

30W constant Voltage-LS Series



■ Approve



Features

- Class II, SELV, Independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OCP/OTP
- Power Factor: ≥ 0.95 (Typ.)
- Efficiency: $\geq 86\%$ (Typ.)
- 5 years warranty

Applications

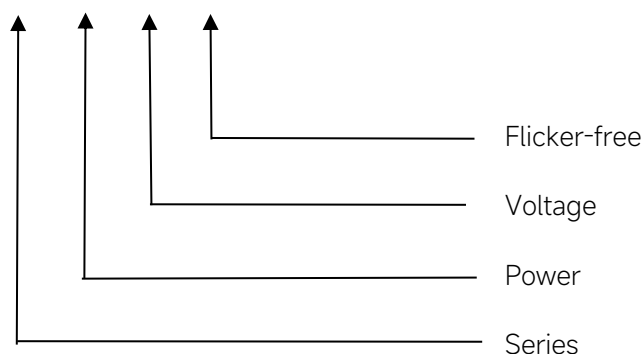
- LED strips

◆ Description

LS-30-XX LI1 EXC is a 30W constant voltage LED driver that operates from 198-264Vac input with 12V, 24V, 48V output voltage. With it's compact dimensions from 116 x 41.2 x 26 mm. It is easy to integrate in LED strips products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

◆ Model code

LS-30-XX LI1 EXC



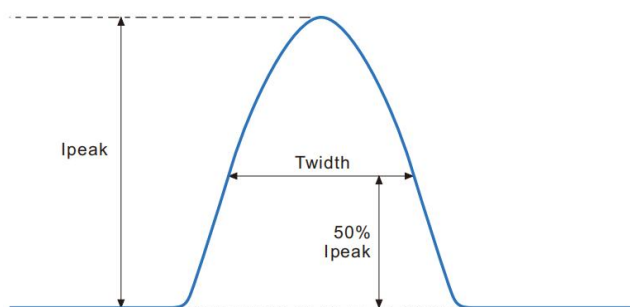
◆ Specification

Output	Constant Voltage	12VDC	24VDC	48VDC
	Current Range	0-2.5A	0-1.25A	0-0.625A
	Voltage Accuracy	±5%		
	Output HF current ripple(≥1KHz)	±3%		
	Output LF current ripple(≤120Hz)	±3%		
	SVM	≤0.4		
	Pst	≤1		
	Efficiency(Typ.)	≥86%@Full load,230V		
Input	Rated input voltage	220-240VAC		
	Range of input voltage	198-264VAC		
	Frequency(Hz)	50/60 Hz		
	Displacement factor	≥0.95		
	Power Factor	≥0.95		
	Input Current max	0.25A		
	Start-up time	< 0.5S		
	No Load Power	≤0.5W		
	THD (Typ.)	< 10%		
Protection	Over Load Protection	105-150%		
		YES/Auto Resume		
	Over Circuit Protection	> 3.75A	> 1.875A	> 0.9375A
		YES/Auto Resume		
	Short circuit 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	80°C		
	Storage Temperature	-20°C~+60°C		
	Life time	> 50000h@Tc=75°C		
	Ripple & Noise	≤20dB(A)@20cm		
Surface	Dimension	116X41.2X26(LXWXH)mm		
	material	PC		
Standards	Safety	GB19510. 1, GB19510. 14;EN61347- 1, EN61347-2- 13		
	EMC	GB/T17743, GB17625. 1;EN55015, EN61000-3-2, EN61000-3-3, EN61547;EN61000-4-5		
	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

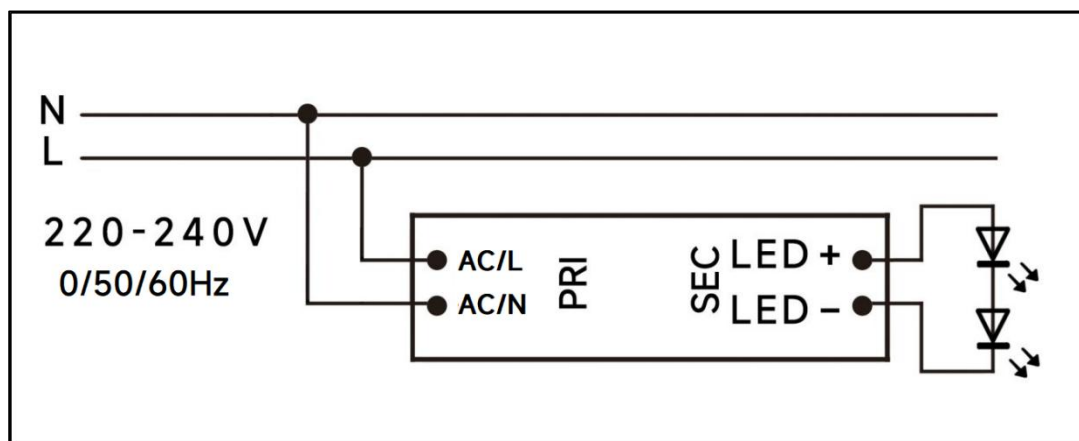
I _{peak}	T _{width}	B10	B16	B20	C10	C16	C20
17.3A	136μs	32pcs	51pcs	64pcs	32pcs	51pcs	64pcs



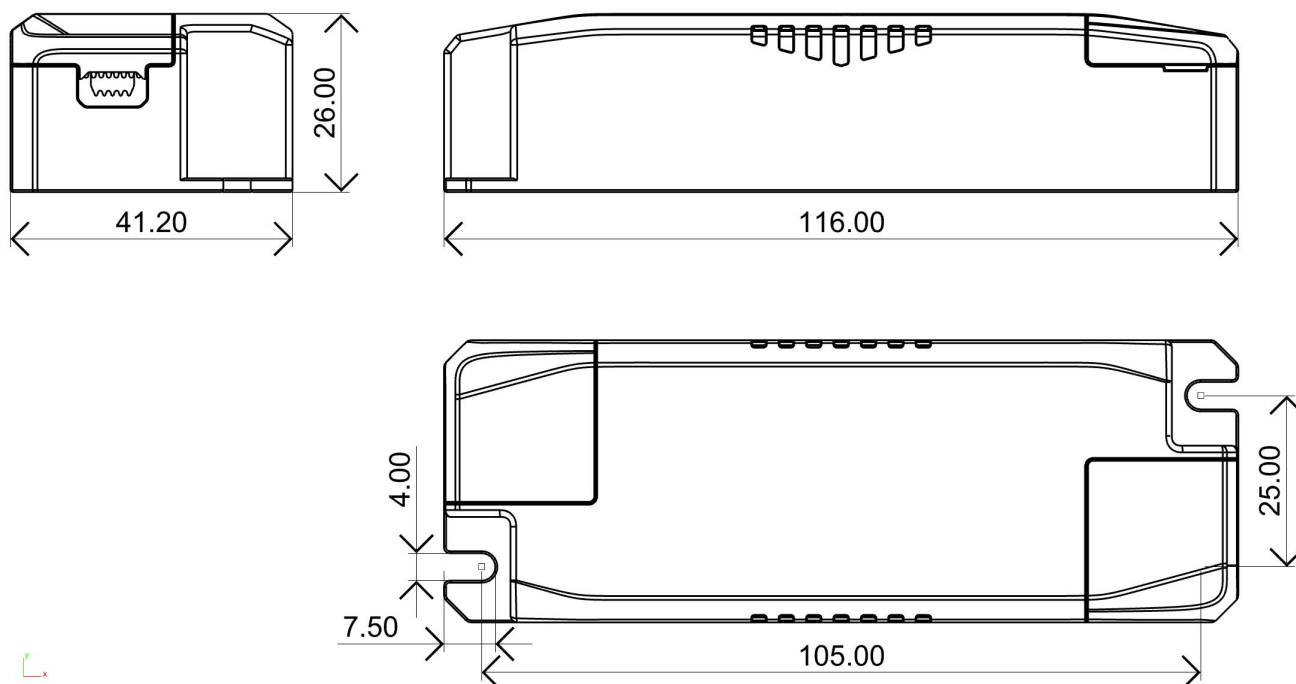
Remarks:

- 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.

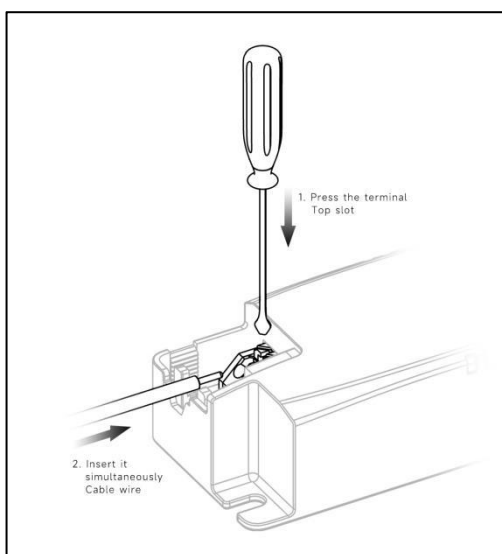
◆ Wiring diagram



◆ 2D diagram



Terminal



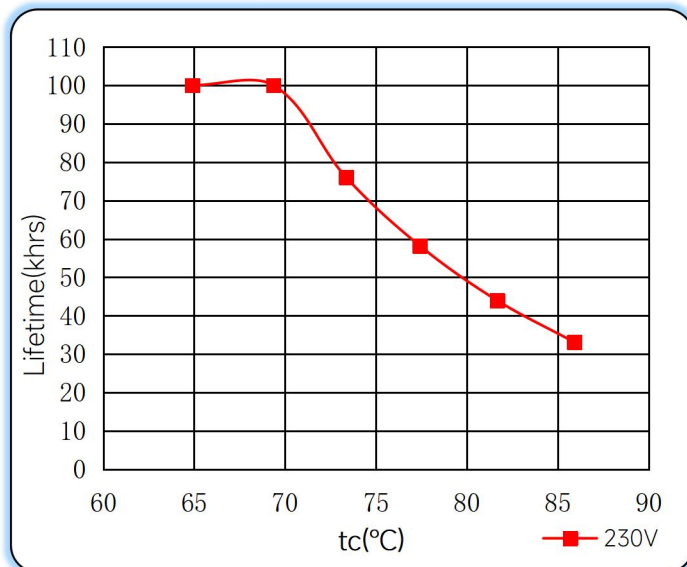
◆ Wiring & Connections

	Specification item	Value (Unit)
Input	Input wire cross-section	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

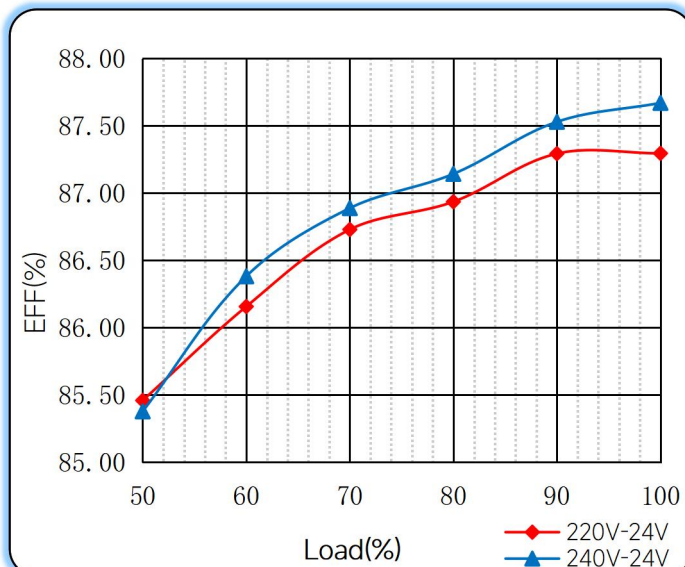
Note: Solid wire is risky to use on an angled terminal. Stranded wire is recommended for this kind of use.

◆ Curve for LS-30-24 LI EXC

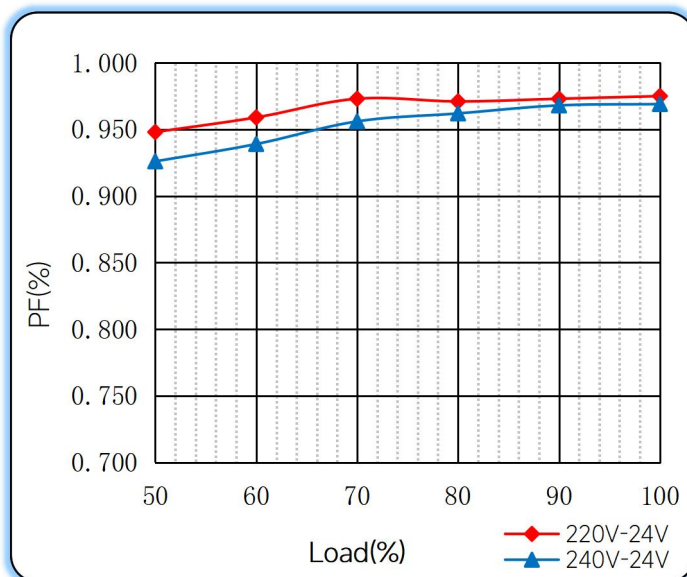
Lifetime vs. Temperature Curve



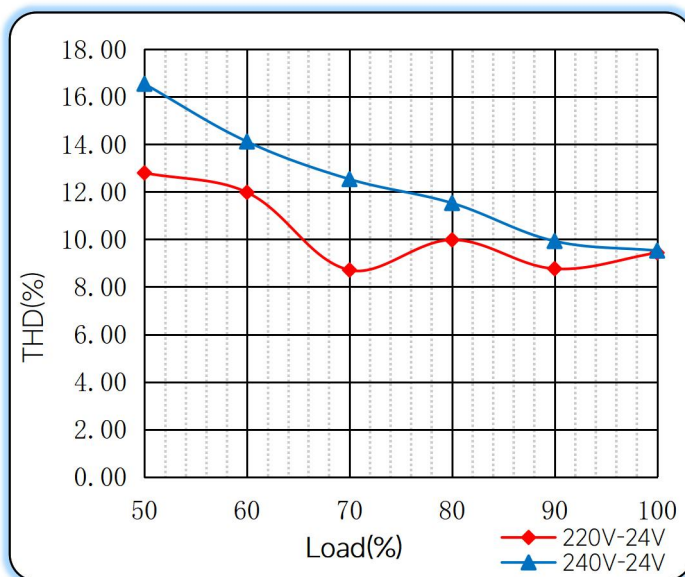
Efficiency vs. Load



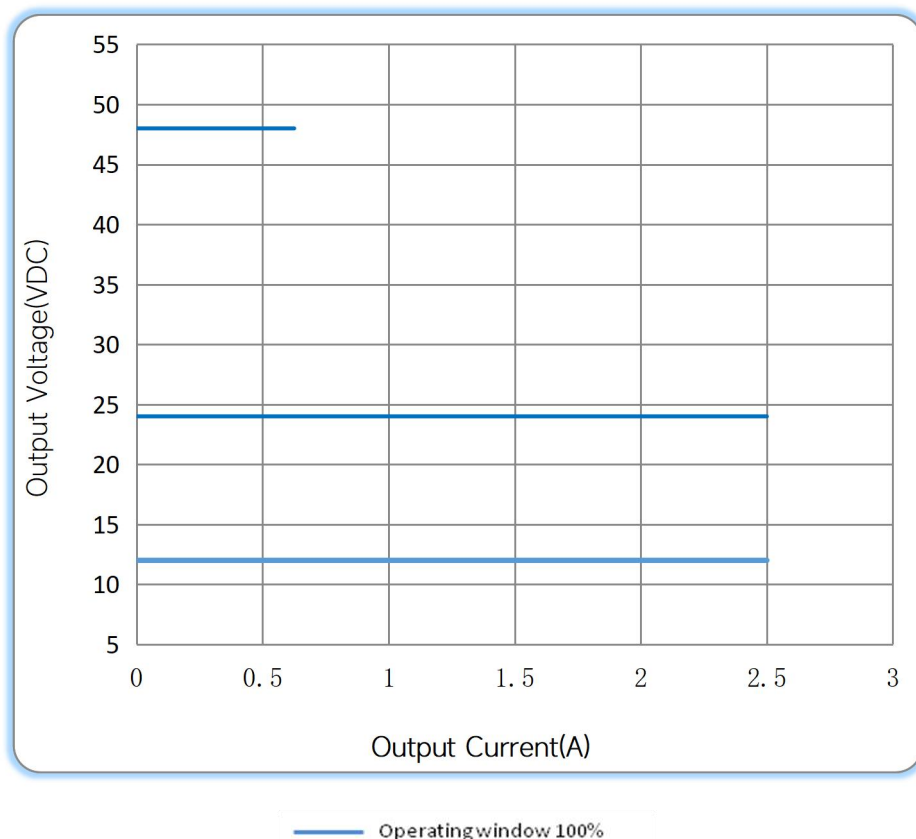
Power Factor Characteristics



THD vs. Load



◆ Operating window



◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2023/07/12
Tc/Ta	75°C/40°C	80°C/45°C	B	2023/12/13
Lifetime	> 50000h@Tc=80°C	> 50000h@Tc=75°C	C	2024/03/12

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

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Manual