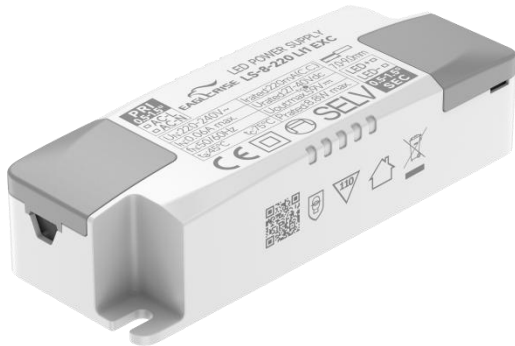


8W Constant Current power supply



■ Approve



Features

- For luminaries of protection Class II, SELV, independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor :0.95
- Efficiency: 68-80%
- 5 years warranty

Applications

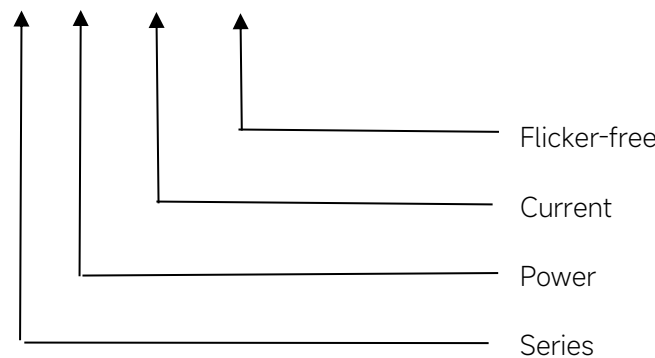
- LED panel, LED down light
- LED spot light

◆ Description

LS-8-XXX LI1 EXC is a 8W constant current LED driver that operates from 198-264Vac input with 70 to 220mA output current. With it's compact dimensions from 92 x 36 x 25mm it is easy to integrate in LED Panel, spot, down lights. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

◆ Model code

LS-8-XXX LI1 EXC



◆ Specification

Output	Constant Current (mA)	70	120	150	160	180	200	220		
	Voltage Range(VDC)	27-42					27-40			
	Unload voltage Max.(VDC)	59V								
	Current Accuracy	±10%	±7%				±5%			
	Output HF current ripple(≥1KHz)	±5%								
	Output LF current ripple(≤120Hz)	±3%								
	SVM	≤0.4								
	P _{st}	≤1								
	Efficiency(Typ.)	68%	76%	78%	79%	80%				
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(Typ.)	≥0.9								
	Power Factor	0.9	0.92	0.95						
	Input Current max	0.025A	0.038A	0.046A	0.048A	0.053A	0.058A	0.06A		
	Start-up time	< 0.5S								
	No Load Power	≤0.5W								
	THD (Typ.)	< 20%						< 10%		
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~+45°C								
	Humidity	10%-90%RH								
	T _c	75°C								
	Storage Temperature	-25°C~+60°C								
	Life time	> 50000h@T _c =75°C								
	Noise	≤20dB(A)@10cm								
Surface	Dimension	92x36x25mm								
	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								

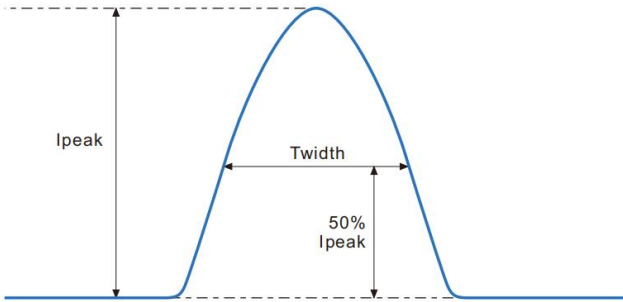
	Energy Efficiency	Erp2.0 EU 2019/2020
	RoHS	RoHS (2011/65/EU) (EU)2015/863
Note	<p>1.All parameters not specially mentioned are measured at 230VAC input , full load and 25°C of ambient temperature.</p> <p>2.Ripple & Noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uF & 47 uF parallel capacitor.</p> <p>3.Switch and dimmer are not recommended to connect between this product output and luminaries.</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>	

◆ Model list

Number	Model number	Input			Output			
		Voltage (VAC)	Current (A)	Frequency (Hz)	Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)
1	LS-8-70 LI1 EXC	220-240	0.025	50/60	70	27-42	59	3
2	LS-8-120 LI1 EXC		0.038		120			5
3	LS-8-150 LI1 EXC		0.046		150			6.3
4	LS-8-160 LI1 EXC		0.048		160			6.7
5	LS-8-180 LI1 EXC		0.053		180	7.6		
6	LS-8-200 LI1 EXC		0.058		200	8		
7	LS-8-220 LI1 EXC		0.06		220	8.8		

◆ Inrush Current

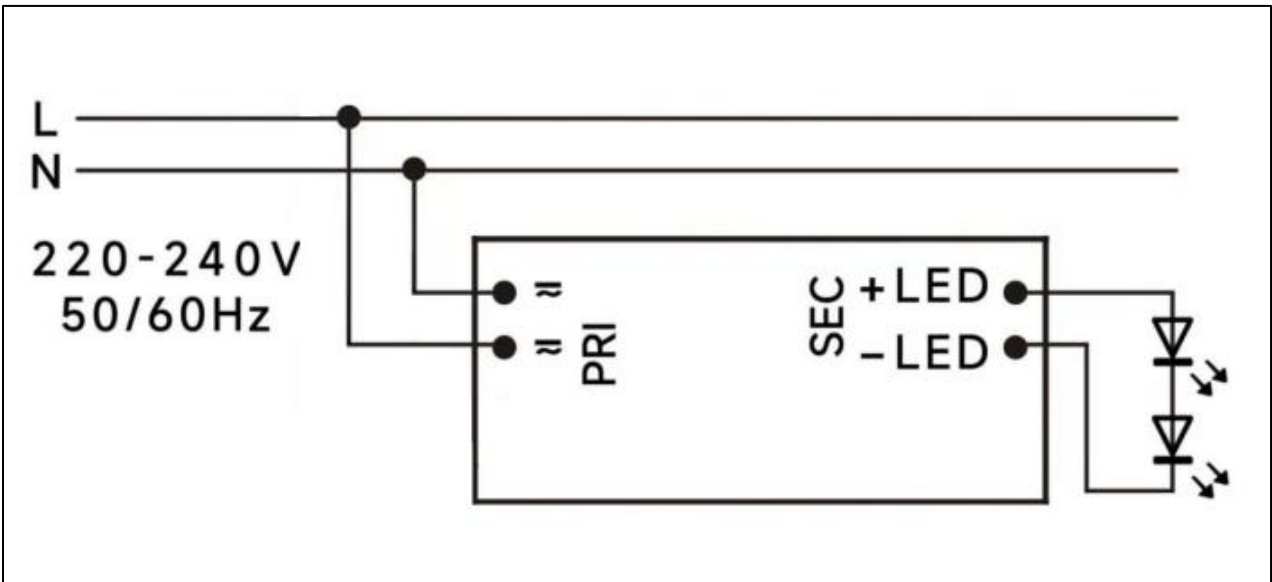
I_{peak}	Twidth	B10	B16	B20	C10	C16	C20
6.76A	122 μ s	102pcs	163pcs	204pcs	133pcs	213pcs	266pcs



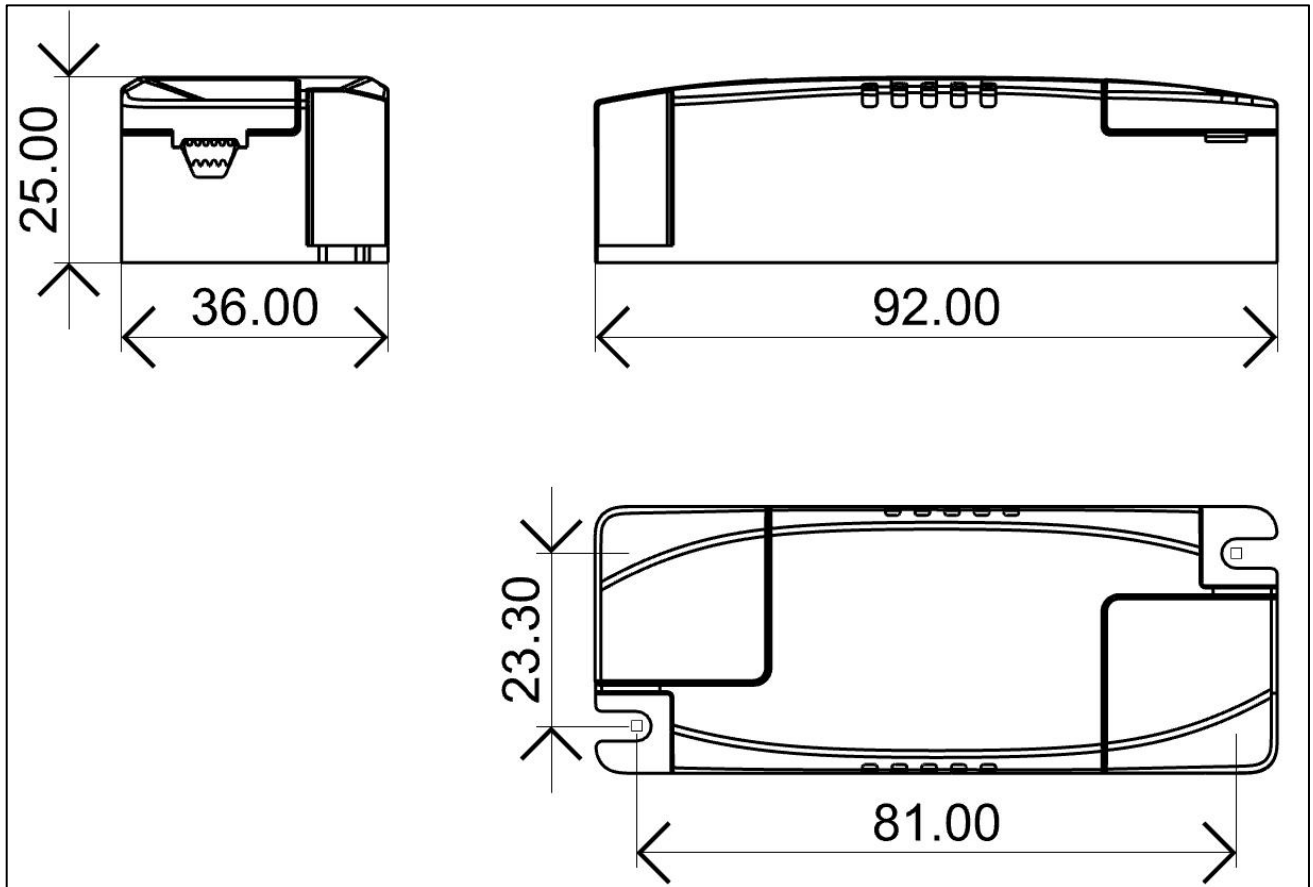
Remarks:

- 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.

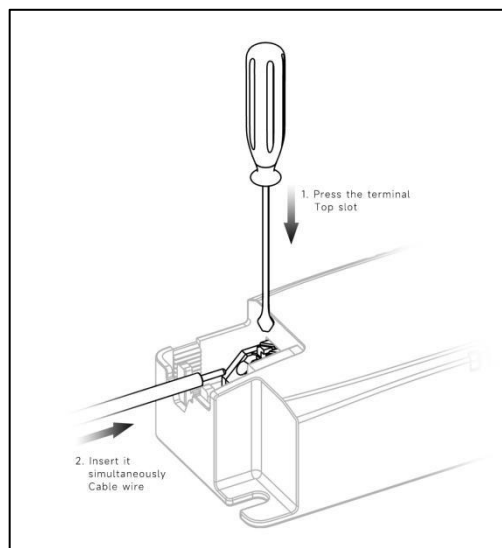
◆ Wiring diagram



◆ 2D diagram



Terminal



◆ Wiring & Connections

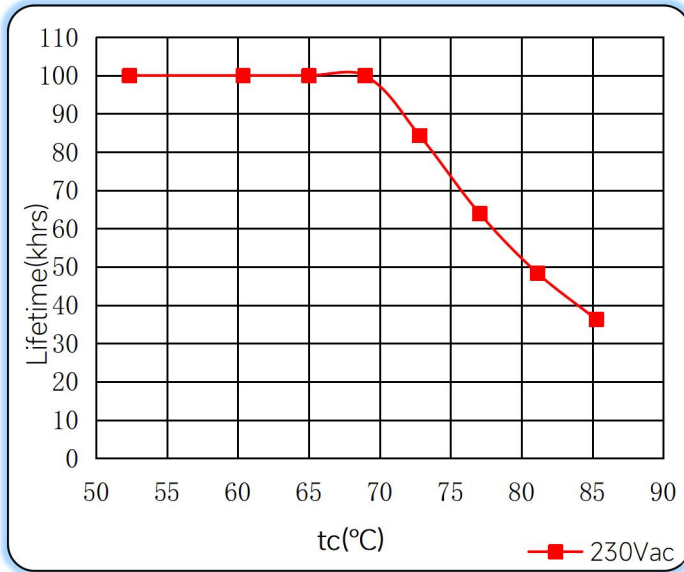
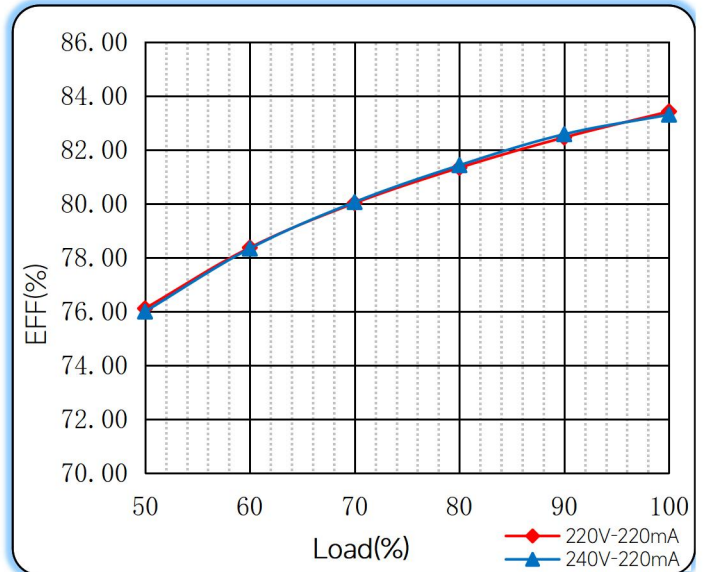
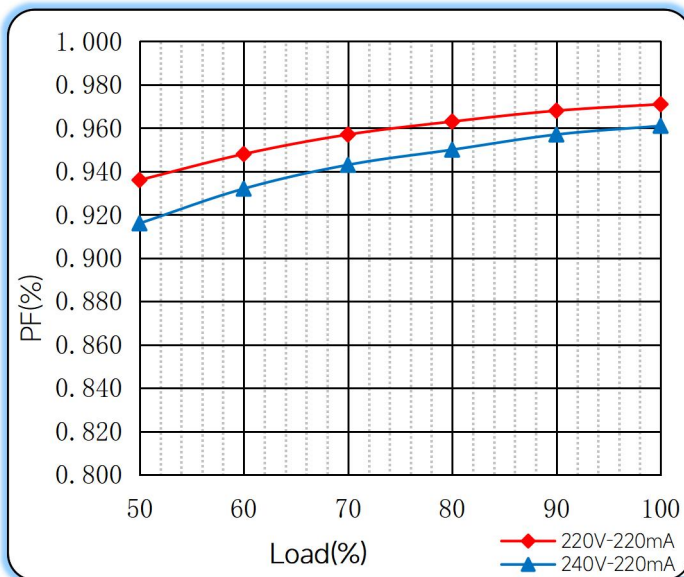
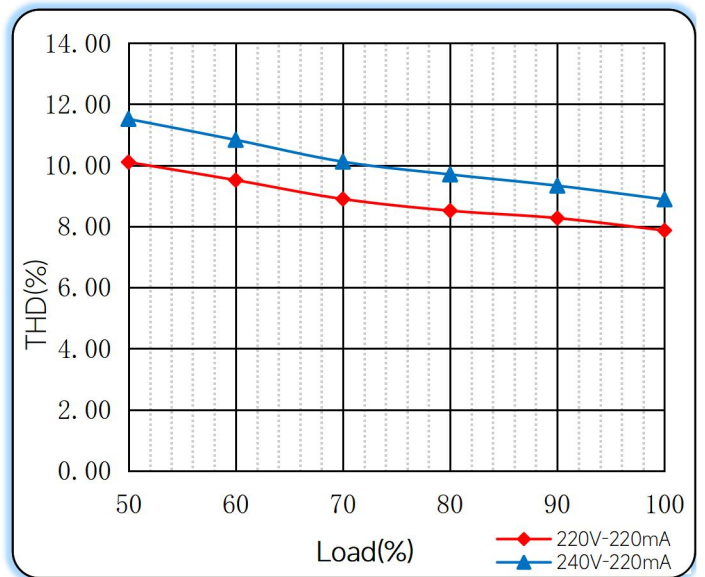
	Specification item	Value (Unit)
Input	Input wire cross-section	0.5...1.5 mm ²
	Input wire gauge.	16...20 AWG
	Input wire strip length	7...9mm
Output	Output wire cross-section	0.5...1.5 mm ²
	Output wire gauge.	16...20 AWG
	Output wire strip length	7...9mm

◆ Recommended wire

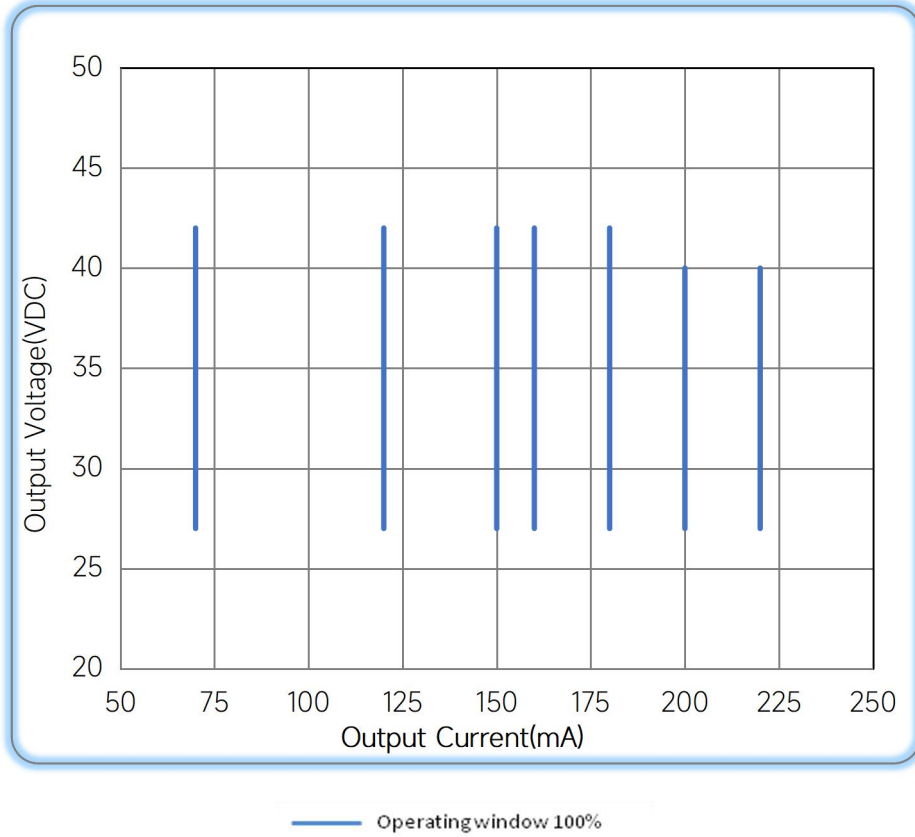
Wire cross-section	Wire type
2*0.5mm ²	H03VVH2-F 2core
2*0.75mm ²	H03VVH2-F 2core
1.5mm ²	CCC 08(RV-90)
16AWG(1.25mm ²)	UL1015

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

◆ Curve for LS-8-200 LI1 EXC, 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	2024/01/09

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

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EAGLERISE



Manual