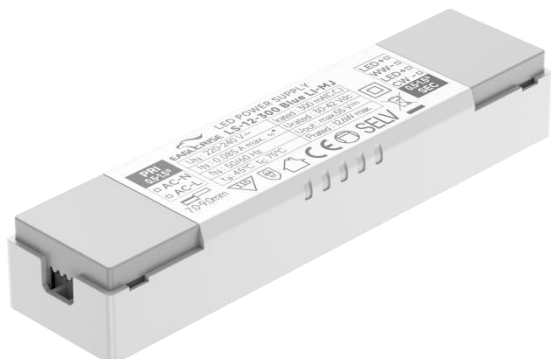


12W Bluetooth Dimming power supply



■ 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

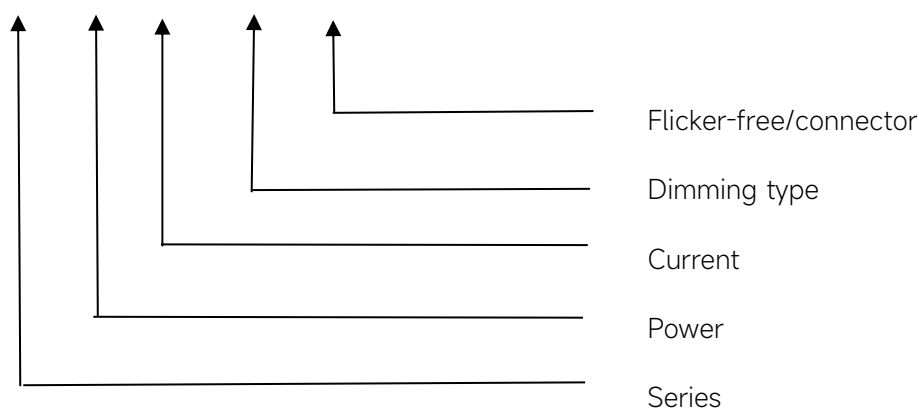
LED panel

◆ 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 it's 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



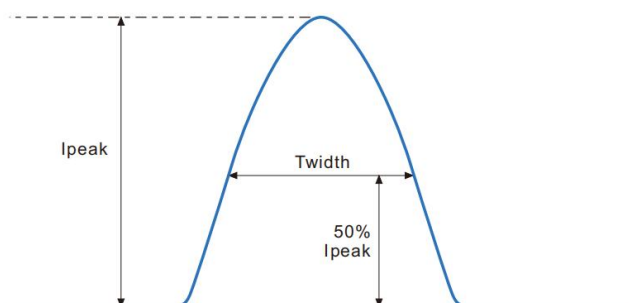
◆ Specification

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	
capability	Over Temperature Protection	YES/Auto Resume	
	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	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.Switch and dimmer are not recommended to connect between this product output and luminaries. 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.	

◆ Inrush Current

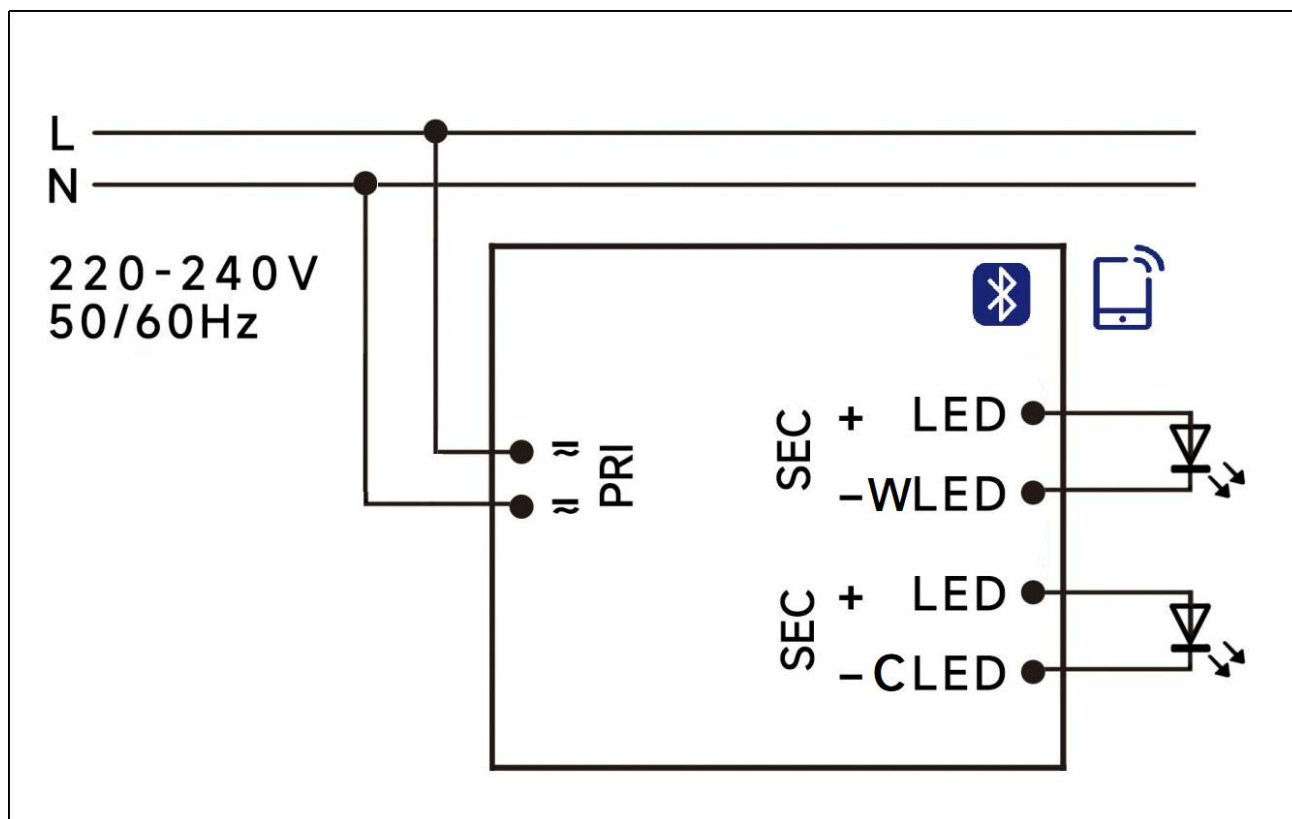
I _{peak}	T _{width}	B10	B16	B20	C10	C16	C20
2.47A	46μs	94pcs	150pcs	188pcs	94pcs	150pcs	188pcs



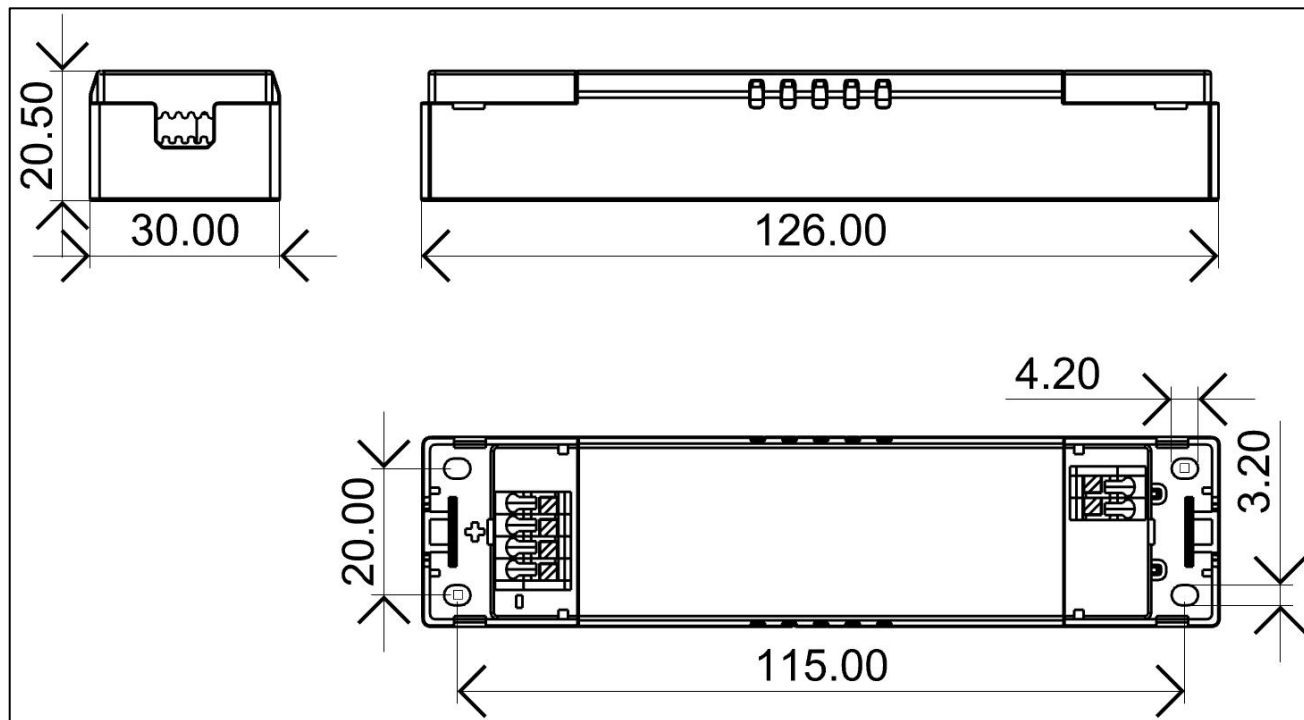
Remarks:

- 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

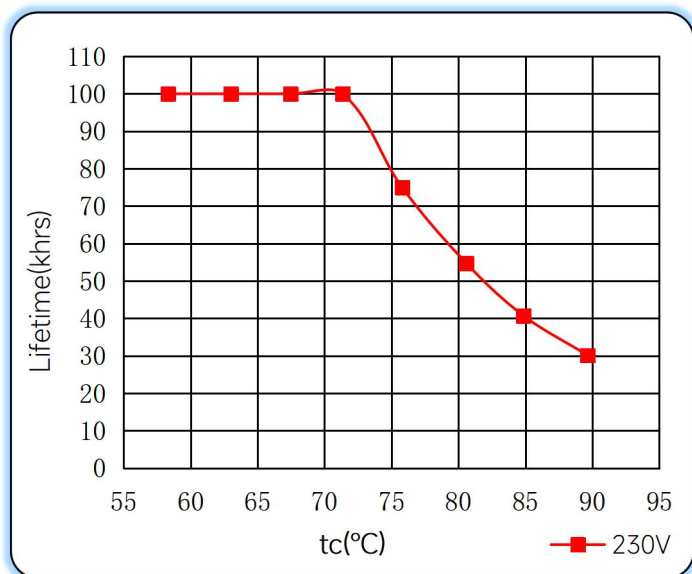
◆ Recommended wire

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

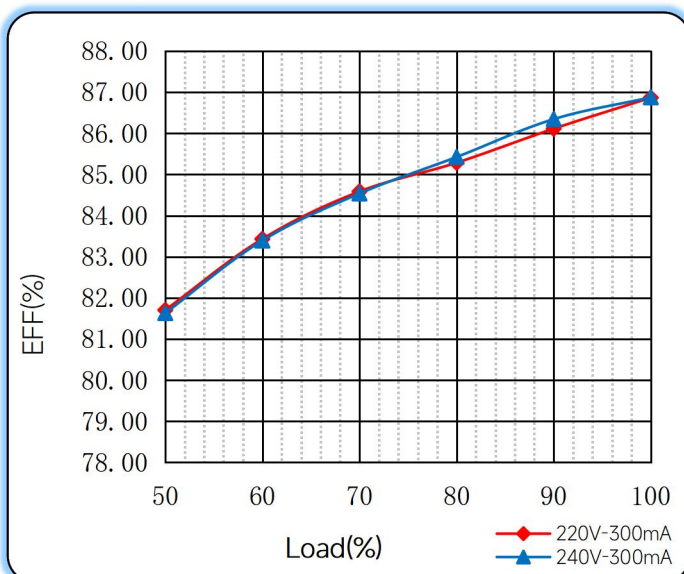
Note: Solid wire is risky to use on an angled terminal. Stranded wire is recommended for this kind of use.

◆ Curve for LS-12-XXX Blue LI-MJ, $I_o=300\text{mA}$

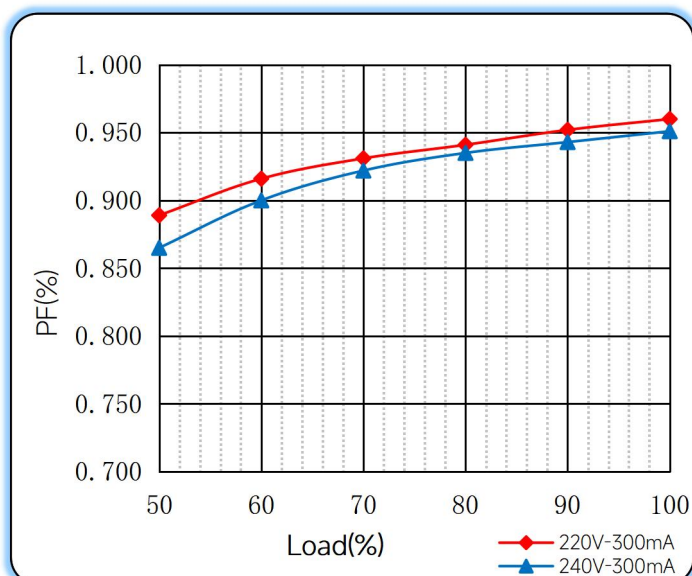
Lifetime vs. Temperature Curve



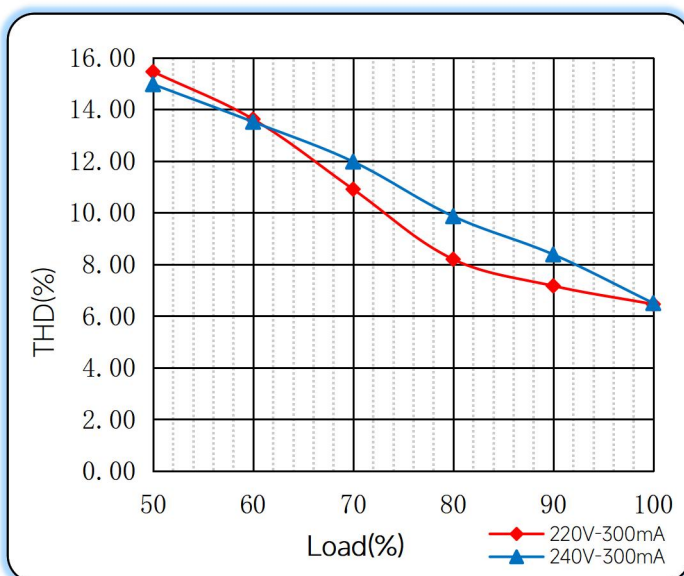
Efficiency vs. Load



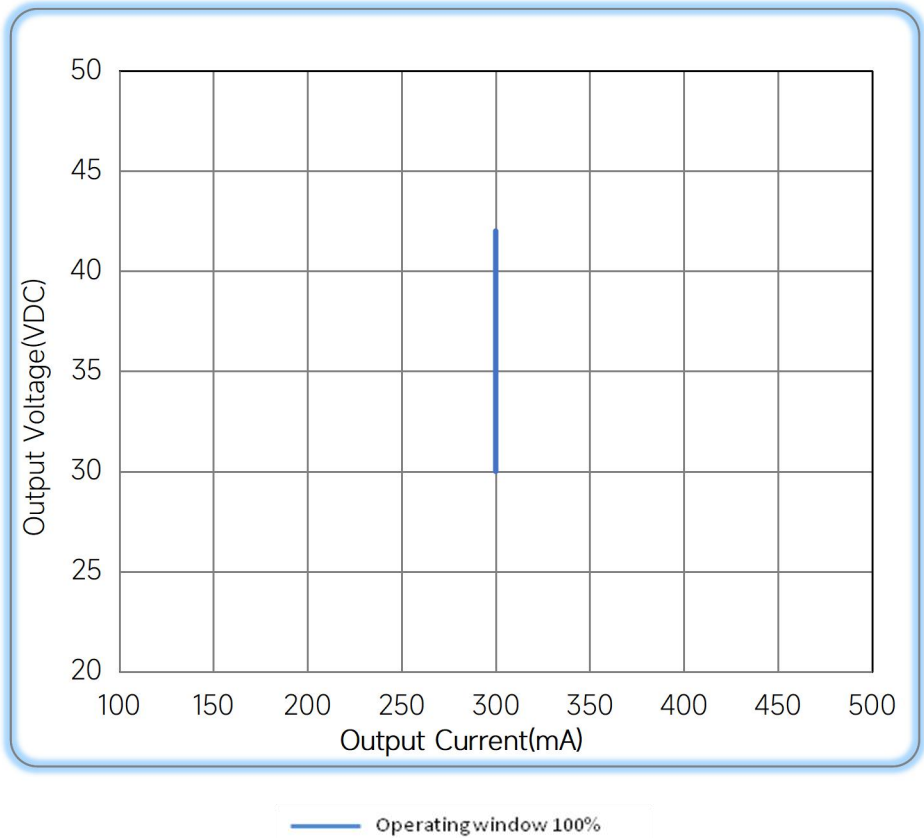
Power Factor Characteristics



THD vs. Load



◆ Operating window



◆ 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