pcs



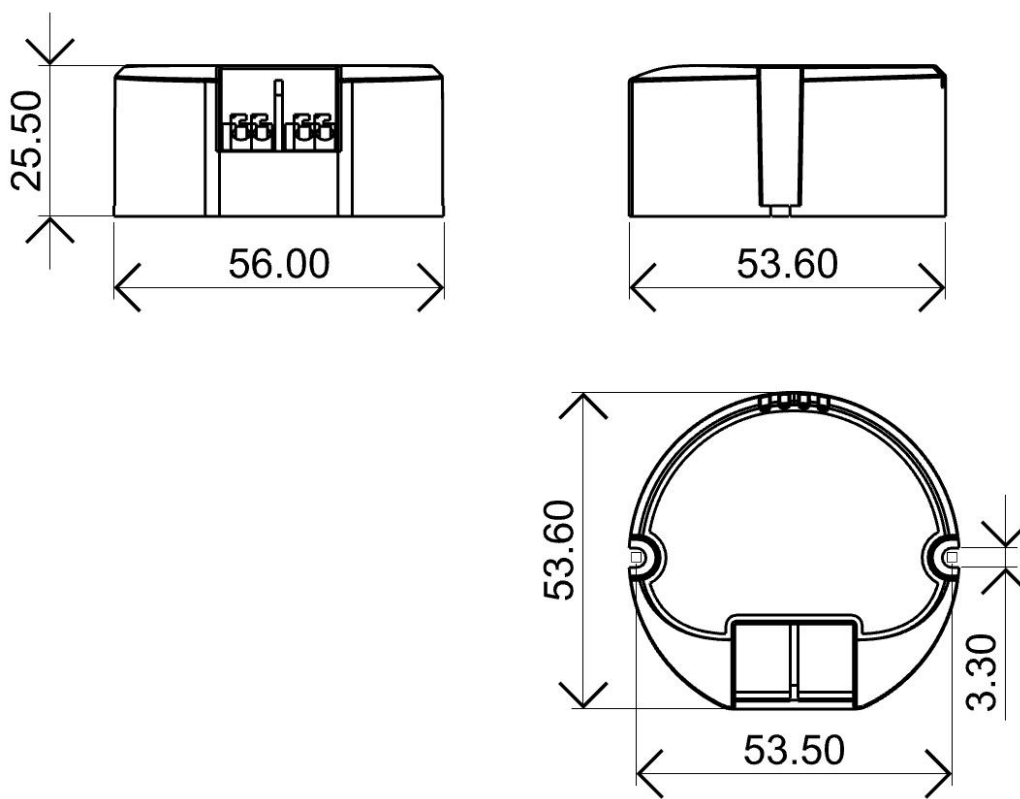
Remarks:

- 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.

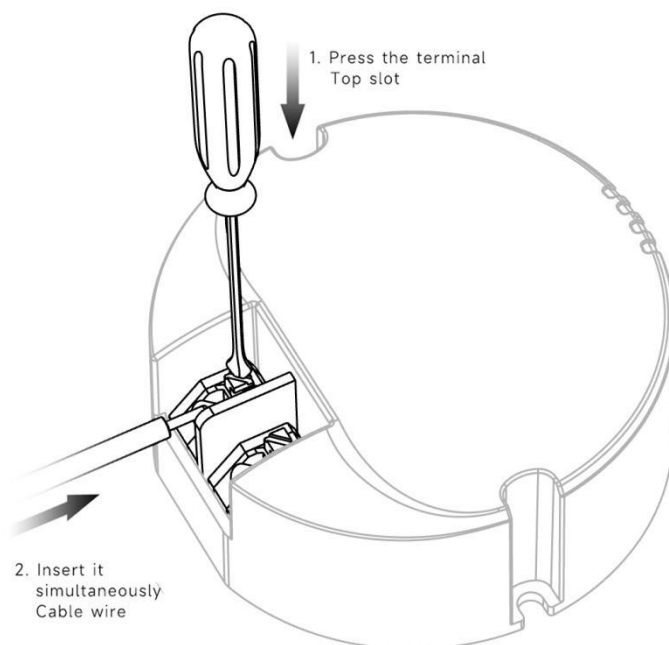
◆ Wiring diagram



◆ **2D diagram**



Terminal

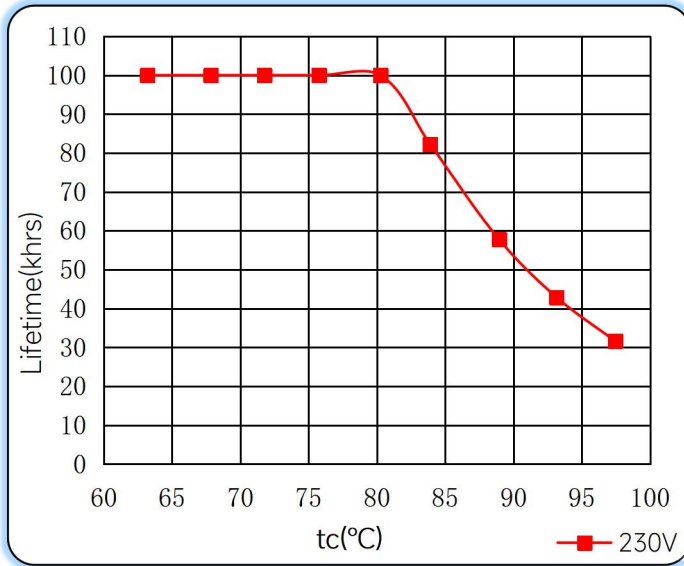
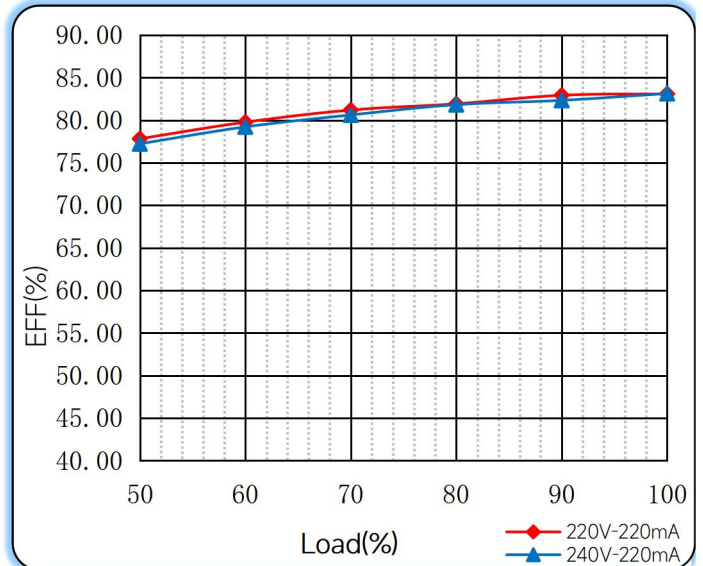
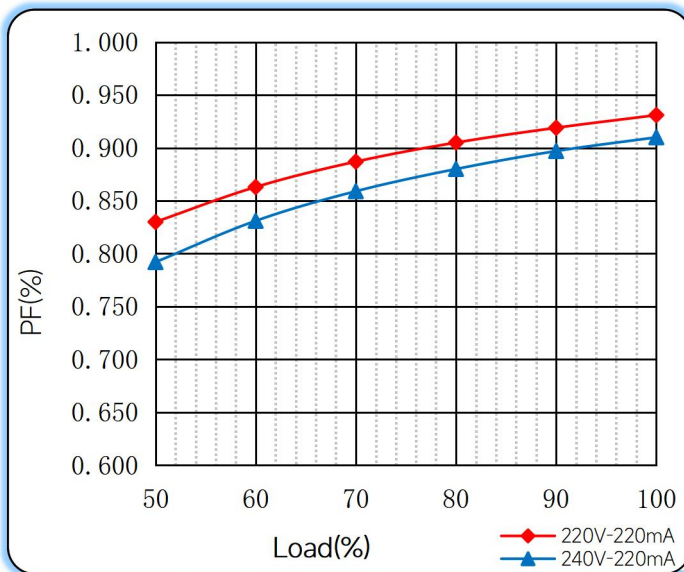
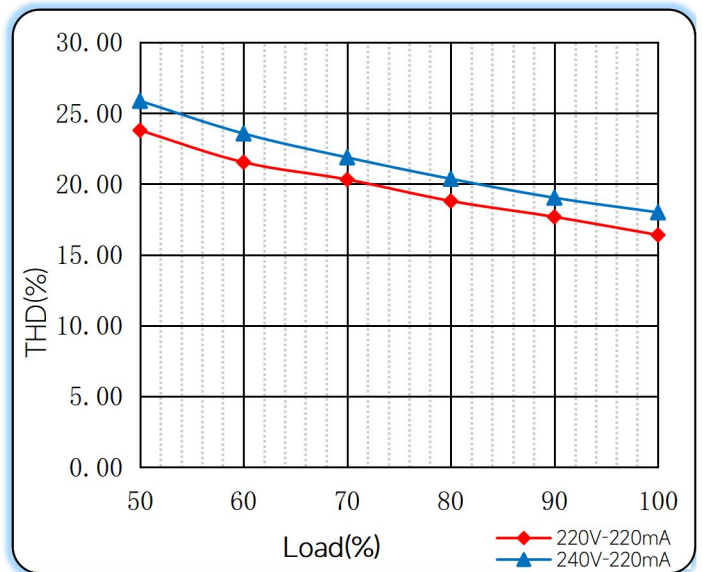


◆ Wiring & Connections

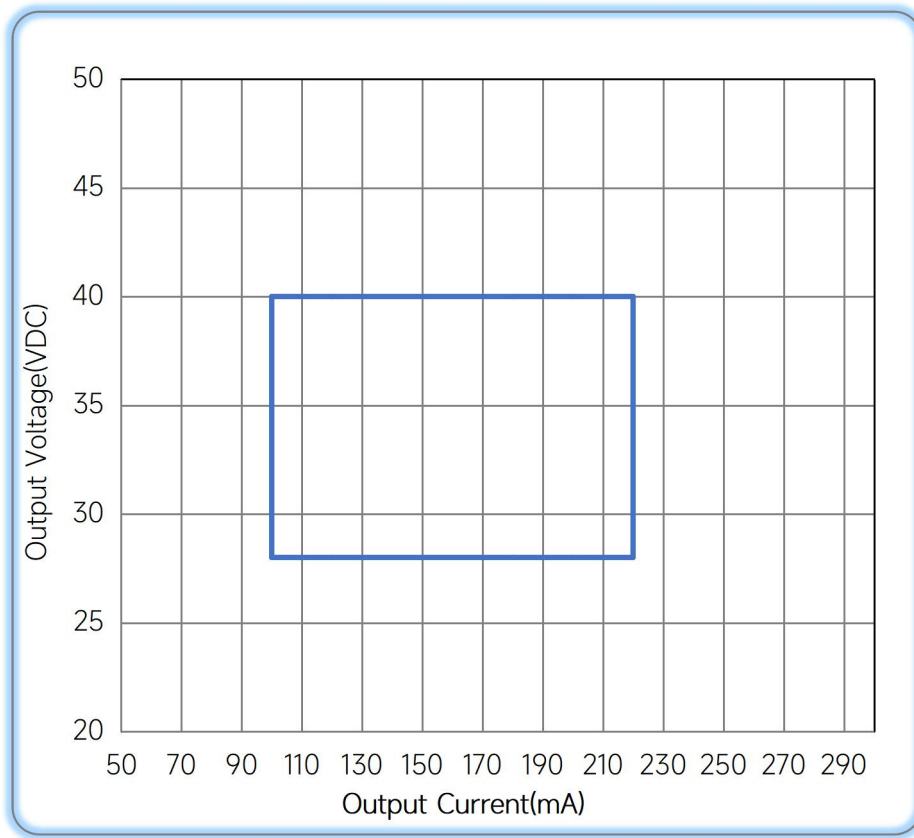
	Specification item	Value (Unit)
Input	Input wire cross-section	0.5...1.5 mm ²
	Input wire gauge.	16...20 AWG
	Input wire strip length	7...9mm
Output	Output wire cross-section	0.5...1.5 mm ²
	Output wire gauge.	16...20 AWG
	Output wire strip length	7...9mm

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, $I_o=220\text{mA}$

Lifetime vs. Temperature Curve

Efficiency vs. Load

Power Factor Characteristics

THD vs. Load


◆ **Operating window**



— Operating window 100%

◆ **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

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

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