

30W LED Driver Constant current

LS-30-XXX TRIAC LI

■ Approve

SELV CE

■ Features

- Class II, SELV, independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP
- Power Factor 0.95 ± 0.05
- Efficiency $\geq 86\%$
- Support Leading edge & trailing edge dimmable
- 5 years warranty

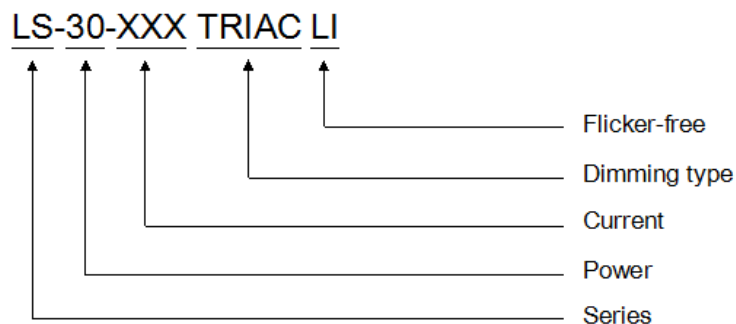
■ Applications(Typ.)

- LED panel
- LED pendant lights
- LED down lights

■ Description

LS-30-XXX TRIAC LI is a 30W constant current LED driver that operates from 198-264Vac input with 350-900mA output current. With its compact dimensions from 150 X 45 X 30 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 and over Load.

■ Model code



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■ Specification

Input	Rated input voltage	220-240Vac			
	Range of input voltage	198-264Vac			
	Frequency(Hz)	50/60 Hz			
	Power Factor	0.95±0.05@230Vac, full load			
	Input Current max	0.25A MAX. @Full Load,198Vac			
	Start-up time	< 0.5S			
	Unload Power Consumption	≤1W			
	Inrush Current	30A Max. /330µs@230V, Full Load , 50%Ipk-50%Ipk			
	THD	< 20% @Full Load,230VAC			
	Leakage Current	< 0.7mA(240VAC)			
Output	Constant Current Max. *Note.3	350mA	400mA	...	900mA
	Unload voltage Max. (VDC)	105V	93V	...	49V
	Voltage Range(VDC)	60-85V	50-75V	...	22-34V
	Rated power	29.8W Max.	30W Max.	...	30.6W Max.
	Current Accuracy	±5%@220-240Vac			
	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.)	≥86%			
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	>105VDC	>93VDC	...	> 49VDC
	Short circuit Protection	Protection type: Auto Resume			
Environment	Operating Temperature	-20°C...+45°C			
	tc	70°C			
	Storage Temperature	-20°C...+60°C			
	Life time	> 30,000h@ta=45°C			
	Humidity	20%-90%RH			
Others	Dimension	150X45X30 (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: 1KV			
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 0.1µF & 47 µF parallel capacitor. 3.Output current can be from 350mA to 900mA and increasing in multiples of 50mA. Please see Model list below and contact EAGLERISE for details.				

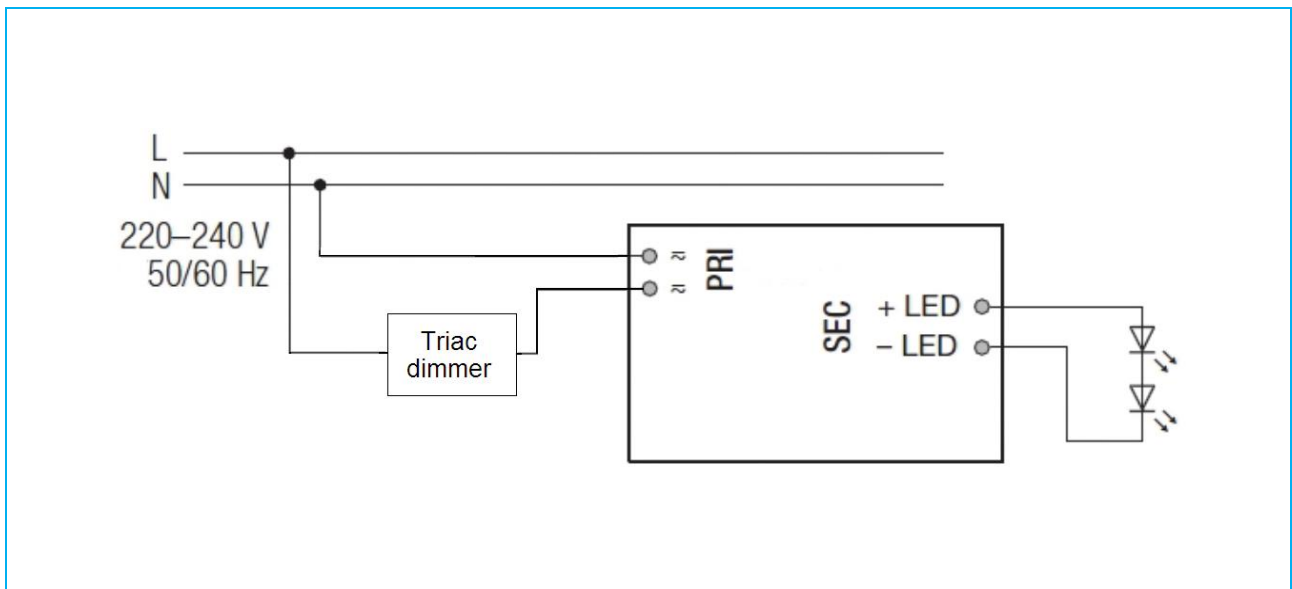
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Model list

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-30-350 TRIAC LI	220-240	0.25	50/60	350	60-85	105	29.8
2	LS-30-400 TRIAC LI	220-240	0.25	50/60	400	50-75	93	30.0
3	LS-30-450 TRIAC LI	220-240	0.25	50/60	450	50-70	88	31.5
4	LS-30-500 TRIAC LI	220-240	0.25	50/60	500	40-60	78	30.0
5	LS-30-550 TRIAC LI	220-240	0.25	50/60	550	35-55	72	30.3
6	LS-30-600 TRIAC LI	220-240	0.25	50/60	600	35-50	65	30.0
7	LS-30-650 TRIAC LI	220-240	0.25	50/60	650	30-45	62	29.3
8	LS-30-700 TRIAC LI	220-240	0.25	50/60	700	27-42	57	29.4
9	LS-30-750 TRIAC LI	220-240	0.25	50/60	750	27-40	55	30.0
10	LS-30-800 TRIAC LI	220-240	0.25	50/60	800	27-40	55	32.0
11	LS-30-850 TRIAC LI	220-240	0.25	50/60	850	24-37	52	31.5
12	LS-30-900 TRIAC LI	220-240	0.25	50/60	900	22-34	49	30.6

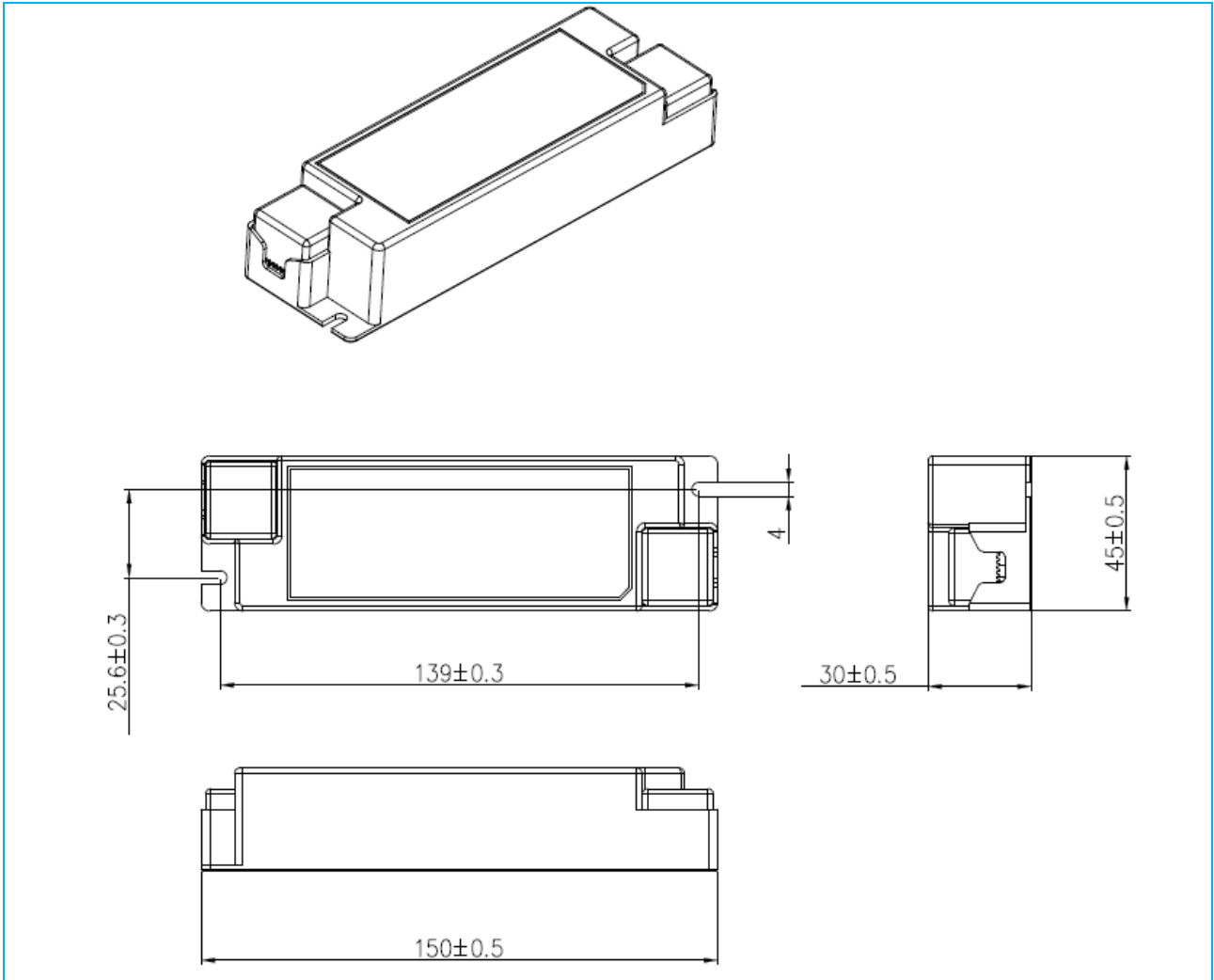
Wiring diagram



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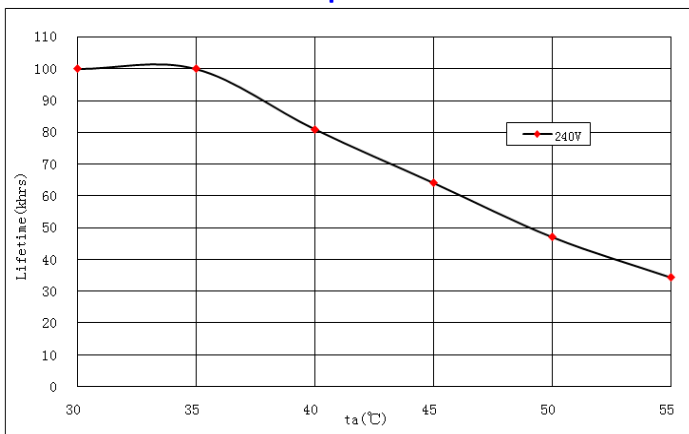
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■ 2D diagram

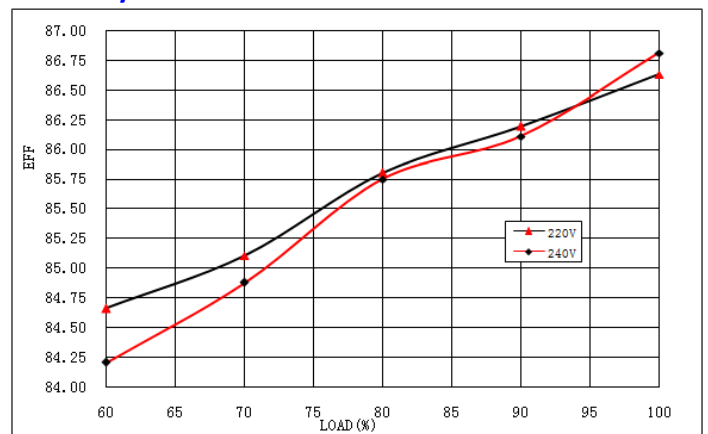


■ Curve for LS-30-800 TRIAC LI

Lifetime vs. Ambient Temperature Curve



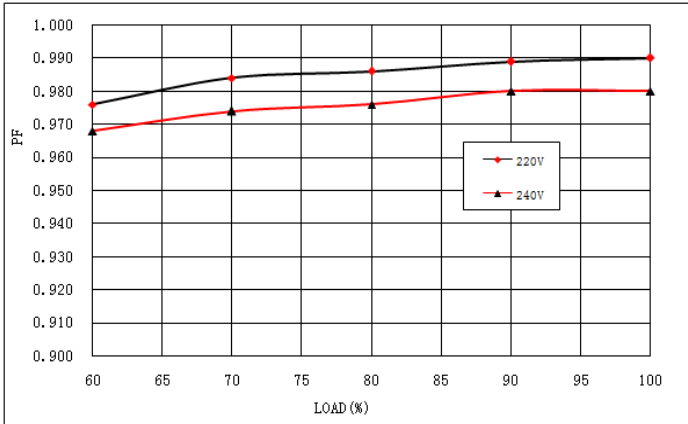
Efficiency vs. Load



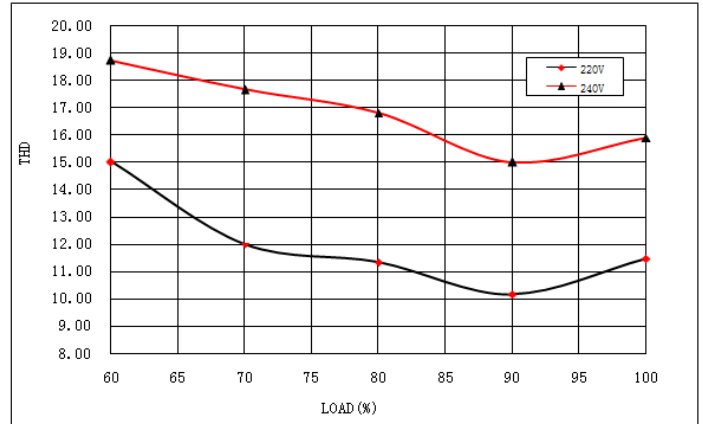
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Power Factor Characteristics



THD vs. Load



■ **Operating window**

