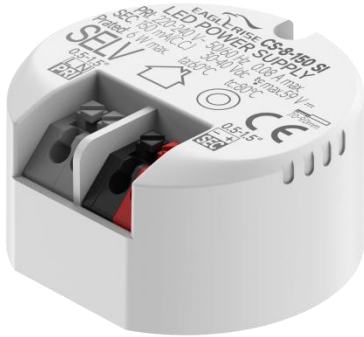


## 8W Constant Current power supply



■ Approve



### Features

- Class II, SELV, Built-in
- Input Voltage: 220-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor: 0.5C
- Efficiency: 80%
- 5 years warranty
- IP20

### Applications

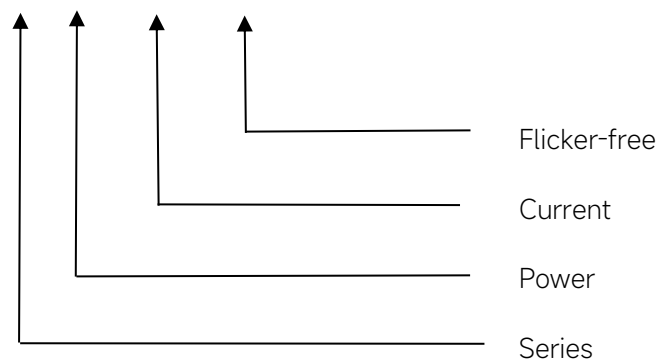
- LED panel, LED ceiling light
- LED spot light

### ◆ Description

CS-8-XXX SI is a 8W constant current LED driver with 100 to 200mA output current. With its compact dimensions from  $\Phi 42 \times 21 \text{mm}$ . It is easy to integrate in LED Panel, spot and ceiling lights product. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

### ◆ Model code

#### CS-8-XXX SI



## ◆ Specification

	Constant Current (mA)	100	120	150	180	200
Output	Voltage Range(VDC)	30-40				
	Unload voltage Max.	59VDC				
	Current Accuracy	±7%				
	Output HF current ripple(≥1KHz)	±5%				
	Output LF current ripple(≤120Hz)	±5%				
	SVM	≤0.4				
	Pst	≤1				
	Efficiency(Typ.)	≥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		≥0.7				
Power Factor		0.5C@Full load,230V				
Input Current max (mA)		70		80	100	110
Start-up time		< 0.5S				
No Load Power		≤0.5W				
Protection	Over Load Protection	103-130% YES/Auto Resume				
	Over Voltage Protection	59VDC YES/Auto Resume				
	Short circuit Protection	YES/Auto Resume				
	Over Temperature Protection	YES/Auto Resume				
capability	Surge capability (L-N)	1KV				
	Surge capability (L/N-Ground)	2KV				
Environment	Operating Temperature	-20°C~+70°C				
	Humidity	20%-90%RH				
	Tc	100°C				
	Storage Temperature	-25°C~+80°C				
	Life time	> 50000h@Tc=85°C				
	Noise	≤20dB(A)@10cm				
Surface	Dimension	Φ42 x 21mm				
	material	PC				
Standards	Safety	GB19510. 1, GB19510. 14;IEC61347- 1, IEC61347-2- 13;EN62384				
	EMC	GB/T17743, GB17625. 1;EN55015, EN61000-3-2, EN61000-3-3, EN61547;EN61000-4-5				
	Energy Efficiency	Erp2.0 EU 2019/2020				

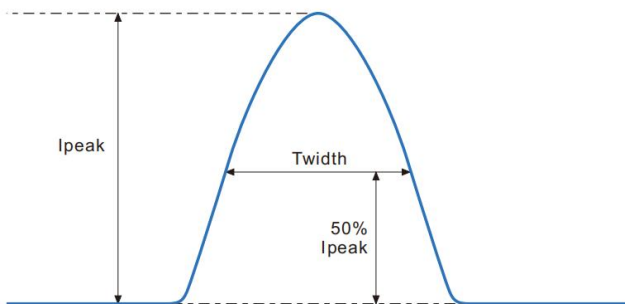
	RoHS	RoHS (2011/65/EU) (EU)2015/863
Note	<p>1.All parameters not specially mentioned are measured at 230VAC input , full load and 25°C of ambient temperature.</p> <p>2.Ripple &amp; Noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uF &amp; 47 uF parallel capacitor.</p> <p>3.Switch and dimmer are not recommended to connect between this product output and luminaries.</p> <p>4.Surge capability (L/N-Ground) was measured with a metal plate 2-3mm underlay.</p> <p>5.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 SI	100	30-40	59	4
2	CS-8-120 SI	120			4.8
3	CS-8-150 SI	150			6
4	CS-8-180 SI	180			7.2
5	CS-8-200 SI	200			8

### ◆ Inrush Current

I <sub>peak</sub>	T <sub>width</sub>	B10	B16	B20	C10	C16	C20
5.76A	102µs	72pcs	116pcs	145pcs	72pcs	116pcs	145pcs

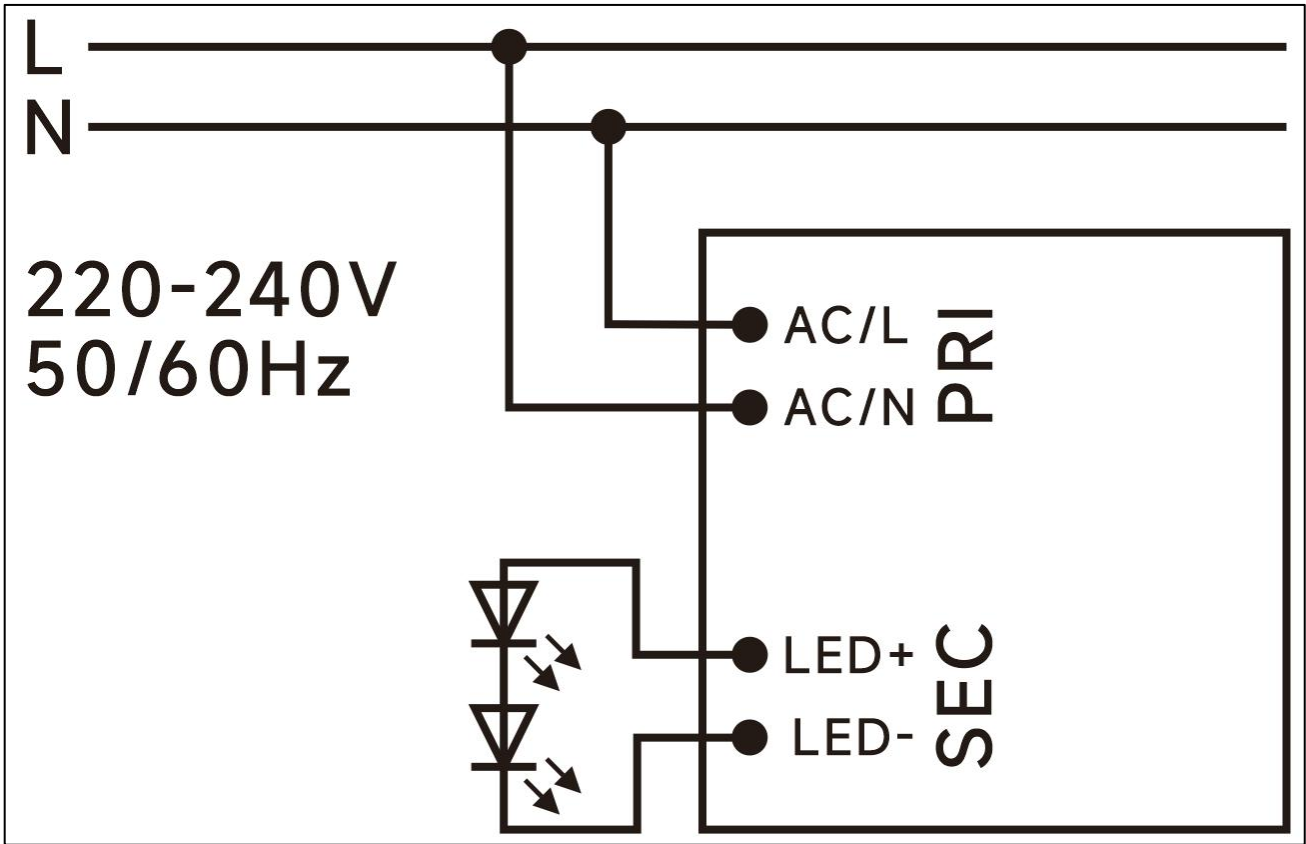


Remarks:

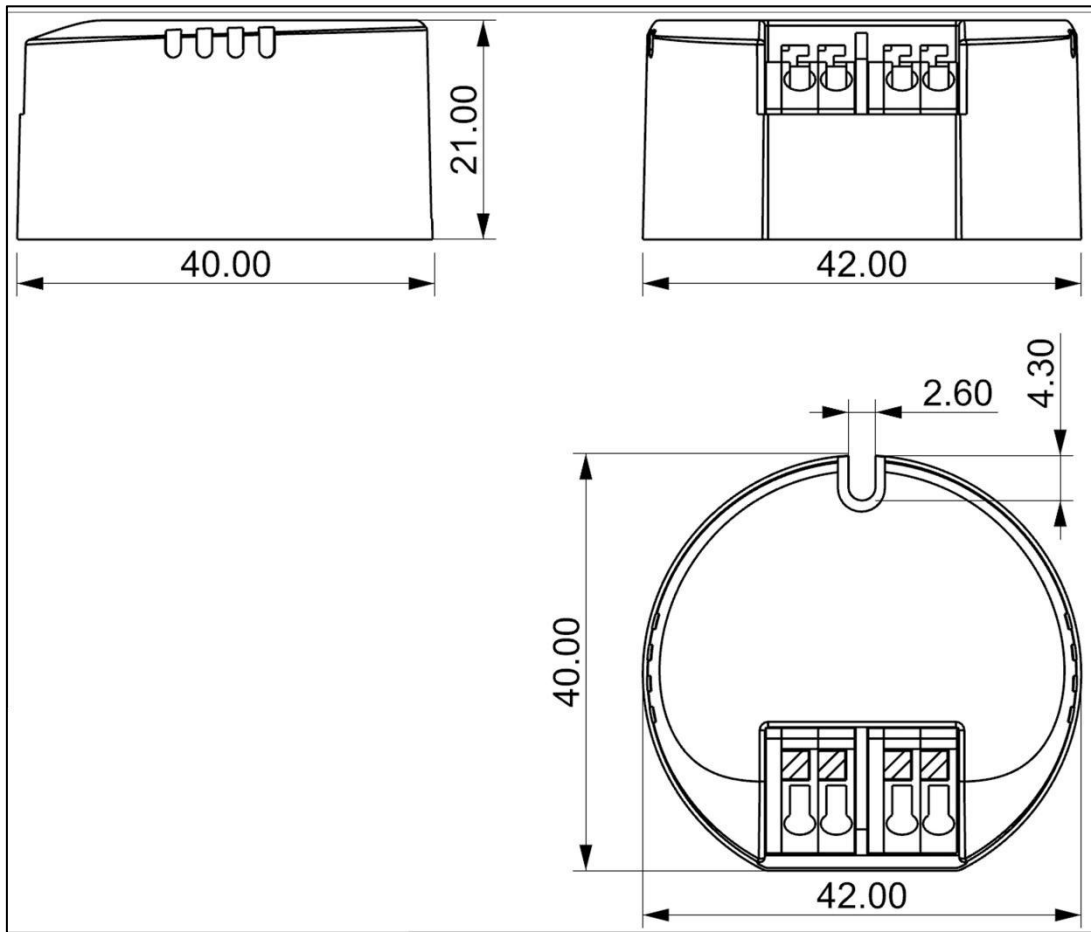
1.The number of drives mounted under different MCBs in the table is the maximum value. Please do not exceed this number during installation.

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

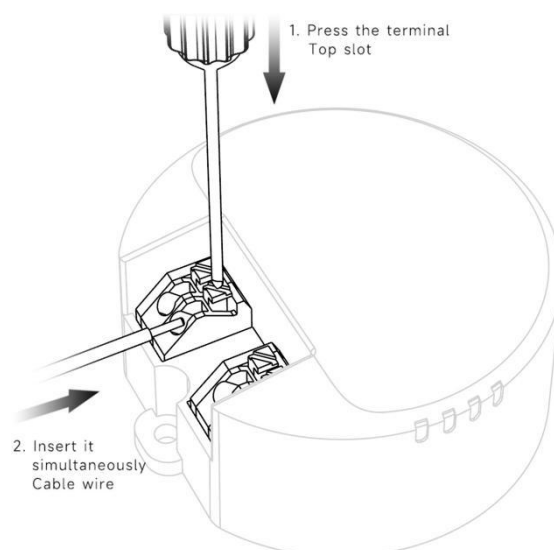
◆ Wiring diagram



◆ 2D diagram



Terminal

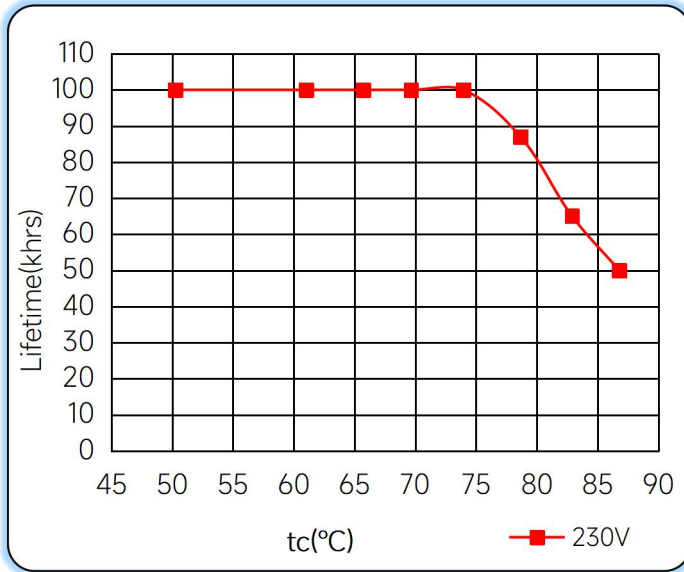
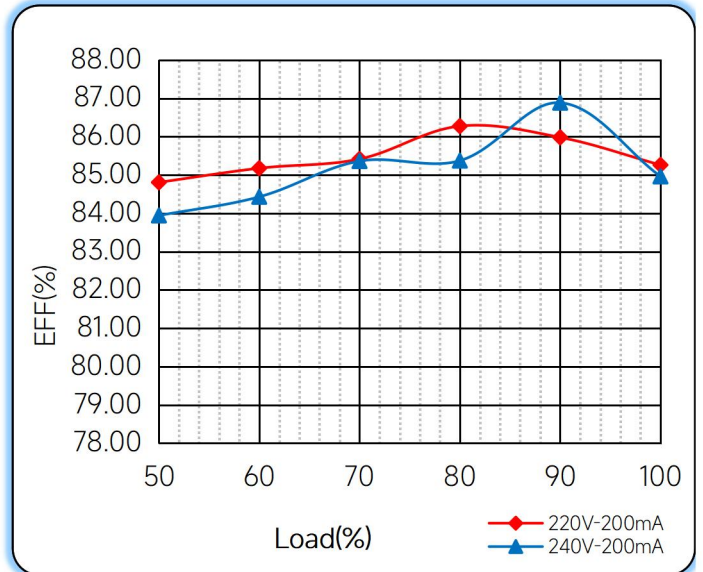
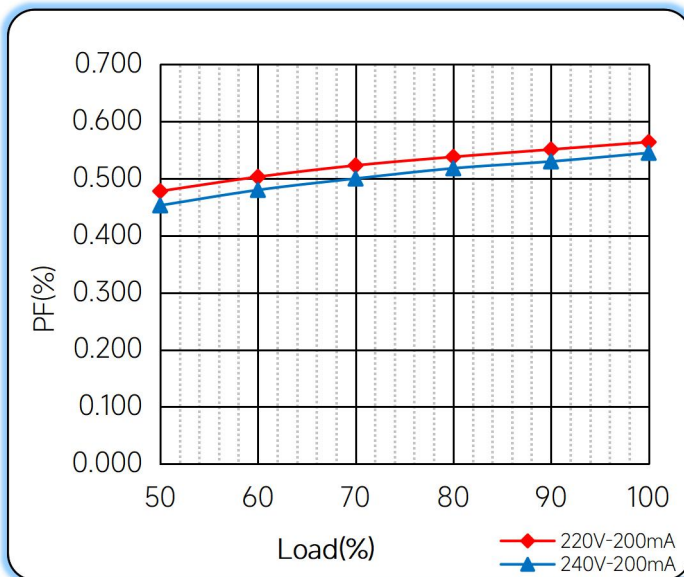
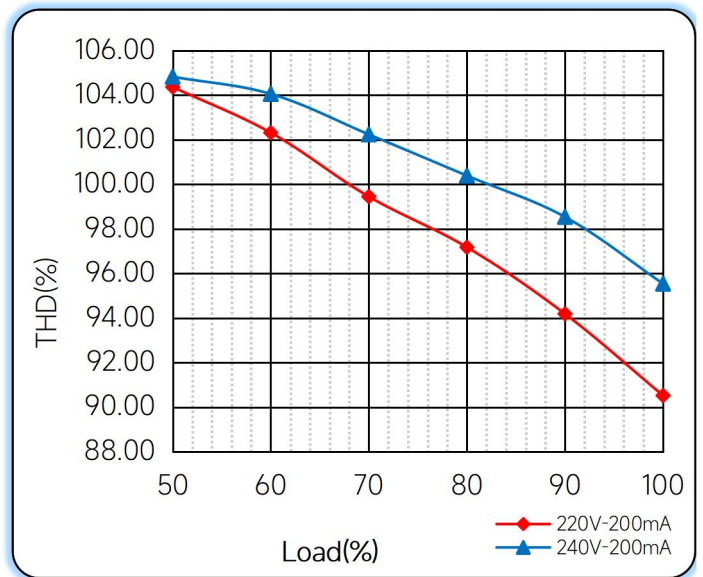


## ◆ Wiring & Connections

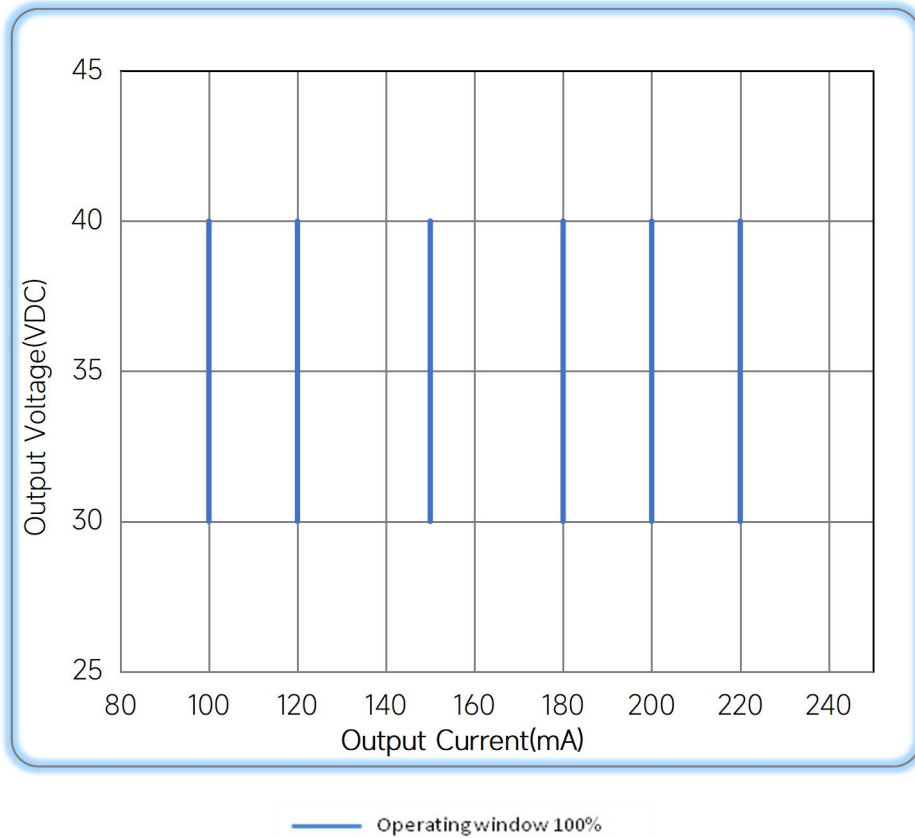
	Specification item	Value (Unit )
Input	Input wire cross-section	0.5...1.5 mm <sup>2</sup>
	Input wire gauge.	16...20 AWG
	Input wire strip length	7...9mm
Output	Output wire cross-section	0.5...1.5 mm <sup>2</sup>
	Output wire gauge.	16...20 AWG
	Output wire strip length	7...9mm

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

### ◆ Curve for CS-8-XXX SI, I<sub>o</sub>=200mA

**Lifetime vs. Temperature Curve**

**Efficiency vs. Load**

**Power Factor Characteristics**

**THD vs. Load**


◆ **Operating window**



◆ **Revision Updates**

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2023/07/12
TC	80°C	85°C	B	2024/02/01
Ta/TC	60°C/85°C	70°C/100°C	C	2024/04/10

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

Tel: +86-0757-86256822, +86-0757-86256831

E-mail: sales@eaglerise.com

Website : <https://lighting.eaglerise.com>



EAGLERISE



Manual