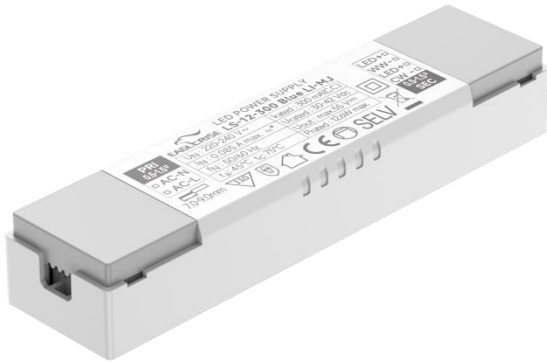


12W Bluetooth Dimming power supply



■ Approve



Features

- Class II, SELV, independent
- Input Voltage: 220-240VAC
- Protections: SCP/OLP/OVP
- Power Factor: > 0.9
- Efficiency: ≥85%
- 5 years warranty
- IP20

Applications

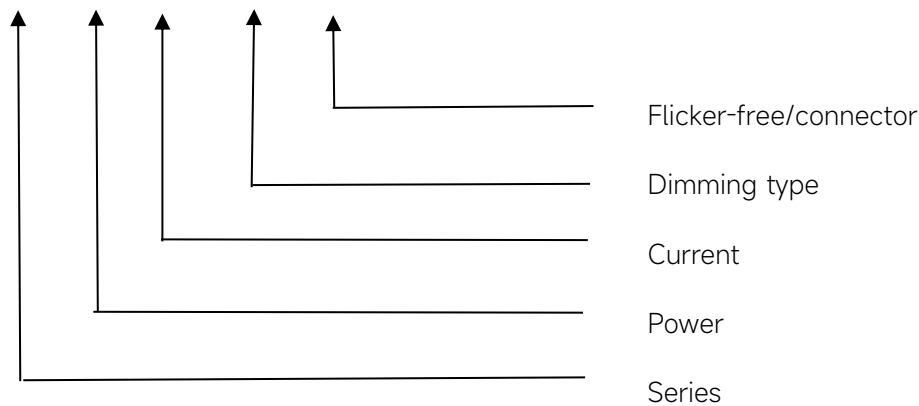
LED panel

◆ Description

LS-12-XXX Blue LI-MJ is a 12W constant current LED driver that operates from 198-264Vac input with 250-300mA output current and a forward voltage range from 30 to 42Vdc. With its compact dimensions from 126 x 30 x 20.5 mm it is easy to integrate in LED panel products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

◆ Model cod

LS-12-XXX Blue LI-MJ



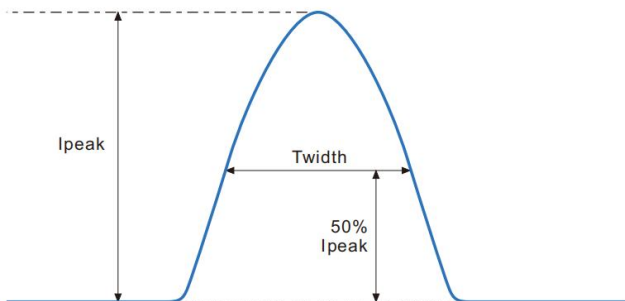
◆ Specification

Output	Constant Current (mA)	250mA	300mA
	Voltage Range(VDC)	30-42VDC	
	Unload voltage Max.(VDC)	55VDC	
	Current Accuracy	±5%	
	Output HF current ripple(≥1KHz)	≤±5%	
	Output LF current ripple(≤120Hz)	≤±3%	
	SVM	≤0.4	
	Pst	≤1	
	Efficiency(Typ.)	85%@220-240VAC, 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	≥0.9@220-240VAC, full load	
	Power Factor	≥0.9@220-240VAC, full load	
	Input Current max	0.075A Max.	0.085A Max.
	Start-up time	< 0.5S	
	No Load Power	≤0.5W	
	Standby Power	≤0.5W	
	Network standby power	≤0.5W	
	THD (Typ.)	<10%@220-240VAC, full load	
	Dimming	Dimming	YES
Dimming mode		Bluetooth	
Dimming depth		10%	
Dimming current range		10~100%	
Protection	Over Load Protection	103-120%	YES/Auto Resume
	Over Voltage Protection	>55VDC	YES/Auto Resume
	Short circuit Protection	YES/Auto Resume	
	Over Temperature Protection	YES/Auto Resume	
capability	Surge capability (L-N)	1KV	
	Surge capability (L/N-Ground)	NA	
Environment	Operating Temperature	-20°C...+45°C	
	Humidity	20%-90%RH	
	Tc	75°C	
	Storage Temperature	-20°C...+80°C	
	Life time	> 50,000h@Tc=75°C,230VAC	

	Noise	≤25dB(A)@20cm
Surface	Dimension	126X30X20.5(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	<p>1.All parameters NOT specially mentioned are measured at 230VAC input , full load and 25°C of ambient temperature.</p> <p>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.</p> <p>3.Switch and dimmer are not recommended to connect between this product output and luminaries.</p> <p>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.</p>	

◆ Inrush Current

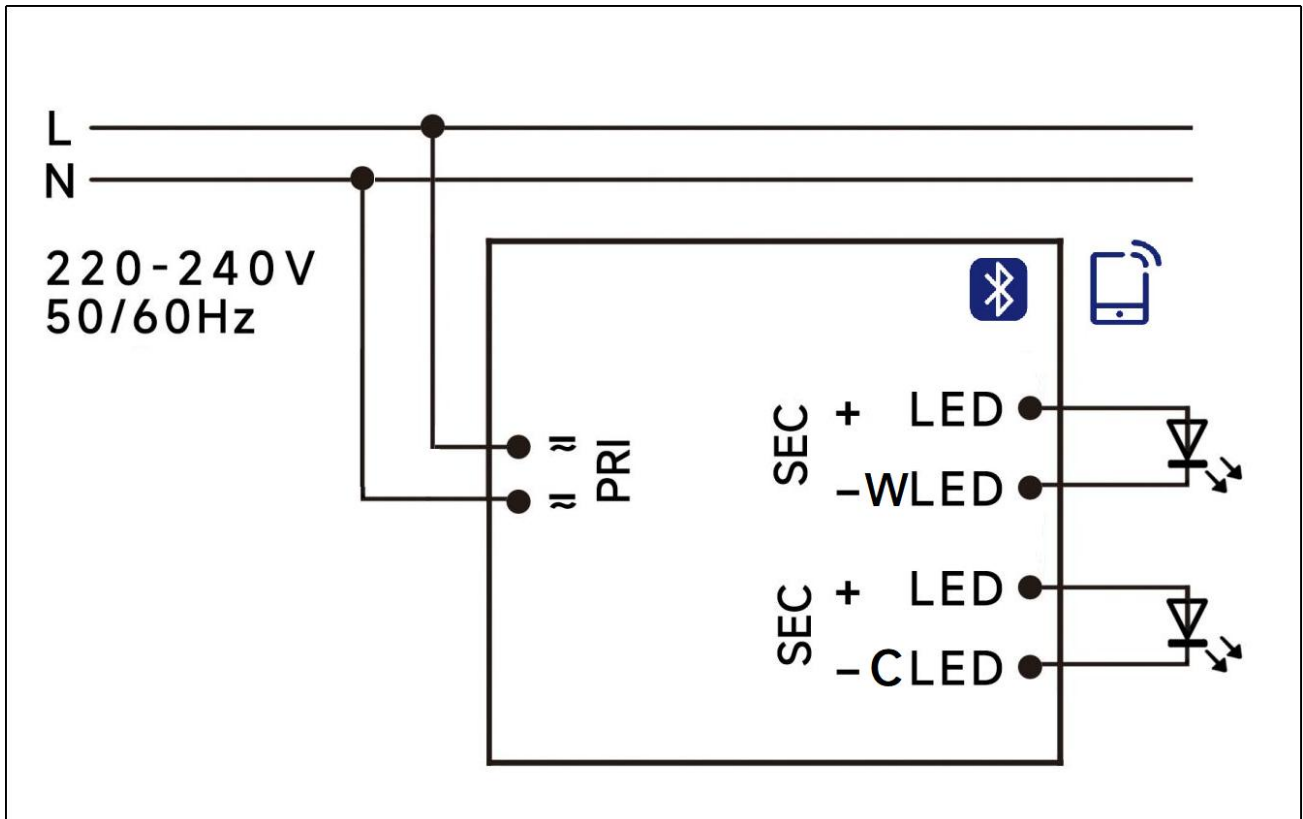
I_{peak}	Twidth	B10	B16	B20	C10	C16	C20
2.47A	46μs	94pcs	150pcs	188pcs	94pcs	150pcs	188pcs



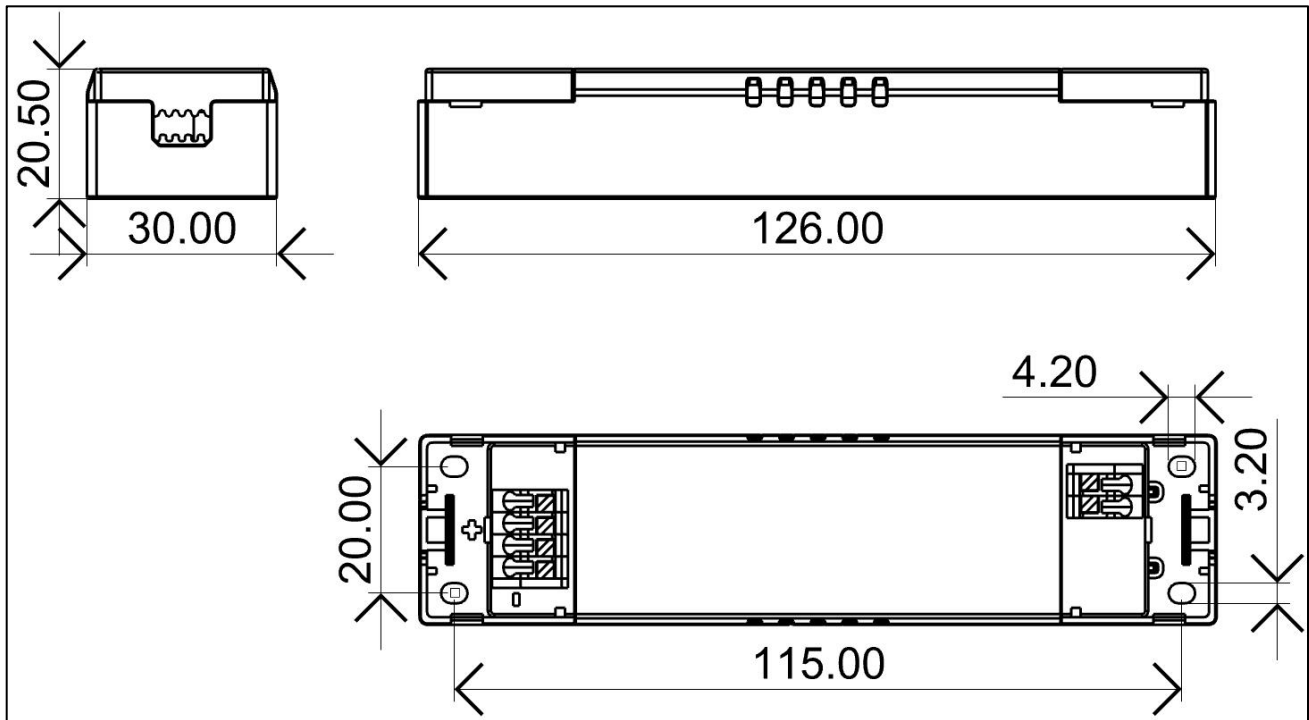
Remarks:

- 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

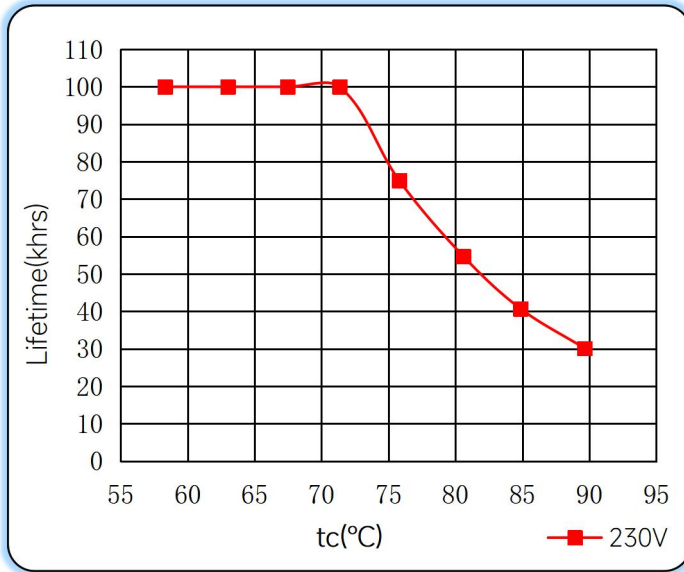
◆ Recommended wire

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

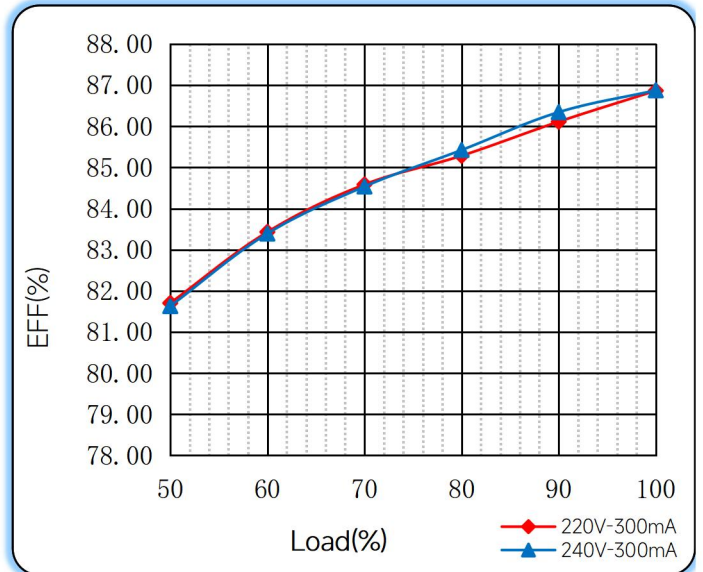
Note: Solid wire is risky to use on an angled terminal. Stranded wire is recommended for this kind of use.

◆ Curve for LS-12-XXX Blue LI-MJ, I_o=300mA

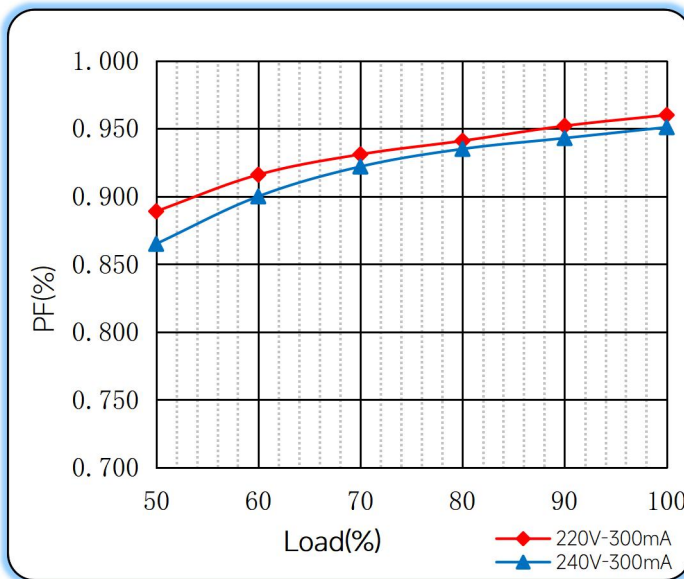
Lifetime vs. Temperature Curve



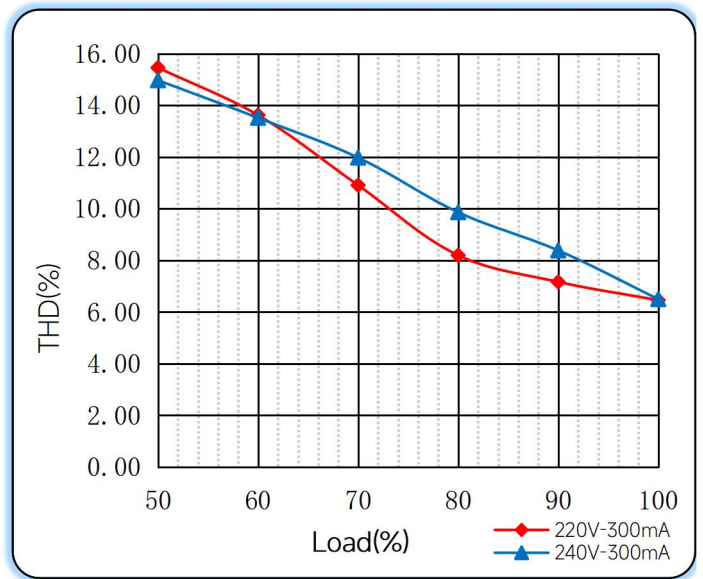
Efficiency vs. Load



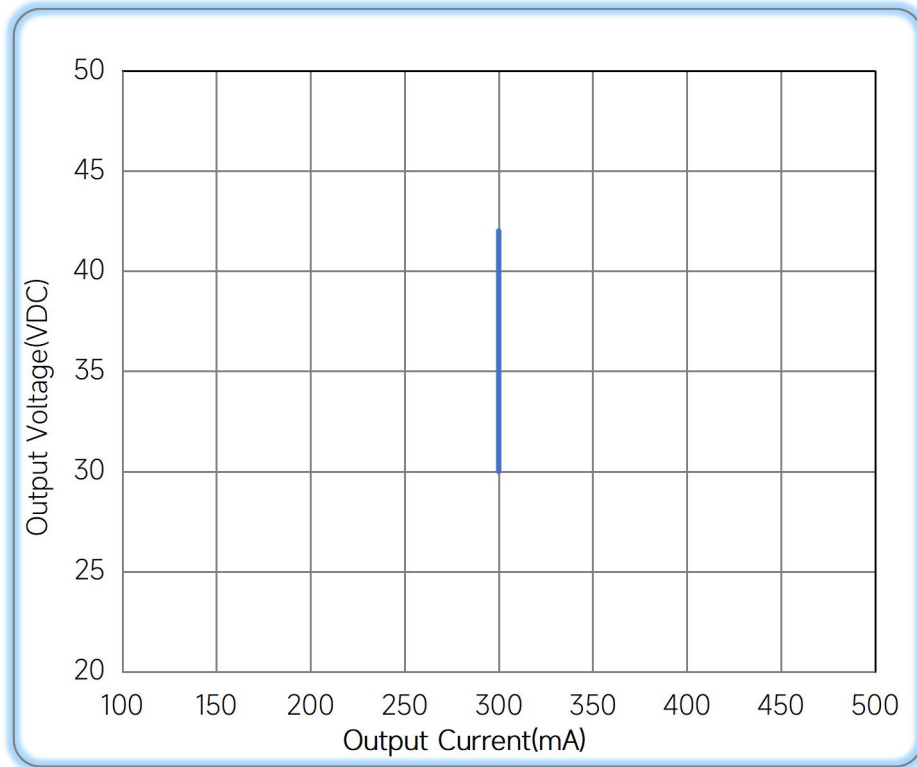
Power Factor Characteristics



THD vs. Load



◆ Operating window



— Operating window 100%

◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2023/10/15
Efficiency(Typ.)	82%@220-240VAC, full load	85%@220-240VAC, full load	B	2025/02/11

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

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EAGLERISE



Manual