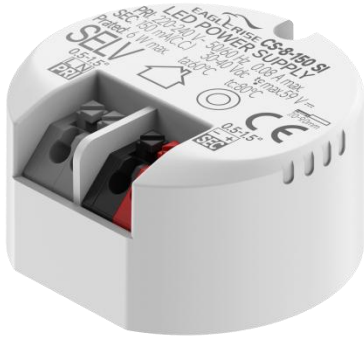


8W Constant Current power supply



■ Approve



Features

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

Applications

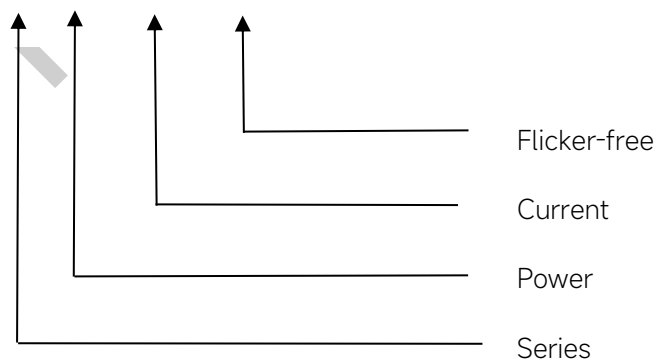
- LED panel, LED ceiling light
LED spot light

◆ Description

CS-8-XXX SI is a 8W constant current LED driver with 100 to 200mA output current. With it's 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	220	
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~+60°C						
	Humidity	20%-90%RH						
	Tc	85°C						
	Storage Temperature	-25°C~+60°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						

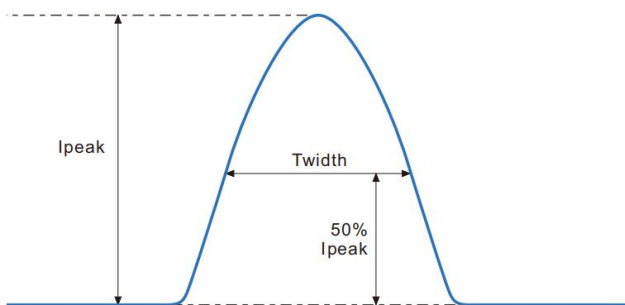
	RoHS	RoHS (2011/65/EU) (EU)2015/863
Note	1.All parameters not specially mentioned are measured at 230VAC input , full load and 25°C of ambient temperature. 2.Ripple & Noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uF & 47 uF parallel capacitor. 3.Switch and dimmer are not recommended to connect between this product output and luminaries. 4.Surge capability (L/N-Ground) was measured with a metal plate 2-3mm underlay. 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.	

◆ 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
6	CS-8-220 SI	220			8.8

◆ Inrush Current

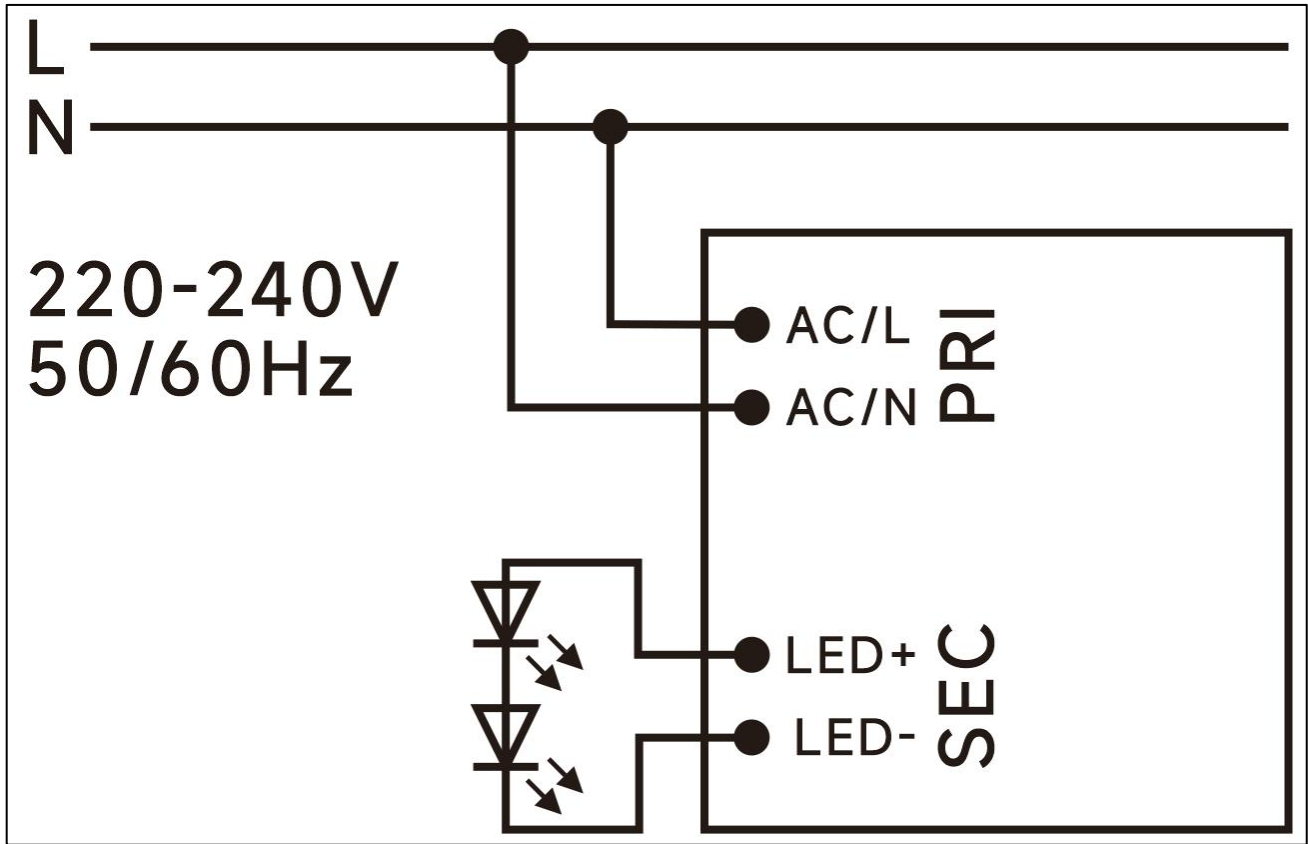
I _{peak}	T _{width}	B10	B16	B20	C10	C16	C20
5.76A	102μs	72pcs	116pcs	145pcs	72pcs	116pcs	145pcs



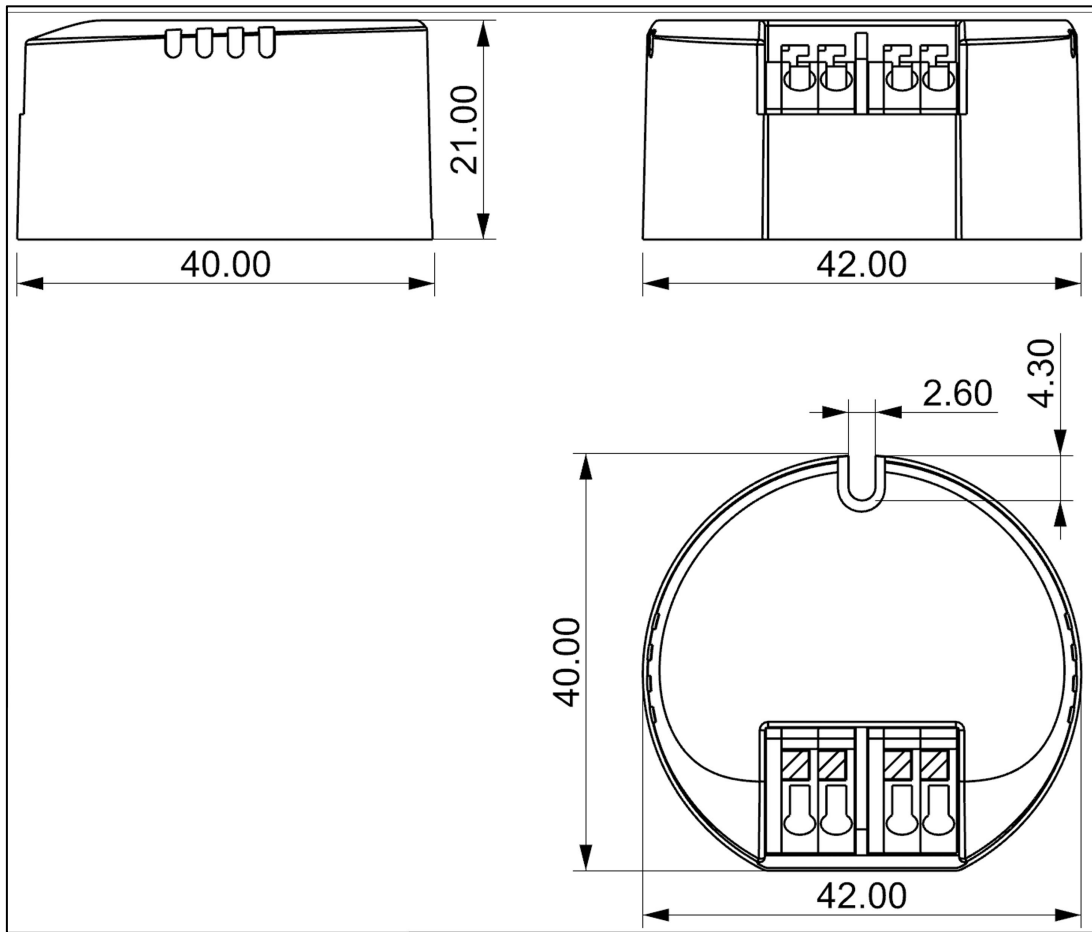
Remarks:

- 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.

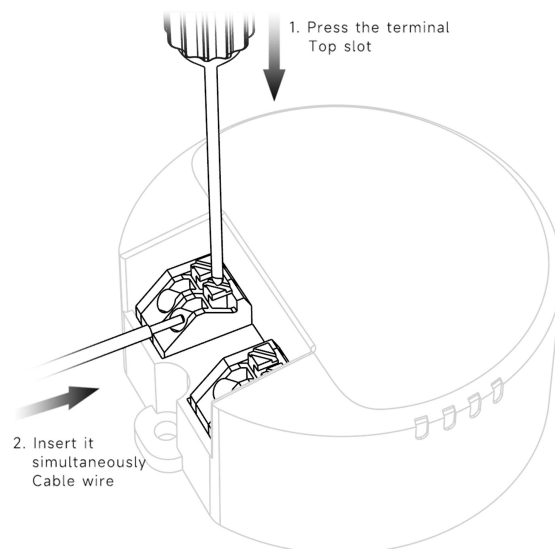
◆ Wiring diagram



◆ 2D diagram



Termina



◆ 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

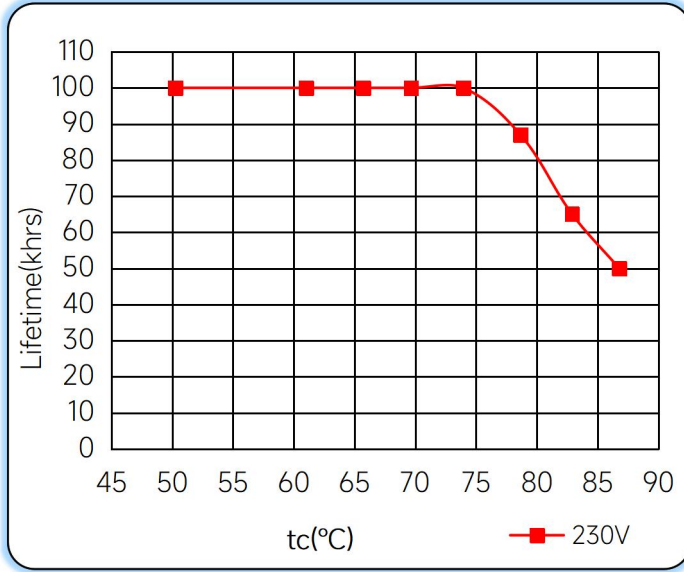
◆ Recommended wire

Wire cross-section	Wire type
2*0.5mm ²	H03VVH2-F 2core
2*0.75mm ²	H03VVH2-F 2core
1.5mm ²	CCC 08(RV-90)
16AWG(1.25mm ²)	UL1015

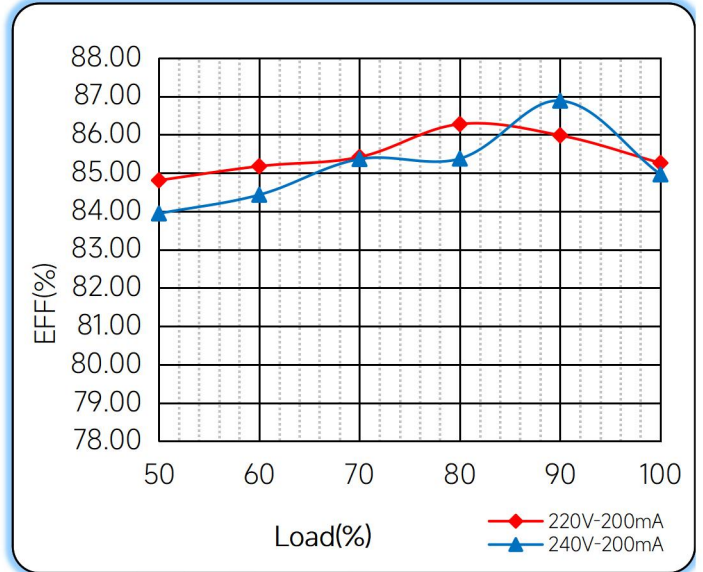
Note: Solid wire is risky to use on an angled terminal. Stranded wire is recommended for this kind of use.

◆ Curve for CS-8-XXX SI, $I_o=200mA$

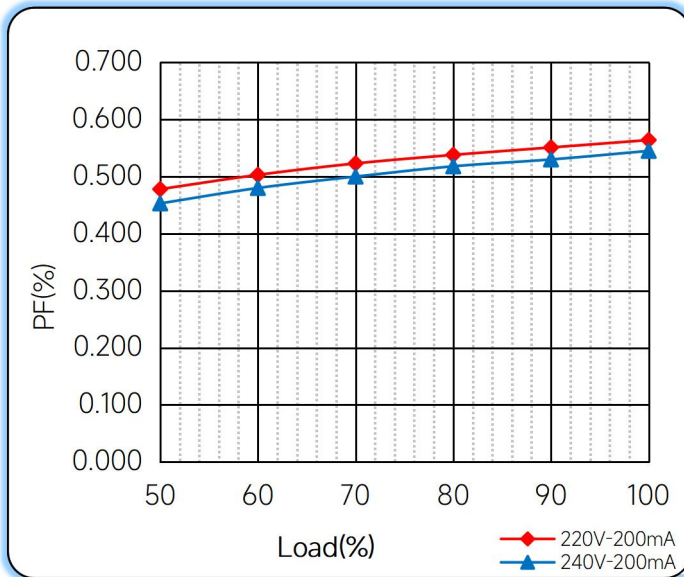
Lifetime vs. Temperature Curve



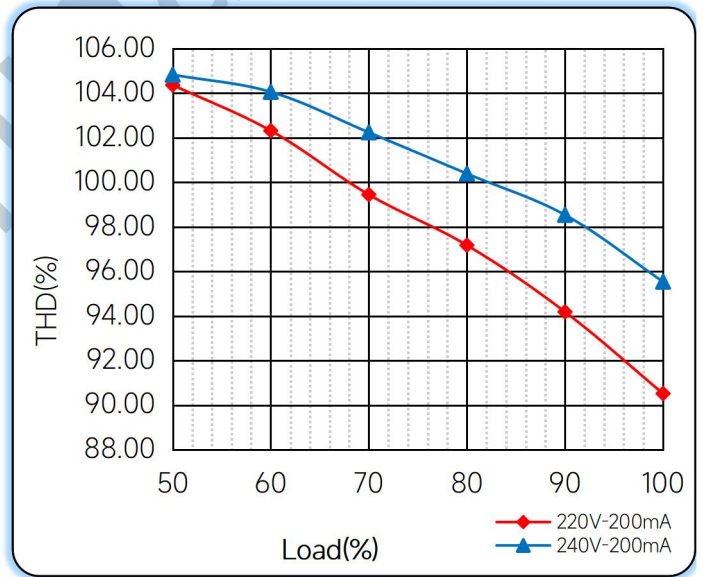
Efficiency vs. Load



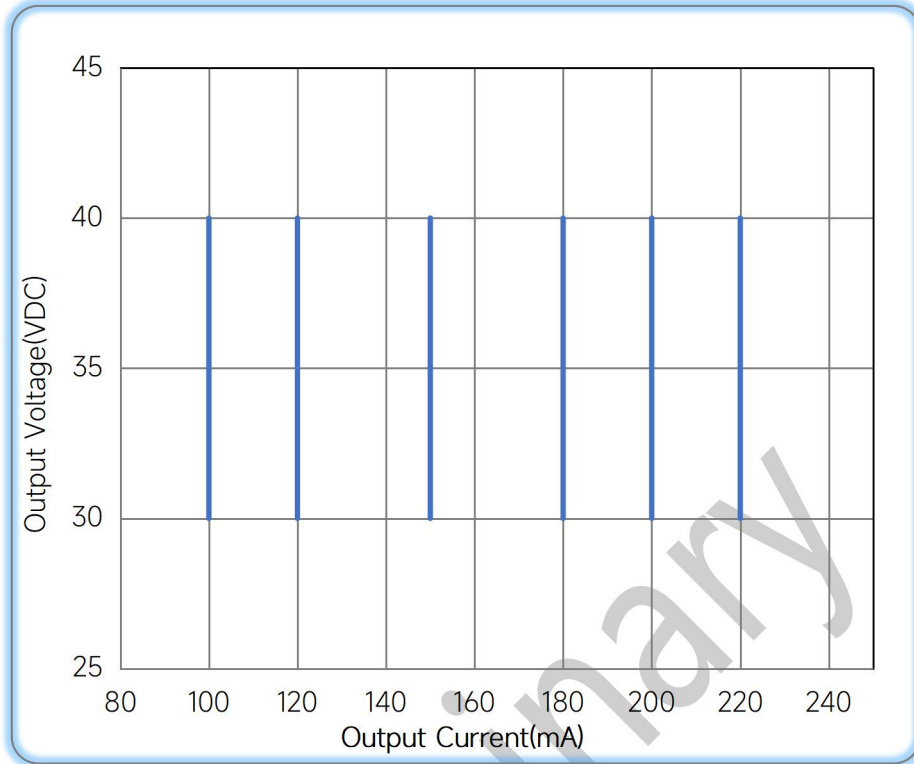
Power Factor Characteristics



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

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

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EAGLERISE



Manual