

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

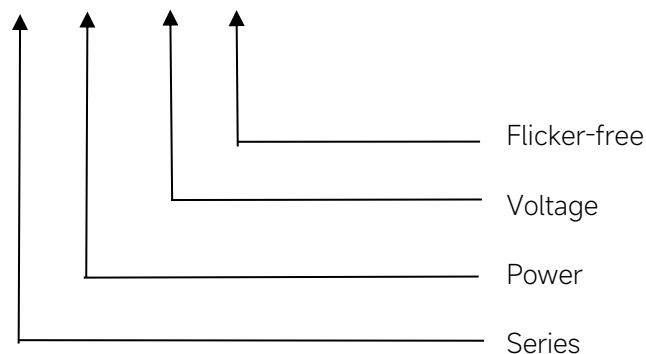
- LED strips

◆ 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



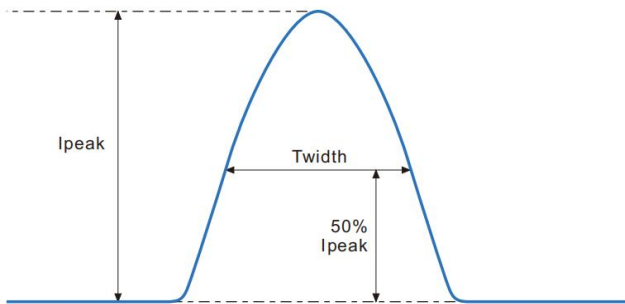
◆ Specification

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	<p>1.All parameters NOT specially mentioned are measured at 240VAC input , full load and 25°C of ambient temperature.</p> <p>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.</p> <p>3.Switch and dimmer are not recommended to connect between this product output and luminaries.</p> <p>4.The efficiency testing will be affected by the instrument used and the results may also be different.</p> <p>5.The DC input for this product is only used for emergency lighting and applies to functional and safety requirements, EMC is not considered.</p> <p>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.</p> <p>7.The over-temperature protection of the product is provided by the IC.</p> <p>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..</p> <p>9.The temperature of the components shall not exceed the maximum limit under rated operating conditions.</p> <p>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.</p>	

◆ Inrush Current

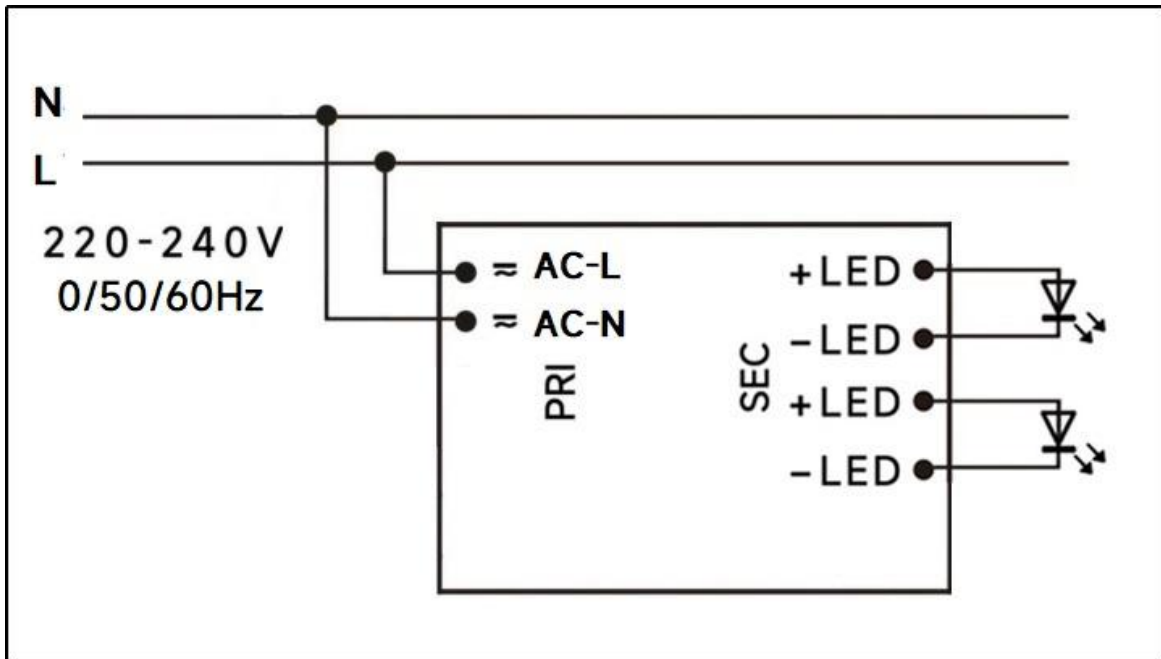
I_{peak}	Twidth	B10	B16	B20	C10	C16	C20
36.2A	188μs	8pcs	12pcs	16pcs	8pcs	12pcs	16pcs



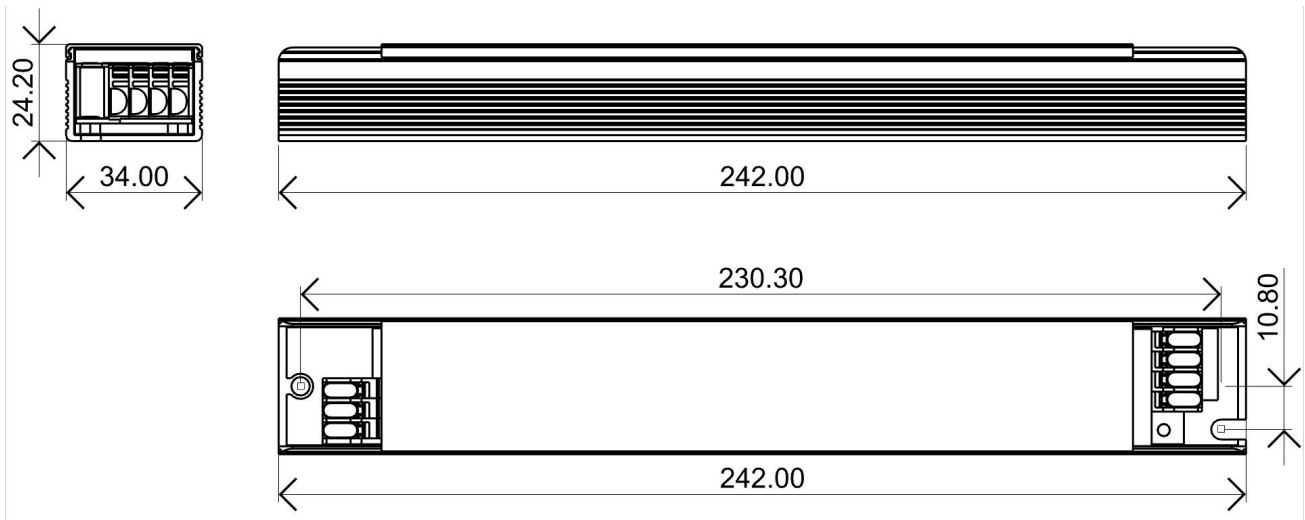
Remarks:

- 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

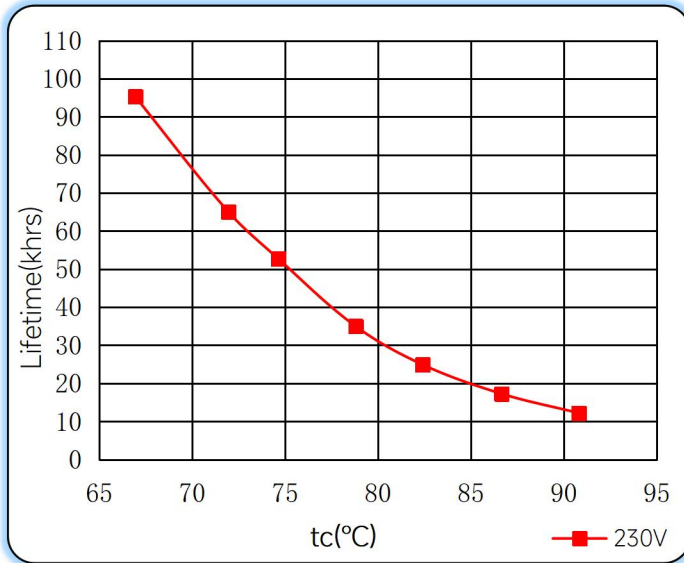
Note: Solid wire is risky to use on an angled terminal. Stranded wire is recommended for this kind of use.

◆ Packaging

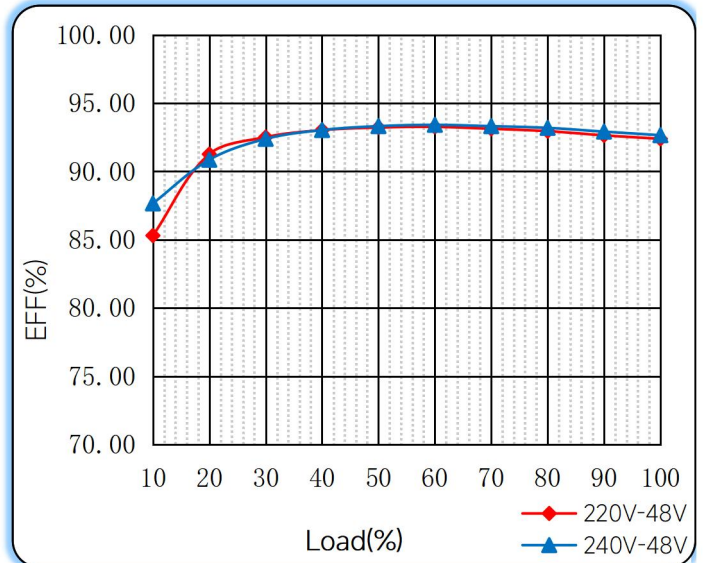
Model	Product Dimensions(mm)	weight/piece	Outer carton dimension(mm)	Quantity/carton	Net weight/carton(Kg)	Gross weight/carton(Kg)
MS-150-48 LX-YX	242x34x24.2	0.2092	Inside:295X255X200 Outside:310X265X210	48	10.0416	10.5816

◆ **Curve for MS-150-48 LX-YX**

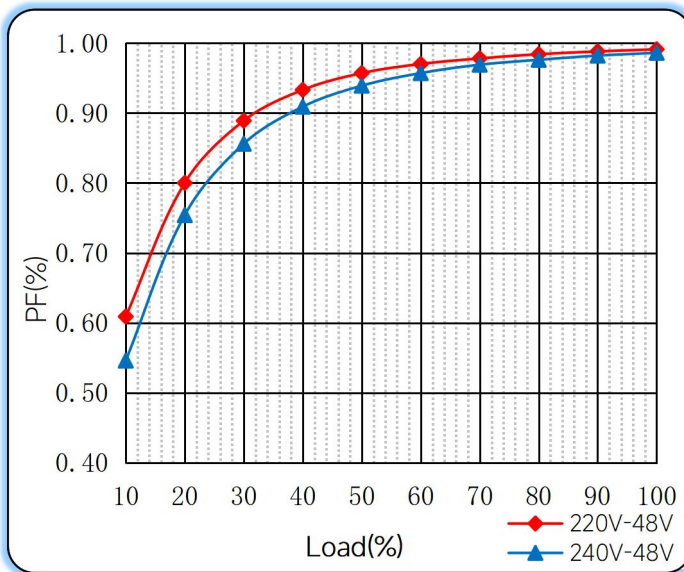
Lifetime vs. Temperature Curve



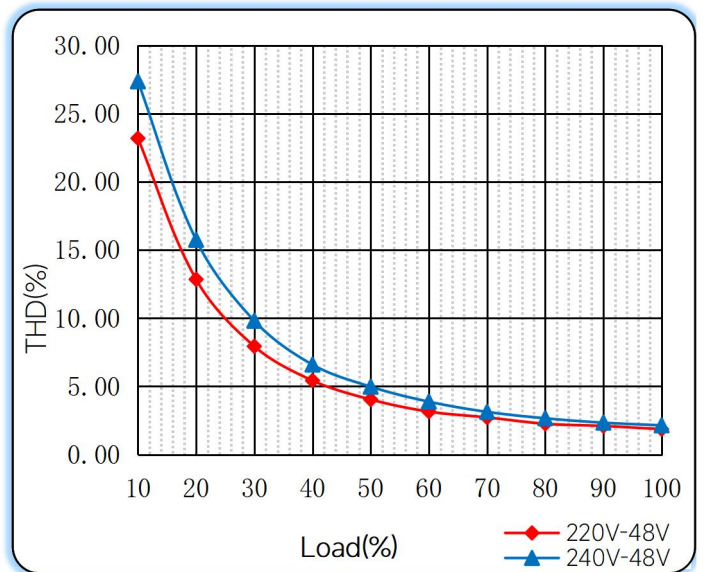
Efficiency vs. Load



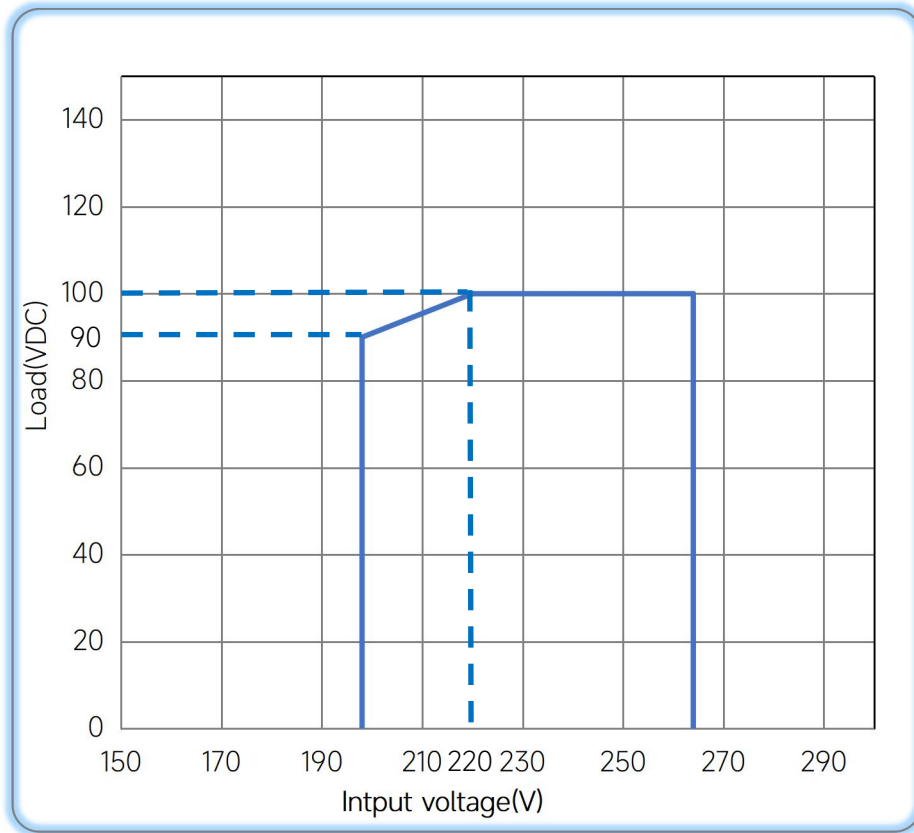
Power Factor Characteristics



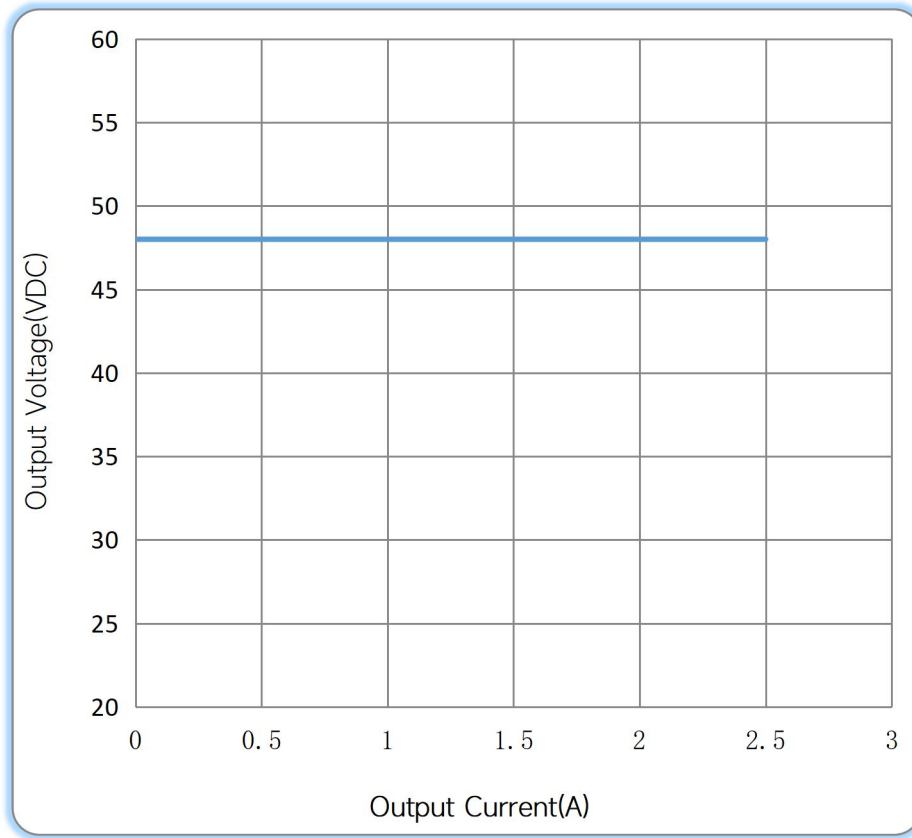
THD vs. Load



◆ **Derating curve**



◆ Operating window



— Operating window 100%

◆ 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