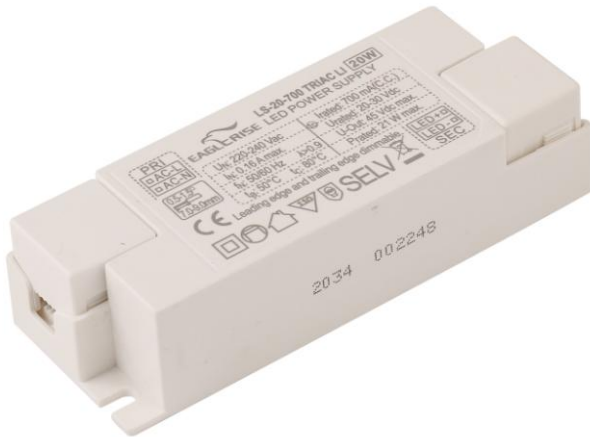


20W LED Driver Constant current

LS-20-XXX TRIAC LI



■ Approve



■ Features

- Class II, SELV, independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP
- Power Factor 0.95±0.05
- Efficiency ≥83%
- Support Leading edge & trailing edge dimmable
- 5 years warranty

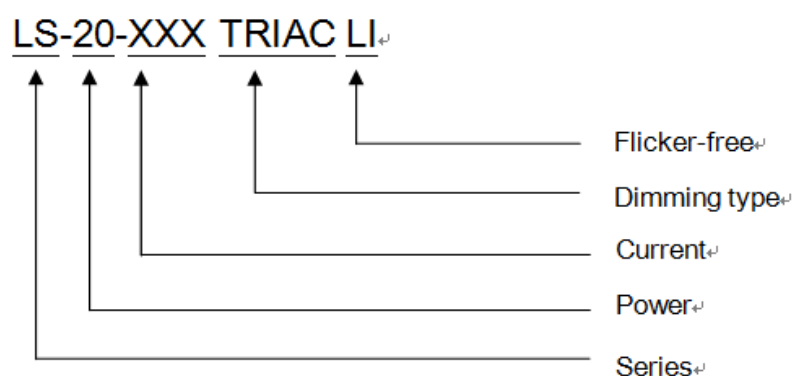
■ Applications(Typ.)

- LED panel
- LED pendant lights
- LED down lights

■ Description

LS-20-XXX TRIAC LI is a 20W constant current LED driver that operates from 198-264Vac input with 300-700mA output current. With it's compact dimensions from 116 x 42.5 x 28mm 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



20W LED Driver Constant current

LS-20-XXX TRIAC LI

■ 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	0.16A 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	< 0.7mA(240VAC)			
Output	Constant Current Max. *Note.3	300mA	350mA	...	700mA
	Unload voltage Max. (VDC)	80V	75V	...	40V
	Voltage Range(VDC)	50-68V	40-60V	...	20-30V
	Rated power	20.4W Max.	21W Max.	...	21W 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.)	≥83%			
Dimming	Dimming mode	Triac , Leading edge & trailing edge dimmable			
	Dimming current range	10% ~ 100%			
Protection	Over Load Protection	105-120% Protection type: Auto Resume			
	Over Voltage Protection	>80VDC	>75VDC	...	> 40VDC
	Short circuit Protection	Protection type: Auto Resume			
Environment	Operating Temperature	-20°C...+50°C			
	tc	80°C			
	Storage Temperature	-20°C...+60°C			
	Life time	> 30,000h@ta=50°C			
	Humidity	20%-90%RH			
Others	Dimension	116X42.5X28 (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 300mA to 700mA and increasing in multiples of 50mA. Please see Model list below and contact EAGLERISE for details.				

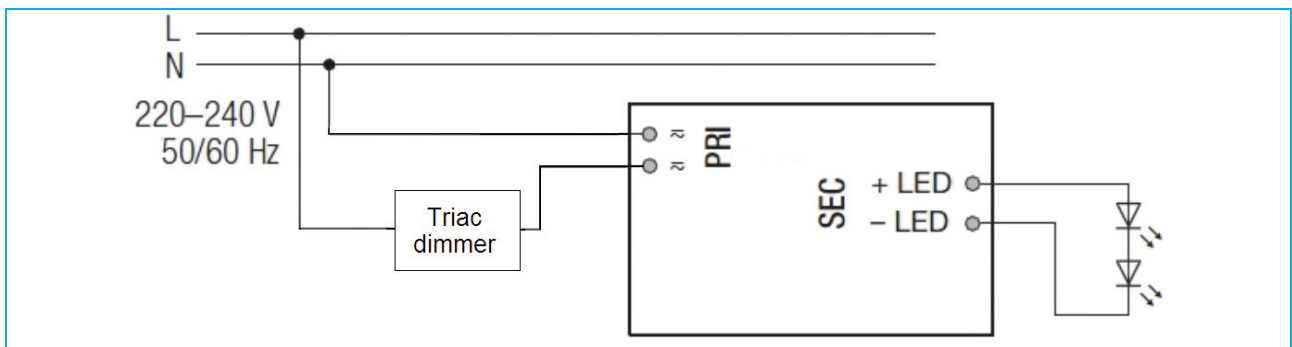
20W LED Driver Constant current

LS-20-XXX TRIAC LI

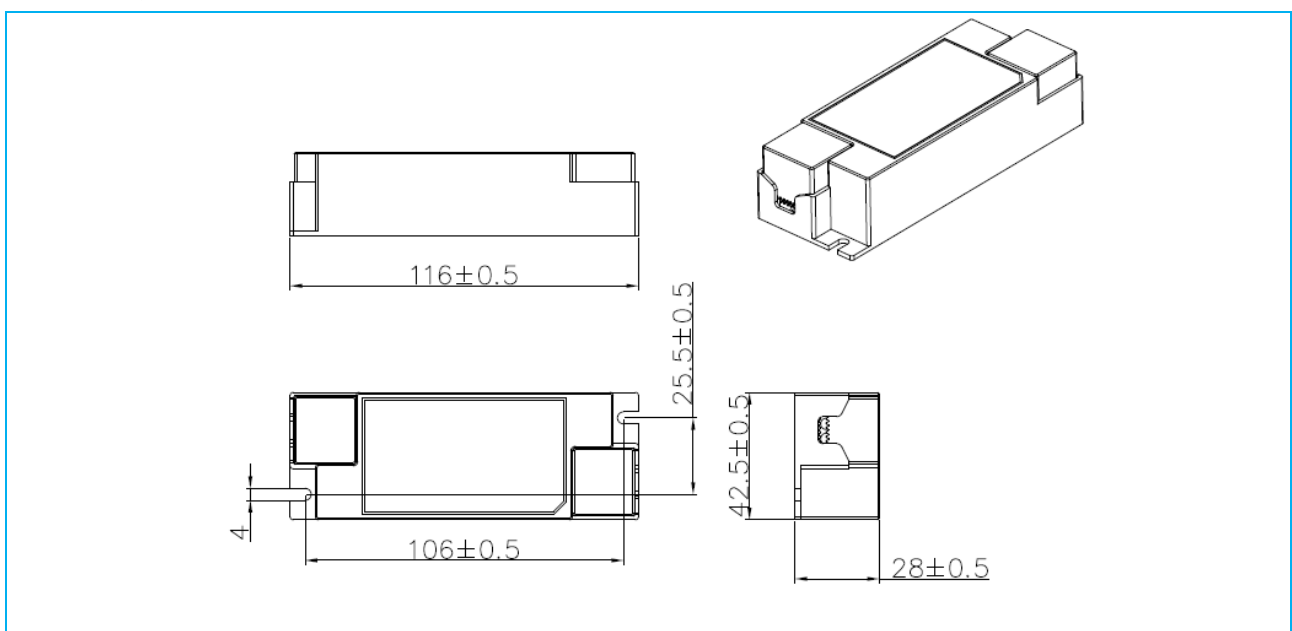
Model list

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-20-300 TRIAC LI	220-240	0.16	50/60	300	50-68	80	20.4
2	LS-20-350 TRIAC LI	220-240	0.16	50/60	350	40-60	75	21
3	LS-20-400 TRIAC LI	220-240	0.16	50/60	400	32-50	59	20
4	LS-20-450 TRIAC LI	220-240	0.16	50/60	450	27-42	53	18.9
5	LS-20-500 TRIAC LI	220-240	0.16	50/60	500	27-42	53	21
6	LS-20-550 TRIAC LI	220-240	0.16	50/60	550	25-38	50	20.9
7	LS-20-600 TRIAC LI	220-240	0.16	50/60	600	22-34	46	20.4
8	LS-20-650 TRIAC LI	220-240	0.16	50/60	650	20-30	40	19.5
9	LS-20-700 TRIAC LI	220-240	0.16	50/60	700	20-30	40	21

Wiring diagram



2D diagram

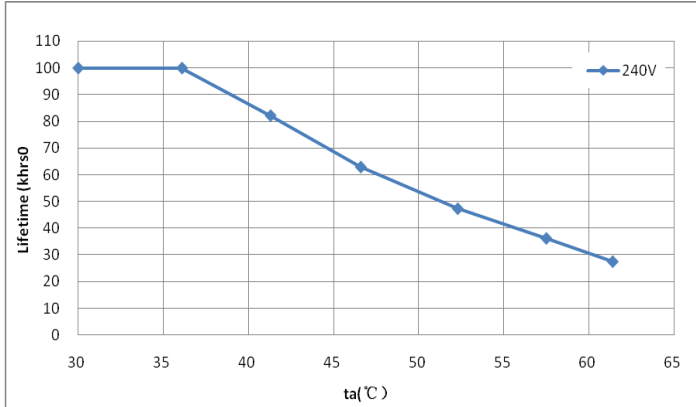


20W LED Driver Constant current

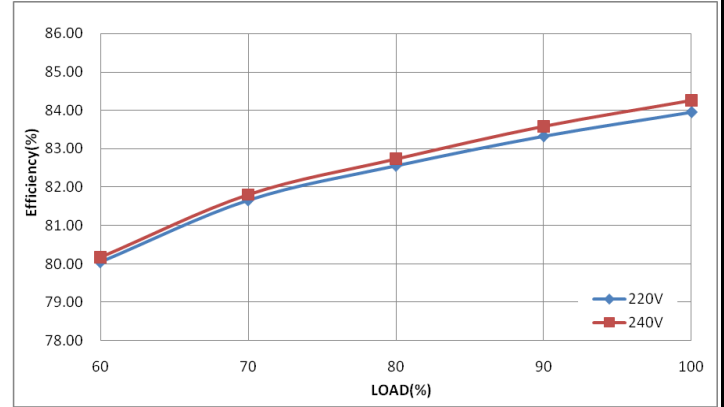
LS-20-XXX TRIAC LI

■ Curve for LS-20-700 TRIAC LI

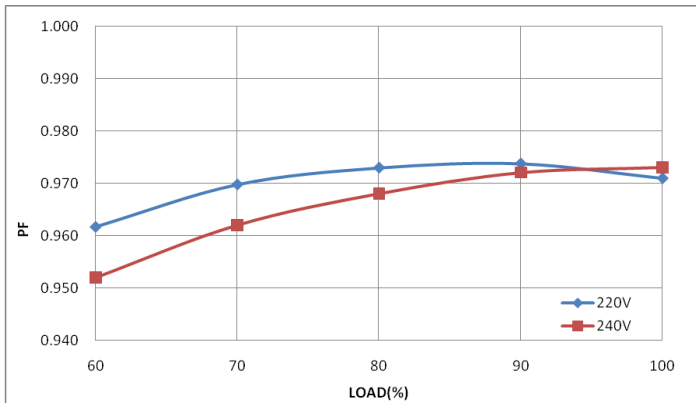
Lifetime vs. Ambient Temperature Curve



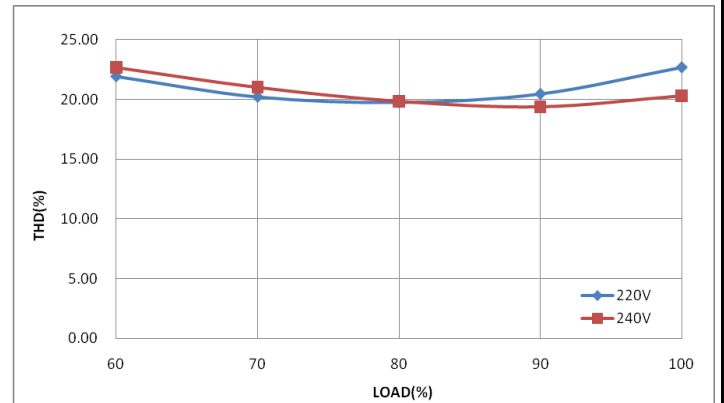
Efficiency vs. Load



Power Factor Characteristics



THD vs. Load



■ Operating window

