

8W Constant Current power supply



Features

- Class II, SELV, Independent
- Input Voltage: 220-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor: 0.5(Typ.)
- Efficiency: 73%(Typ.)
- 5 years warranty
- IP20

Applications

- LED panel、LED down light
- LED spot light

Approve



◆ Description

LS-8-XXX SI E1 is a 8W constant current LED driver with 180~500mA output current. With it's compact dimensions from 84×20.5×16.5mm. It is easy to integrate in LED panel、LED down light、LED spot light products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

◆ Model code



◆ Specification

	Constant Current (mA)	180	200	220	500
Output	Voltage Range(VDC)	30-42	30-42	30-42	13-18
	Unload voltage Max.(VDC)	59VDC			30VDC
	Current Accuracy	±7%			
	Output HF current ripple(≥1KHz)	±5%			
	Output LF current ripple(≤120Hz)	±5%			
	SVM	≤0.4			
	P _{st}	≤1			
	Efficiency(Typ.)	≥73%@Full load,230V			
	Input	Rated input voltage	220-240VAC		
Range of input voltage		198-264VAC			
Frequency(Hz)		50/60 Hz			
Displacement factor		≥0.5			
Power Factor		0.5@Full load,230V			
Input Current max (mA)		0.11A			
Start-up time		< 0.5S			
No Load Power		≤0.5W			
Protection	Over Load Protection	103-130%			
		YES/Auto Resume			
	Over Voltage Protection	>59VDC			30VDC
		YES/Auto Resume			
capability	Short circuit Protection	YES/Auto Resume			
	Over Temperature Protection	YES/Auto Resume			
capability	Surge capability (L-N)	700V			
	Surge capability (L/N-Ground)	NA			
Environment	Operating Temperature	-20°C~+45°C			
	Humidity	20%-90%RH			
	Tc	80°C			
	Storage Temperature	-20°C~+60°C			
	Life time	> 50,000h@TC=65°C			
	Noise	≤20dB(A)@10cm			
Surface	Dimension	84×20.5×16.5 (LxWxH)mm			
standards	EN 61547; EN 61347-1,EN 61347-2-13;IEC 61347-1,IEC 61347-2-13;GB 19510.1,GB 19510.14,GB/T 17743 EN 62384;EN IEC 55015,EN IEC 61000-3-2,EN 61000-3-3;IS 15885 (Part 2/Sec13)				
Others	ErP	EU 2019/2020			
	RoHS	RoHS (2011/65/EU) (EU)2015/863			

Note	<ol style="list-style-type: none"> 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. Data are typical values obtained from test samples 4. Switch and dimmer are not recommended to connect between this product output and luminaries. 5. The series BIS certification includes 180、200、220mA
------	--

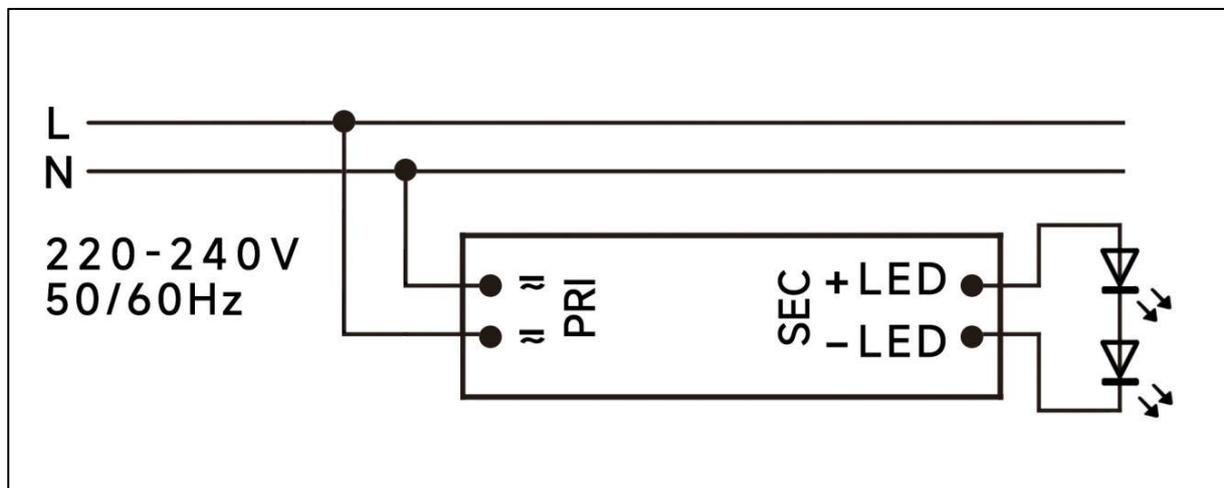
◆ Model list

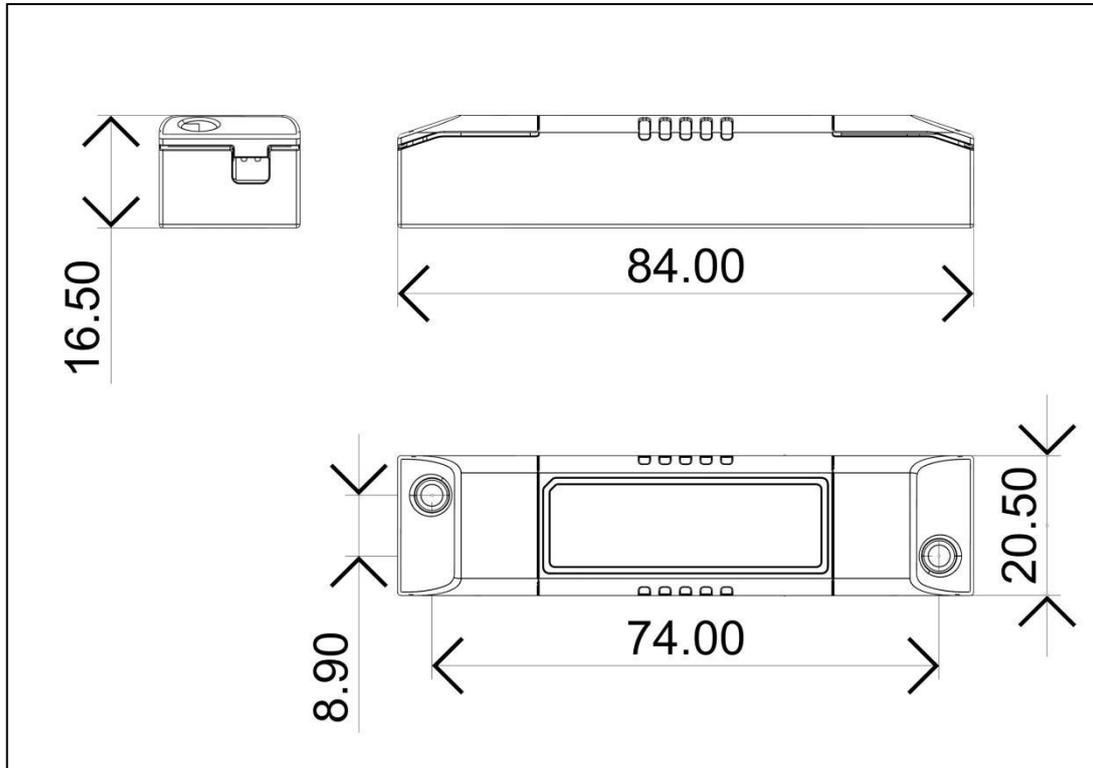
Number	Model number	Output			
		Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)
1	LS-8-180 SI E1	180	30-42	59	7.6
2	LS-8-200 SI E1	200	30-42	59	8.4
3	LS-8-220 SI E1	220	30-42	59	9.24
4	LS-8-500 SI E1	500	13-18	30	9

◆ Circuit Breaker

I _{peak}	T _{width}	B10	B16	B20	C10	C16	C20
4.2A	94μs	72pcs	116pcs	145pcs	72pcs	116pcs	145pcs

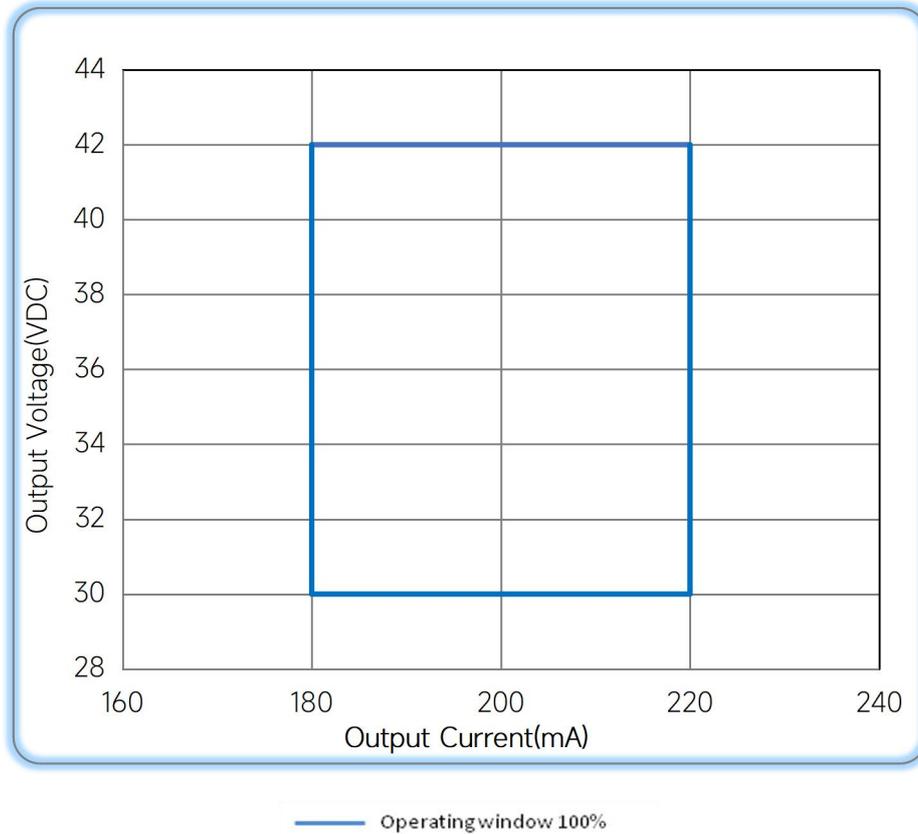
◆ Wiring diagram



◆ 2D diagram

◆ 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

◆ Operating window



◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2023/01/04
Current Accuracy	±5%	±7%@180-220mA ±5%@700mA	B	2023/03/22
700mA		Deleted	C	2023/05/25
Over Load Protection	103-120%	103-130%	D	2024/12/13

Tel: +86-0757-86256822, +86-0757-86256831

E-mail: sales@eaglerise.com

Website : <https://lighting.eaglerise.com>



EAGLERISE



Manual