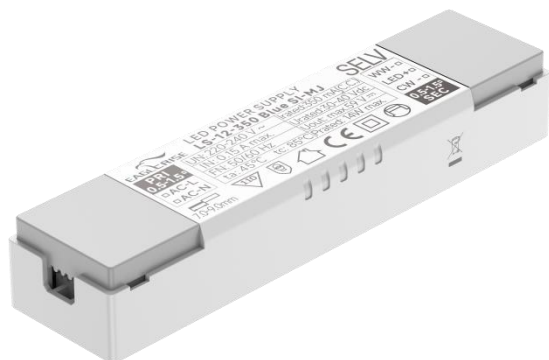


12W Bluetooth Dimming power supply



■ Approve



Features

- For luminaires of protection Class II, SELV, independent
- Input Voltage: 220-240VAC
- Protections: OLP/OVP/OTP
- Power Factor: > 0.5
- Efficiency: 85%
- 5 years warranty
- IP20

Applications

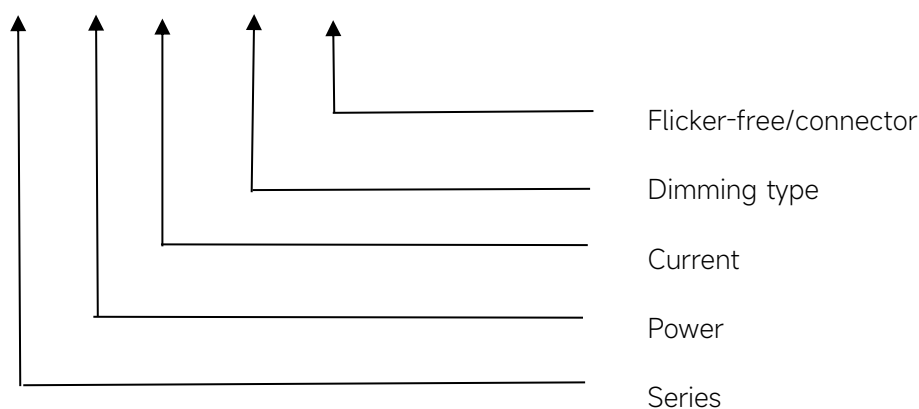
- LED down light, LED spot light

◆ Description

LS-12-XXX Blue SI-MJ is a 12W constant current LED driver that operates from 198-264Vac input with 250-350mA output current and a forward voltage range from 30 to 40Vdc. With it's compact dimensions from 115 x 30 x 20.5 mm it is easy to integrate in LED panel products. To ensure trouble-free operation, protection is provided against over Load.

◆ Model cod

LS-12-XXX Blue SI-MJ



◆ Specification

Output	Constant Current (mA)	250mA	280mA	300mA	350mA
	Voltage Range(VDC)	30-40VDC			
	Unload voltage Max.(VDC)	59VDC			
	Current Accuracy	±5%			
	Output HF current ripple(≥1KHz)	≤±5%			
	Output LF current ripple(≤120Hz)	≤±3%			
	SVM	≤0.4			
	Pst	≤1			
	Efficiency(Typ.)	84%@230VAC, full load			85%@230VAC, full load
Input	Rated input voltage(VAC)	220-240VAC			
	Range of input voltage(VAC)	198-264VAC			
	Maximum voltage	300VAC@1 h maximum,unit might not operate in this abnormal condition			
	Frequency(Hz)	50/60 Hz			
	Displacement factor	≥0.5@220-240VAC, full load			
	Power Factor	≥0.5@220-240VAC, full load			
	Input Current max	0.12A	0.13A	0.14A	0.15A
	Start-up time	< 0.8S			
	No Load Power	≤0.5W			
	Standby Power	≤0.5W			
	Network standby power	≤0.5W			
Dimming	Dimming	YES			
	Dimming mode	Bluetooth			
	Dimming depth	5%			
	Dimming current range	5~100%			
Protection	Over Load Protection	103-130%			
		YES/Auto Resume			
	Over Voltage Protection	>45VDC			
capability	Surge capability (L-N)	1KV			
	Surge capability (L/N-Ground)	NA			
Environment	Operating Temperature	-20°C...+45°C			
	Humidity	20%-90%RH			
	Tc	80°C			85°C
	Storage Temperature	-20°C...+80°C			
	Life time	> 50,000h@Tc=75°C,230VAC			
	Noise	≤25dB(A)@20cm			
Surface	Dimension	115X30X20.5(LXWXH)mm			

Standards	Safety	GB19510. 1, GB19510. 14,EN61347- 1, EN61347-2- 13
	EMC	GB/T17743, GB17625. 1,EN55015, EN61000-3-2, EN61000-3-3, EN61547,EN55015, EN61000-3-2, EN61000-3-3, EN61547
	Energy Efficiency	Erp2.0 EU 2019/2020
	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 capacitor. 3.The over-temperature protection of the product is provided by the IC. 4.All Eaglerise power supply are complied with EMI regulations. Since they are belong to component and will be installed inside system enclosure. When they are integrated into a system, the EMI characteristics of the system must be re-verified again.	

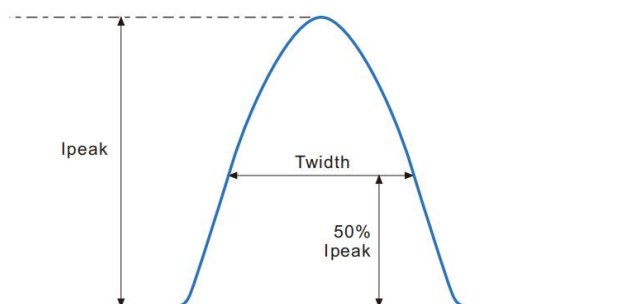
◆ Model list

Number	Model number	Output			
		Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)
1	*LS-12-250 Blue SI-MJ	250	30-40	59	10
2	*LS-12-280 Blue SI-MJ	280			11.2
3	*LS-12-300 Blue SI-MJ	300			12
4	*LS-12-350 Blue SI-MJ	350			14

*Regular stockpile products

◆ Inrush Current

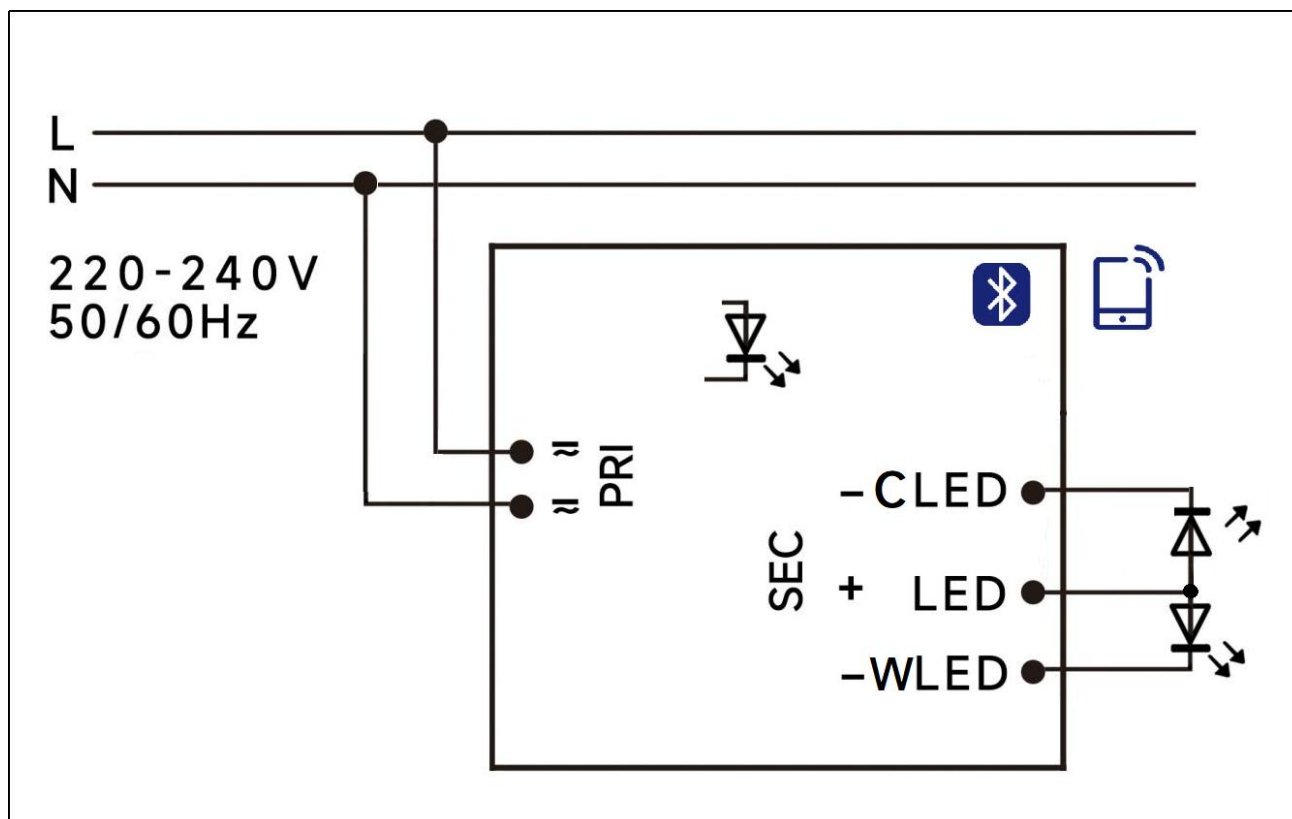
I_{peak}	Twidth	B10	B16	B20	C10	C16	C20
13.1A	104μs	53pcs	85pcs	106pcs	53pcs	85pcs	106pcs



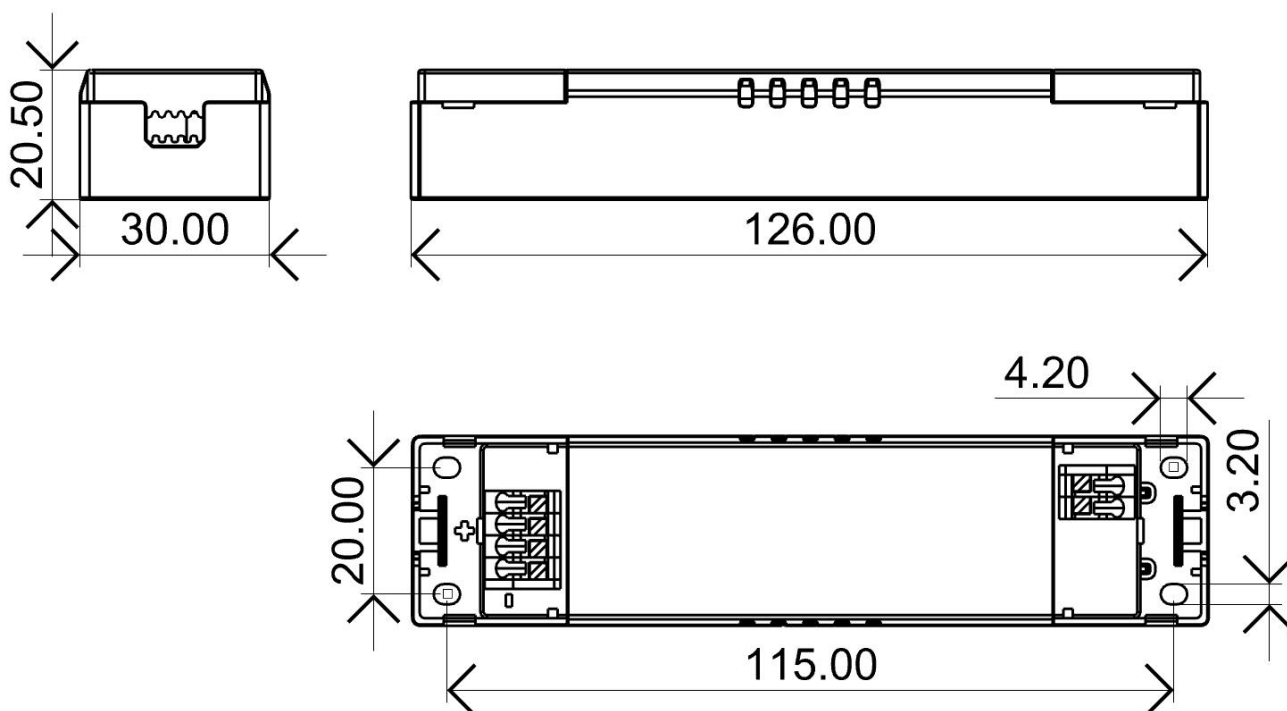
Remarks:

- 1.The number of drives mounted under different MCBs in the table is the maximum value. Please do not exceed this number during installation.
- 2.Different brands and models of miniature circuit breakers, the number of drives mounted will be slightly different.

◆ 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

◆ Recommended wire

Wire cross-section	Wire type
2*0.5mm ²	H03VVH2-F 2core
2*0.75mm ²	H03VVH2-F 2core
1.5mm ²	CCC 08(RV-90)
16AWG(1.25mm ²)	UL1015

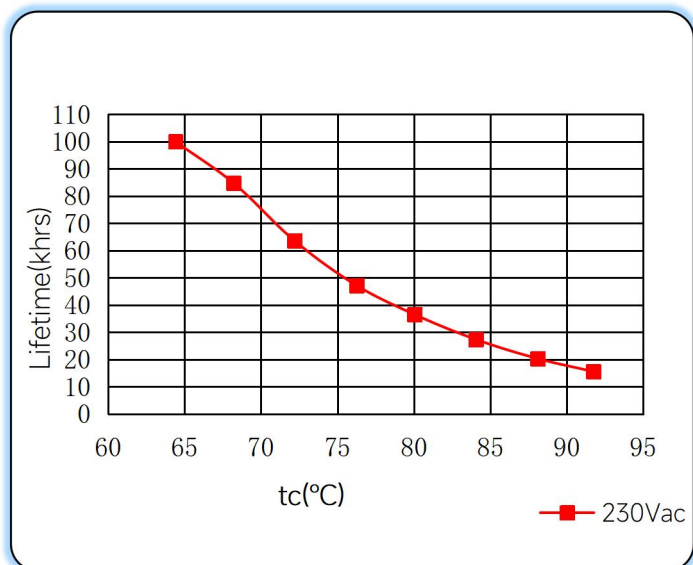
Note: Solid wire is risky to use on an angled terminal. Stranded wire is recommended for this kind of use.

◆ Packaging

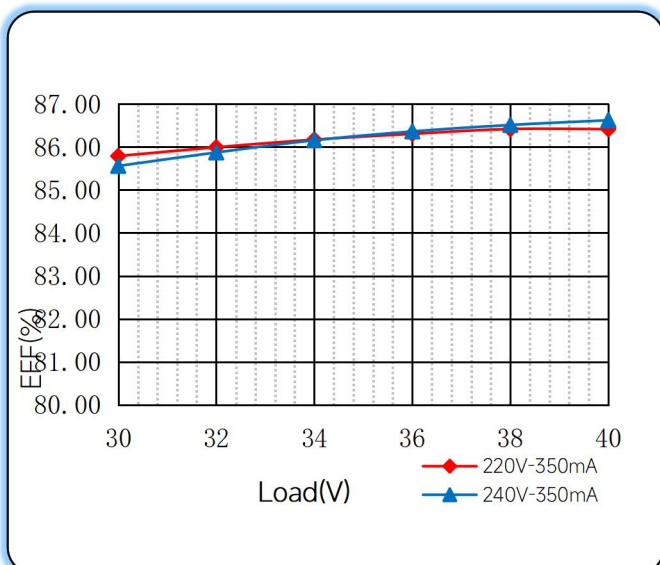
Model	Product Dimensions(mm)	weight/piece	Outer carton dimension(mm)	Quantity/carton	Net weight/carton(Kg)	Gross weight/carton(Kg)
LS-12-XXX Blue SI-MJ	115X30X20.5mm	45.2	385X285X225mm	203	9.176	16.65

◆ Curve for LS-12-XXX Blue SI-MJ, $I_o=350\text{mA}$

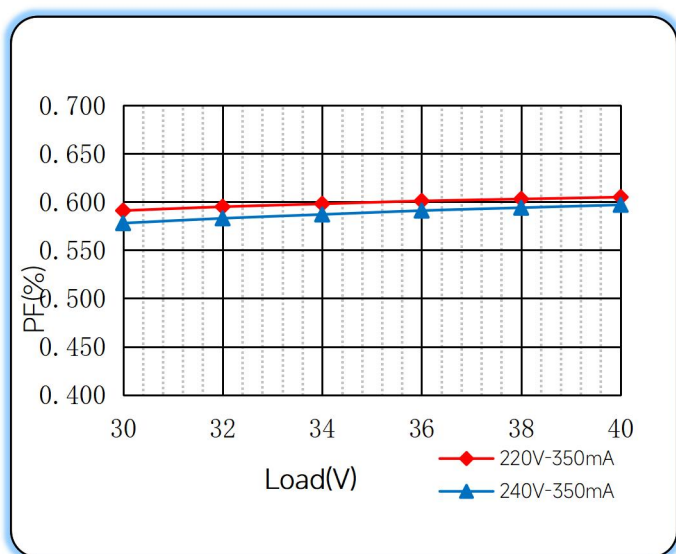
Lifetime vs. Temperature Curve



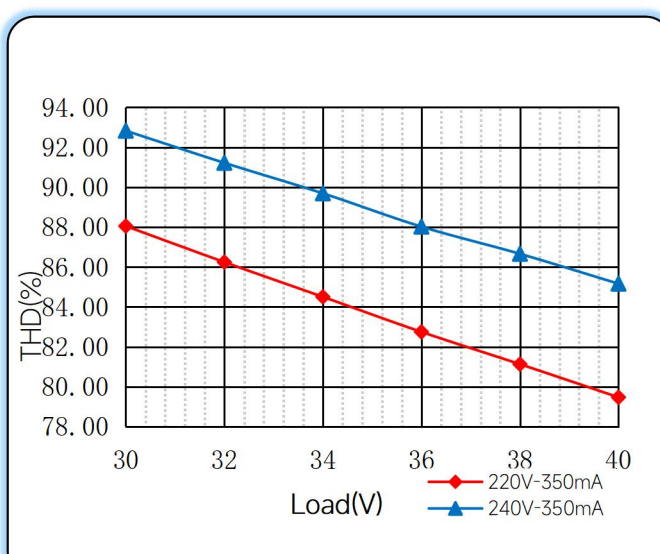
Efficiency vs. Load



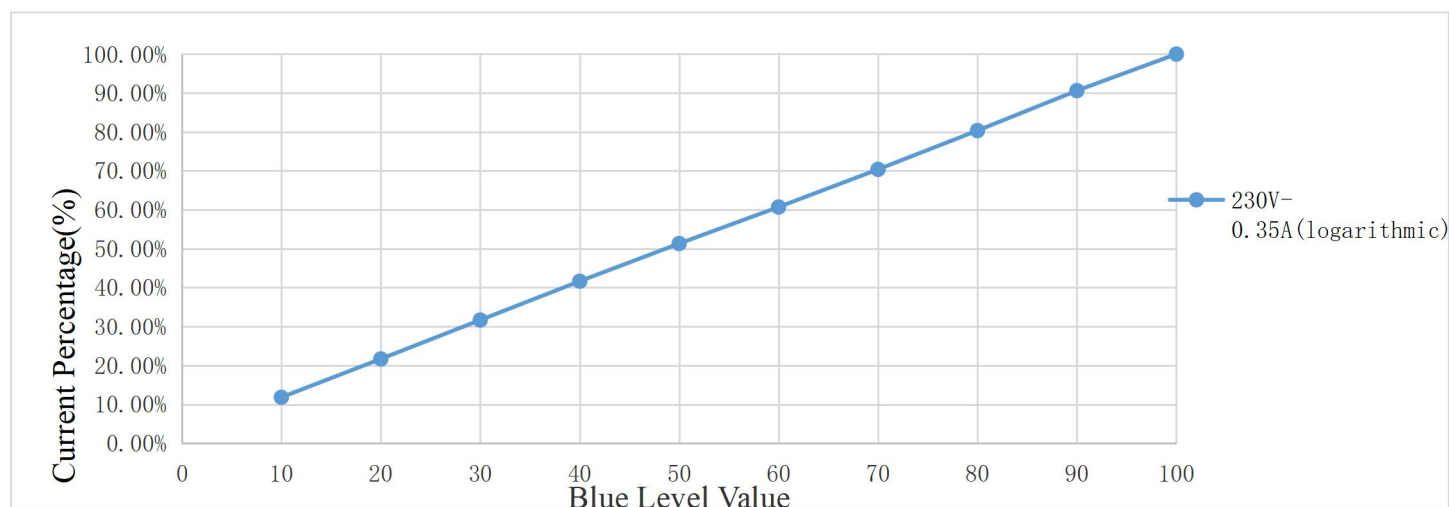
Power Factor Characteristics



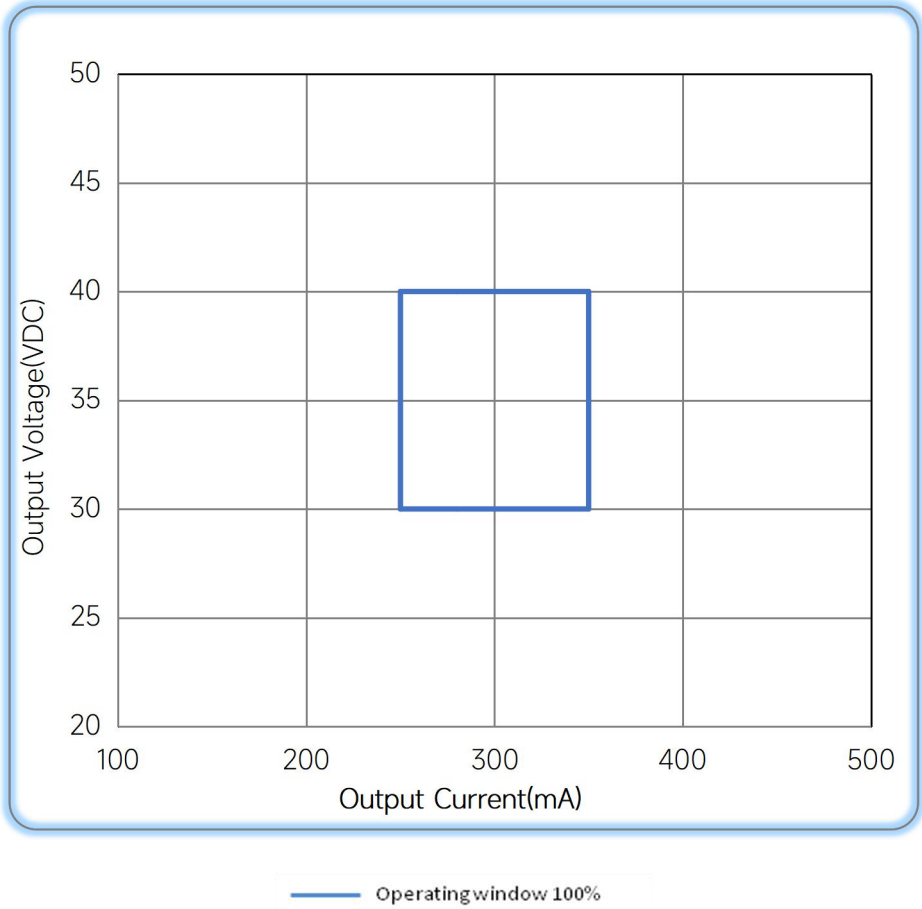
THD vs. Load



◆ Dimming Curve



◆ Operating window



◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2025/02/11

Remark:The final interpretation of the contents of the specification belongs to Eaglerise Electric & Electronic (China) Co., Ltd.

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

E-mail: sales@eaglerise.com

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



EAGLERISE



Manual