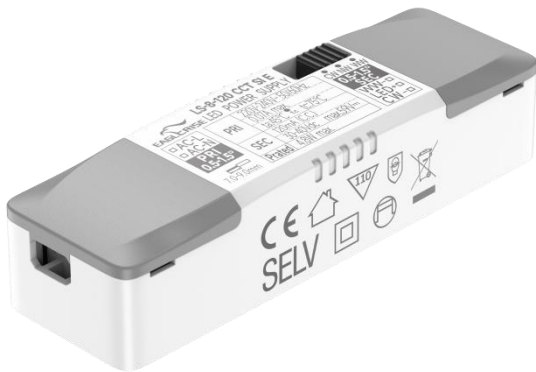


8W Constant Current power supply



■ Approve



Features

- Class II, SELV, Independent
- Input Voltage: 220-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor: 0.6C
- Efficiency: $\geq 72\%$ @70mA
 $\geq 78\%$ @80mA
 $\geq 80\%$ @ ≥ 100 mA

- 5 years warranty
- IP20

Applications

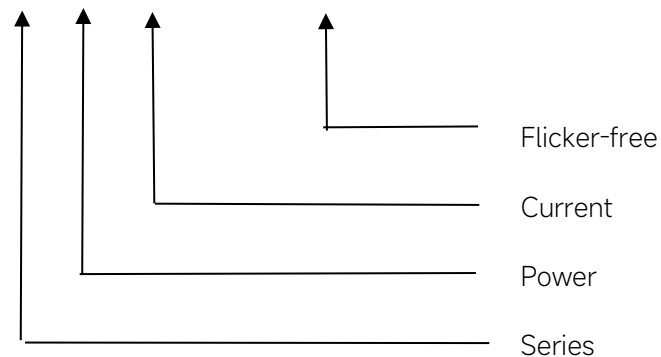
- LED panel, LED down light
LED spot light

◆ Description

LS-8-XXX CCT SI E is a 8W constant current LED driver with 70-700mA output current. With it's compact dimensions from 92 x 28 x 21 mm. It is easy to integrate in LED panel, LED down light, LED spot light products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

◆ Model code

LS-8-XXX CCT SI E



◆ Specification

Output	Constant Current (mA)	70	80	100	120	150	160	180	...	700
	Voltage Range(VDC)	30-40							...	8-11.4
	Unload voltage Max.(VDC)	59							...	28
	Current Accuracy	±8%			±7%	±7%	±6%	±5%		
	Output HF current ripple(≥1KHz)	±5%								
	Output LF current ripple(≤120Hz)	±5%								
	SVM	≤0.4								
	P _{st}	≤1								
	Efficiency(Typ.)	≥72%	≥78%	≥80%						
Input	Rated input voltage	220-240VAC								
	Range of input voltage	198-264VAC								
	Frequency(Hz)	50/60 Hz								
	Displacement factor	≥0.7								
	Power Factor	0.5C			0.6C@full					
	Input Current max (mA)	40	40	50	70	80	90	100	...	110
	Start-up time	< 0.5S								
	No Load Power	≤0.5W								
	Standby Power	≤0.5W								
Protection	Over Load Protection	103-130%								
		YES/Auto Resume								
	Over Voltage Protection	59V								
		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~-+45°C								
	Humidity	20%-90%RH								
	Tc	75°C								
	Storage Temperature	-20°C~-+60°C								
	Life time	> 50,000h@Tc=65°C(> 50,000h@Tc=65°C@220mA)								
	Noise	≤20dB(A)@10cm								
Surface	Dimension	92X28X21 (LXWXH)mm								
	material	PP								
Standards	Safety	GB19510. 1, GB19510. 14;IEC61347- 1, IEC61347-2- 13;AS/NZS 61347- 1, AS/NZS 61347-2- 13;AS 61347.2.13;EN62384;								
	EMC	GB/T17743, GB17625. 1;EN55015, EN61000-3-2, EN61000-3-3, EN61547;EN55015, EN61000-3-2, EN61000-3-3, EN61547,EN 62493;EN61000-4-5;EN61000-4-2,3,4,5,6,8,11, EN61547								

	ErP	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.Data are typical values obtained from test samples 4.The over-temperature protection of the product is provided by the IC. 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.	

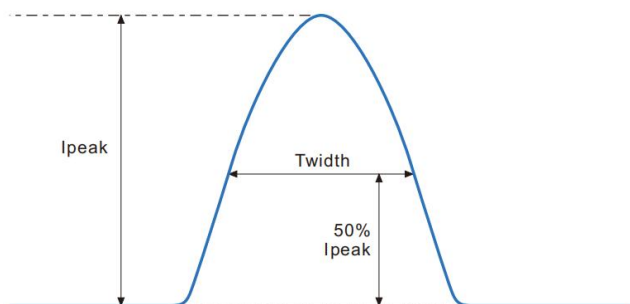
◆ Model list

Number	Model number	Input	Output			
		Input Current max (mA)	Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)
1	*LS-8-70 CCT SI E	40	70	30-40	59	2.8
2	*LS-8-80 CCT SI E	40	80			3.2
3	*LS-8-100 CCT SI E	50	100			4
4	*LS-8-120 CCT SI E	70	120			4.8
5	*LS-8-150 CCT SI E	80	150			6
6	*LS-8-160 CCT SI E	90	160			6.4
7	*LS-8-180 CCT SI E	100	180			7.2
8	*LS-8-200 CCT SI E	110	200			8
9	*LS-8-220 CCT SI E	120	220			8.8
10	*LS-8-300 CCT SI E	100	300	18-24	40	7.2
11	*LS-8-350 CCT SI E	120	350	18-24	40	8.4
12	*LS-8-500 CCT SI E	120	500	10-16	35	8
13	*LS-8-700 CCT SI E	110	700	8-11.4	28	8

*Regular stockpile products

◆ Inrush Current

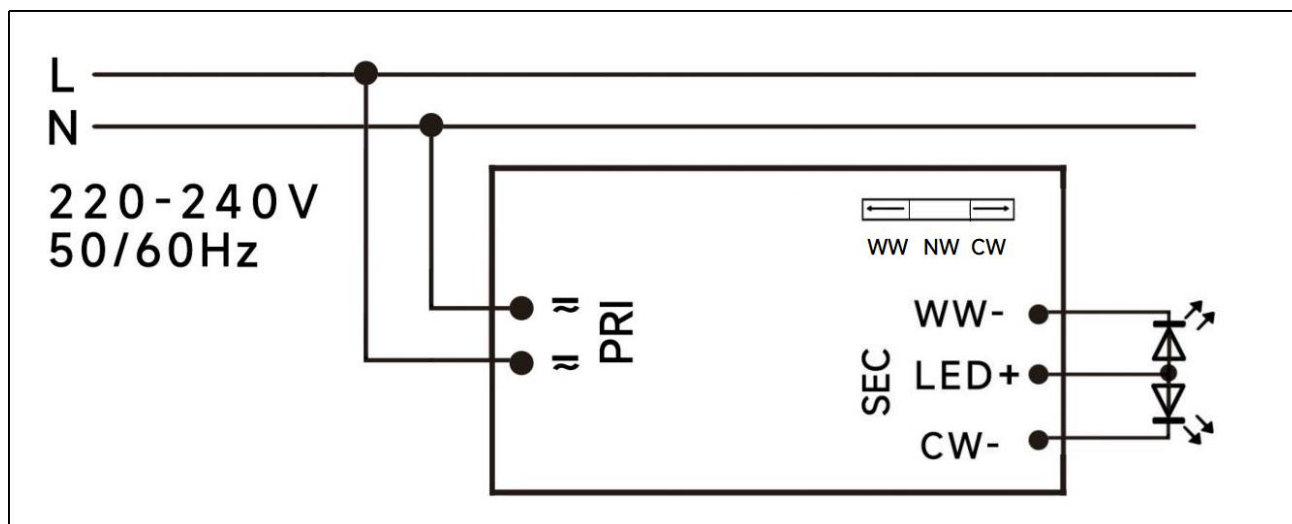
I_{peak}	Twidth	B10	B16	B20	C10	C16	C20
8.28A	92 μ s	72pcs	116pcs	145pcs	72pcs	116pcs	145pcs



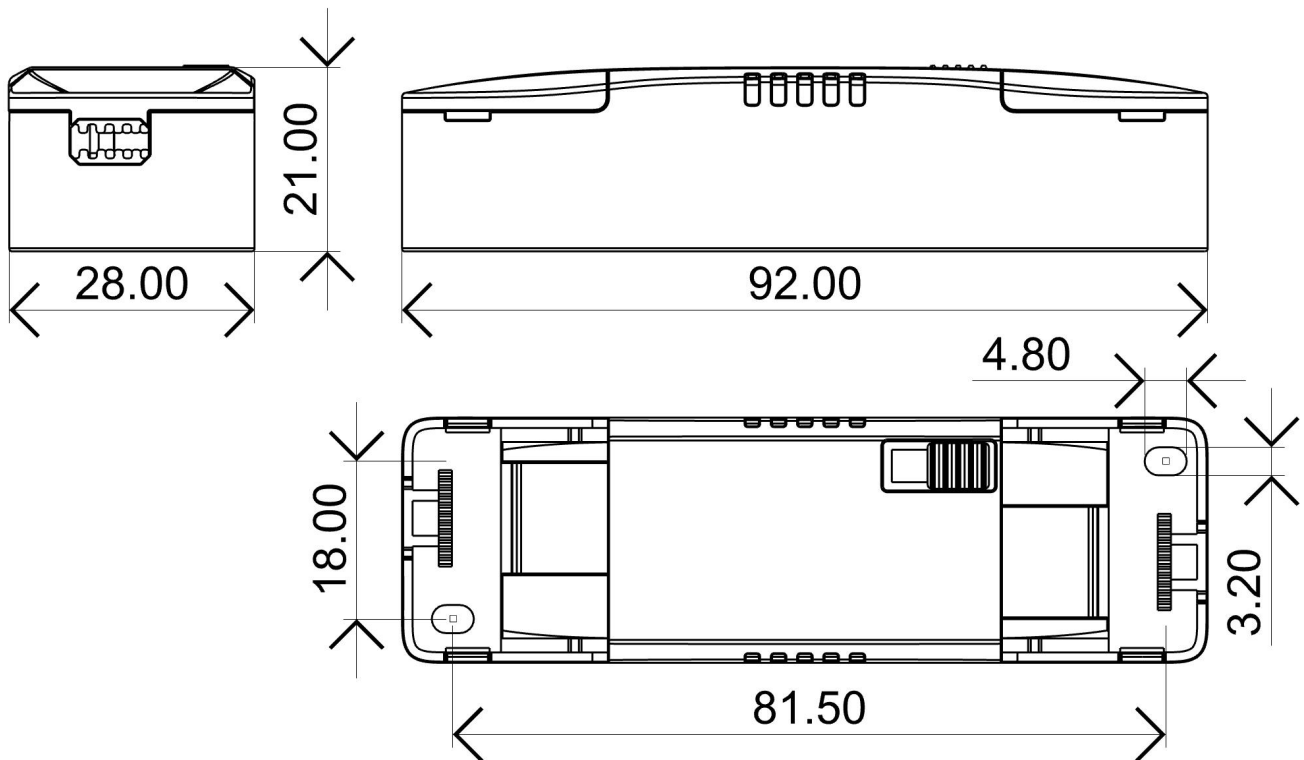
Remarks:

- 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



◆ Wiring & Connections

Specification item		Value (Unit)
Input	Input wire cross-section	0.5...1.5 mm ² (With side caps: 0.75...1.5 mm ²)
	Input wire gauge.	16...20 AWG (With side caps: 16...22 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

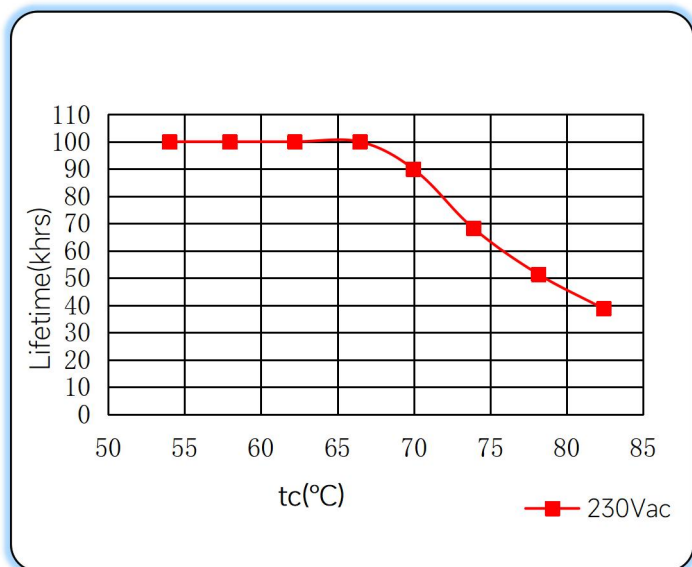
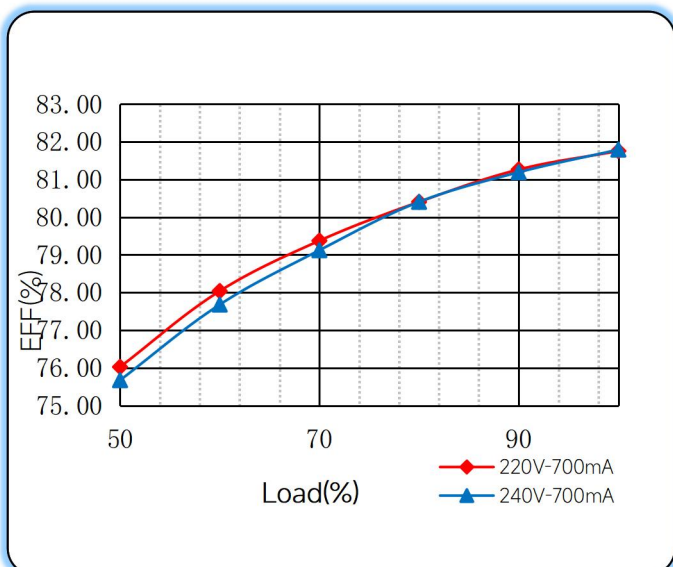
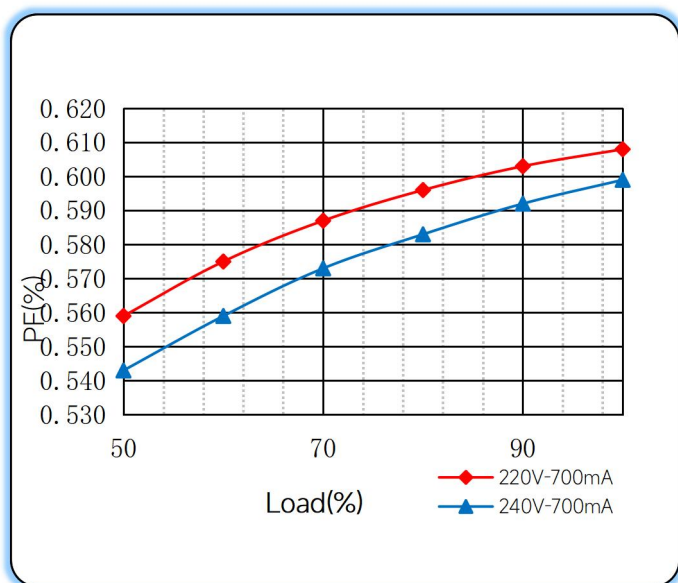
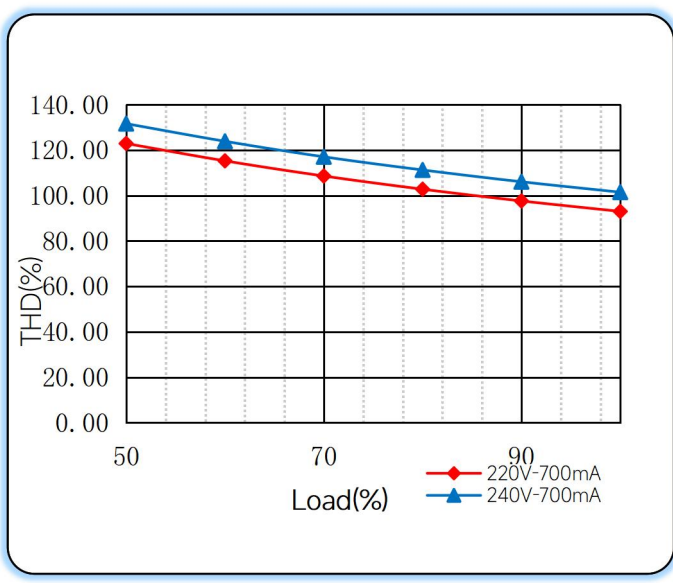
Wire cross-section	Wire type
2*0.5mm ²	H03VVH2-F 2core
2*0.75mm ²	H03VVH2-F 2core
1.5mm ²	CCC 08(RV-90)
16AWG(1.25mm ²)	UL1015

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

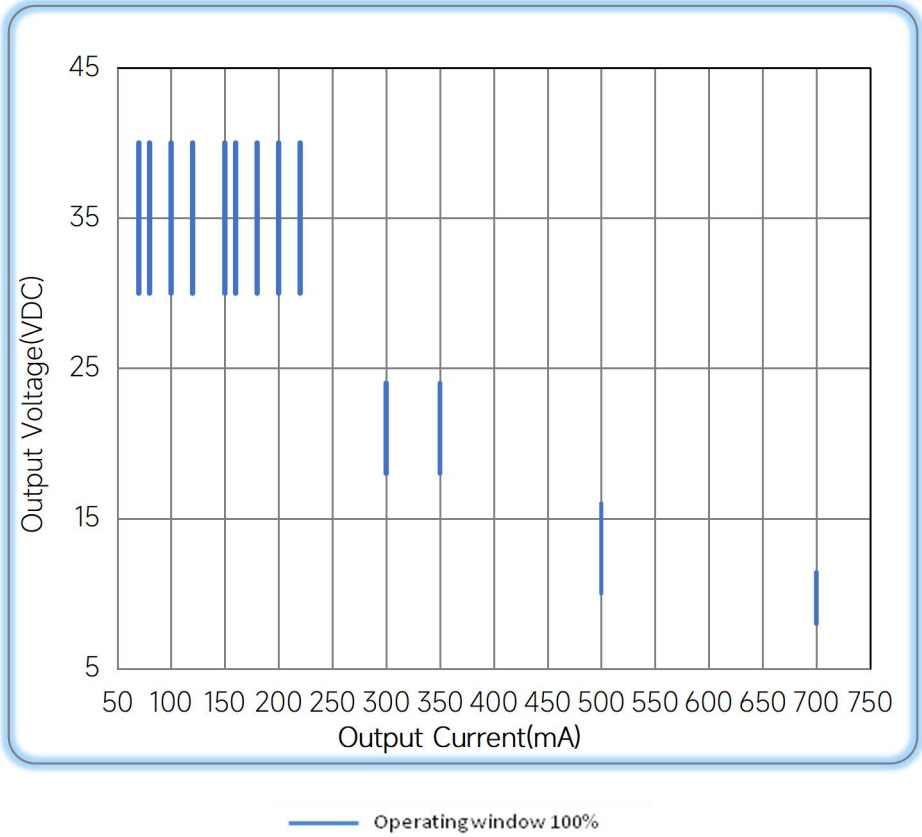
◆ Packaging

Model	Product Dimensions(mm)	weight/piece	Outer carton dimension(mm)	Quantity/carton	Net weight/carton(Kg)	Gross weight/carton(Kg)
LS-8-XXX CCT SI E	92X28X21	0.03	Inside:295X255X200 Outside:310X265*210	135	4.05	4.47

◆ Curve for LS-8-XXX CCT SI E, $I_o=700\text{mA}$

Lifetime vs. Temperature Curve

Efficiency vs. Load

Power Factor Characteristics

THD vs. Load


◆ Operating window



◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2024/11/08
Efficiency(Typ.)	≥78%@70mA	≥76%@70mA	B	2024/03/13

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>

