

40W 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

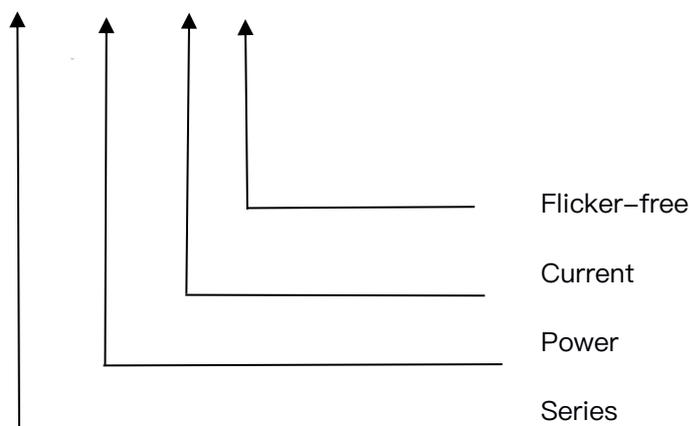
- Linear light

◆ Description

FMS-40-400 LD is a 40W 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 220 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-40-400 LD



◆ Specification

Output	Constant Current	250mA	300mA	350mA	400mA
	Voltage Range	40–160V	40–140V	40–120V	40–105V
	Unload voltage Max.	220VDC			
	Current Accuracy	±5%			
	Output HF current ripple(≥1KHz)	±5%			
	Output LF current ripple(≤)	±5%			
	SVM	≤1			
	Pst	≤0.4			
	Efficiency(Typ.)	90%			
Input	Rated input voltage(VAC)	220–240VAC			
	Range of input voltage(VAC)	198–264VAC			
	Maximum voltage	300VAC@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	0.3A			
	Start-up time	< 0.5S			
	No Load Power	≤0.5W			
	THD (Typ.)	<10%			
Protection	Over Load Protection	103–120% YES/Auto Resume			
	Over Voltage Protection	> 220VDC 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~+50°C			
	Humidity	10%–90%RH			
	Tc	85°C			
	Storage Temperature	–25°C~+85°C			
	Life time	> 50000h@Tc=max,230VAC			
	Ripple&Noise	≤25dB(A)@20cm			
Surface	Dimension	220X30X21(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
	ErP	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.Temperature test: tested at high temperature(50°C)/low temperature(-20°C)/normal temperature(25°C)</p> <p>4.Data are typical values obtained from test samples</p> <p>5.Switch and dimmer are not recommended to connect between this product output and luminaries.</p>	

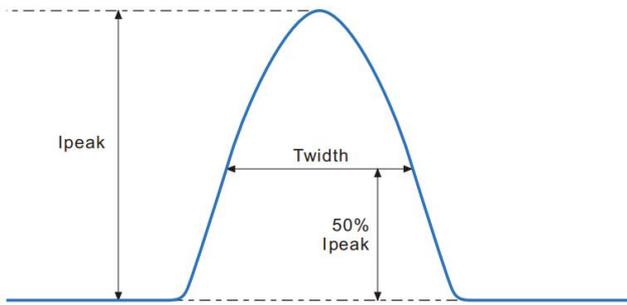
◆ Parameter

Number	Current (mA)	Voltage (VDC)	Output			
			Voltage No load (VDC)	Power (W)	1	2
1	250mA	40-160VDC	220VDC	40	--	--
2	300mA	40-140VDC		42	ON	--
3	350mA	40-120VDC		42	--	ON
4	400mA	40-105VDC		42	ON	ON

* Factory default

◆ Inrush Current

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

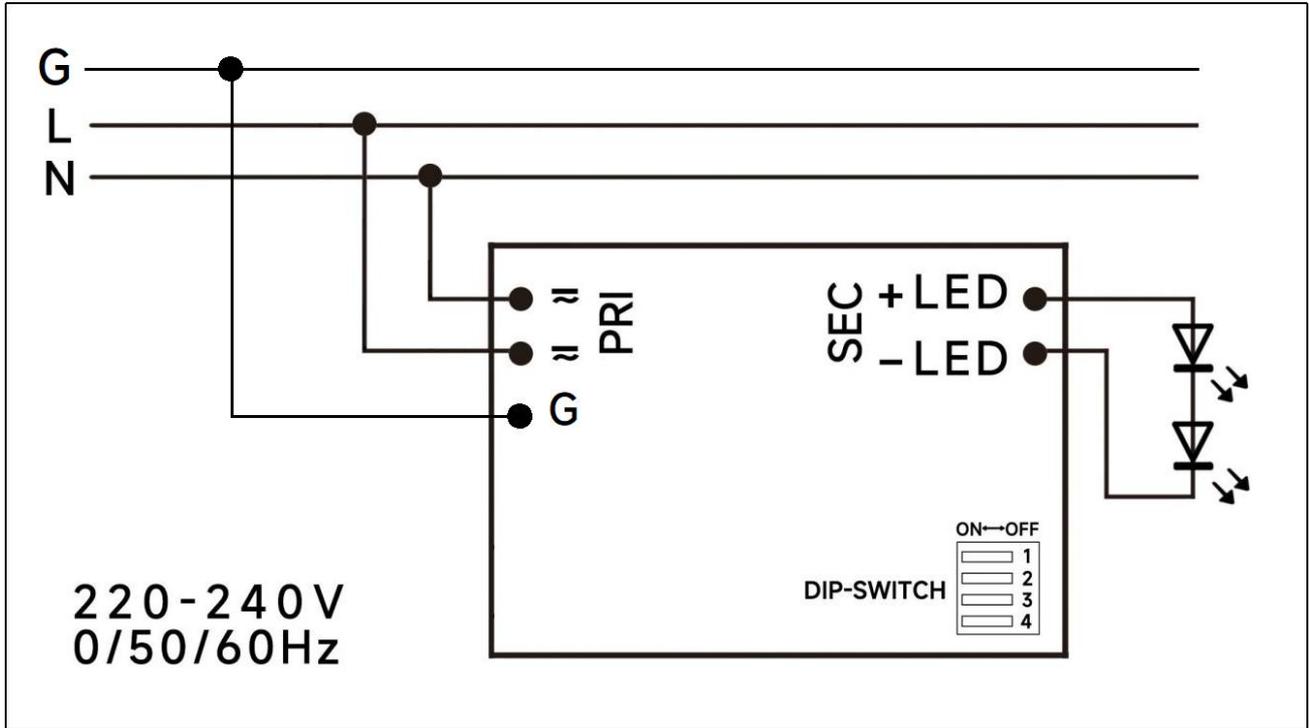
**Remarks:**

1.The number of drives mounted under different MCBs in the table is the maximum value. Please do not exceed this number during installation.

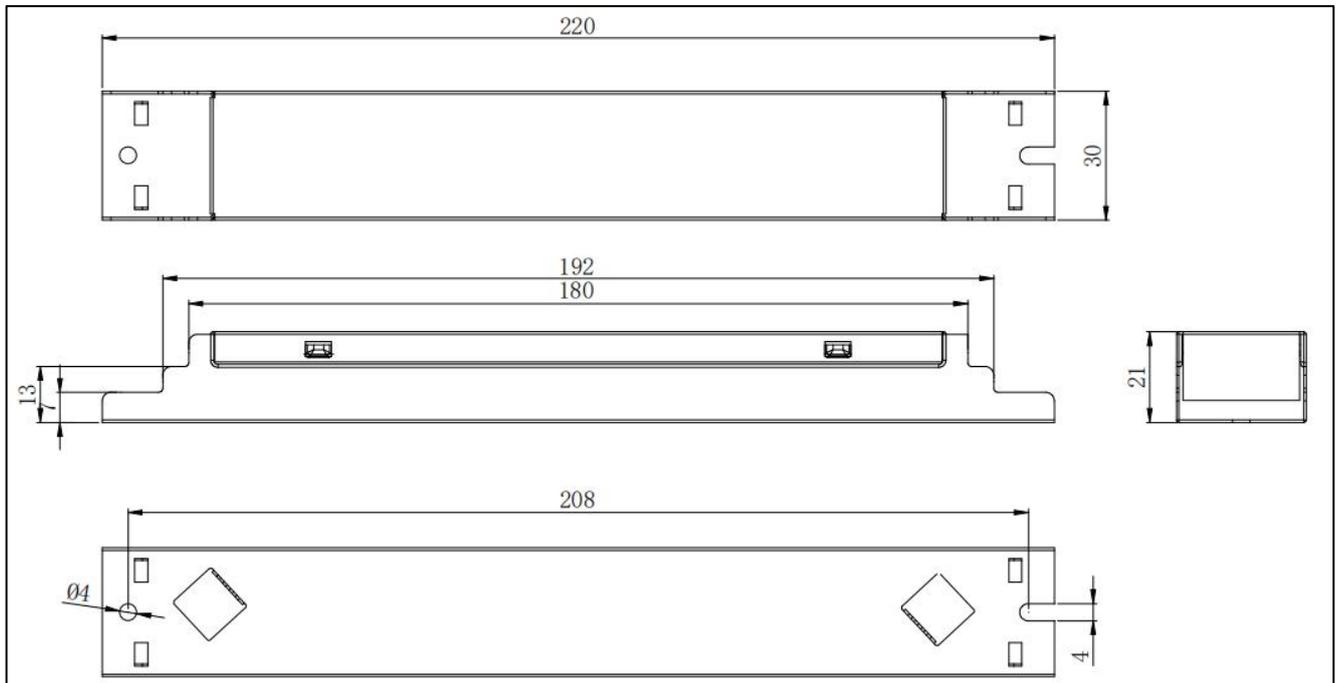
2.Different brands and models of miniature circuit breakers, the number of drives mounted will be slightly different.

Preliminary

◆ **Wiring diagram**



Preliminary

◆ 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

◆ 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.

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