

150W constant Voltage-MS Series



■ Approve



Features

- For luminaries of protection Class I, SELV, Built-in
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor: ≥ 0.95 (Typ.)
- Efficiency: $\geq 92\%$ (Typ.)
- 5 years warranty

Applications

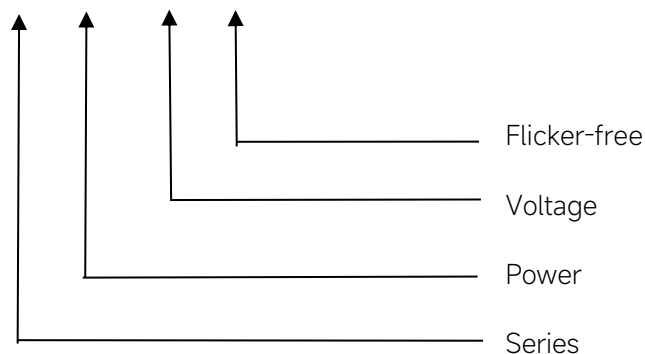
- LED strips

◆ Description

MS-150-48 LX-YX is a 150W constant voltage LED driver that operates from 198-264Vac input with 48V output voltage. With it's compact dimensions from 242 x 34 x 24.2mm. 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

MS-150-48 LX-YX



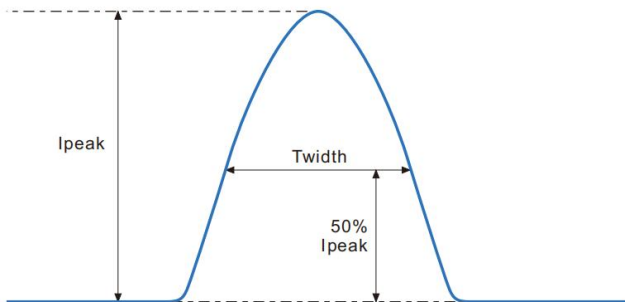
◆ Specification

Output	Constant Voltage	48VDC
	Current Range	0-3.13A
	Voltage Accuracy	±5%
	Output HF current ripple(≥1KHz)	±5%
	Output LF current ripple(≤120Hz)	±5%
	SVM	≤0.4
	Pst	≤1
	Efficiency(Typ.)	≥92%@Full load,230V
Input	Rated input voltage	220-240VAC
	Range of input voltage	198-264VAC
	Maximum voltage	300VAC@1 h maximum,unit might not operate in this abnormal condition
	Range of input voltage(VDC)	280-373VDC
	Frequency(Hz)	50/60 Hz
	Displacement factor	≥0.9
	Power Factor	≥0.95@Full load,230V
	Input Current max	1A
	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	60VDC
		YES/Auto Resume
	Short circuit Protection	YES/Auto Resume
capability	Surge capability (L-N)	1KV
	Surge capability (L/N-Ground)	2KV
Environment	Operating Temperature	-20°C~+40°C
	Humidity	20%-90%RH
	Tc	80°C
	Storage Temperature	-20°C~+60°C
	Life time	> 50000h@Tc=75°C
	Ripple & Noise	≤25dB(A)@20cm
Surface	Dimension	242x34x24.2(LXWXH)mm
	material	metal case
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;EN61000-4-2,3,4,5,6,8,11, EN61547
	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 efficiency testing will be affected by the instrument used and the results may also be different. 5.The DC input for this product is only used for emergency lighting and applies to functional and safety requirements, EMC is not considered. 6.EL compatible with IEC 61347-2-13 Annex J, compatible with EN 60598-2-22 emergency lighting fixtures, compatible with EN 50172 central battery system applications. 7.The over-temperature protection of the product is provided by the IC. 8.The start-up time is measured under cold start-up, frequent switching on and off may extend the start-up time to different degrees.. 9.The temperature of the components shall not exceed the maximum limit under rated operating conditions. 10.All Eaglerise 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

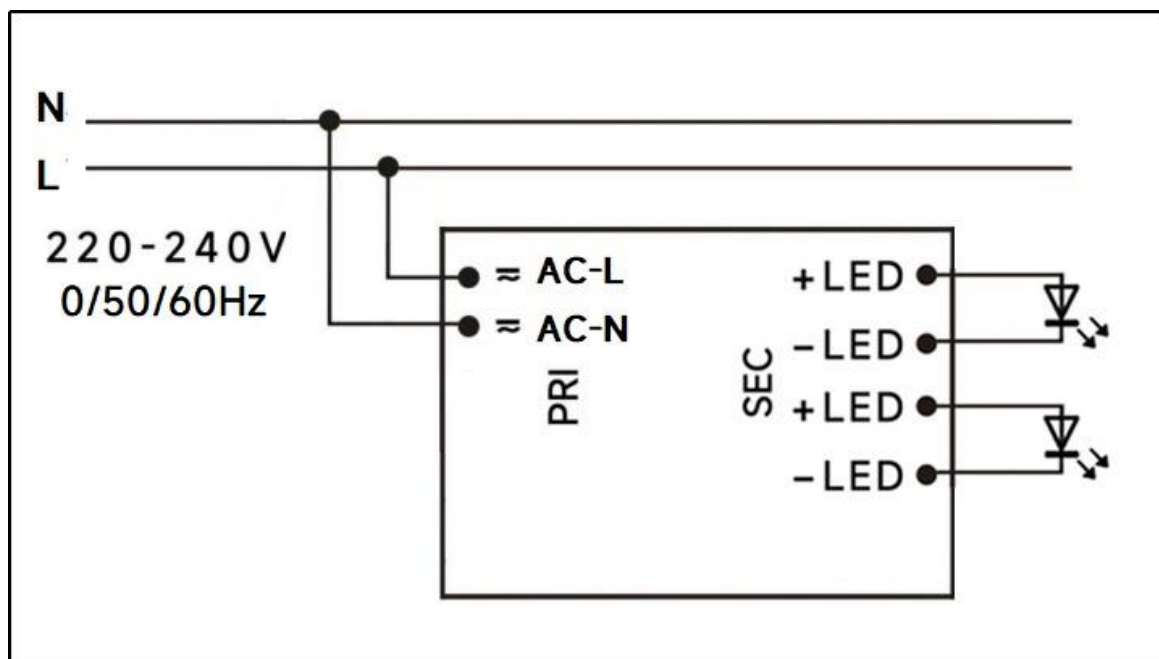
I_{peak}	Twidth	B10	B16	B20	C10	C16	C20
36.2A	188μs	8pcs	12pcs	16pcs	8pcs	12pcs	16pcs



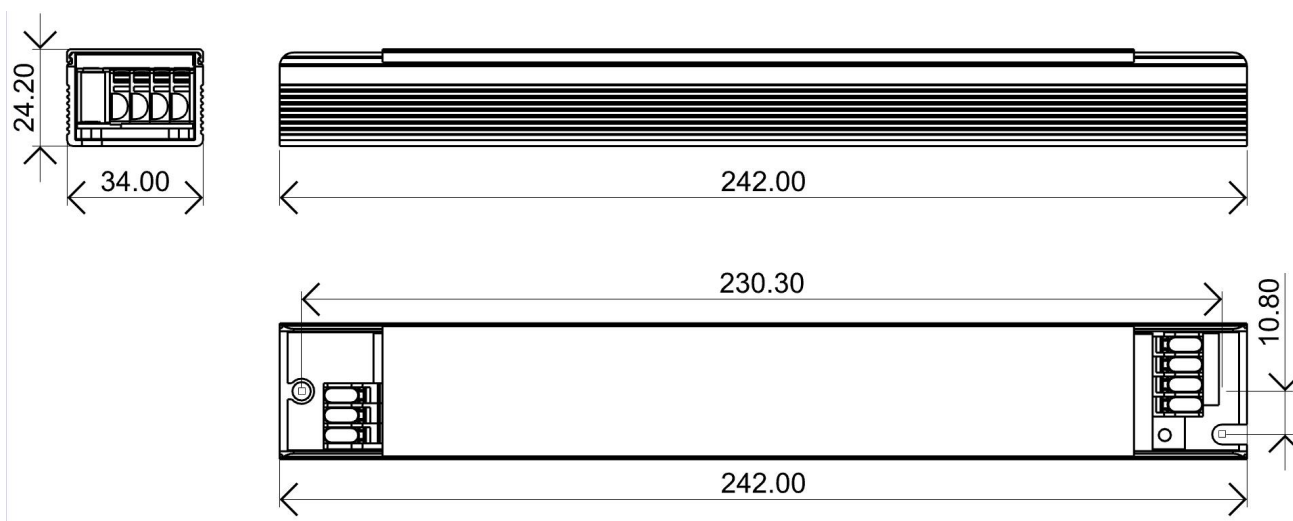
Remarks:

- 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	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

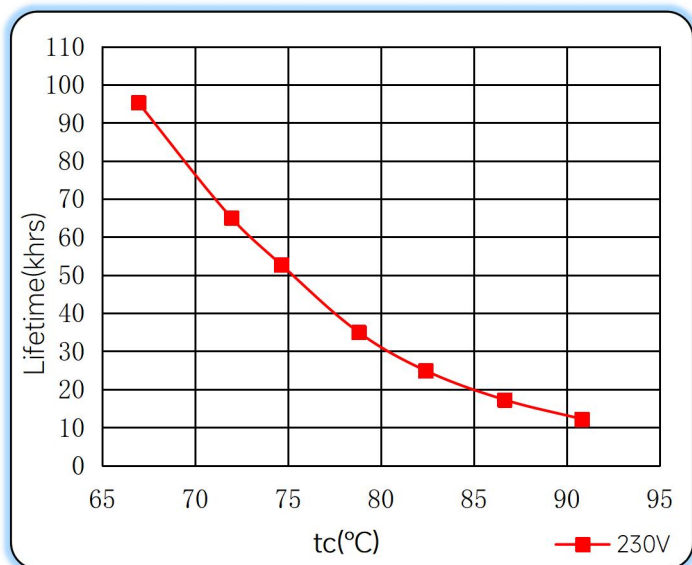
Note: Solid wire is risky to use on an angled terminal. Stranded wire is recommended for this kind of use.

◆ Packaging

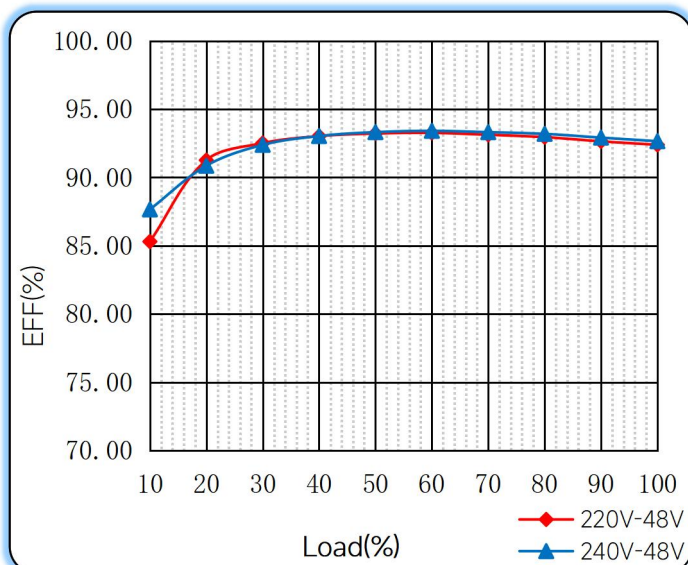
Model	Product Dimensions(mm)	weight/piece	Outer carton dimension(mm)	Quantity/carton	Net weight/carton(Kg)	Gross weight/carton(Kg)
MS-150-48 LX-YX	242x34x24.2	0.2092	Inside:295X255X200 Outside:310X265X210	48	10.0416	10.5816

◆ Curve for MS-150-48 LX-YX

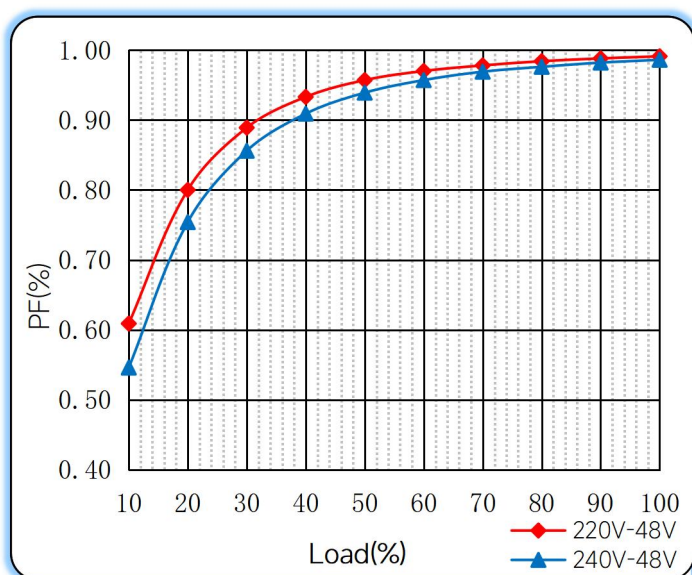
Lifetime vs. Temperature Curve



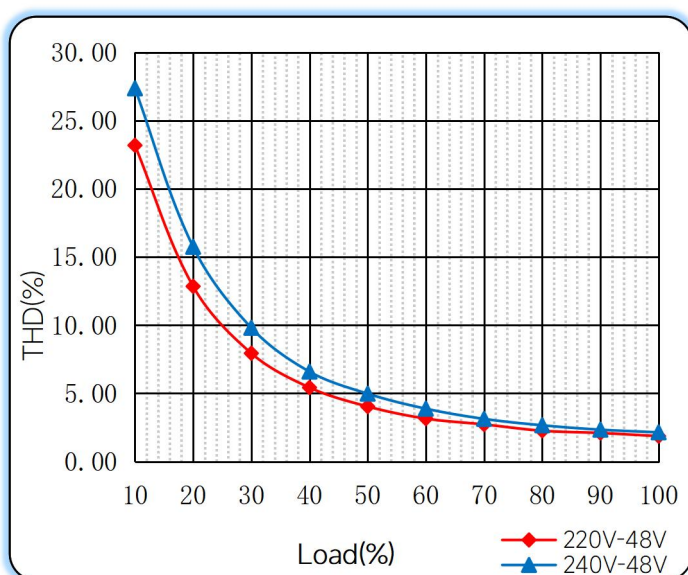
Efficiency vs. Load



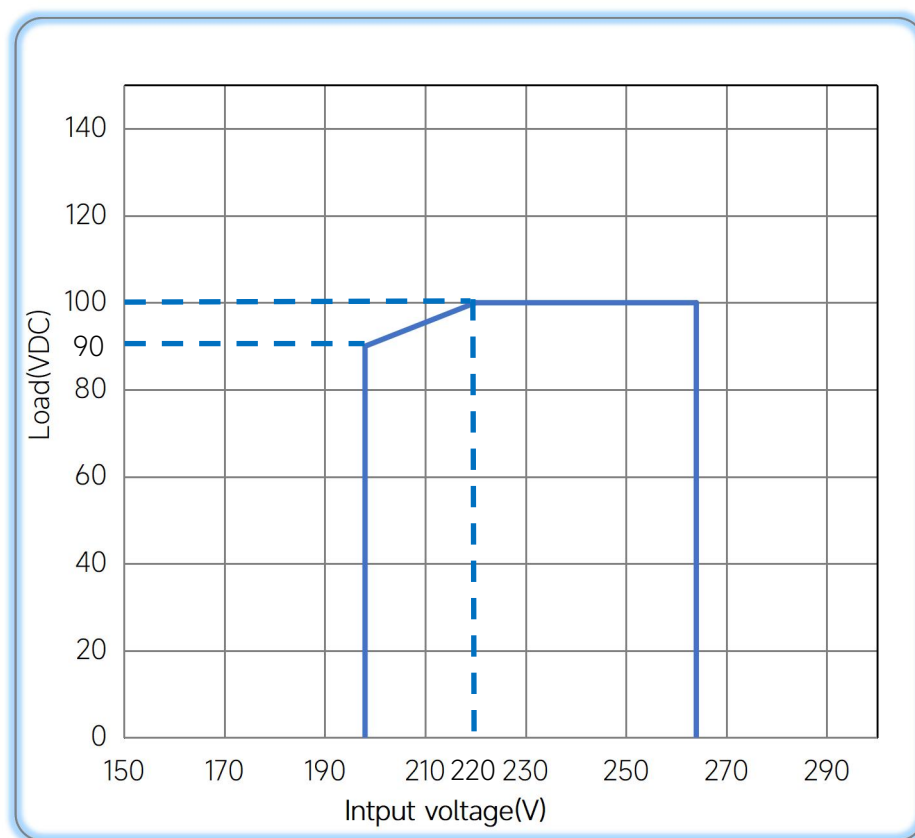
Power Factor Characteristics



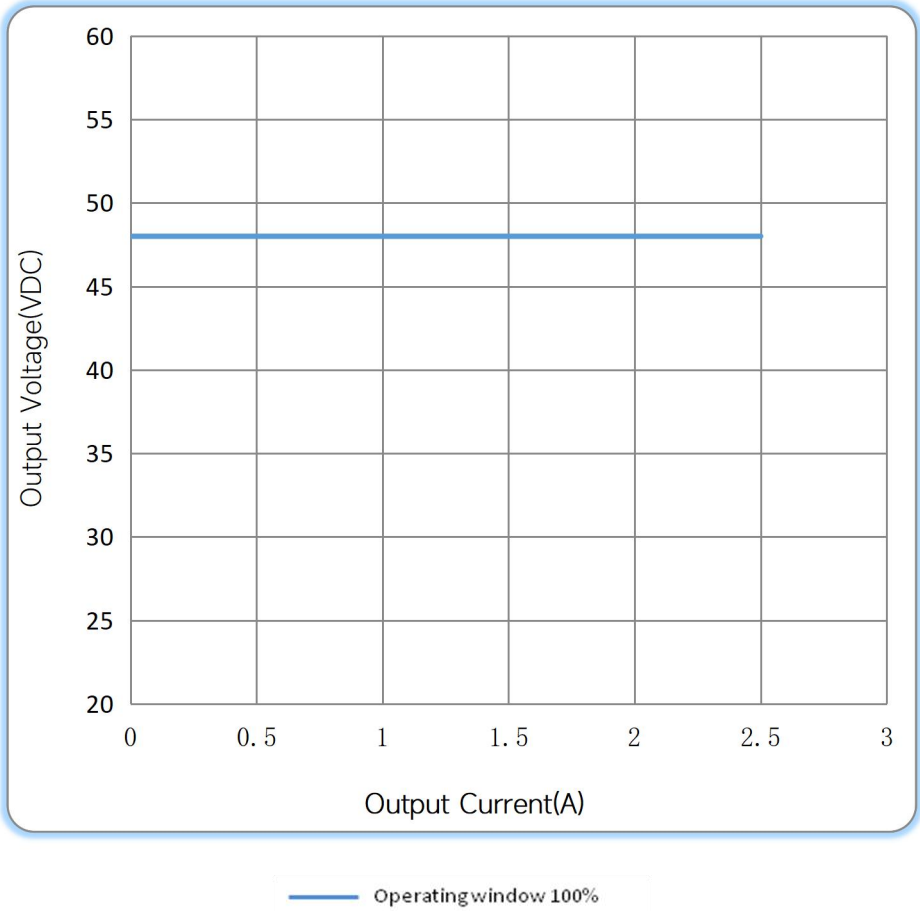
THD vs. Load



◆ Derating curve



◆ Operating window



◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2024/12/11

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

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EAGLERISE



Manual