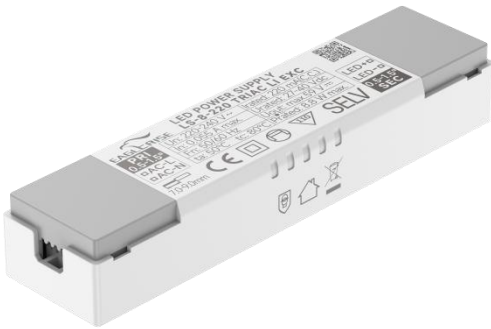


8W Triac Dimming power supply



■ Approve



Features

- For luminaires of protection Class II, SELV, Independent
- Input Voltage: 220-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor: 0.85C
- Efficiency: 80%
- 5 years warranty
- IP20

Applications

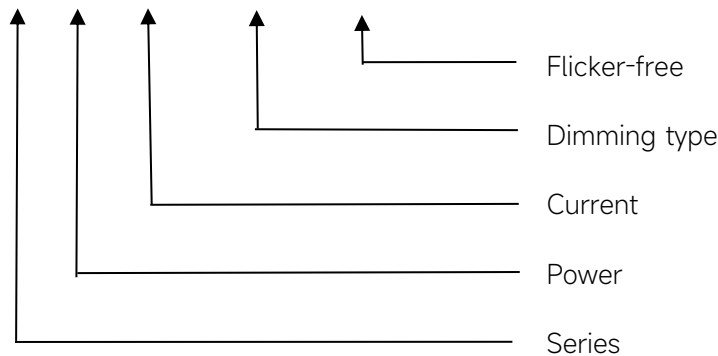
- LED panel, LED down light

◆ Description

LS-8-XXX TRIAC LI EXC is a 8W constant current LED driver that operates from 198-264Vac input with 120 to 220mA output current. With it's compact dimensions from 115 x 30 x 20.5 mm it is easy to integrate in LED panel, pendant light and down light products. To ensure trouble-free operation, protection is provided against output short circuit, over load, over voltage and over temperature.

◆ Model code

LS-8-XXX TRIAC LI EXC



◆ Specification

Output	Constant Current (mA)	120mA	200mA	220mA
	Voltage Range(VDC)	27-40VDC	27-40VDC	
	Unload voltage Max.	59VDC		
	Current Accuracy@220-240V	±10%	±7%	±6%
	Output HF current ripple(≥1KHz)	±5%		
	Output LF current ripple(≤120Hz)	±5%		
	SVM	≤0.4@Full load,230V		
	Pst	≤1@Full load,230V		
	Efficiency(Typ.)	75%@Full load,230V	80%@Full load,230V	83%@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	≥0.9@Full load,230V		
	Power Factor	0.85C@Full load,230V		
	Input Current max (A)	0.055A		
	Start-up time	< 0.5S		
	No Load Power	≤0.5W		
	THD (Typ.)	<25%		
	Dimming	Dimming	YES	
Dimming mode		Triac, Leading edge & trailing edge dimmable		
Dimming depth		10%@220-240V		
Dimming current range		10 ~ 100%		
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		
Withstand voltage	Input-Output	3750V/5mA/60S		
Environment	Operating Temperature	-20°C~+50°C		
	Humidity	20%-90%RH		
	Tc	80°C		
	Storage Temperature	-25°C~+80°C		
	Life time	> 50000h@Tc=75°C		
	Ripple&Noise	≤30dB(A)@20cm		

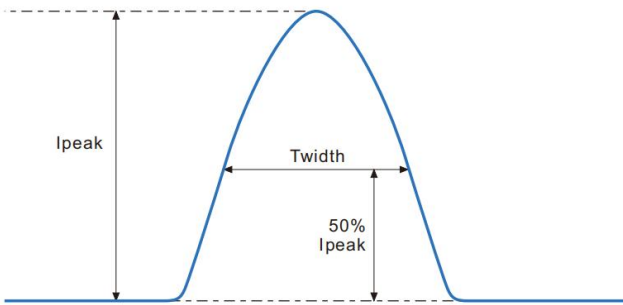
Surface	Dimension	115 x30 x 20.5mm
	material	PC
Standards	Safety	GB19510. 1, GB19510. 14;IEC61347- 1, IEC61347-2- 13;EN61347- 1, EN61347-2-13; EN62384
	EMC	GB/T17743, GB17625. 1;EN55015, EN61000-3-2, EN61000-3-3, EN61547;EN61000-4-5;EN61000-4-2,3,4,5,6,8,11, EN61547
	Energy Efficiency	Erp2.0 EU 2019/2020
	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.The over-temperature protection of the product is provided by the IC.</p> <p>4.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	LS-8-120 TRIAC LI EXC	120	27-40	59	5
2	LS-8-200 TRIAC LI EXC	200	27-40		8
3	LS-8-220 TRIAC LI EXC	220			8.8

◆ Inrush Current

I _{peak}	T _{width}	B10	B16	B20	C10	C16	C20
1.74A	54μs	145pcs	232pcs	290pcs	145pcs	232pcs	290pcs

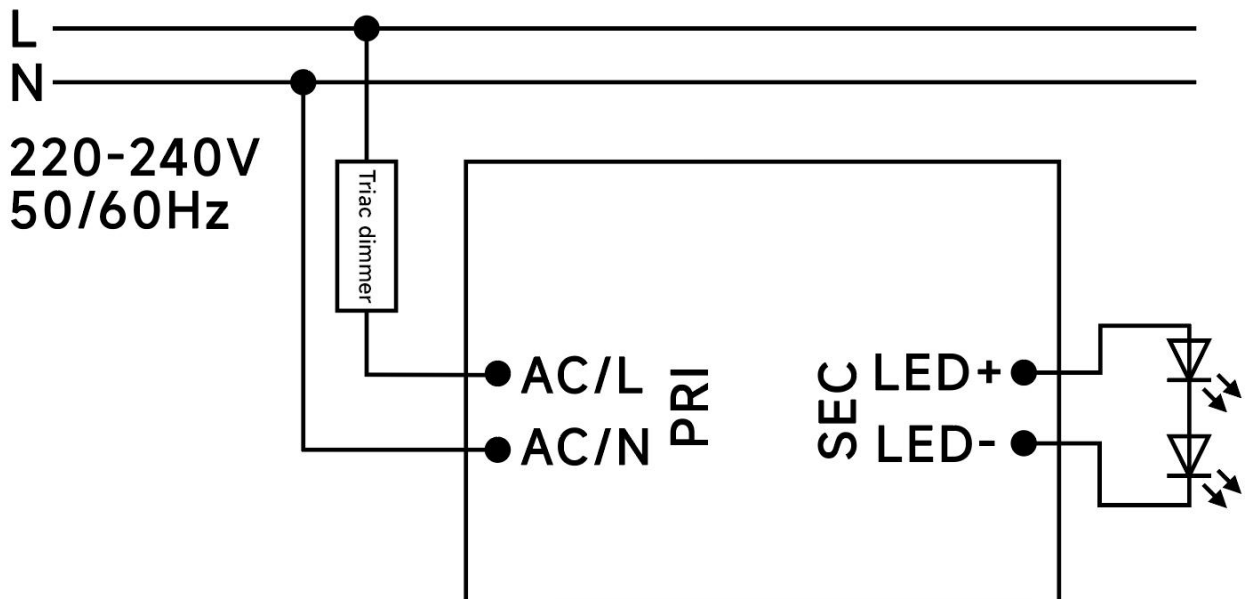


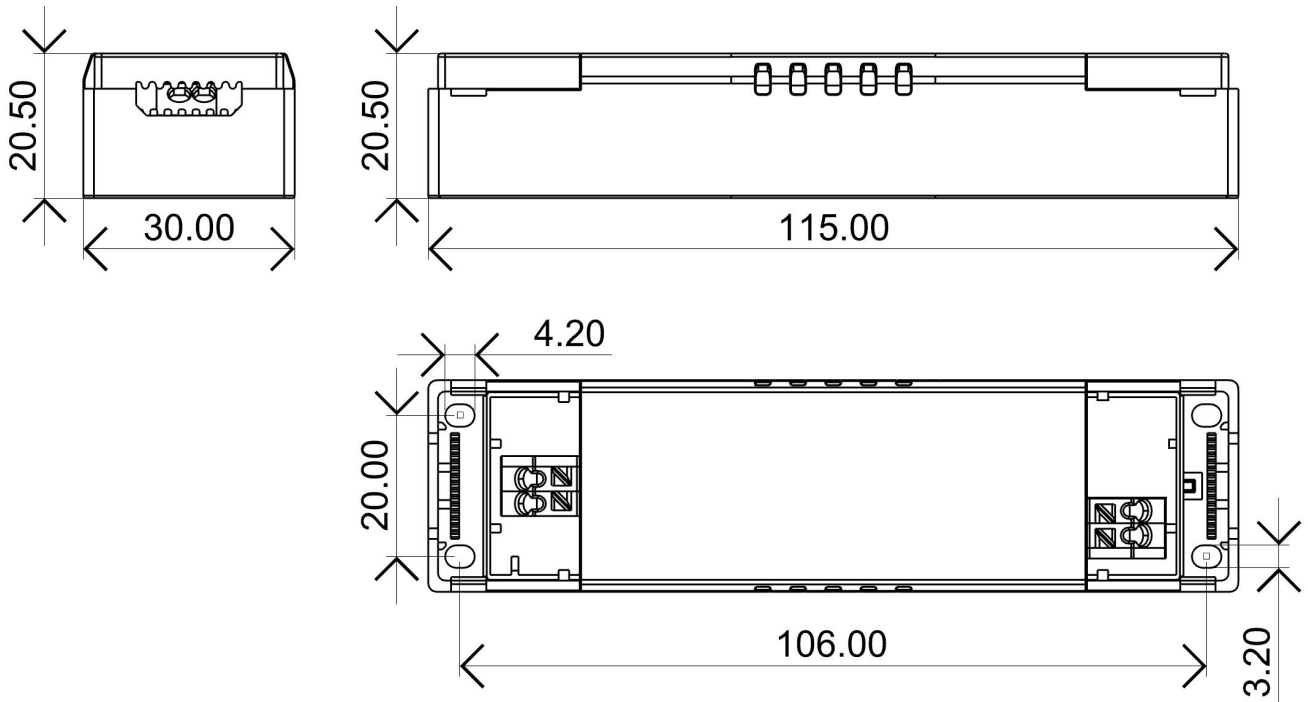
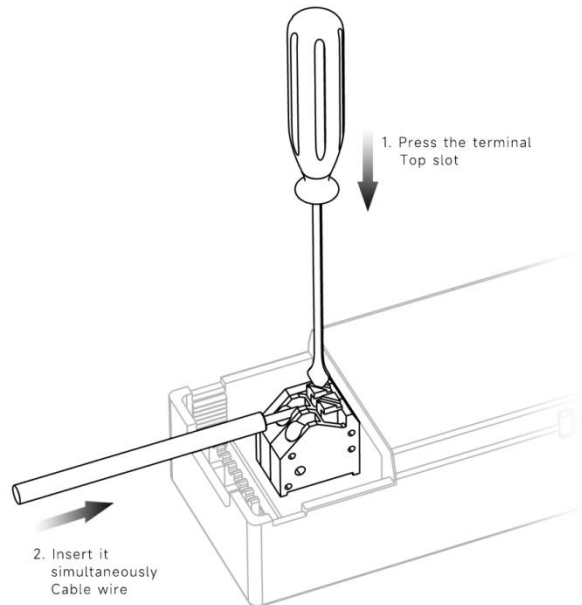
Remarks:

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

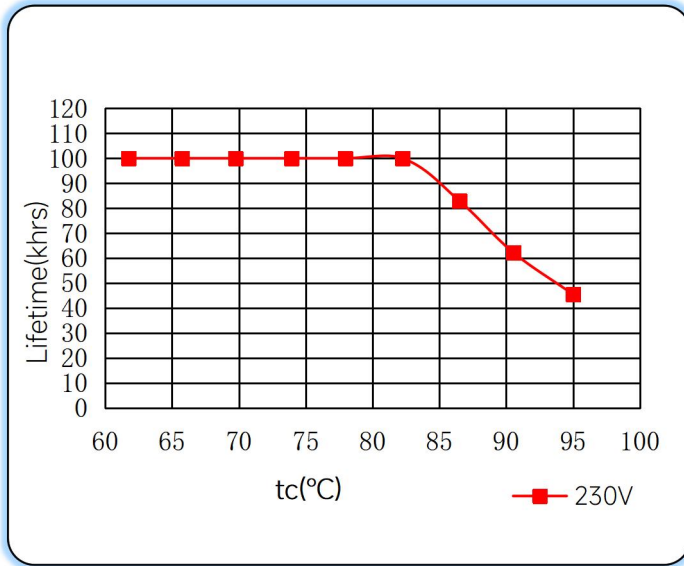
Note: Solid wire is risky to use on an angled terminal. Stranded wire is recommended for this kind of use.

◆ Packaging

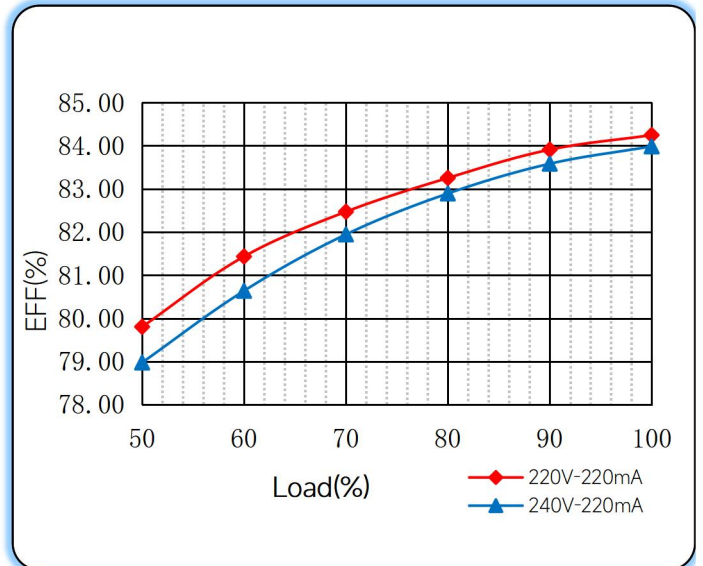
Model	Product Dimensions(mm)	weight/piece	Outer carton dimension(mm)	Quantity/carton	Net weight/carton(Kg)	Gross weight/carton(Kg)
LS-8-XXX TRIAC LI EXC	115X30X20.5	0.0488	370X275X215	203	10	10.7

◆ Curve for LS-8-220 TRIAC LI EXC, $I_o=220mA$

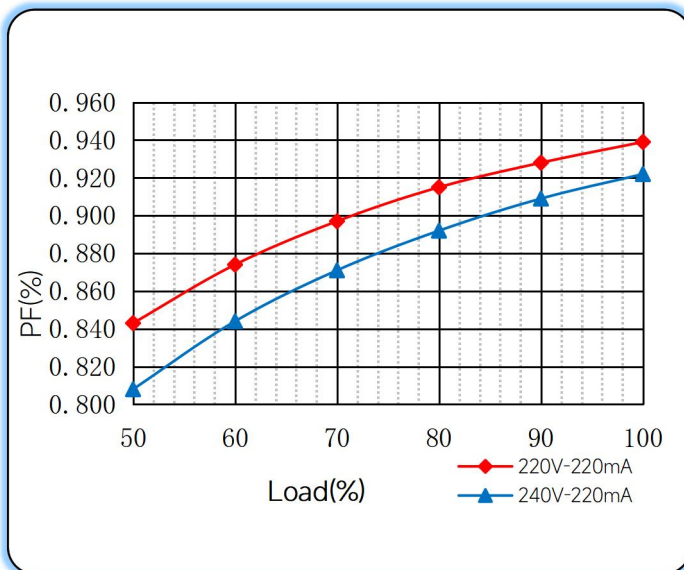
Lifetime vs. Temperature Curve



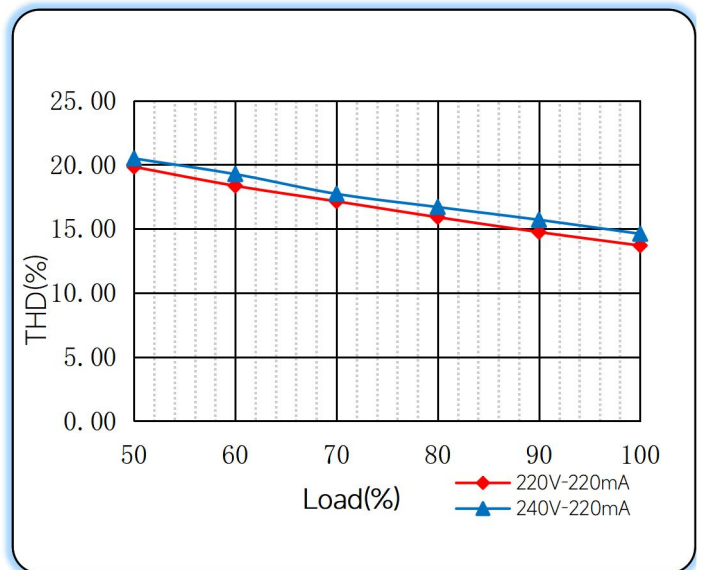
Efficiency vs. Load



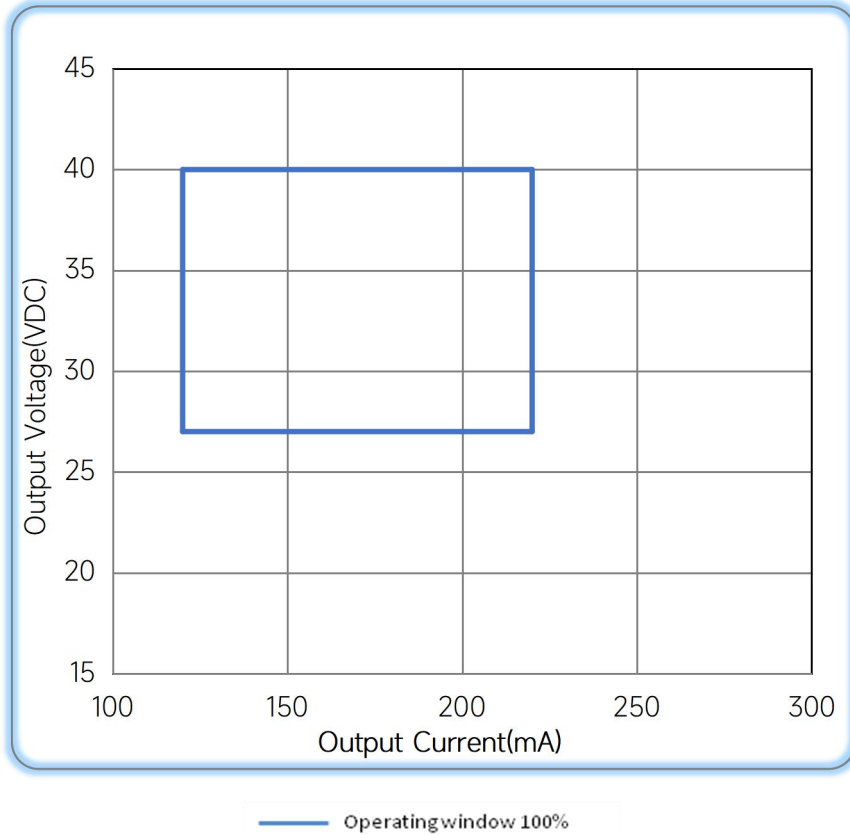
Power Factor Characteristics



THD vs. Load



◆ **Operating window**



◆ **Revision Updates**

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2025/01/16
Power Factor	0.9	0.85C	B	2025/11/24
Current Accuracy	±5%	±10%@120mA, ±7%@200mA, ±6%@220mA	C	2025/12/12

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