150W Constant Voltage Series

Features

- Class II，SELV，Independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OTP
- Power Factor ＞0.95
- Efficiency 91%
- 5 years warranty

Applications

- Magnetic Lamp

Approve

◆ Description

LS-150-48 LX is a 150W constant voltage LED driver that operates from 198-264Vac input with 48V output voltage. With it's slim dimensions from 280 x 22x42.5mm it is easy to integrate in Magnetic Lamp. To ensure trouble-free operation, protection is provided against output short circuit, over Load and over temperature.

◆ Model code

LS-150-48 LX

- LX → Flicker-free
- 48 → Voltage
- 150 → Power
- LS → Series

◆ Specification

Output	Constant Voltage	48VDC
	Current Range	0-3.13A
	Voltage Accuracy	±5%
	Output HF current ripple(≥1KHz)	±4%
	Output LF current ripple(≤120Hz)	±4%
	SVM	≤0.4
	P_{st}	≤1
	Efficiency(Typ.)	91%
Input	Rated input voltage	220-240VAC
	Range of input voltage	198-264VAC
	Frequency(Hz)	50/60 Hz
	Displacement factor	≥0.9
	Power Factor	>0.95
	Input Current max	0.95 A MAX
	Start-up time	< 0.7 S
	No Load Power	≤0.5W
	THD (Typ.)	< 10%
Protection	Over Load Protection	105-150% rated output power
		YES/Auto Resume
	Short circuit Protection	YES/Auto Resume
	Over Temperature Protection	YES/Auto Resume
Environment	Operating Temperature	-20℃...+45℃
	Humidity	20%-90%RH
	Tc	70℃
	Storage Temperature	-40℃...+80℃
	Life time	≥50,000h@Tc=70℃, full load
Surface	Dimension	280x22x42.5(LXWXH)mm
standards	EN 61347-1; EN61347-2-13; EN62384; EN55015; EN61000-3-2 ; EN61000-3-3; EN 61547	
Others	ErP	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℃ 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.	

◆ Model list

Number	Model number	Input			Output		
		Voltage (VAC)	Max.Current (A)	Frequency (Hz)	Normal working Voltage (V)	Normal working current (A)	Power (W)
1	LS-150-48 LX	220-240	0.95	50/60	48	0-3.12	150

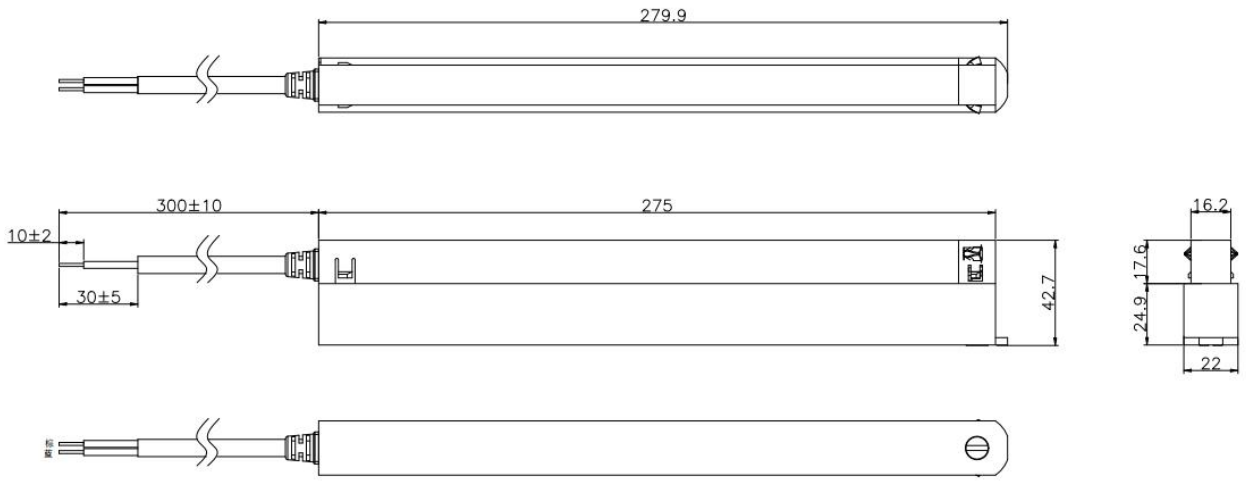
Note:

Test condition: 230Vac/50Hz, at full Load;

◆ Circuit Breaker

I^{peak}	Twidth	B10	B16	B20	C10	C16	C20
45.6A	**308μs**	5pcs	9pcs	11pcs	9pcs	15pcs	18pcs

◆ 2D diagram

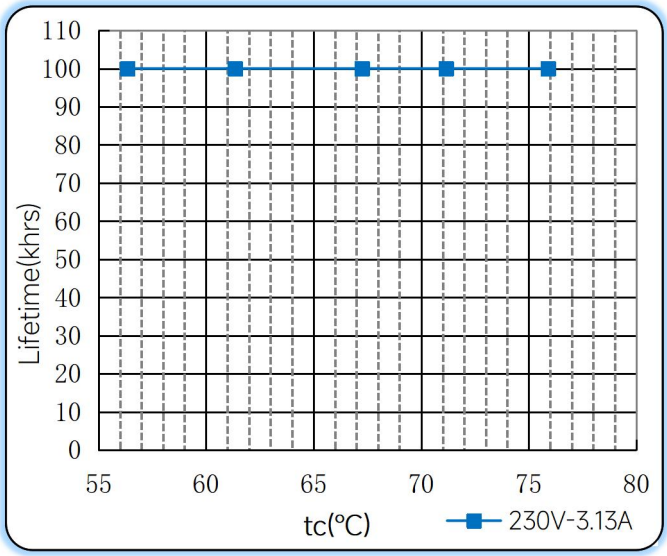


◆ Wiring & Connections

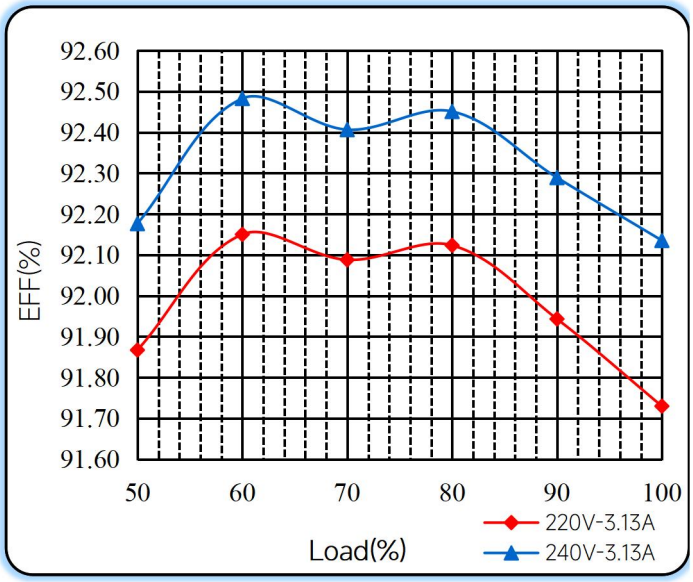
Specification item		Value （Unit ）
Input	Total Length	300mm
	Outside Color	Black/brown/blue
	Inside Wires Color	brown/blue
	Wire Model/Diameter	CCC 2x0.75mm2

◆ Curve for LS-150-48 LX

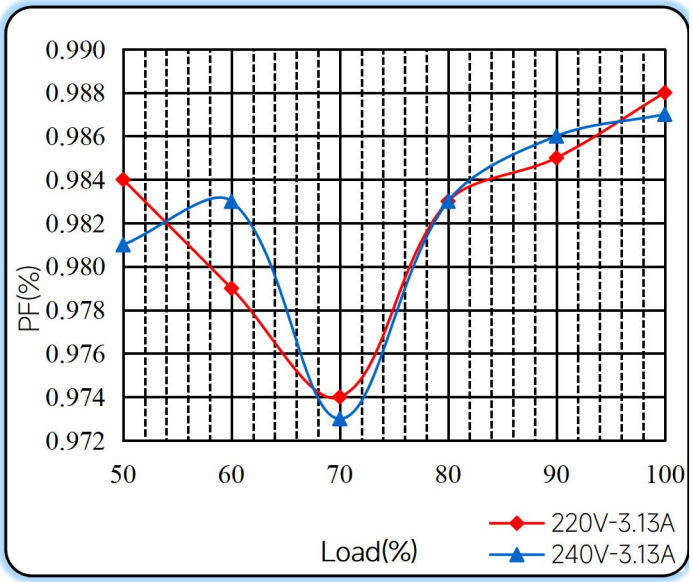
Lifetime vs. Temperature Curve



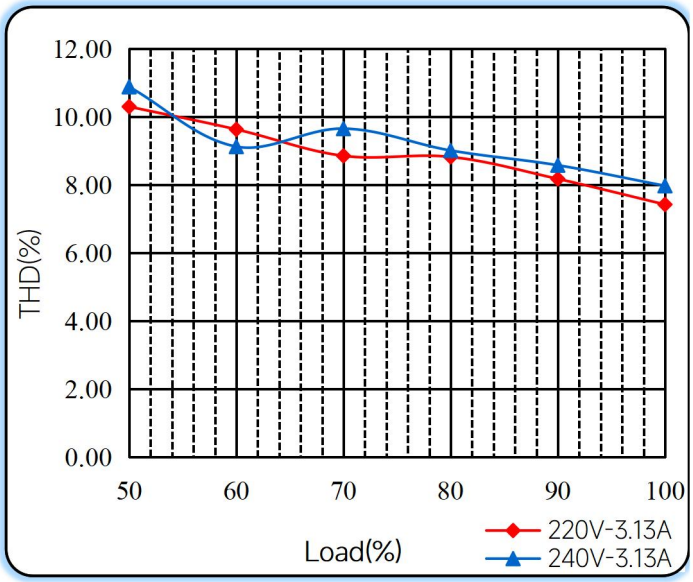
Efficiency vs. Load



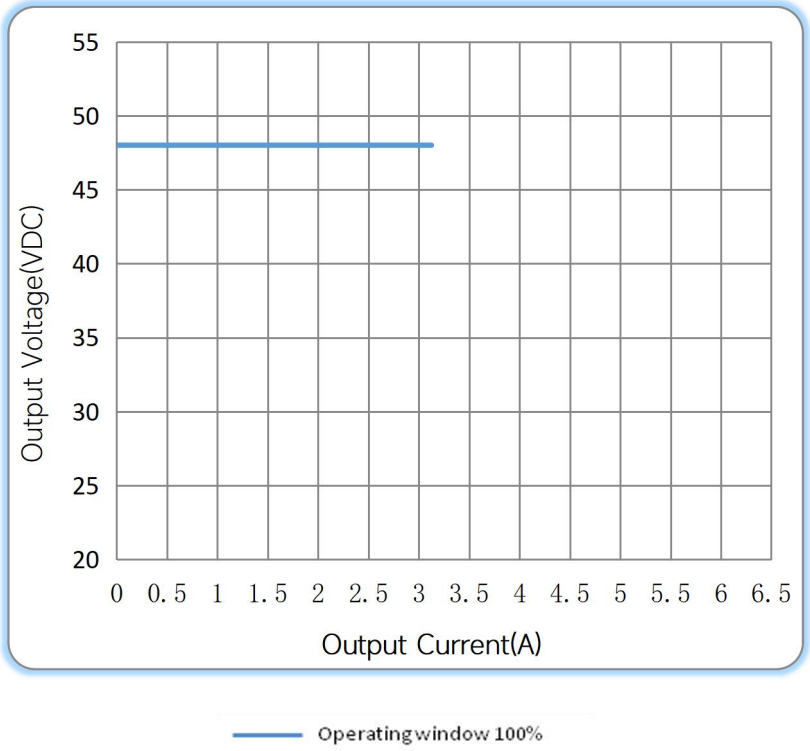
Power Factor Characteristics



THD vs. Load



◆ Operating window



◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2022/02/15
Start-up time	<0.5s	<0.7s	B	2022/11/09
Protection	OVP	OTP	B	2022/11/09
Wiring & Connections		Added	C	2022/11/15
Current Range	0-3.12A	0-3.13A	D	2023/01/06

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