

80W 0-10 Dimming power supply



■ Approve



Features

- Class II, SELV, Independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OTP
- Power Factor: ≥ 0.95 (Typ.)
- Efficiency: $\geq 89\%$ (Typ.)
- 5 years warranty

Applications

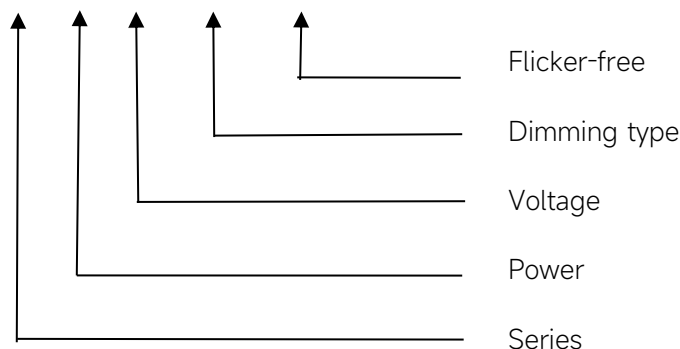
- LED strips

◆ Description

LS-80-24 0-10 LI is a 80W constant voltage LED driver that operates from 198-264Vac input with 24V output voltage. With it's compact dimensions from 227 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 and over temperature.

◆ Model code

LS-80-24 0-10 LI



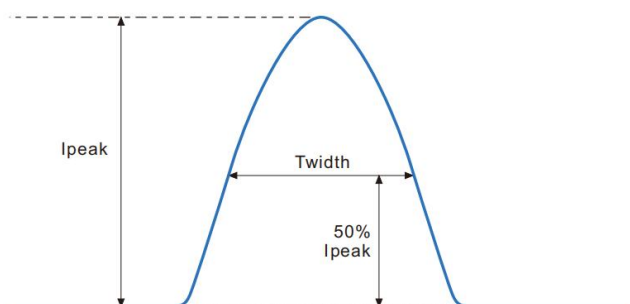
◆ Specification

Output	Constant Voltage	24VDC
	Current Range	0-3.33A
	Voltage Accuracy	±5%
	Output HF voltage ripple(≥1KHz)	±1%
	Output LF voltage ripple(≤120Hz)	±1%
	SVM	≤0.4
	Pst	≤1
	Efficiency(Typ.)	≥89%@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	0.52A Max @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% @230Vac,Full load
Dimming	Dimming	YES
	Dimming mode	0-10V,RX,PWM Dimming
	Dimming depth	1%
	Dimming current range	1-100%
	Dimming frequency	10KHz-5KHz Frequency variation
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	85°C
	Storage Temperature	-30°C~+85°C
	Life time	> 50000h@Tc=80°C,230VAC,full load

	Ripple & Noise	≤25dB(A)@20cm
Surface	Dimension	227X38X30(LXWXH)mm
	material	PC
Standards	Safety	IEC61347- 1, IEC61347-2- 13;EN61347- 1, EN61347-2- 13;EN61347- 1, EN61347-2- 13, EN62384;GB19510. 1, GB19510. 14;AS/NZS 61347- 1, AS/NZS 61347-2- 13
	EMC	EN55015, EN61000-3-2, EN61000-3-3, EN61547;GB/T17743;GB17625. 1;EN 62493
	Energy Efficiency	Erp2.0 EU 2019/2020
	RoHS	RoHS (2011/65/EU) (EU)2015/863
DALI performance	EN 62386-101 (DALI-2) EN 62386-102 (DALI-2) EN 62386-207 (DALI-2,including part251,252,253)	
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

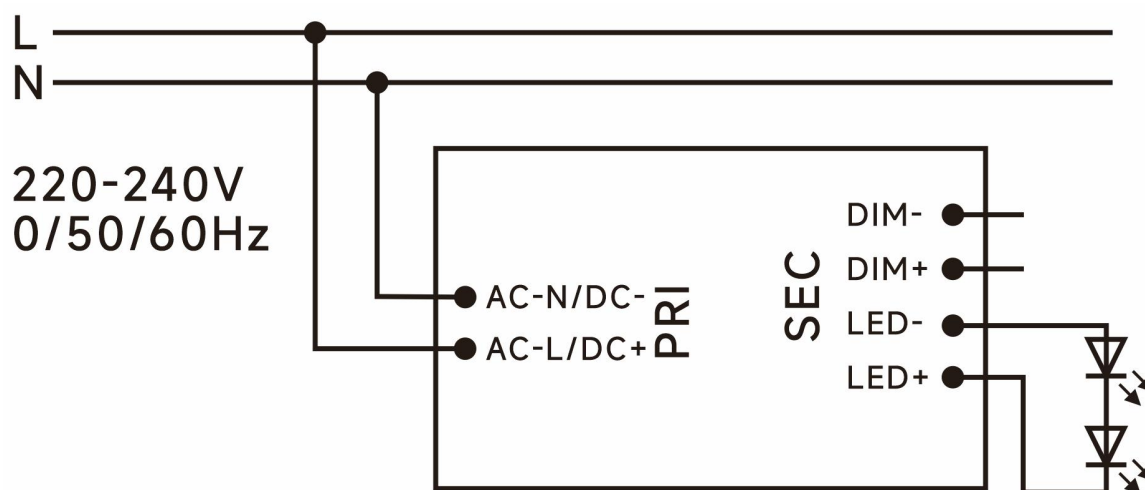
I_{peak}	Twidth	B10	B16	B20	C10	C16	C20
31A	268 μ s	9pcs	15pcs	19pcs	15pcs	24pcs	30pcs



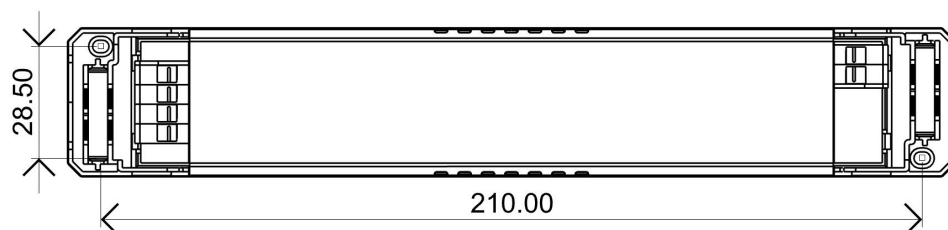
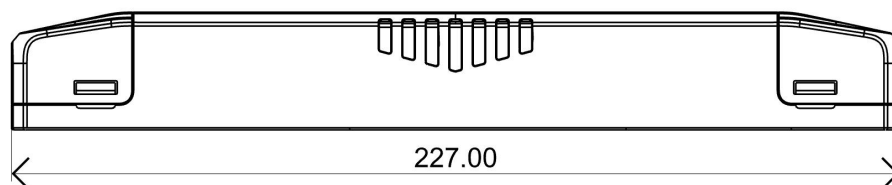
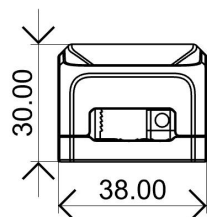
Remarks:

- 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.

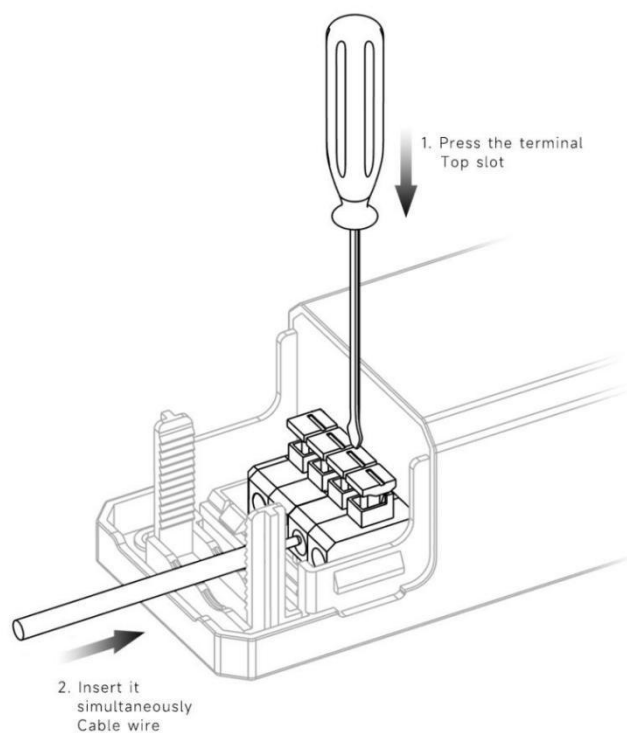
◆ Wiring diagram



◆ **2D diagram**



Terminal



◆ 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

◆ 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

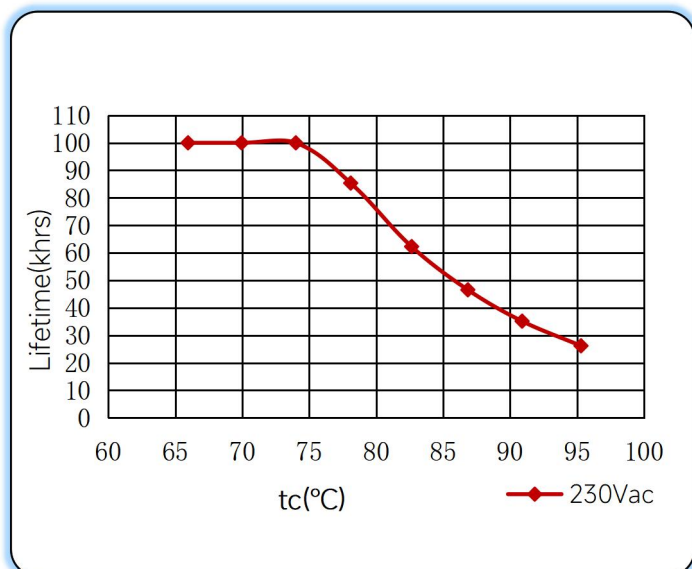
Note: Solid wire is risky to use on an angled terminal. Stranded wire is recommended for this kind of use.

◆ Packaging

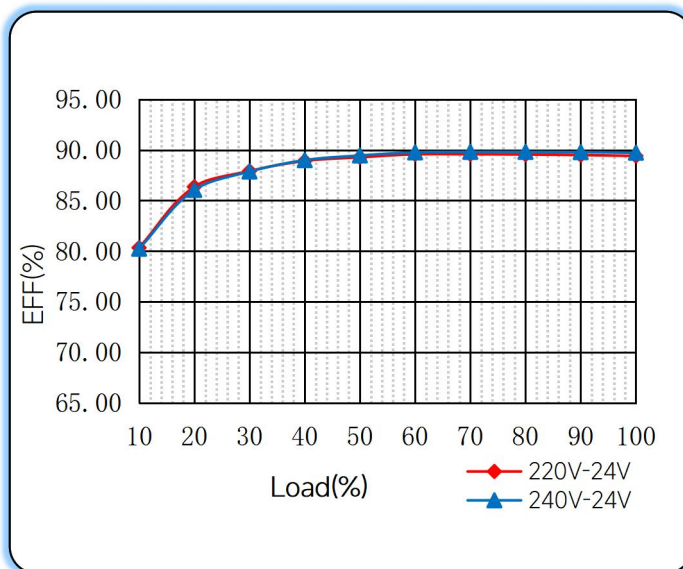
Model	Product Dimensions(mm)	weight/ piece(Kg)	Outer carton dimension(mm)	Quantity/carton	Net weight/carton(Kg)	Gross weight/carton(Kg)
LS-80-24 0-10 LI	227 x 38 x 30mm	0.272	395 x 245 x 190mm	40	10.88	11.5

◆ Curve for LS-80-24 0-10 LI

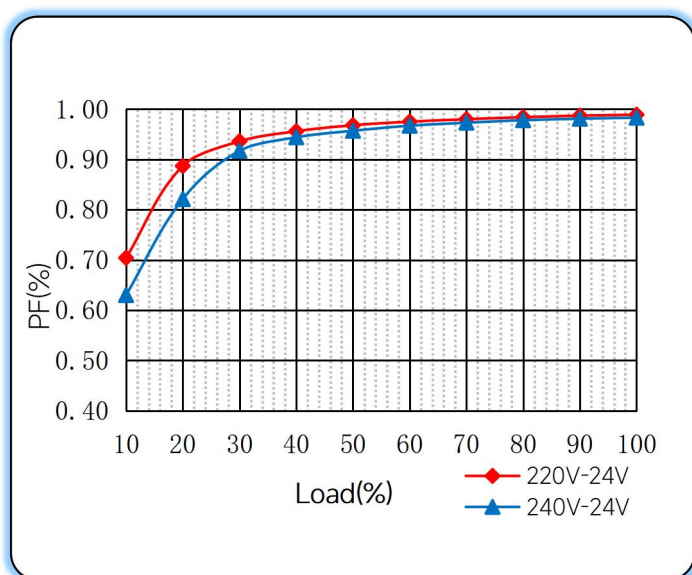
Lifetime vs. Temperature Curve



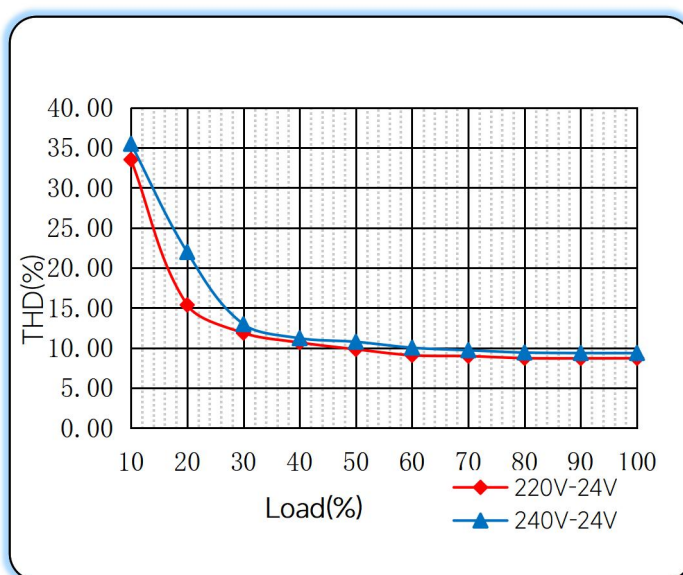
Efficiency vs. Load



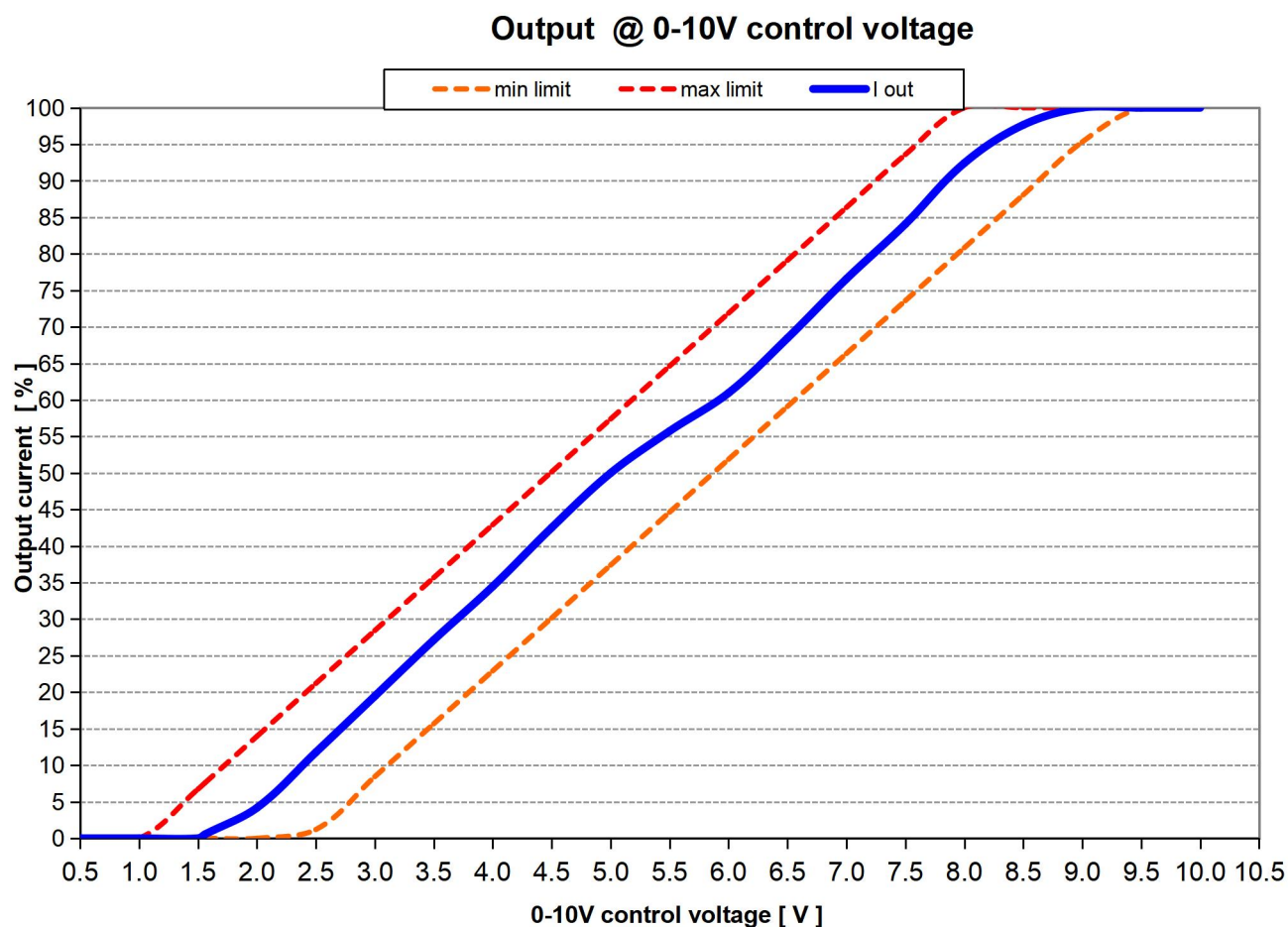
Power Factor Characteristics



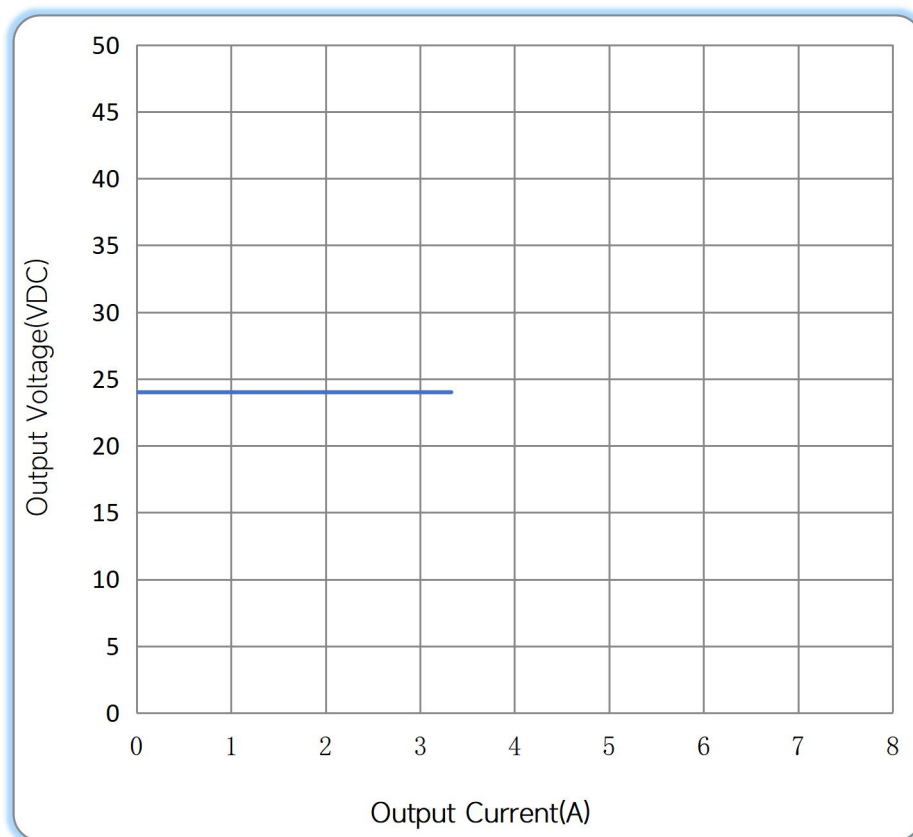
THD vs. Load



◆ Dimming curve



◆ Operating window



— Operating window 100%

◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2025/07/19
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.

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

E-mail: sales@eaglerise.com

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



EAGLERISE



Manual