

60W Constant Current -FMS Series



Features

- Class I , SELV, Built-in
- Input Voltage :220-240VAC
- Protections: SCP/OLP/OVP
- Power Factor: >0.95@full load
- Efficiency: 90%
- Adjustable Output Current with dip-switch
- 5 years warranty

Applications

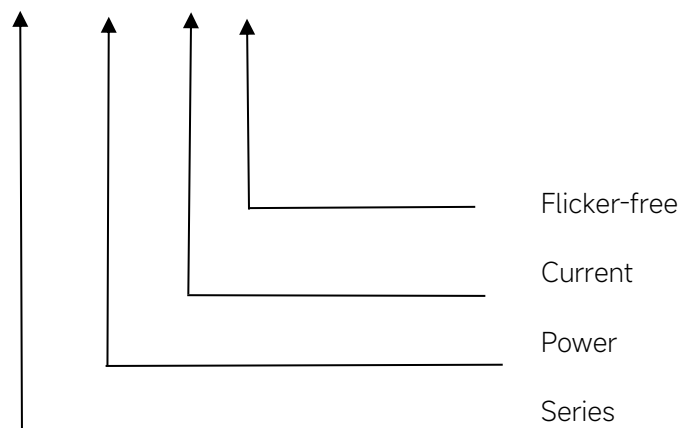
- Linear light

◆ Description

FMS-60-400 LD-F is a 60W isolated design constant current LED driver that operates from 198-264Vac input with 250 to 400mA output current. The output current is adjustable by dip-switch. With it's long dimensions from 280 x 30 x 21mm. It is easy to integrate in linear light products. To ensure trouble-free operation, protection is provided against output short circuit, over Load and over temperature.

◆ Model code

FMS-60-400 LD-F



◆ Specification

Output	Constant Current	250mA	300mA	350mA	400mA
	Voltage Range	70-240V	70-200V	70-170V	70-150V
	Unload voltage Max.	300VDC			
	Current Accuracy	±8%		±6%	
	Output HF current ripple(≥1KHz)	±5%			
	Output LF current ripple(≤120Hz)	±3%			
	SVM	≤1			
	Pst	≤0.4			
	Efficiency(Typ.)	90%			
Input	Rated input voltage(VAC)	220-240V			
	Range of input voltage(VAC)	198-264VAC			
	Maximum voltage	380VAC@1 h maximum,unit might not operate in this abnormal condition			
	Range input voltage(VDC)	176-280VDC			
	Frequency(Hz)	0/50/60 Hz			
	Displacement factor	>0.95			
	Power Factor	>0.95@full load			
	Input Current max	0.45A			
	Start-up time	< 0.5S			
	No Load Power	≤1W			
	THD (Typ.)	<10%			
Protection	Over Load Protection	103-160%			
		YES/Auto Resume			
	Over Voltage Protection	> 300VDC			
		YES/Auto Resume			
capability	Short circuit Protection	YES/Auto Resume			
	Surge capability (L-N)	2KV			
Environment	Surge capability (L/N-Ground)	2KV			
	Operating Temperature	-20℃~-+50℃			
	Humidity	10%-90%RH			
	Tc	80℃			
	Storage Temperature	-25℃~-+85℃			
	Life time	> 50000h@Tc=75,230VAC			
Surface	Ripple&Noise	≤25dB(A)@20cm			
	Dimension	280X30X21(LXWXH)mm			
	material	metal case			
Standards	Safety	IEC61347- 1, IEC61347-2- 13;EN61347- 1, EN61347-2- 13;EN62384;AS/NZS 61347- 1, AS/NZS 61347-2- 13			

	EMC	EN55015, EN61000-3-2, EN61000-3-3, EN61547;EN 62493;EN61000-4-5;EN61000-4-2,3,4,5,6,8,11, EN61547
	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.Temperature test: tested at high temperature(50°C)/low temperature(-20°C)/normal temperature(25°C) 4.Data are typical values obtained from test samples 5.Switch and dimmer are not recommended to connect between this product output and luminaries.	

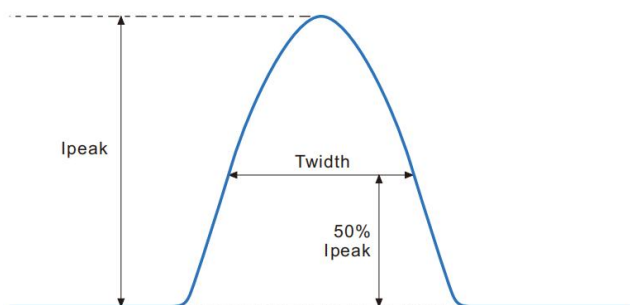
◆ Parameter

Number	Output				Switch position	
	Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)	1	2
1	250mA	70-240VDC	300VDC	60	--	--
2	300mA	70-200VDC		60	ON	--
3	350mA	70-170VDC		59.5	--	ON
4	400mA	70-150VDC		60	ON	ON

* Factory default

◆ Inrush Current

I _{peak}	T _{width}	B10	B16	B20	C10	C16	C20
A	μs	pcs	pcs	pcs	pcs	pcs	pcs

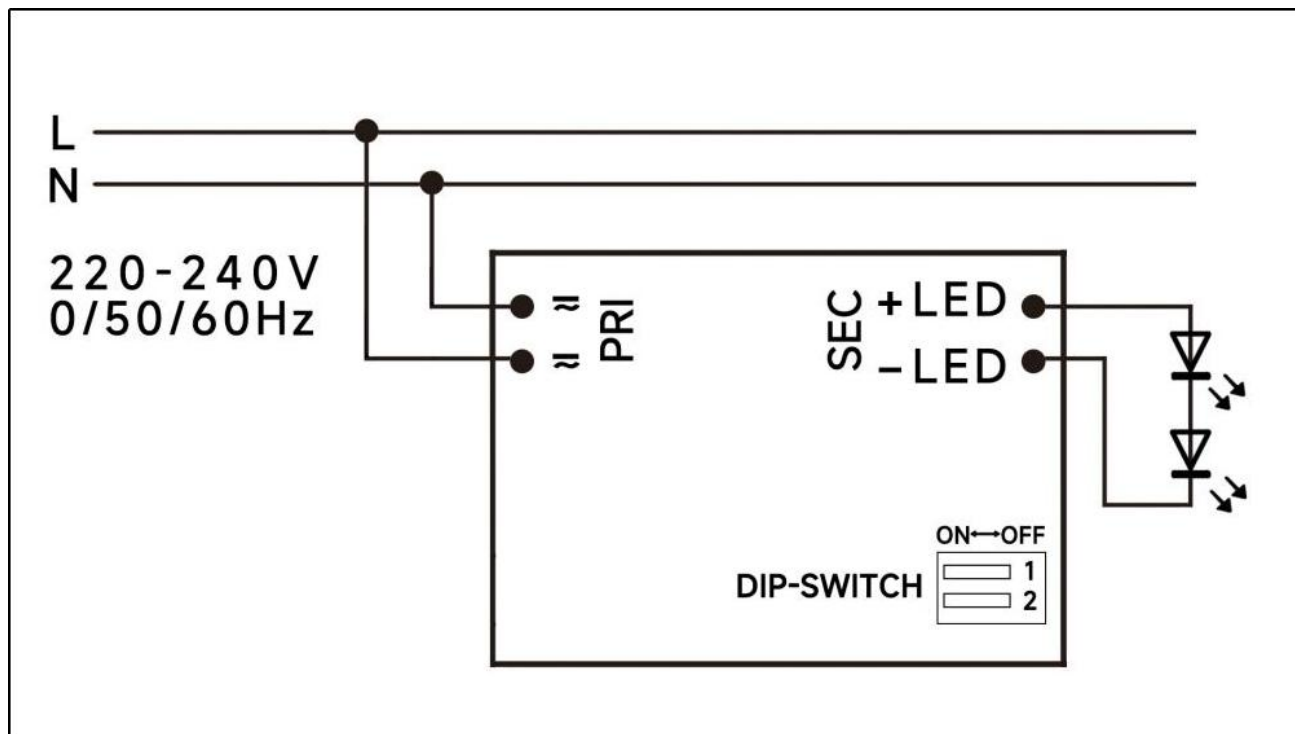


Remarks:

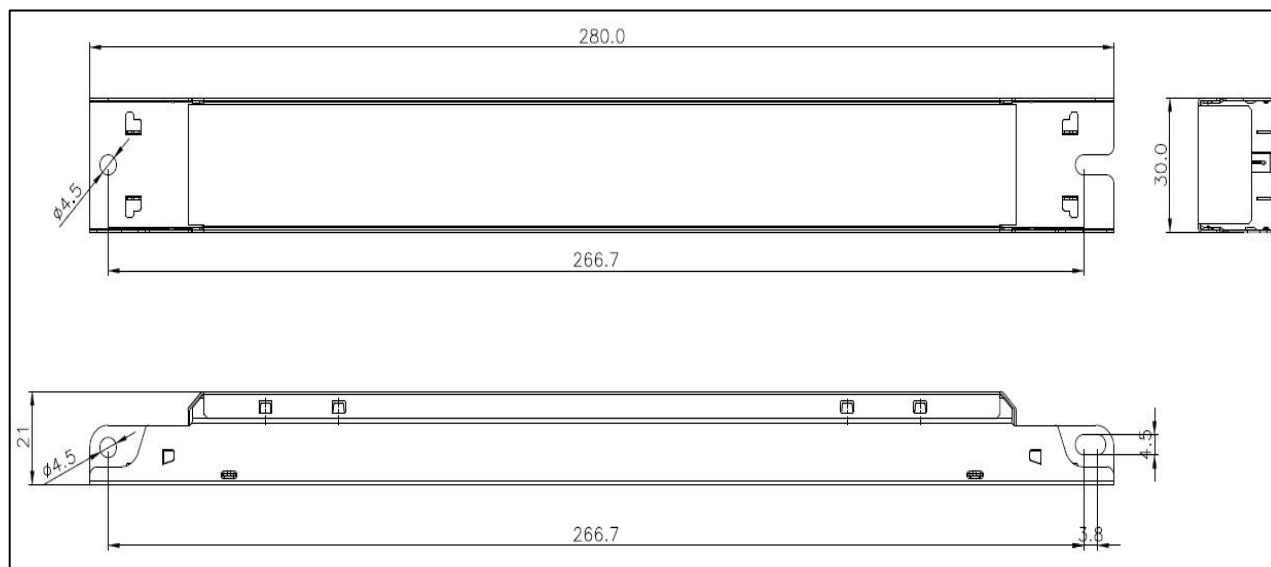
- 1.The number of drives mounted under different MCBs in the table is the maximum value. Please do not exceed this number during installation.
- 2.Different brands and models of miniature circuit breakers, the number of drives mounted will be slightly different.

Preliminary

◆ Wiring diagram



◆ 2D diagram

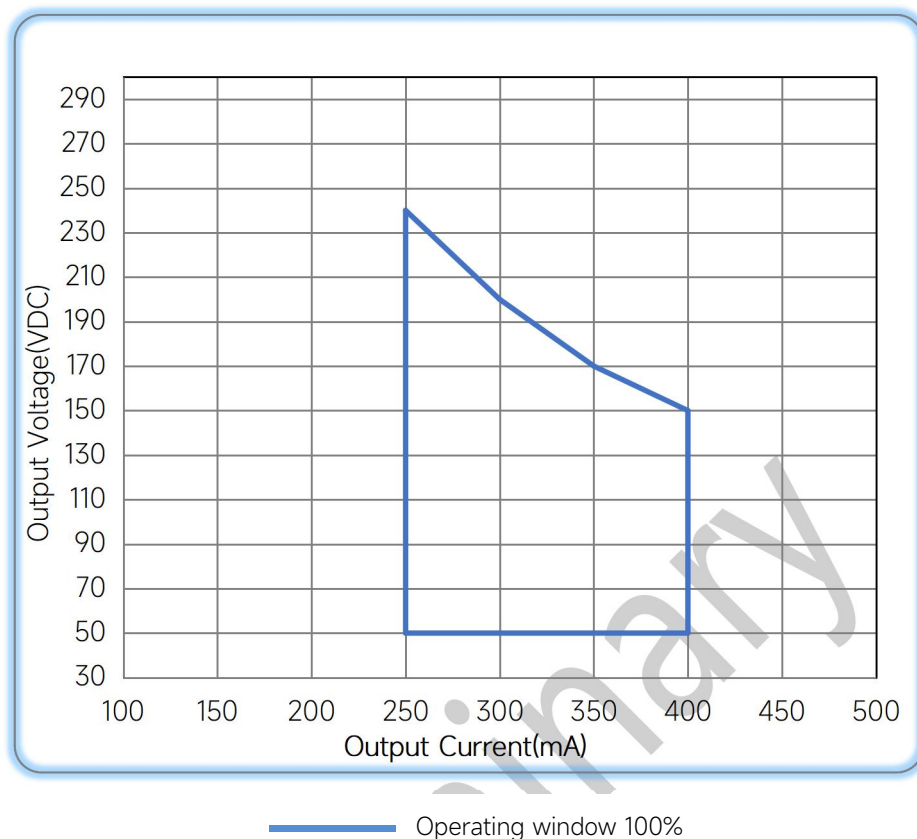


◆ Wiring & Connections

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: Single-strand wire is risky to use on an angled terminal mounted on single-sided PCB. Multi-strand wire is recommended for this kind of use.

◆ Operating window



◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2023/09/05

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

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

E-mail: sales@eaglerise.com

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



EAGLERISE



Manual