

## 9W LED Driver Constant current

LS-9-XXX TRIAC LI



■ Approve

**SELV** 

### ■ Features

- Class II, SELV, independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP
- Power Factor >0.9
- Efficiency ≥78%
- Support Leading edge & trailing edge dimmable
- 5 years warranty

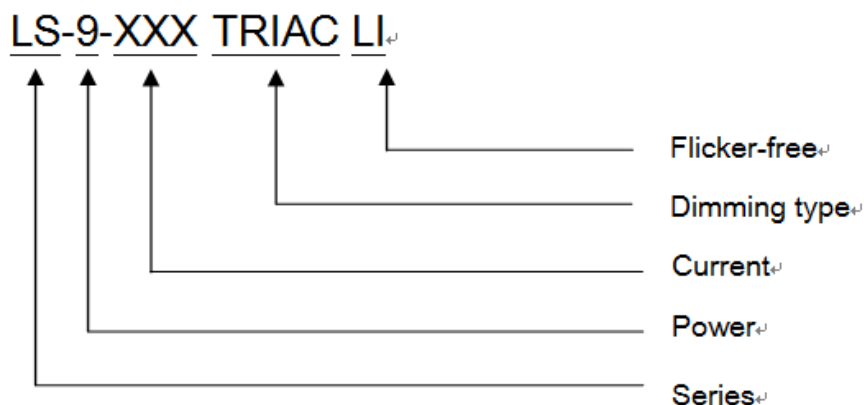
### ■ Applications(Typ.)

- LED panel
- LED pendant lights
- LED down lights

### ■ Description

LS-9-XXX TRIAC LI is a 9W constant current LED driver that operates from 198-264Vac input with 200mA to 500mA output current. With it's compact dimensions from 100 x 38 x 25mm 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 and over Load.

### ■ Model code



## 9W LED Driver Constant current

## LS-9-XXX TRIAC LI

### ■ Specification

Input	Rated input voltage	220-240Vac			
	Range of input voltage	198-264Vac			
	Frequency(Hz)	50/60 Hz			
	Power Factor	>0.9@230Vac, full load			
	Input Current max	0.08A MAX. @Full Load,198Vac			
	Start-up time	< 0.5S			
	Unload Power Consumption	≤1W			
	Inrush Current	10A Max. /60μs@230V, Full Load , 50%Ipk-50%Ipk			
	THD	< 25%@Full Load,230VAC			
	Leakage Current	< 0.5mA(240VAC)			
Output	Constant Current Max.	200mA	350mA	...	500mA
	Unload voltage Max. (VDC)	55V	35V	...	28V
	Voltage Range(VDC)	27-42V	17-27V	...	12-19V
	Rated power	8.4W Max.	9.5W Max.	...	9.5W Max
	Current Accuracy	±5%@220-240Vac (±7 for I <sub>o</sub> ≤300mA)			
	Voltage Regulation	±5% @Full Load, 220-240Vac			
	Load Regulation	±5%@220-240Vac			
	Hold-up Time	1s max.@Full Load			
	Ripple & Noise *Note.2	≤±3% @Full Load,230VAC			
	Output LF current ripple(<120Hz)	≤±3% @Full Load,230VAC			
	Efficiency(Typ.)	≥78% @Full Load,230VAC			
Dimming	Dimming mode	Triac , Leading edge & trailing edge dimmable			
	Dimming current range	10% ~ 100%			
Protection	Over Load Protection	103-120% Protection type: Auto Resume			
	Over Voltage Protection	>55VDC	>35VDC	...	>28VDC
	Short circuit Protection	Protection type: Auto Resume			
Environment	Operating Temperature	-20°C...+50°C			
	tc	80°C			
	Storage Temperature	-25°C...+60°C			
	Life time	> 30,000h@ta=50°C			
	Humidity	20%-90%RH			
Others	Dimension	100X38X25(LXWXH)mm			
Safety & EMC	Safety standards	EN 61347-1; EN61347-2-13; EN62384			
	Withstand voltage	Input-output : 3750V/5mA/1min			
	Isolation resistance	Input-output : ≥4MΩ@500VDC			
	EMI	EN55015; EN61000-3-2 Class C; EN61000-3-3			
	EMS	EN 61547; EN 61000-4-2; EN 61000-4-5 —L-N: 500V			
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.Output current can be from 200mA to 500mA and increasing in multiples of 50mA. Please see Model list below and contact EAGLERISE for details.				

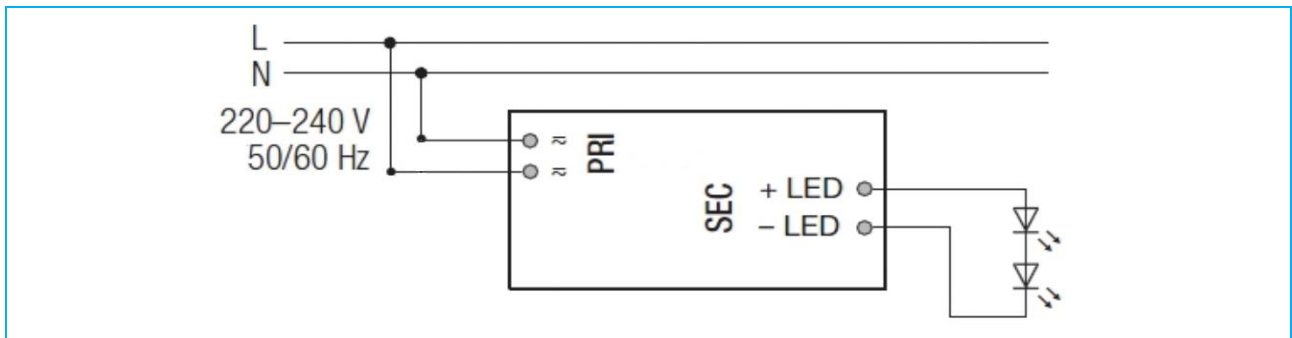
## 9W LED Driver Constant current

## LS-9-XXX TRIAC LI

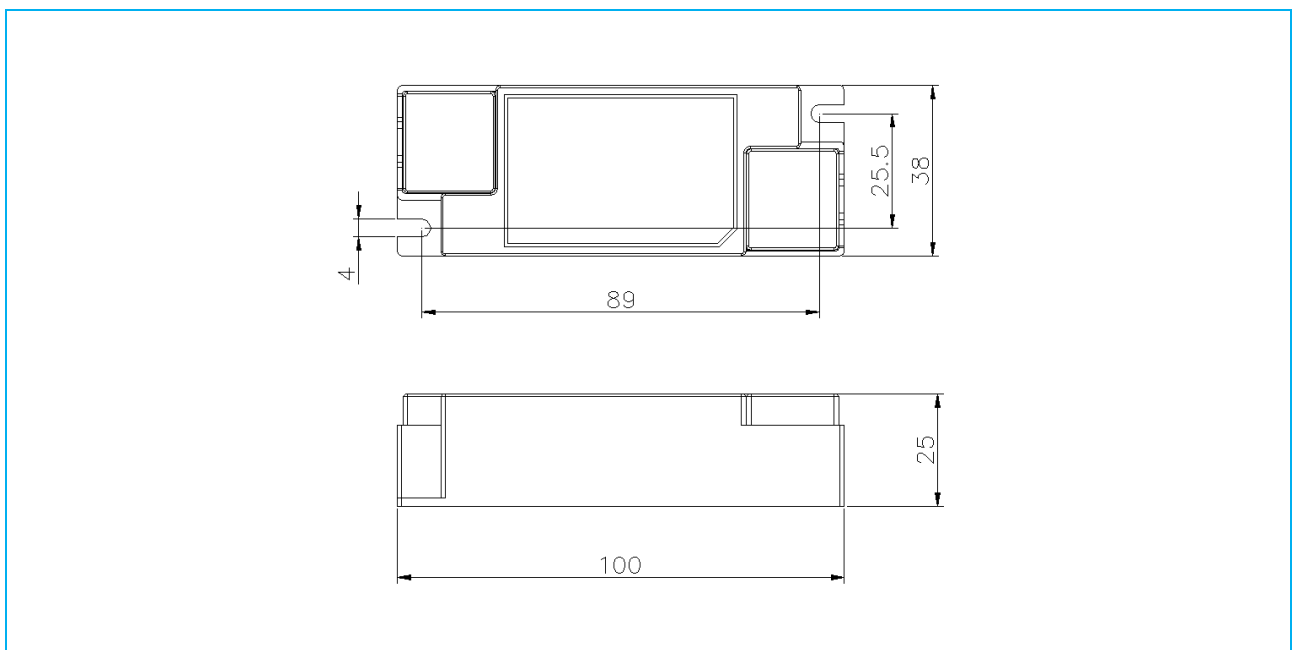
### Model list

No	Model number	Input			Output			Max. Prated(W)
		Voltage (VAC)	Max.Current (A)	Frequency (Hz)	Constant current (mA)	Normal working voltage (VDC)	No load working voltage (VDC)	
1	LS-9-200 TRIAC LI	220-240	0.08	50/60	200	27-42	55	8.4
2	LS-9-250 TRIAC LI	220-240	0.08	50/60	250	25-38	50	9.5
3	LS-9-300 TRIAC LI	220-240	0.08	50/60	300	20-30	40	9
4	LS-9-350 TRIAC LI	220-240	0.08	50/60	350	17-27	35	9.5
5	LS-9-400 TRIAC LI	220-240	0.08	50/60	400	15-23	33	9.2
6	LS-9-450 TRIAC LI	220-240	0.08	50/60	450	13-20	30	9
7	LS-9-500 TRIAC LI	220-240	0.08	50/60	500	12-19	28	9.5

### Wiring diagram



### 2D diagram

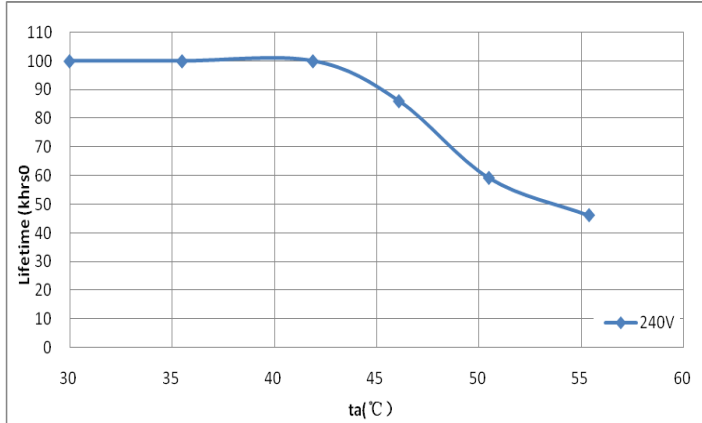


### Curve for LS-9-350 TRIAC LI

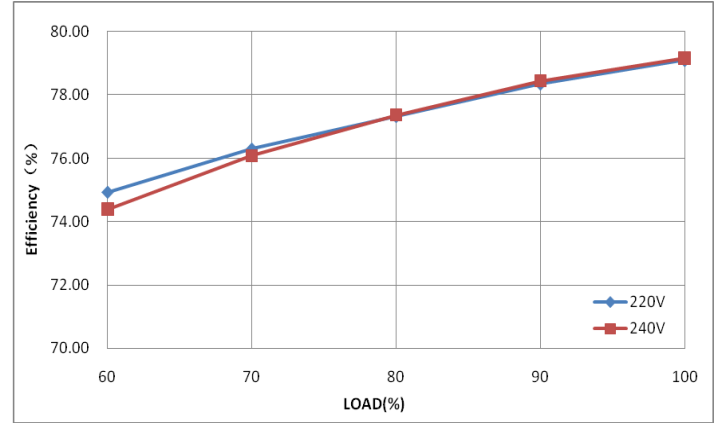
## 9W LED Driver Constant current

## LS-9-XXX TRIAC LI

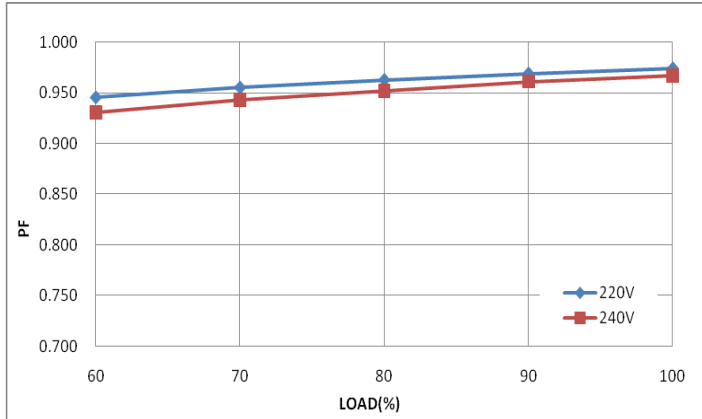
**Lifetime vs. Ambient Temperature Curve**



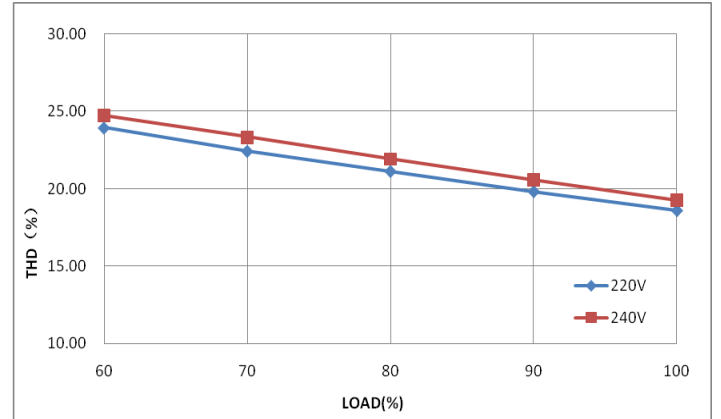
**Efficiency vs. Load**



**Power Factor Characteristics**



**THD vs. Load**



### ■ Operating window

