

150W Constant Current-FMS Series



■ Approve



Features

- Class I, Non-isolated, Built-in
- Input Voltage 220-240VAC
- Protections: SCP/OVP/OTP
- Power Factor: 0.95(Typ.)
- Efficiency: 90%(Typ.)
- Adjustable Output Current with dip-switch
- 5 years warranty
- IP20

Applications

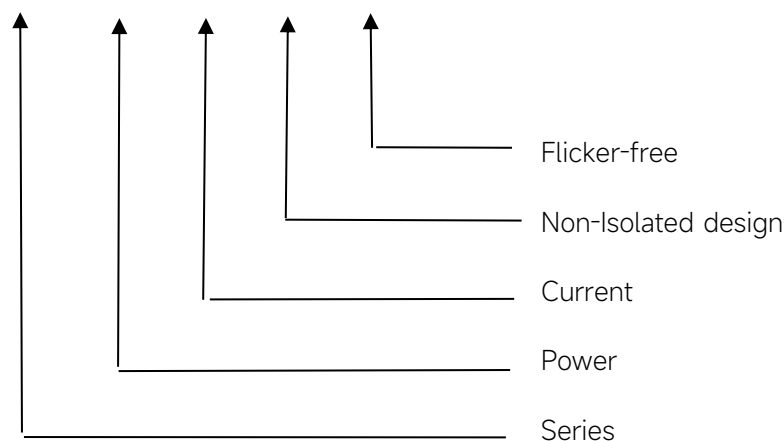
- Linear light

◆ Description

FMS-150-900 N-S LD EXC is a 150W constant current LED driver that operates from 198-264Vac input with 550 to 900mA output current. The output current is adjustable by DIP Switch. With it's dimensions from 280x30x21mm. It is easy to integrate in linear light products. To ensure trouble-free operation, protection is provided against output short circuit, over voltage and over temperature.

◆ Model code

FMS-150-900 N-S LD EXC



◆ Specification

Output	Constant Current	550mA	600mA	...mA	900mA
	Voltage Range	40-220VDC			
	Unload voltage Max.(VDC)	250VDC			
	Current Accuracy	±5%			
	Output HF current ripple(≥1KHz)	±5%			
	Output LF current ripple(<120Hz)	±5%			
	SVM	≤0.4			
	Pst	≤1			
	Efficiency(Typ.)	≥90%@Full load ,220-240V			
Input	Rated input voltage	220-240VAC			
	Range of input voltage	198-264VAC			
	Range of input DC voltage(VDC)	176-280VDC			
	Frequency(Hz)	0/50/60 Hz			
	Displacement factor	≥0.9			
	Power Factor	≥0.95@Full load ,220-240V			
	Input Current max	0.9A			
	Start-up time	< 0.5S			
	No Load Power	≤0.5W			
Protection	THD (Typ.)	<10%@Full load ,220-240V			
	Over Voltage Protection	YES/Auto Resume			
	Short circuit Protection	YES/Auto Resume			
	Over Temperature Protection	YES/Auto Resume Ta≥75° C, reducing the output current			
Environment	Operating Temperature	25°C~+60°C			
	Humidity	20%-90%RH			
	Maximum case temperature(Tc)	85°C			
	Storage Temperature	-40°C~+85°C			
	Life time	>50,000h@Tc=85°C >100,000h@Tc=75°C			
	Ripple & Noise	≤20dB(A)@20cm			
Surface	Dimension	280X30X21(LXWXH)mm			
Standards	IEC61347- 1, IEC61347-2- 13; EN61347- 1, EN61347-2- 13; EN61347- 1, EN61347-2- 13, EN62384; GB/T17743, GB17625. 1, GB19510. 1, GB19510. 14; EN55015, EN61000-3-2, EN61000-3-3, EN61547				
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.Switch and dimmer are not recommended to connect between this product output and luminaries.				

◆ Parameter

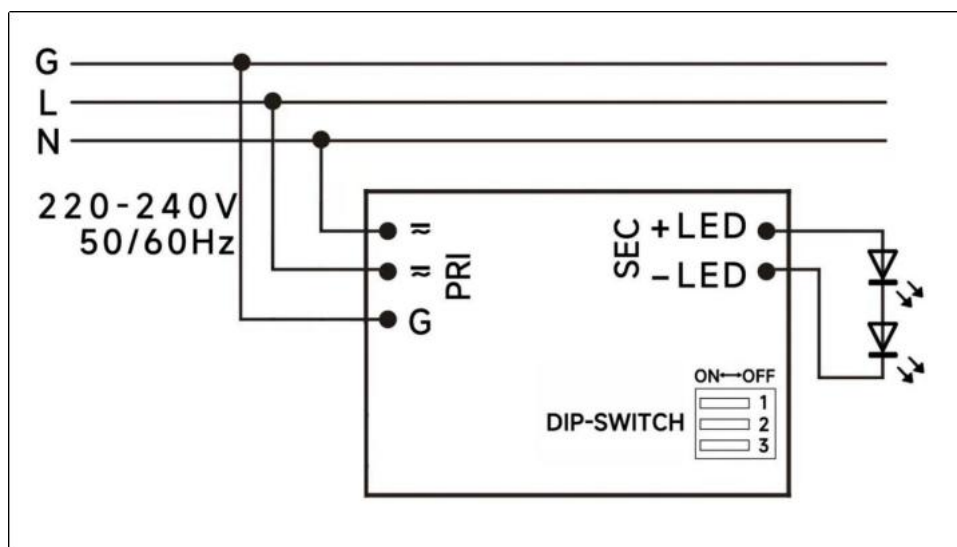
Number	Output				Switch position		
	Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)	1	2	3
1	550mA	40-220	250	121W	--	--	--
2	600mA	40-220		132W	ON	--	--
3	650mA	40-220		143W	--	ON	--
4	700mA	40-210		147W	ON	ON	--
5	750mA	40-200		150W	--	--	ON
6	800mA	40-180		144W	ON	--	ON
7	850mA	40-170		144.5W	--	ON	ON
*8	900mA	40-160		144W	ON	ON	ON

* Factory default

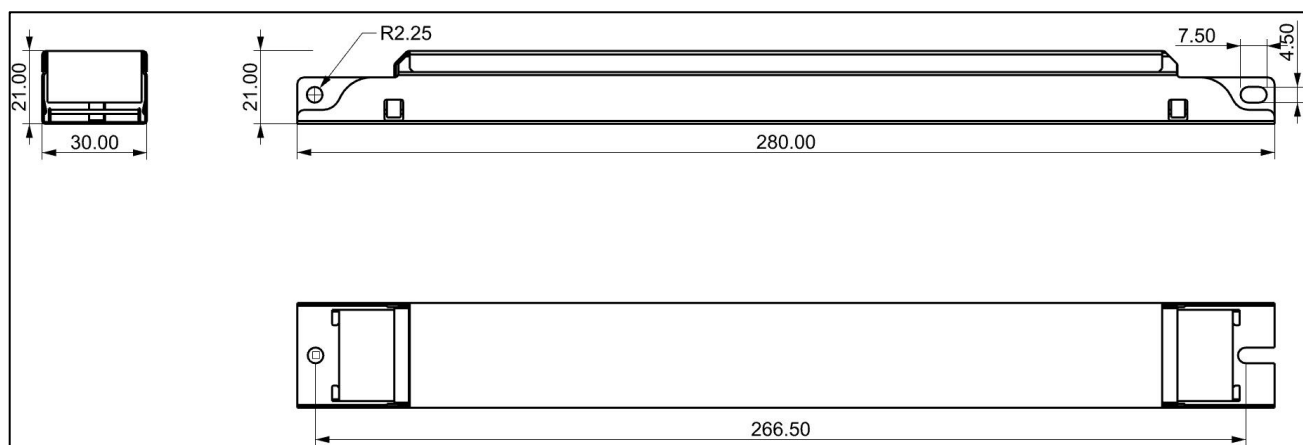
◆ Circuit Breaker

I _{peak}	T _{width}	B10	B16	B20	C10	C16	C20
41.8A	258μs	7pcs	11pcs	14pcs	8pcs	14pcs	17pcs

◆ Wiring diagram

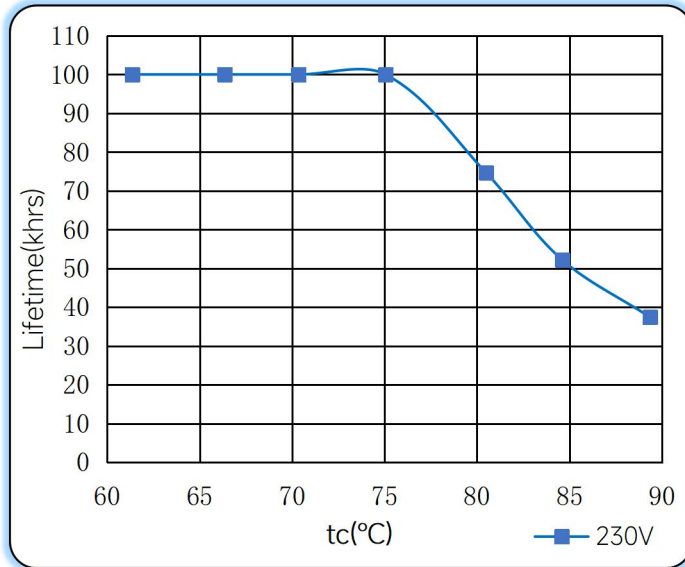


◆ 2D diagram

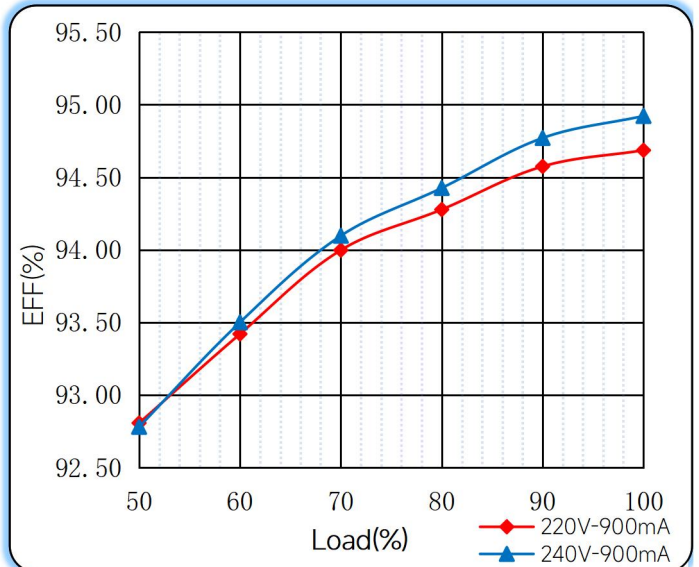


◆ Curve for FMS-150-900 N-S LD EXC, $I_o=900\text{mA}$

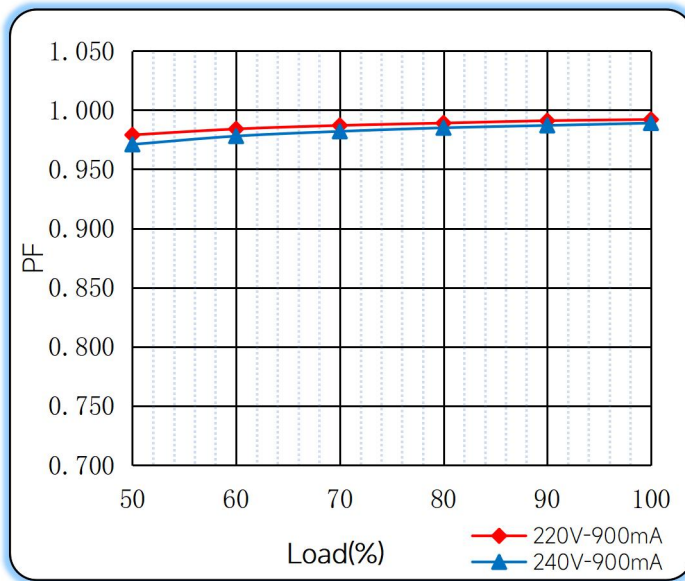
Lifetime vs. Temperature Curve



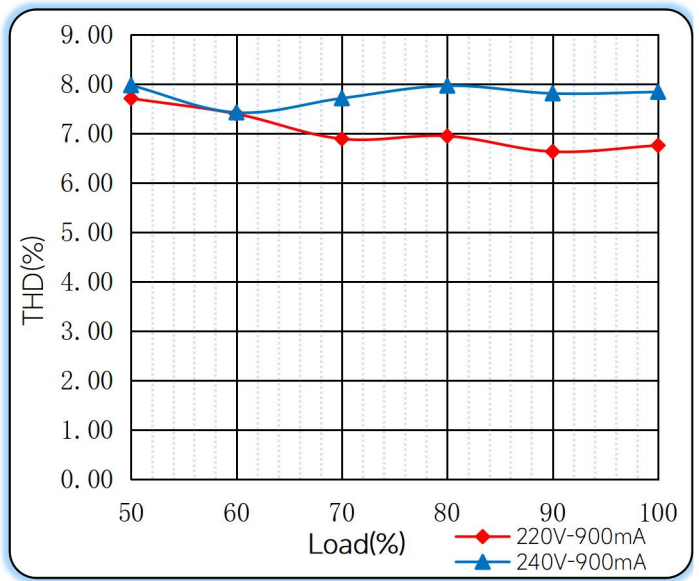
Efficiency vs. Load



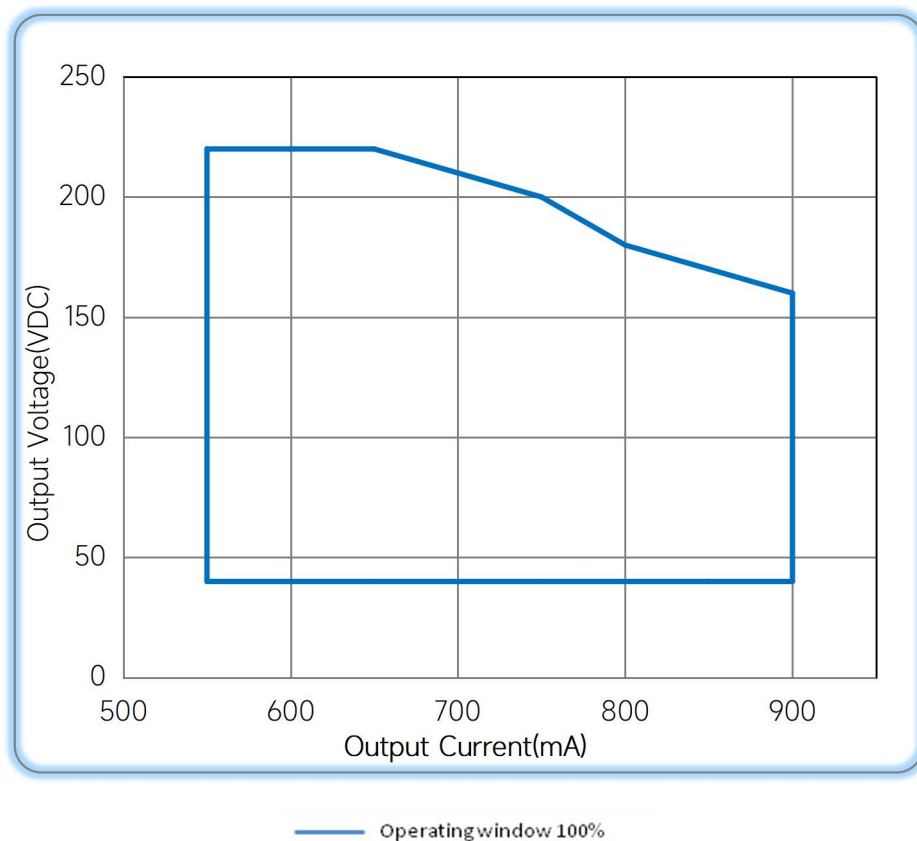
Power Factor Characteristics



THD vs. Load



◆ Operating window



◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2023/01/13
		Updated	B	2023/05/30

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

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