

150W Constant Current power supply



■ Approve

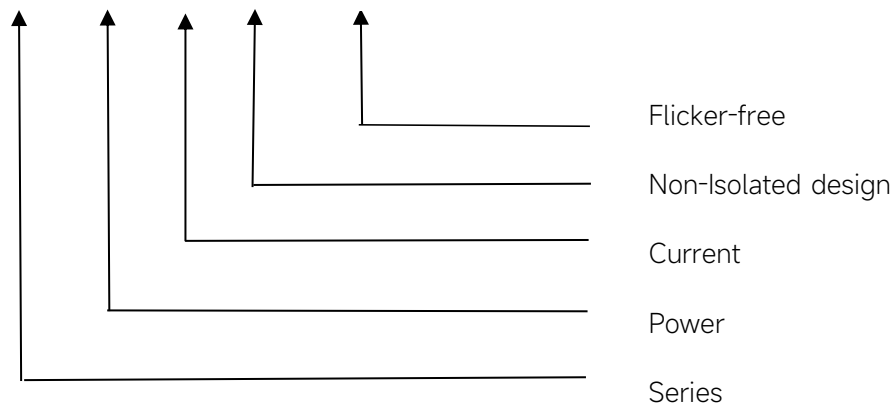


◆ Description

FMS-150-800 N-S LN is a 150W constant current LED driver that operates from 198-264Vac input with 250 to 800mA output current and a forward voltage range from 50 to 220Vdc. The output current is adjustable by NFC. With it's compact dimensions from 280 x 30 x 16 mm. It is easy to integrate in linear light products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

◆ Model code

FMS-150-800 N-S LN



Features

- Class I, Non-Isolated design, Built-in
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor : 0.75C-0.95
- Efficiency : 94%
- Adjustable Output Current with NFC
- 5 years warranty

Applications

- Linear light

◆ Specification

Output	Constant Current (mA)	250-800mA
	Voltage Range(VDC)	50-220VDC
	Unload voltage Max.(VDC)	<250V RMS
	Current Accuracy	±3%
	Output HF current ripple(≥1KHz)	±3%
	Output LF current ripple(≤120Hz)	±3%
	SVM	<0.4
	P _{st}	<1
	Efficiency(Typ.)	94%@Full Load,230VAC
Input	Rated input voltage(VAC)	220-240VAC
	Range of input voltage(VAC)	198-264VAC
	Rated input voltage(VDC)	220-240VDC
	Range of input voltage(VDC)	176-280VDC
	Frequency(Hz)	0/50/60 Hz
	Displacement factor	≥0.95@Full Load,230VAC
	Power Factor	0.75C-0.95@Full Load,230VAC
	Input Current max	0.85A.Max@Full Load,230VAC
	Start-up time	<0.5S
	No Load Power	<0.5W
	Standby Power	<0.5W
	THD (Typ.)	<10%@Full Load,230VAC
Protection	Over Load Protection	103-130%
		YES/Non-auto Resume
	Over Voltage Protection	<250V RMS
		YES/Auto Resume
	Short circuit Protection	YES/Auto Resume
Environment	Over Temperature Protection	YES/Auto Resume
	Operating Temperature	-25°C~+50°C
	Humidity	20%-90%RH
	Tc	80°C
	Storage Temperature	-25°C~+60°C
Surface	Life time	>50000h,@Tc=75°C
	Dimension	280x30x16(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°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.The DC input for this product is only used for emergency lighting and applies to functional and safety requirements, EMC is not considered.
- 4.Switch and dimmer are not recommended to connect between this product output and luminaries.

◆ Circuit Breaker

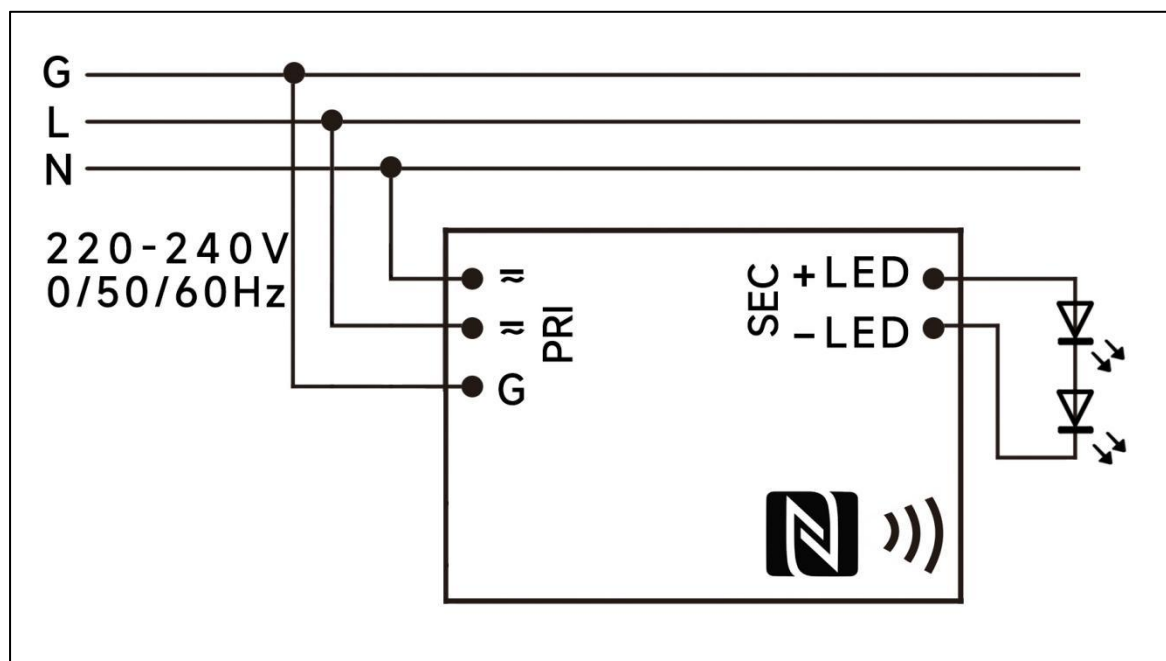
I _{peak}	T _{width}	B10	B16	B20	C10	C16	C20
45.4A	320μs	5pcs	8pcs	10pcs	9pcs	14pcs	18pcs

◆ Parameter

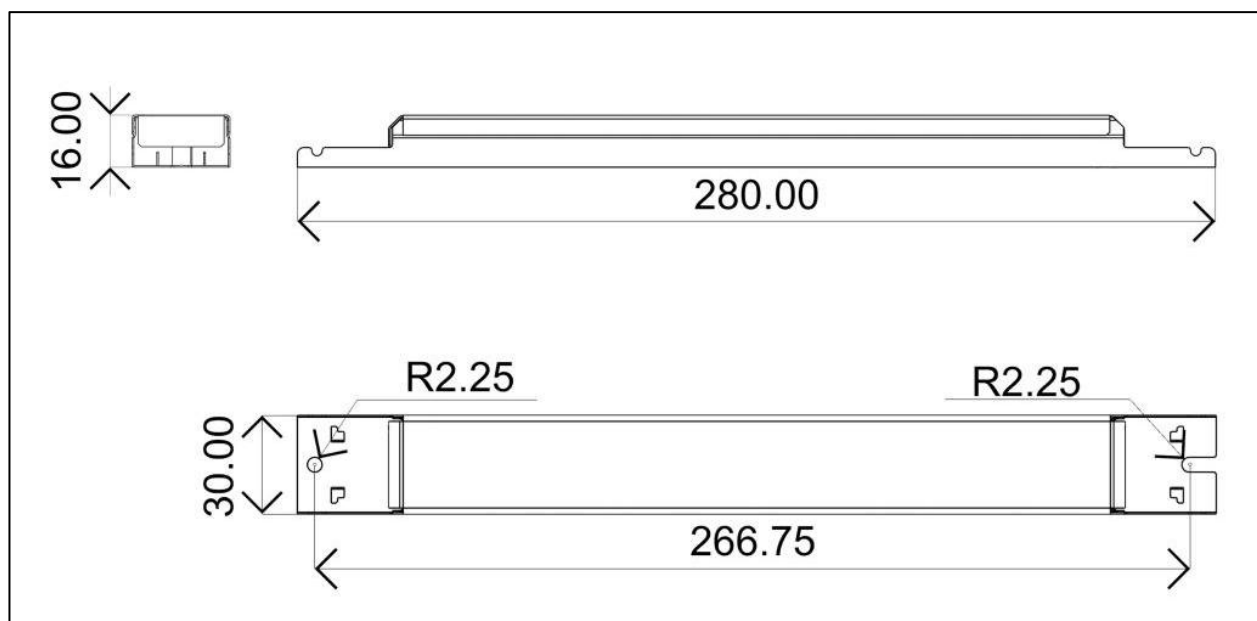
Number	Output			
	Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)
*1	250mA	50-220VDC	250	55
2	...	...	...	...
3	400mA	50-220VDC	250	88
4	...	...	...	...
5	800mA	50-187.5VDC	250	150

* Factory default

◆ Wiring diagram



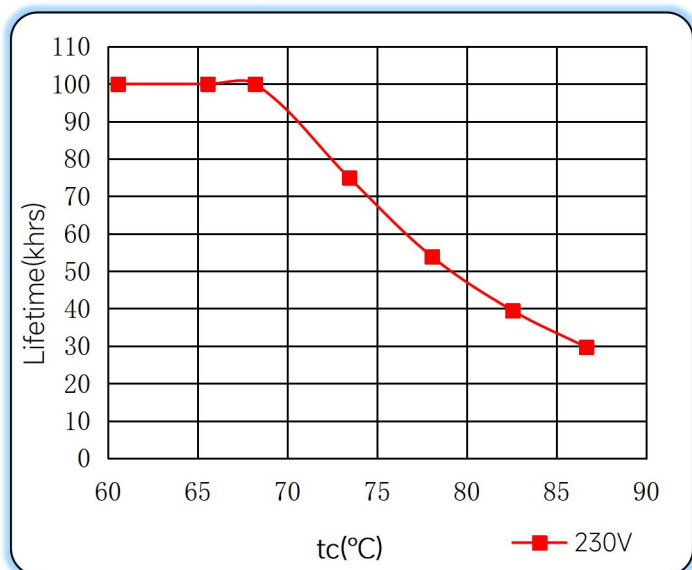
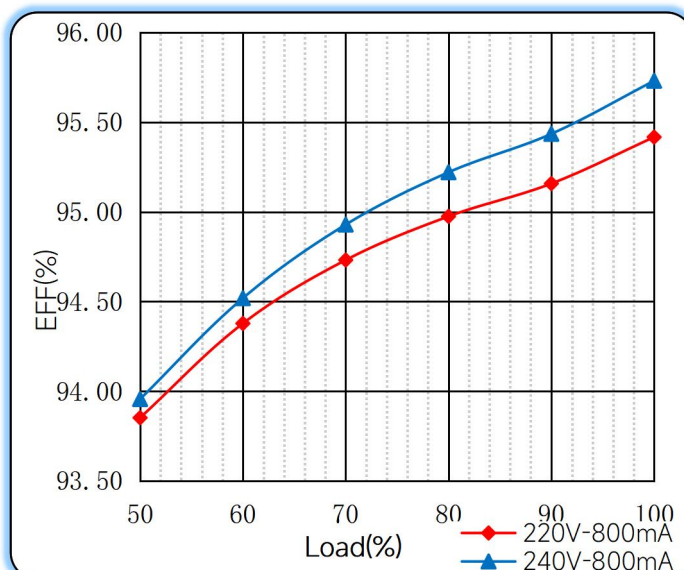
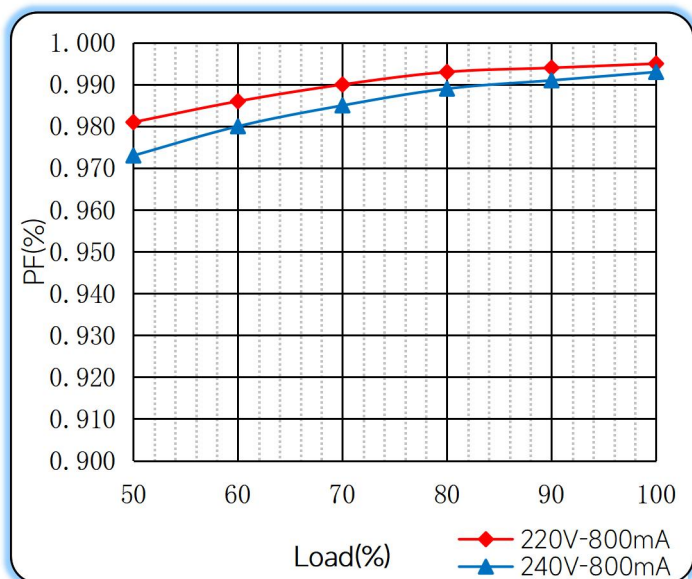
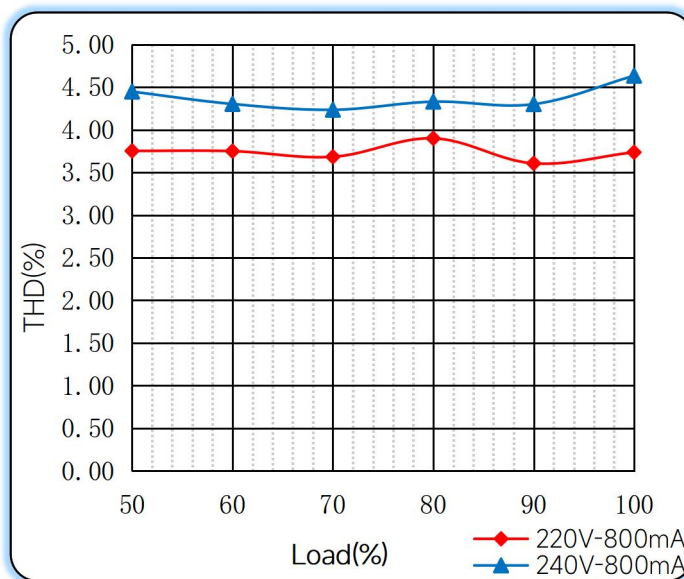
◆ 2D diagram



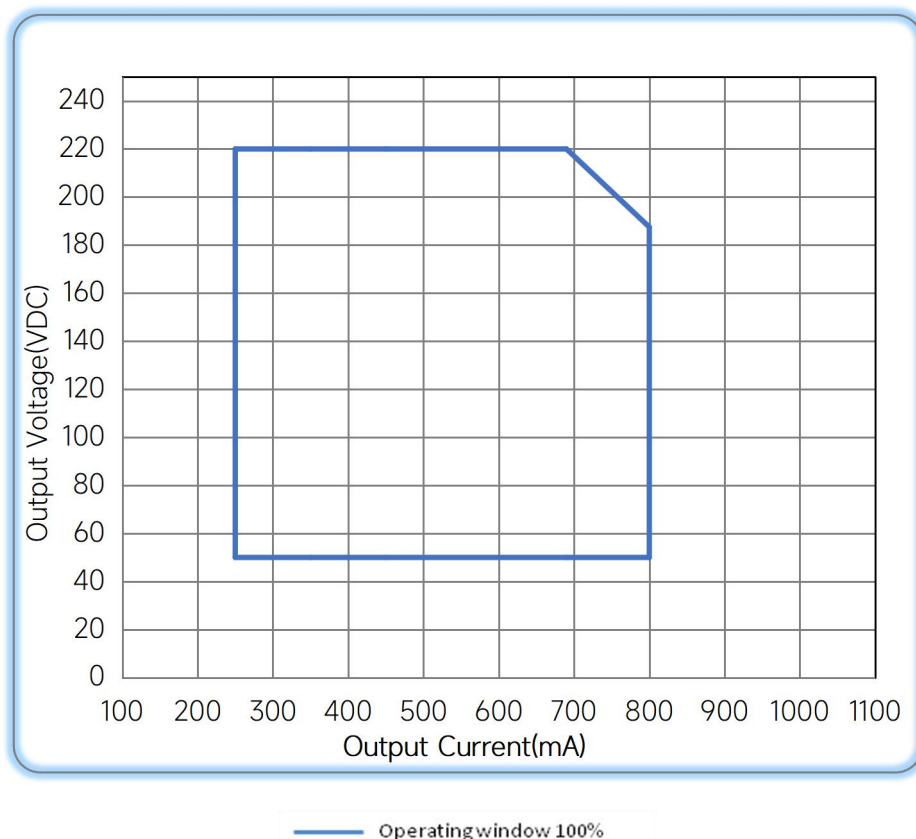
◆ Wiring & Connections

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

◆ Curve for FMS-150-800 N-S LN, $I_o=800\text{mA}$

Lifetime vs. Temperature Curve

Efficiency vs. Load

Power Factor Characteristics

THD vs. Load


◆ Operating window



◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2023/05/29
Power Factor	0.95	0.75C-0.95		2023/10/16

Tel: +86-0757-86256822, +86-0757-86256831

E-mail: sales@eaglerise.com

Website : <https://lighting.eaglerise.com>



EAGLERISE



Manual