

45W 0-10 Dimming power supply



■ Approve



SELV

Features

- Class II, SELV, Independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor: ≥ 0.95 (Typ.)
- Efficiency: $\geq 87\%$ (Typ.)
- 5 years warranty
- Support 0-10V,RX,PWM Dimming

Applications

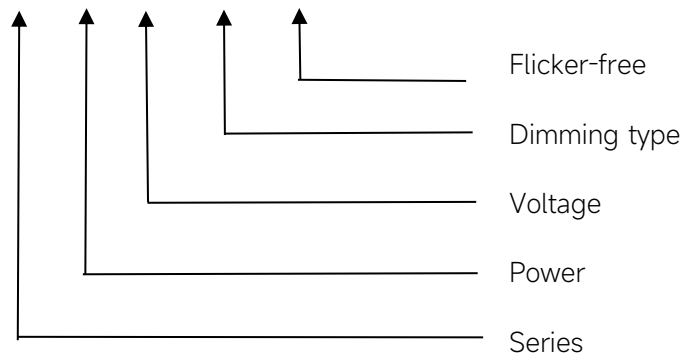
- LED strips

◆ Description

LS-45-24 0-10 LI is a 45W constant voltage LED driver that operates from 198-264Vac input with 24V output voltage. With it's compact dimensions from 168 x 38 x 30 mm. It is easy to integrate in LED strips products. To ensure trouble-free operation, protection is provided against output short circuit, over Load, over voltage and over temperature.

◆ Model code

LS-45-24 0-10 LI



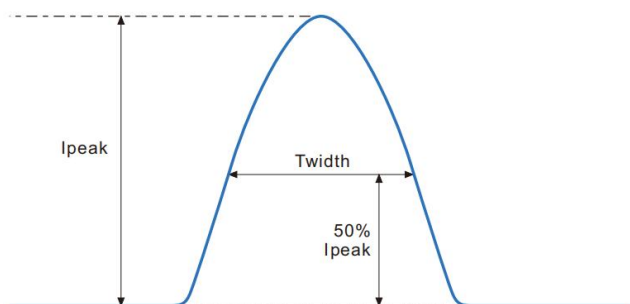
◆ Specification

Output	Constant Voltage	24VDC
	Current Range	0-1.88A
	Voltage Accuracy	±5%
	Output HF current ripple(≥1KHz)	±3%
	Output LF current ripple(≤120Hz)	±1%
	SVM	≤0.4
	Pst	≤1
	Efficiency(Typ.)	≥87%@Full load,230V
	EOFI	15%
Input	Rated input voltage	220-240V
	Range of input voltage	198-264VAC
	Maximum voltage	300VAC@1 h maximum,unit might not operate in this abnormal condition
	Range input voltage(VDC)	176-280VDC
	Frequency(Hz)	0/50/60 Hz
	Displacement factor	≥0.9
	Power Factor	0.95@full load, 230Vac
	Input Current max	0.3A @full load, 198Vac
	Start-up time	< 0.5S
	Standby Power	≤0.5W, @DIM TO OFF, 230VAC
	Network Standby Power	≤0.5W, @DIM TO OFF, 230VAC
	THD (Typ.)	< 10% @240Vac, Full load
Dimming	Dimming	YES
	Dimming mode	0-10V,RX,PWM Dimming
	Dimming depth	1%
	Dimming current range	1-100%
	Dimming frequency	4KHz Constant frequency
Protection	Over Load Protection	105-150% YES/Auto Resume
	Short circuit Protection	YES/Auto Resume
	Over Temperature Protection	YES/Auto Resume
capability	Surge capability (L-N)	2KV
	Surge capability (L/N-Ground)	NA
Environment	Operating Temperature	-20°C~+45°C
	Humidity	20%-90%RH
	Tc	80°C
	Storage Temperature	-30°C~+85°C
	Life time	> 50000h@Tc=75°C,230VAC,full load

	Ripple & Noise	≤25dB(A)@20cm
Surface	Dimension	168X38X30(LXWXH)mm
	material	PC
Standards	Safety	IEC61347- 1, IEC61347-2- 13;EN61347- 1, EN61347-2- 13;EN61347- 1,
	EMC	EN55015, EN61000-3-2, EN61000-3-3, EN61547;GB/T17743;GB17625. 1
	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 240VAC 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.The DC input for this product is only used for emergency lighting and applies to functional and safety requirements, EMC is not considered.	

◆ Inrush Current

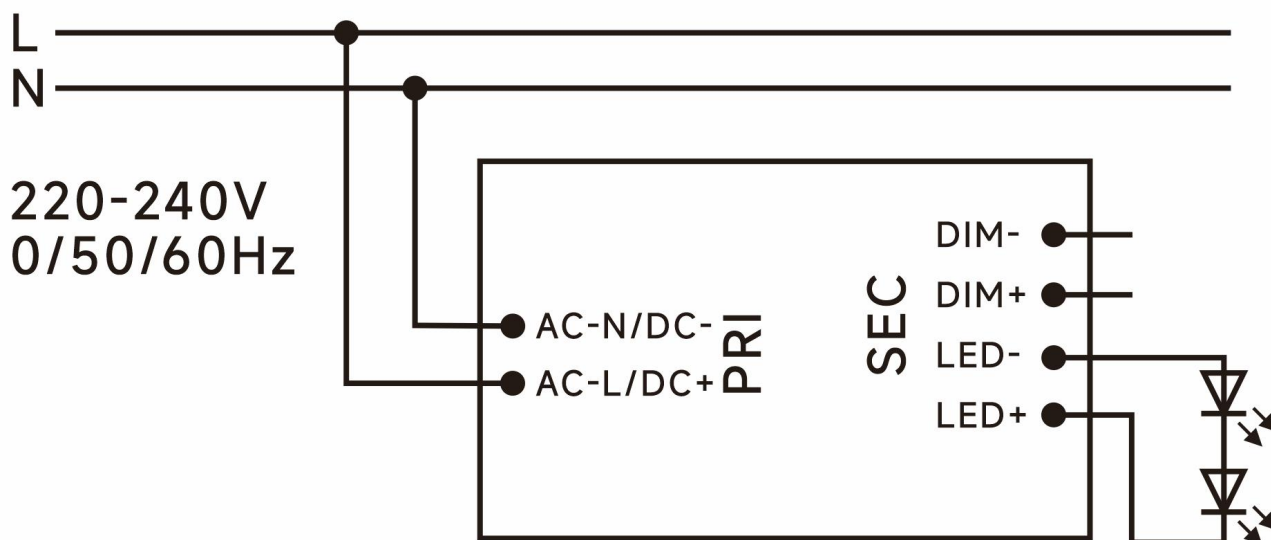
I _{peak}	T _{width}	B10	B16	B20	C10	C16	C20
20.6A	202μs	19pcs	31pcs	39pcs	26pcs	42pcs	53pcs



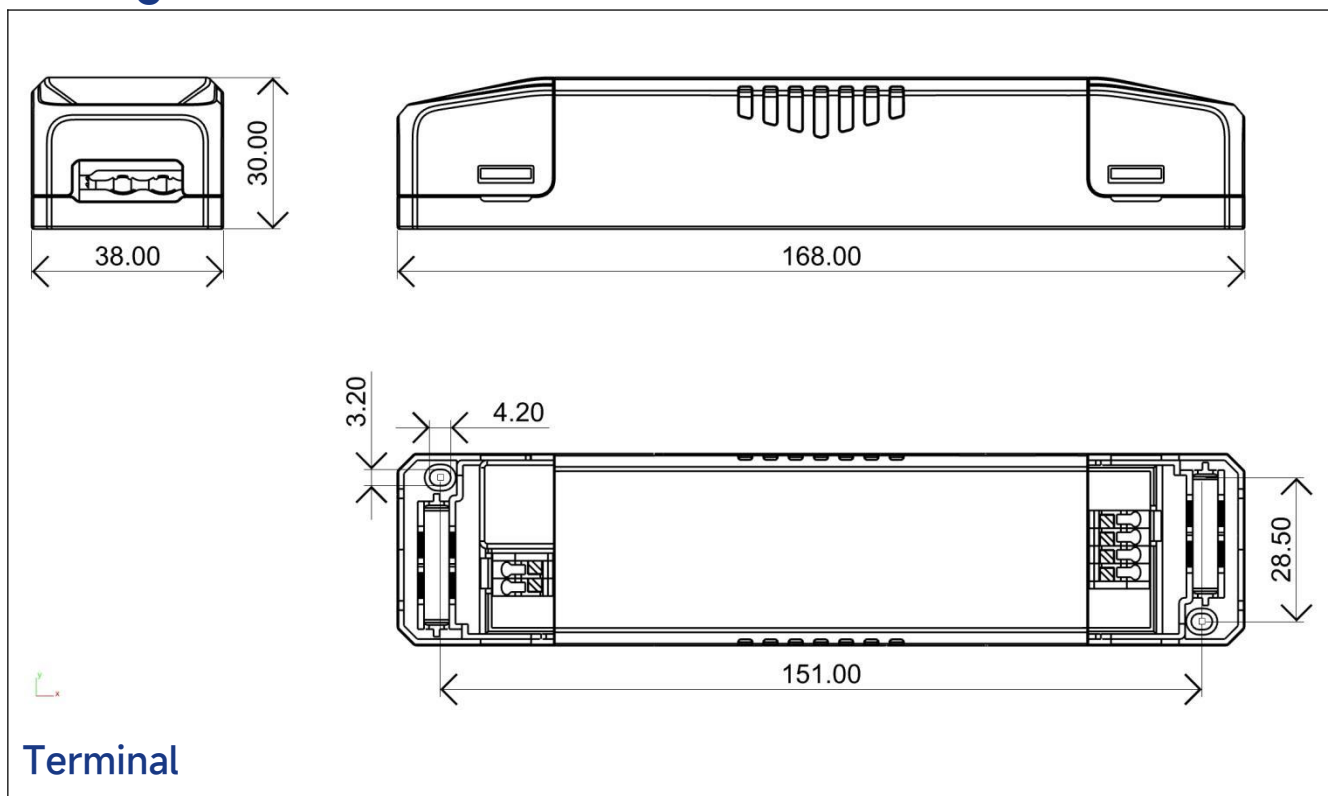
Remarks:

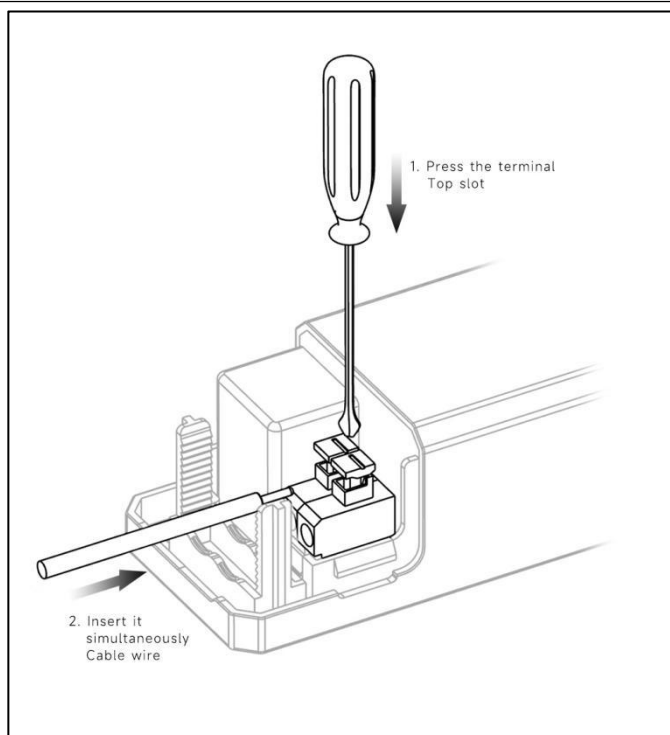
- 1.The number of drives mounted under different MCBs in the table is the maximum value. Please do not exceed this number during installation.
- 2.Different brands and models of miniature circuit breakers, the number of drives mounted will be slightly different.

◆ Wiring diagram



◆ 2D diagram





◆ Wiring & Connections

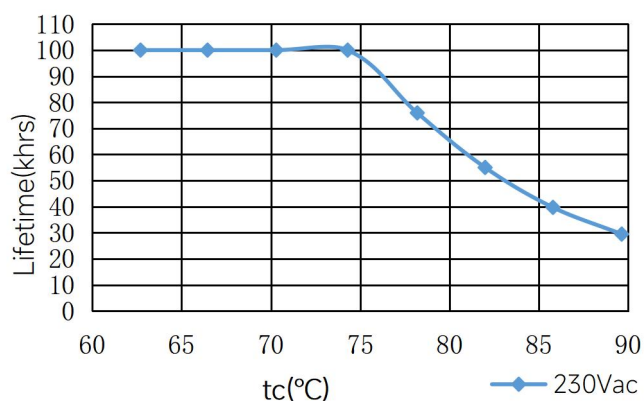
Specification item		Value (Unit)
Input	Input wire cross-section	1.0...1.5 mm ²
	Input wire gauge.	16...18 AWG
	Input wire strip length	7...9mm
Output	Output wire cross-section	1.0...1.5 mm ²
	Output wire gauge.	16...18 AWG
	Output wire strip length	7...9mm

◆ Packaging

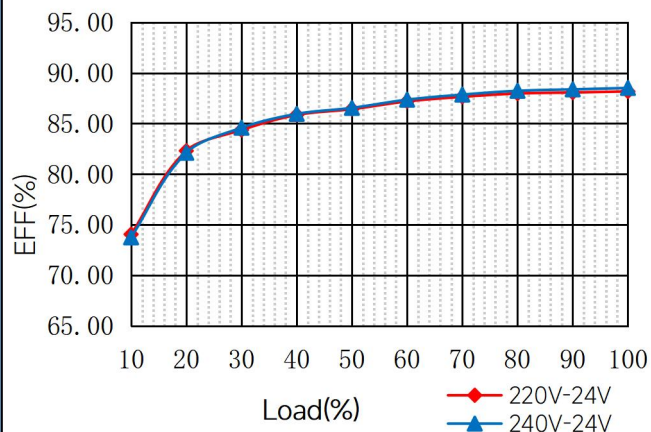
Model	Product Dimensions(mm)	weight/ piece(Kg)	Outer carton dimension(mm)	Quantity/carton	Net weight/carton(Kg)	Gross weight/carton(Kg)
LS-45-24 0-10 LI	168 x 38 x 30mm	0.211	385 x285 x 225mm	80	16.88	17.48

◆ Curve for LS-45-24 0-10 LI

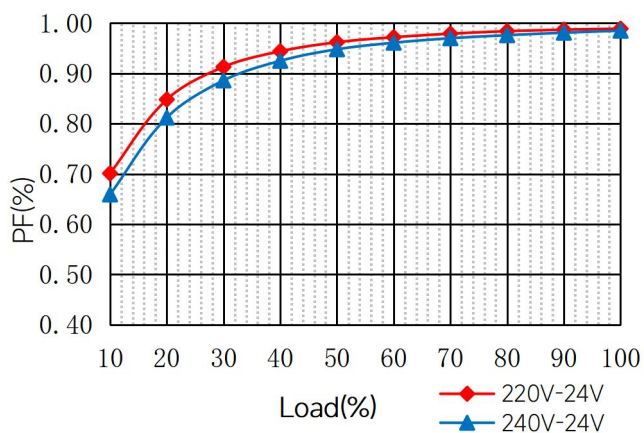
Lifetime vs. Temperature Curve



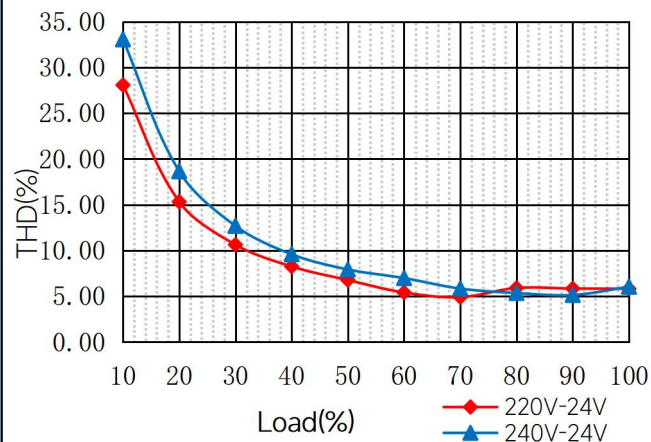
Efficiency vs. Load



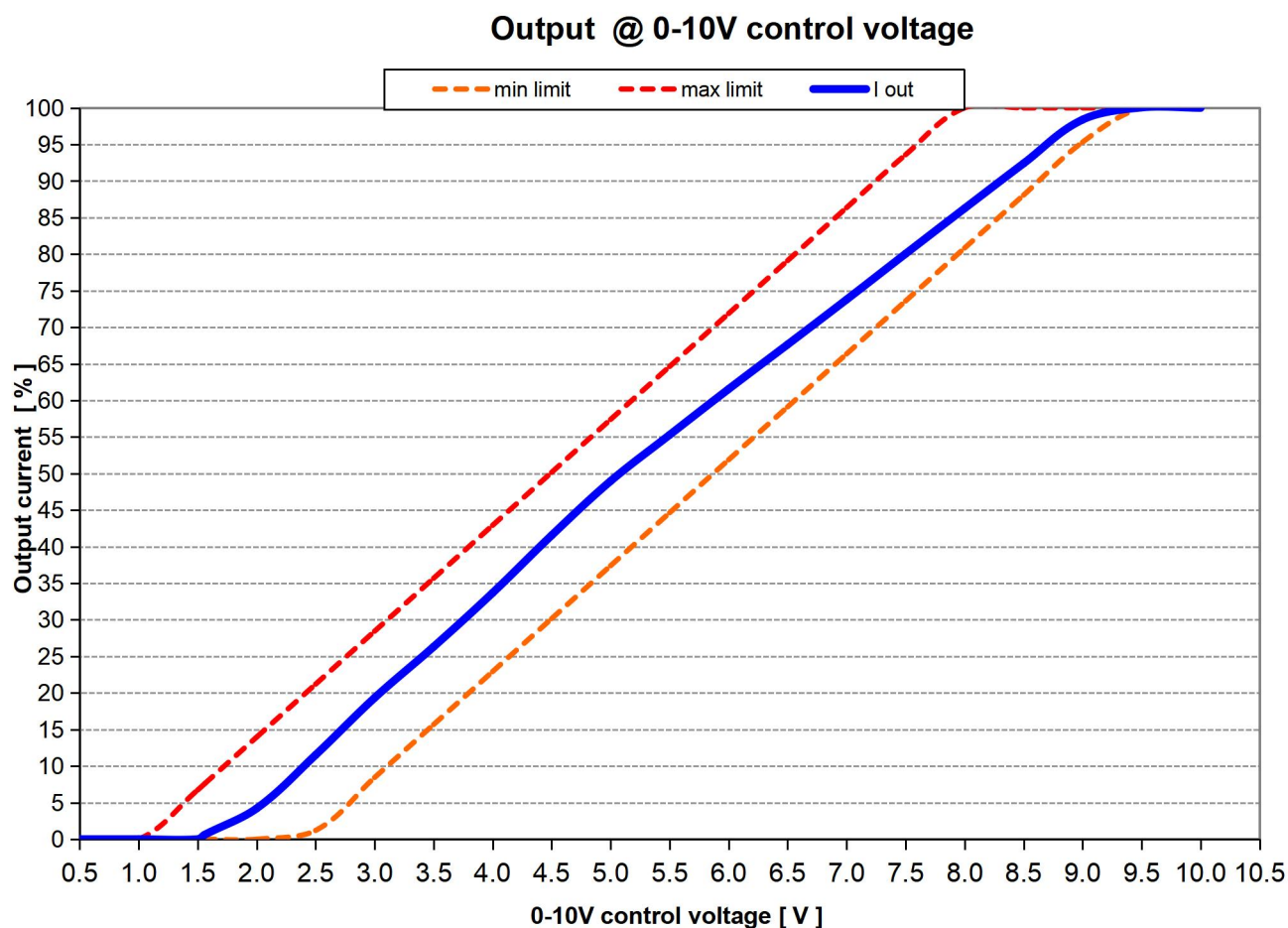
Power Factor Characteristics



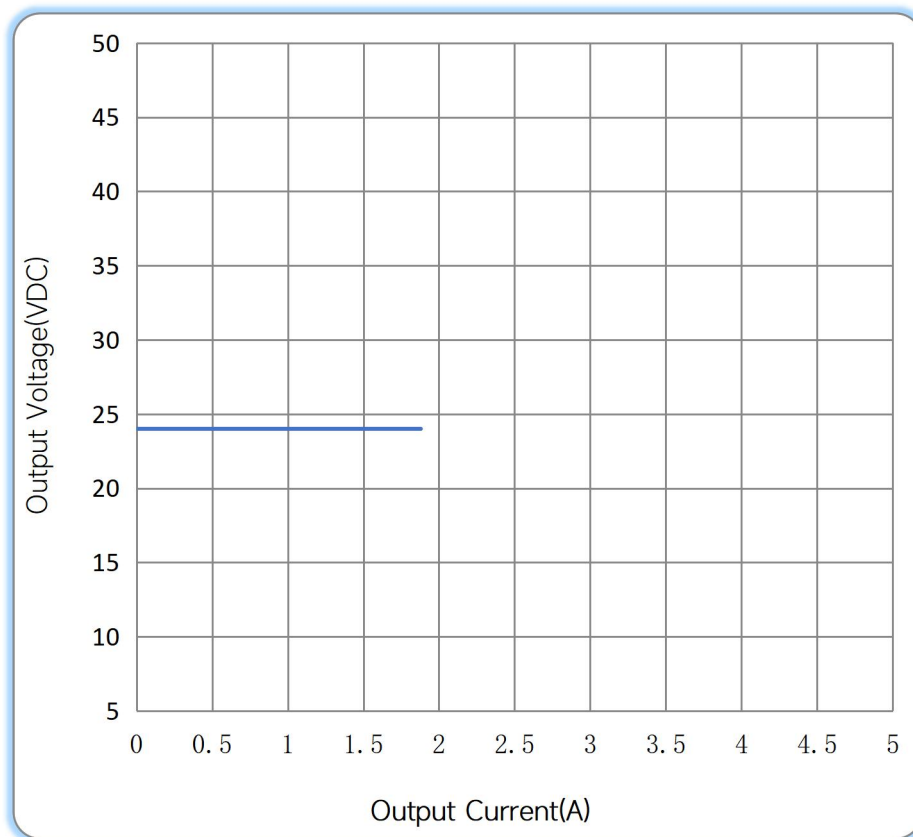
THD vs. Load



◆ The dimming curve



◆ Operating window



— Operating window 100%

◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2025/7/19
Dimming frequency		Adding	B	2025/11/22

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

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EAGLERISE



Manual