

## 12W Triac Dimming power supply



■ Approve



### Features

Class II, SELV, independent  
Input Voltage: 220-240VAC  
Protections: SCP/OLP/OVP  
Power Factor: 0.95  
Efficiency: 82%  
5 years warranty  
IP20

### Applications

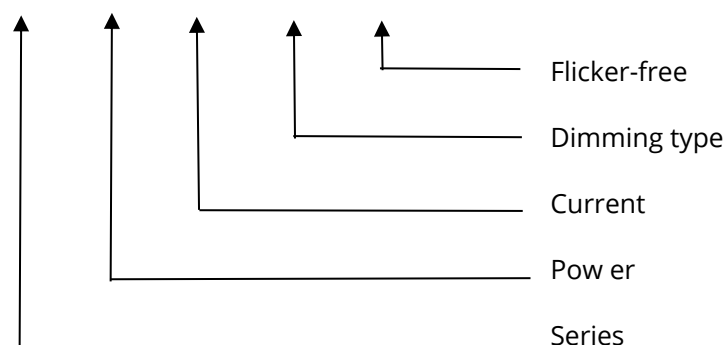
LED panel, LED down light  
LED spot light

## Description

LS-12-XXX TRIAC LI is a 12W constant current LED driver that operates from 198-264Vac input with 250-700mA 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

LS-12-XXX TRIAC LI



## Specification

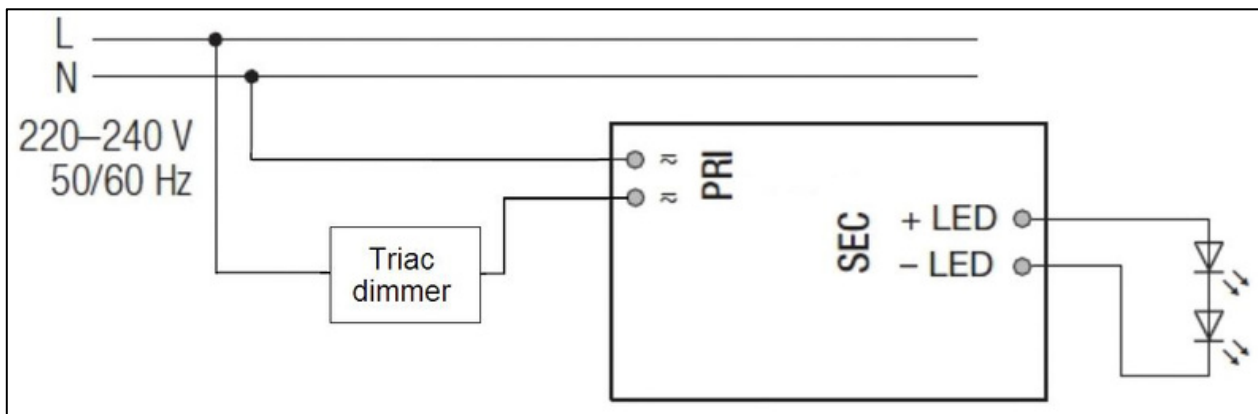
Output	ConstantCurrent(mA)	250mA	300mA	.....	700mA
	Voltage Range(VDC)	32-48V	26-40V	.....	12-18V
	Unload voltageMax.(VDC)	59V	50V	.....	25V
	CurrentAccuracy	±5%			
	Output HF current ripple(≥1KHz)	±5%			
	Output LF current ripple(≤120Hz)	±5%			
	SVM	<0.4			
	Pst	<1			
	Efficiency(Typ.)	≥82%@FullLoad,230VAC			
Input	Rated input voltage(VAC)	220-240VAC			
	Range of input voltage(VAC)	198-264VAC			
	Range of input voltage(VDC)	198-280VDC			
	Frequency(Hz)	50/60Hz			
	Displacement factor	≥0.9			
	Power Factor	0.95±0.05			
	Input Currentmax	0.1AMAX.			
	Start-uptime	<0.5S			
	No Load Power	≤1W			
	THD(Typ.)	<25%@FullLoad,230VAC			
D imming	Dimming	YES			
	Dimming mode	Triac, Leadingedge&trailingedge dimmable			
	Dimming depth	10%			
	Dimming current range	10~100%			
Protection	Over Load Protection	103-120% YES/Latch off			
	Over Voltage Protection	>59VDC	>50VDC	...	>25VDC
	Short circuit Protection	YES/Latchoff			
	Operating Temperature	-20°C...+50°C			
Environment	Humidity	20%-90%RH			
	Tc	80°C			
	Storage Temperature	-20°C...+60°C			
	Lifetime	>30,000h@ta=50°C			
Surface	Dimension	116X42.5X28(LXWXH)mm			
standards	EN 61347-1,EN 61347-2-13;GB 19510.1,GB 19510.14;EN 62384;EN IEC 55015,EN IEC 61000-3-2, EN 61000-3-3;GB/T 17743,GB 17625.1;EN 61547				
Others	ErP EU2019/2020				

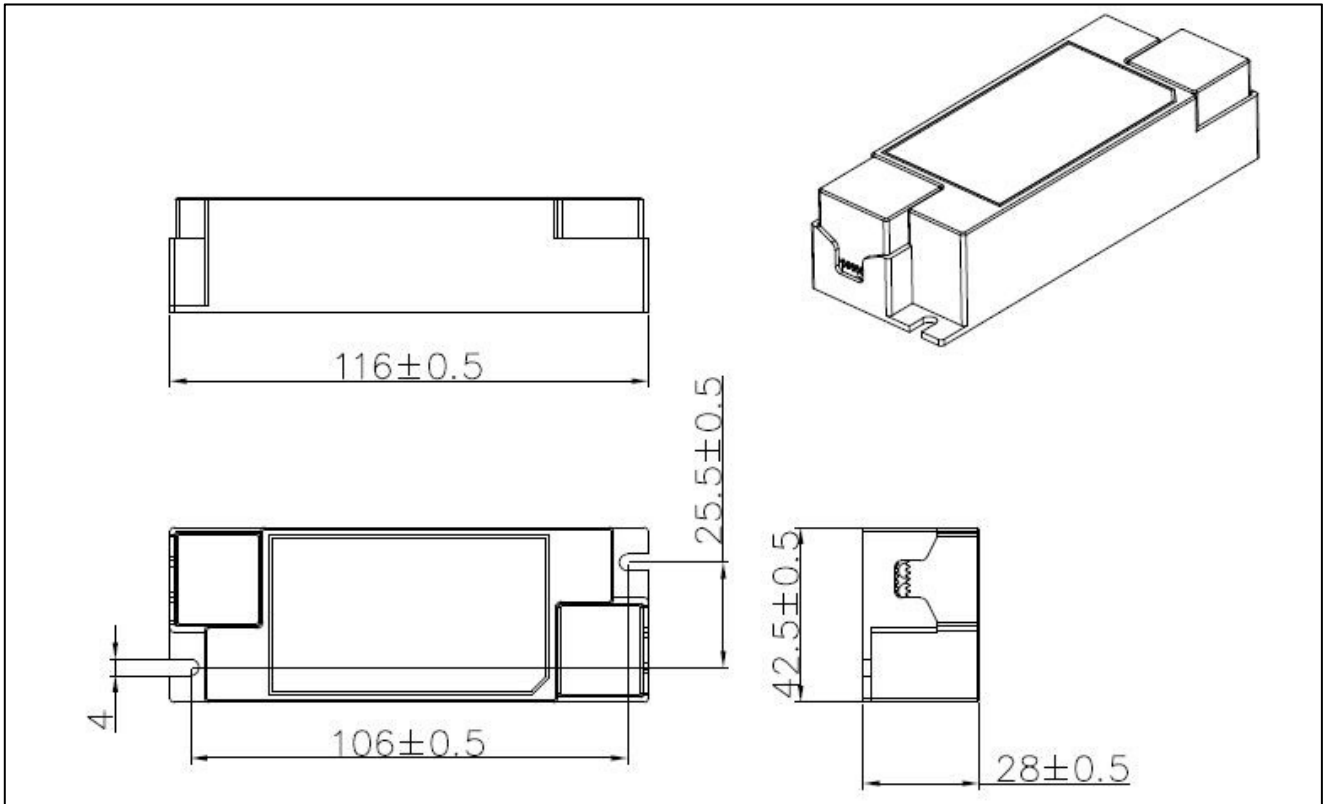
	RoHS	RoHS (2011/65/EU) (EU)2015/863
Note	1.All parameters NOT specially mentioned are measured at 230VAC input , full load and 25°C of ambient temperature. 2.Ripple & Noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uF & 47 uF parallel capa citor.	

## Model list

No.	Model number	Input		Output			Max. Prated(W)
		Voltage (VAC)	Max.Current (A)	Constant current (mA)	Normal working voltage (VDC)	No load working voltage (VDC)	
1	LS-12-250 TRIAC LI	220-240	0.1	250	32-48	59	12
1	LS-12-300 TRIAC LI			300	26-40	50	12
2	LS-12-350 TRIAC LI			350	23-35	46	12.3
3	LS-12-400 TRIAC LI			400	20-30	40	12
4	LS-12-450 TRIAC LI			450	17-27	35	12.2
5	LS-12-500 TRIAC LI			500	16-24	34	12
6	LS-12-550 TRIAC LI			550	14-22	32	12.1
7	LS-12-600 TRIAC LI			600	13-20	30	12
8	LS-12-650 TRIAC LI			650	12-18	25	11.7
9	LS-12-700 TRIAC LI			700	12-18	25	12.6

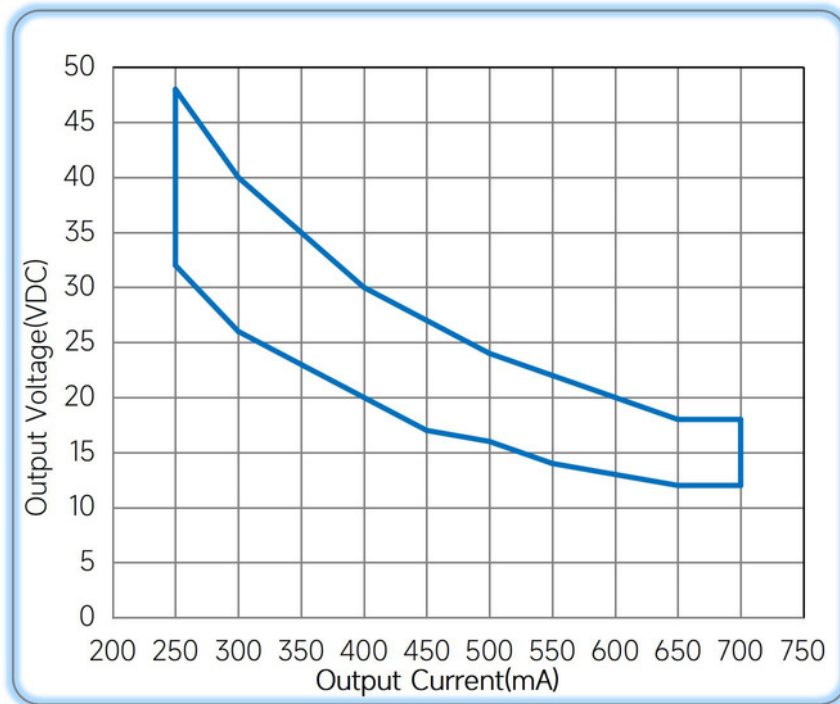
## Wiring diagram



**2D diagram**

**Wiring & Connections**

	Specification item	Value (Unit)
Input	Input wire cross-section	0.75...1.5 mm <sup>2</sup>
	Input wire gauge.	16...20 AWG
	Input wire strip length	7...9mm
Output	Output wire cross-section	0.5...1.5 mm <sup>2</sup>
	Output wire gauge.	16...20 AWG
	Output wire strip length	7...9mm

## Operating window



— Operating window 100%

## Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2022/05/15