

## 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:  $\geq 80\%$
- 5 years warranty
- IP20

### Applications

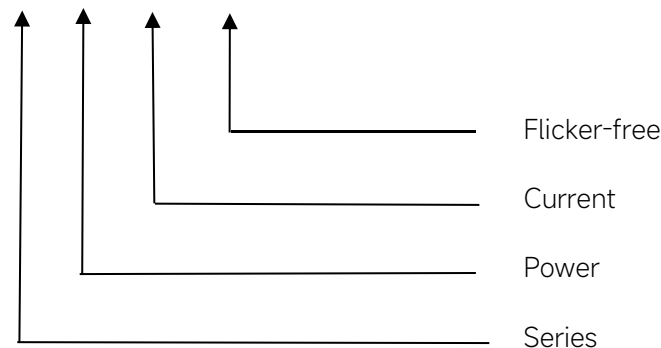
- LED panel, LED down light  
LED spot light

### ◆ Description

LS-8-XXX SI1 E is a 8W constant current LED driver with 120-220mA output current. With it's compact dimensions from 92 x 36 x 25 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 SI1 E



## ◆ Specification

Output	Constant Current (mA)	120	150	160	180	200	220
	Voltage Range(VDC)	30-40					
	Unload voltage Max.(VDC)	59					
	Current Accuracy	±10%	±7%	±7%	±7%	±7%	±5%
	Output HF current ripple(≥1KHz)	±5%					
	Output LF current ripple(≤)	±5%					
	SVM	≤0.4					
	P <sub>st</sub>	≤1					
	Efficiency(Typ.)	≥80%					
Input	Rated input voltage	220-240VAC					
	Range of input voltage	198-264VAC					
	Frequency(Hz)	50/60 Hz					
	Displacement factor	≥0.7					
	Power Factor	0.6C					
	Input Current max (mA)	70	80	90	100	110	120
	Start-up time	< 0.5S					
	No Load Power	≤0.5W					
Protection	Over Load Protection	103-135% 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	92X36X25(LXWXH)mm					
	material	PP					
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					
	ErP	Erp2.0 EU 2019/2020					
	RoHS	RoHS (2011/65/EU) (EU)2015/863					

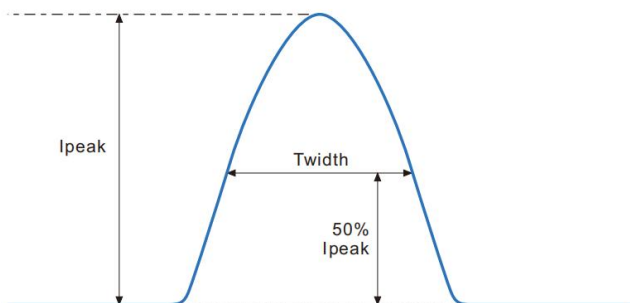
Note	<p>1.All parameters not specially mentioned are measured at 230VAC input , full load and 25°C of ambient temperature.</p> <p>2.Ripple &amp; Noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uF &amp; 47 uF parallel capacitor.</p> <p>3.Data are typical values obtained from test samples</p> <p>4.The over-temperature protection of the product is provided by the IC.</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>
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## ◆ Model list

Number	Model number	Output			
		Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)
1	LS-8-120 S11 E	120	30-40VDC	59VDC	4.8
2	LS-8-150 S11 E	150			6
3	LS-8-160 S11 E	160			6.4
4	LS-8-180 S11 E	180			7.2
5	LS-8-200 S11 E	200			8
6	LS-8-220 S11 E	220			8.8

## ◆ Inrush Current

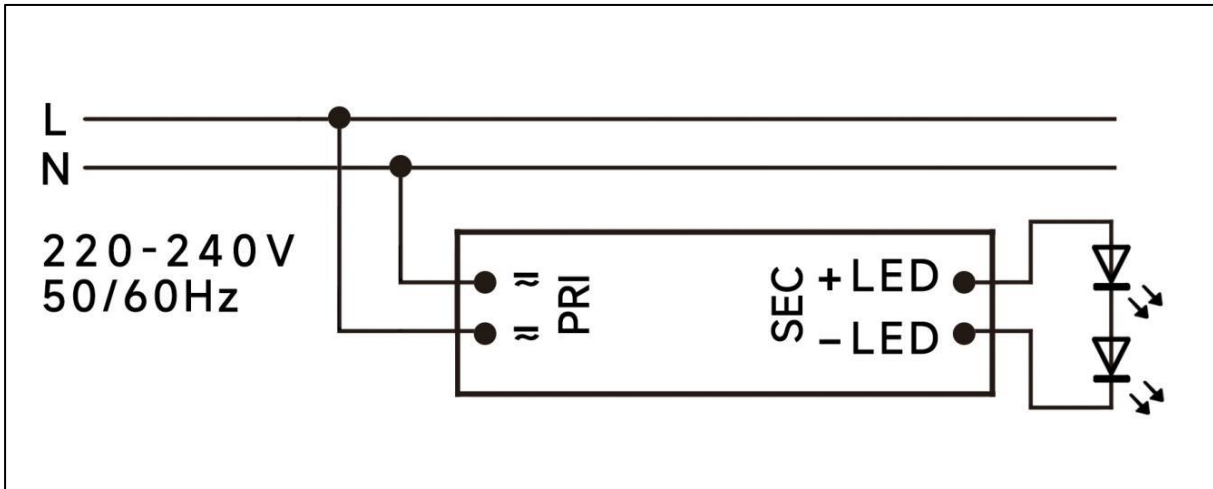
I <sub>peak</sub>	T <sub>width</sub>	B10	B16	B20	C10	C16	C20
8.6A	80μs	36pcs	58pcs	72pcs	36pcs	58pcs	72pcs



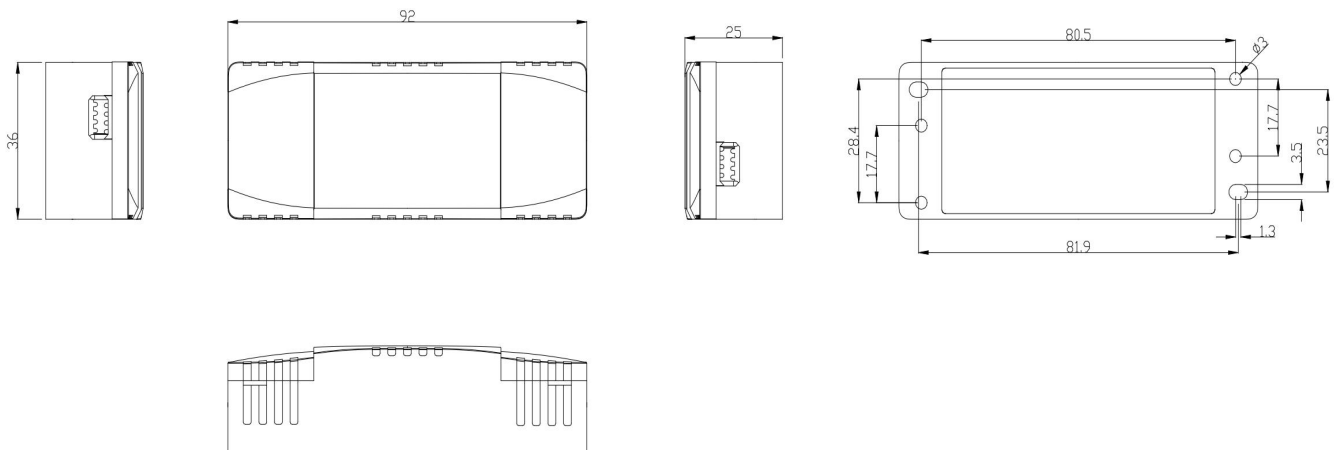
### Remarks:

- 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 <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

## ◆ Recommended wire

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

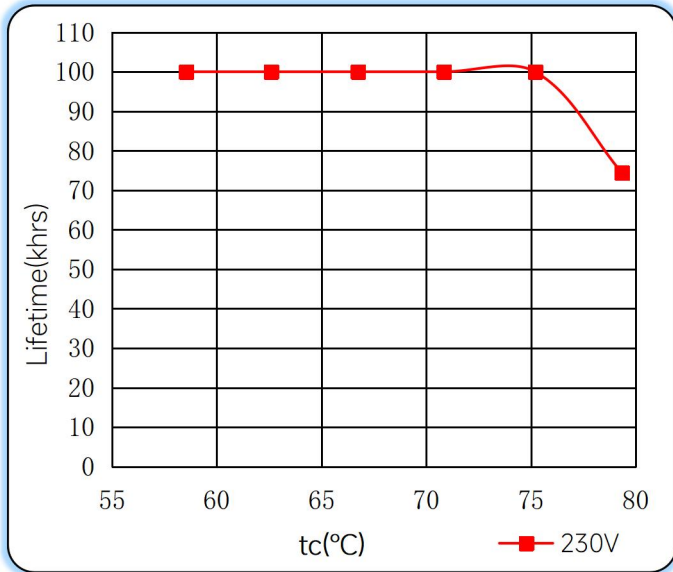
Note: Solid wire is risky to use on an angled terminal. Stranded wire is recommended for this kind of use.

## ◆ Packaging

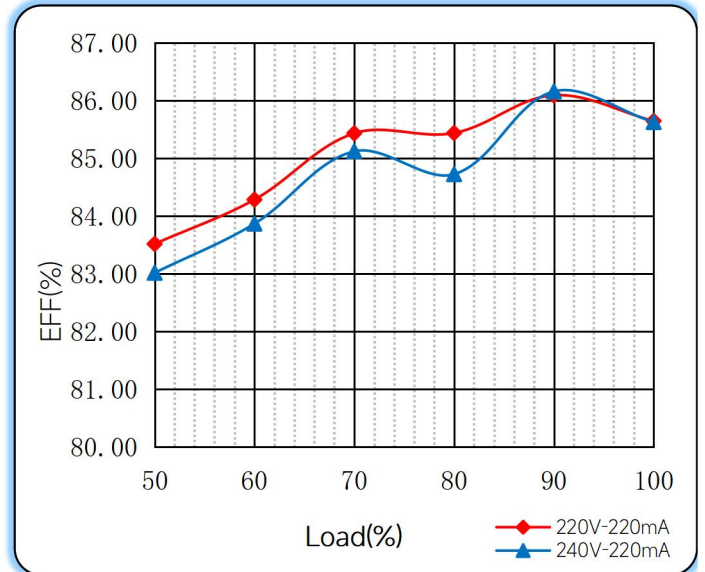
Model	Product Dimensions(mm)	weight/piece	Outer carton dimension(mm)	Quantity/carton	Net weight/carton(Kg)	Gross weight/carton(Kg)
LS-8-XXX S11 E	92X36X25	0.041	370X275X215	180	7.4	8

◆ Curve for LS-8-220 S11 E, I<sub>o</sub>=220mA

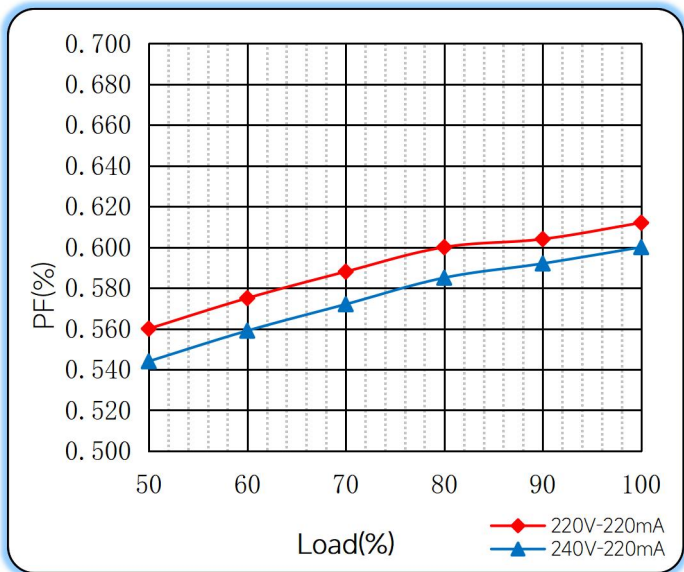
Lifetime vs. Temperature Curve



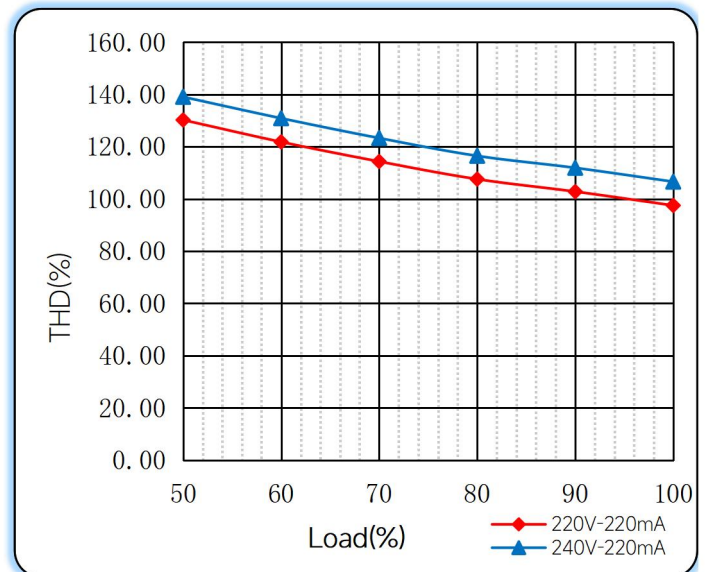
Efficiency vs. Load



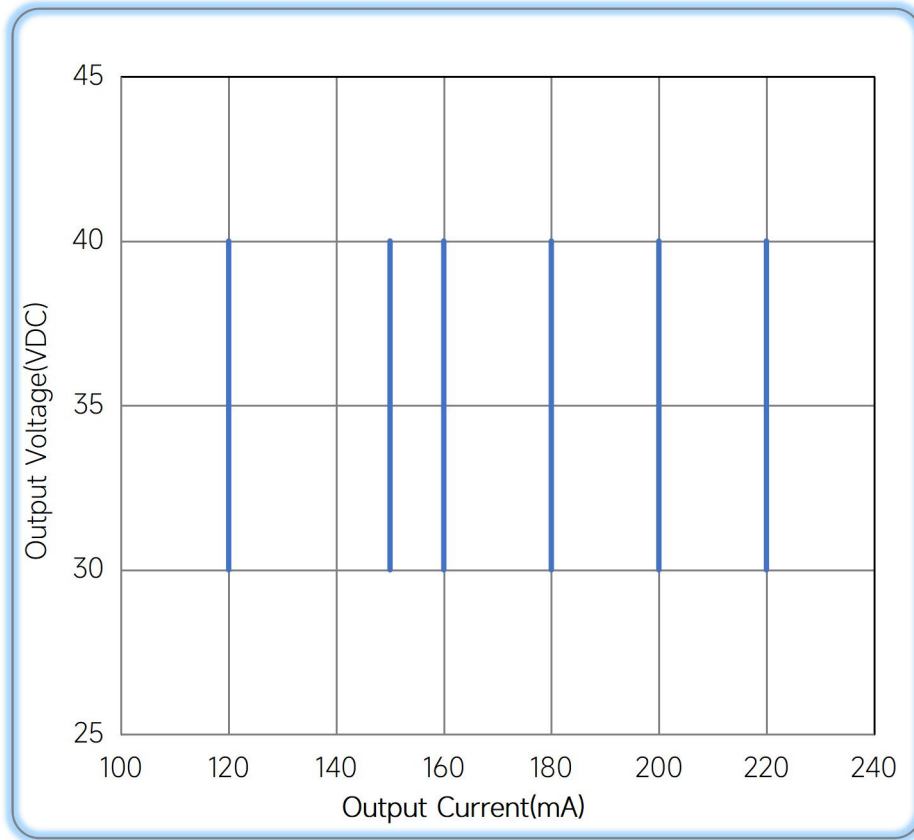
Power Factor Characteristics



THD vs. Load



### ◆ Operating window



— Operating window 100%

### ◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2025/09/29
2D diagram		Update	B	2026/04/24

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

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Manual