

75W constant Voltage-LS Series



■ Approve



Features

- Class II, SELV, Independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor: ≥ 0.95 (Typ.)
- Efficiency: $\geq 90\%$ @48V(Typ.)
- 5 years warranty

Applications

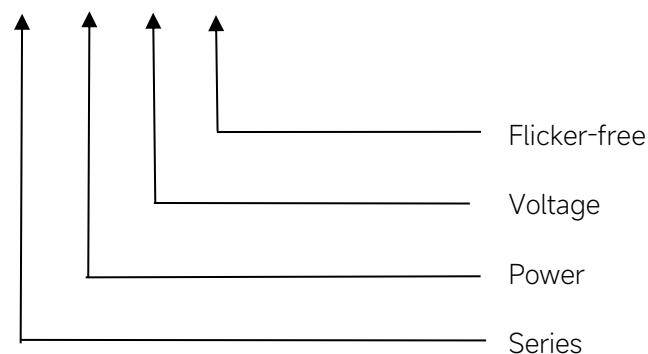
- LED strips

◆ Description

LS-75-48 LI EXC is a 75W constant voltage LED driver that operates from 198-264Vac input with 48V output voltage. With it's compact dimensions from 168 x 38x 30mm. 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-75-48 LI EXC



◆ Specification

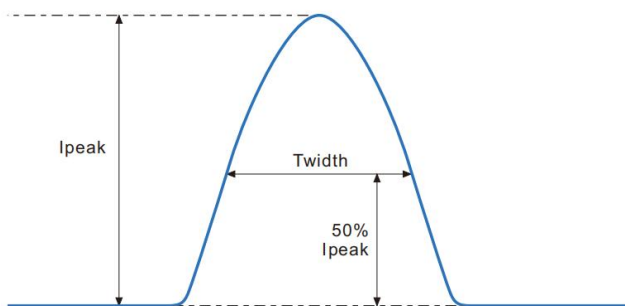
Output	Constant Voltage	48VDC
	Current Range	0-1.56A
	Voltage Accuracy	±5%
	Output HF current ripple(≥1KHz)	±1%
	Output LF current ripple(≤120Hz)	±1%
	SVM	≤0.4@Full Load
	Pst	≤1@Full Load
	Efficiency(Typ.)	≥90%@Full load,230V
Input	Rated input voltage	220-240VAC
	Range of input voltage	198-264VAC
	Frequency(Hz)	50/60 Hz
	Displacement factor	≥0.95
	Power Factor	≥0.95@Full load,230V
	Input Current max	0.49A
	Start-up time	< 0.5S
	No Load Power	≤0.5W
	THD (Typ.)	< 10%@Full load,230V
Protection	Over Load Protection	105-150%
		YES/Auto Resume
	Over Voltage Protection	> 49.8VDC
		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)	2KV
Environment	Operating Temperature	-20°C~+45°C
	Humidity	20%-90%RH
	Tc	90°C
	Storage Temperature	-20°C~+60°C
	Life time	> 50000h@Tc=85°C
	Ripple & Noise	≤25dB(A)@20cm
Surface	Dimension	168X38X30(LXWXH)mm
	material	PC
Standards	Safety	GB19510. 1, GB19510. 14;EN61347- 1, EN61347-2- 13;S/NZS 61347- 1, AS/NZS 61347-2- 13
	EMC	GB/T17743, GB17625. 1;EN55015, EN61000-3-2, EN61000-3-3, EN61547;EN61000-4-5;EN 62493
	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.All Astralux 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.

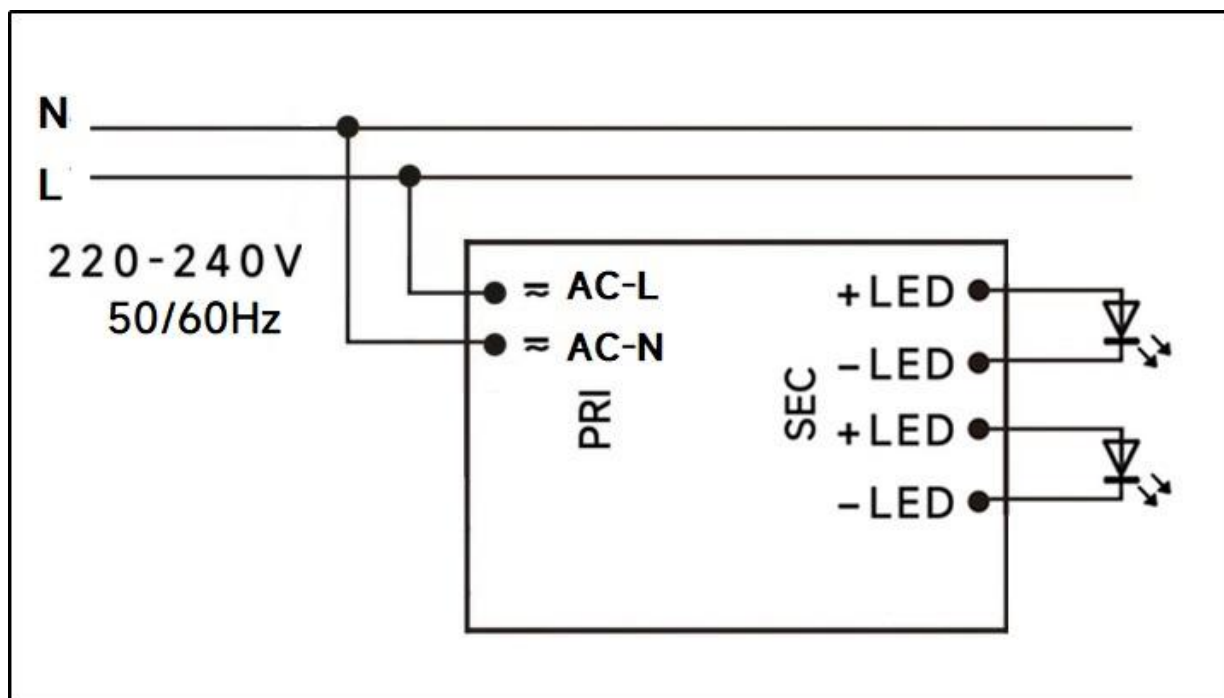
◆ Inrush Current

I_{peak}	Twidth	B10	B16	B20	C10	C16	C20
35.2A	246μs	9pcs	14pcs	18pcs	15pcs	24pcs	31pcs

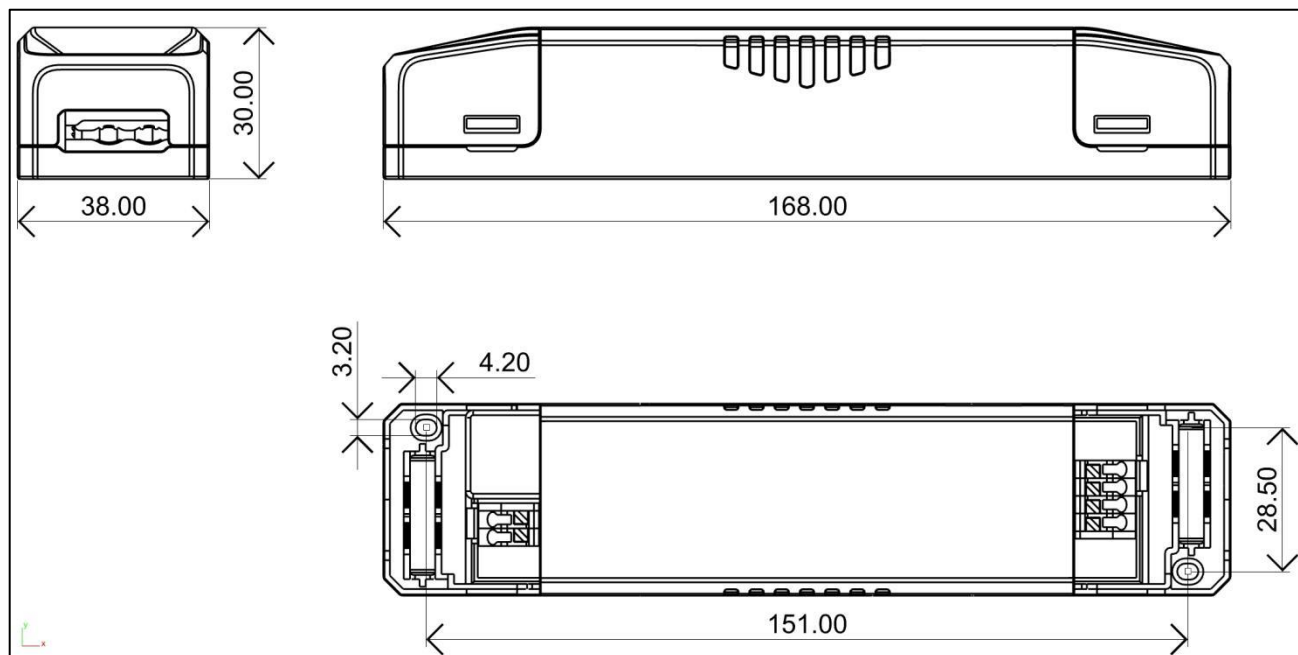

Remarks:

- 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.

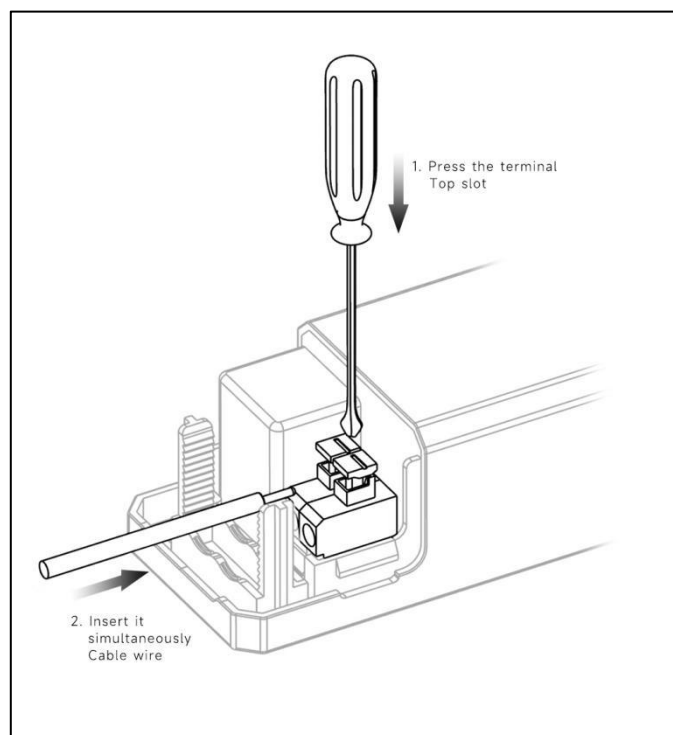
◆ Wiring diagram



◆ 2D diagram



Terminal



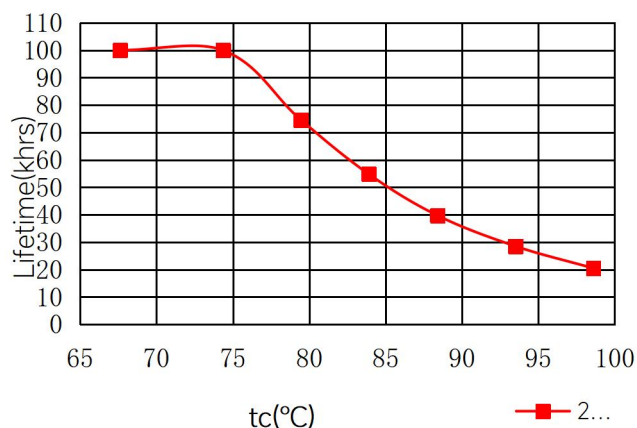
◆ Wiring & Connections

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

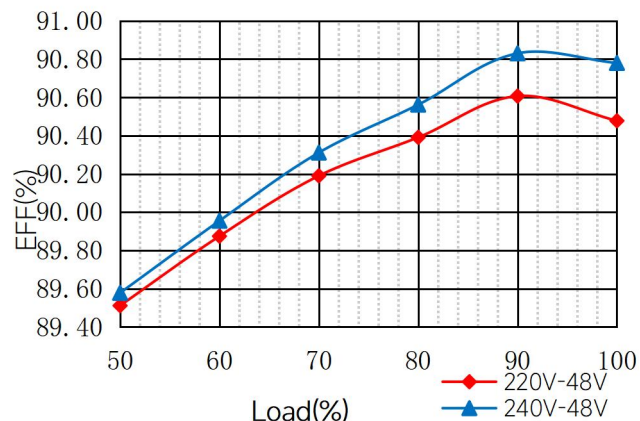
Note: Solid wire is risky to use on an angled terminal. Stranded wire is recommended for this kind of use.

◆ Curve for LS-75-48 LI EXC

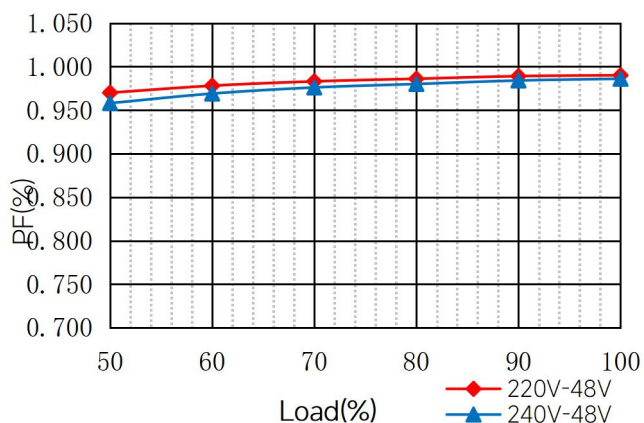
Lifetime vs. Temperature Curve



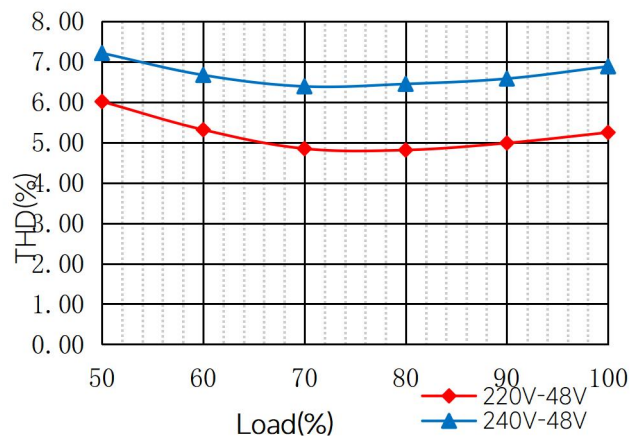
Efficiency vs. Load



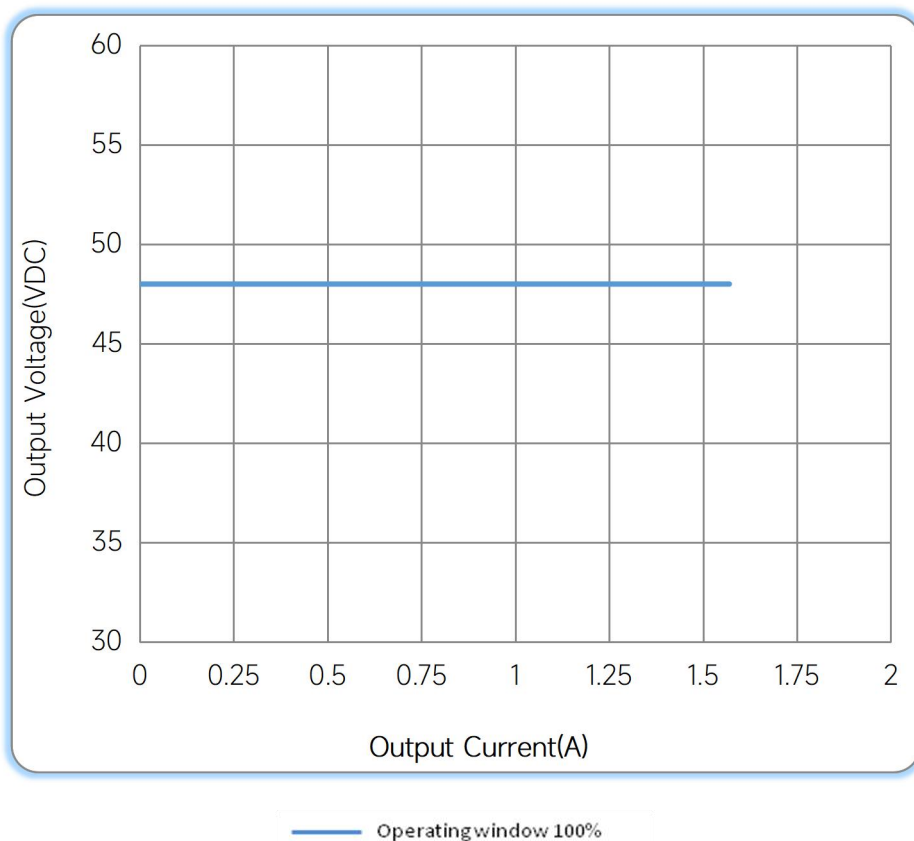
Power Factor Characteristics



THD vs. Load



◆ Operating window



◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2023/11/28
Ripple & Noise	≤20dB(A)@10cm	≤25dB(A)@20cm	B	2023/12/18

Remark: The final interpretation of the contents of the specification belongs to Astralux.

E-mail: sales@astralux-driver.com
 Website : www.astralux-driver.com