

60W 0-10V Dimming power supply



■ Approve



Features

- Class I, Built-in
- Input Voltage: 220-240VAC
- Protections: SCP/OLP/OVP
- Power Factor : 0.9
- Efficiency : 88%(Typ.)
- Support 0-10V Dimming
- 5 years warranty
- IP20

Applications

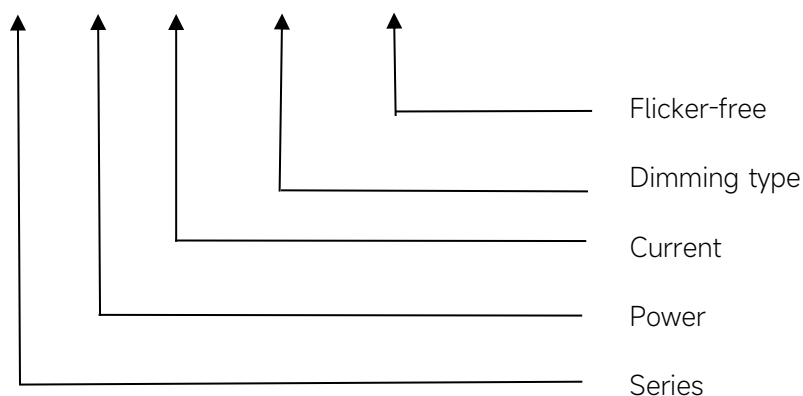
- LED panel light
- LED spot light

◆ Description

FMS-60-350 0-10 LD-F is a 60W constant current LED driver that operates from 198-264Vac input with 200 to 350mA output current and a forward voltage range from 70 to 300Vdc. The output current is adjustable by DIP Switch. With it's compact dimensions from 280x 30 x 21mm. It is easy to integrate in LED Panel products. To ensure trouble-free operation, it provides protection against output short circuit, overload and over Voltage.

◆ Model code

FMS-60-350 0-10 LD-F



◆ Specification

Output	Constant Current (mA)	200mA	250mA	300mA	350mA
	Voltage Range(VDC)	70-300V	70-240V	70-200V	70-180V
	Unload voltage Max.(VDC)	350V			
	Current Accuracy	±8%			
	Output HF current ripple(≥1KHz)	±5%			
	Output LF current ripple(≤120Hz)	±5%			
	Auxiliary Output Voltage	12V			
	Auxiliary Output Current	150 mA			
	SVM	≤0.4			
	Pst	≤1			
	Efficiency(Typ.)	88%@full Load,230V			
Input	Rated input voltage(VAC)	220-240V			
	Range of input voltage(VAC)	198-264VAC			
	Range of input voltage(VDC)	176-280VDC			
	Maximum voltage	300VAC@1 h maximum,unit might not operate in this abnormal condition			
	Frequency(Hz)	0/50/60 Hz			
	Displacement factor	> 0.9			
	Power Factor	>0.9@full Load,230V			
	Input Current max	0.4A			
	Start-up time	< 0.5S			
	No Load Power	≤1W			
	Standby Power	≤0.5W			
	Network standby power	≤0.5W			
	THD (Typ.)	<10%@full Load,220-240V			
Dimming	Dimming	YES			
	Dimming mode	0-10V			
	Dimming depth	1%			
	Dimming current range	1-100%			
Protection	Over Load Protection	103-130%		103-180%	
		YES/Auto Resume			
	Over Voltage Protection	350VDC			
		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	20%-90%RH			
	Tc	90°C			

	Storage Temperature	-25°C...+60°C
	Life time	>50000h@Tc=80°C
	Noise	≤25dB(A)@20cm
Surface	Dimension	280 x 30 x 21mm
	material	metal case
statutory	Safety Standards	GB19510. 1, GB19510. 14; IEC61347- 1, IEC61347-2- 13; EN 60598-2-22; EN61347- 1, EN61347-2- 13; EN62384;
	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
	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.The current with load range cannot exceed 130% of the maximum power at full load.	

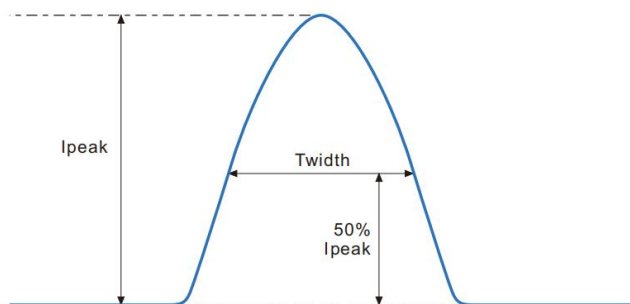
◆ Parameter

Number	Output				Switch position	
	Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)	1	2
1	200mA	70-300V	350	60W	--	--
2	250mA	70-240V		60W	ON	--
3	300mA	70-200V		60W	--	ON
*4	350mA	70-180V		63W	ON	ON

* Factory default

◆ Inrush Current

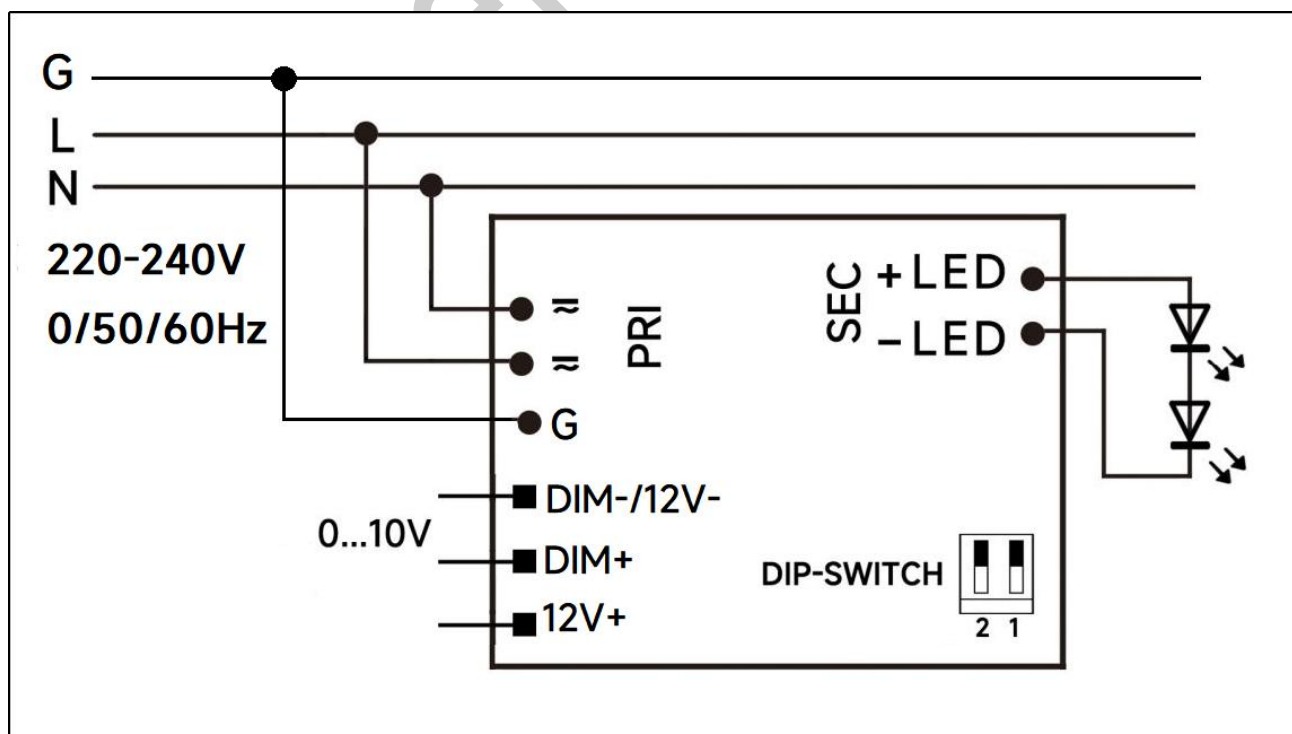
I_{peak}	Twidth	B10	B16	B20	C10	C16	C20
33.5A	210μs	11pcs	18pcs	23pcs	19pcs	30pcs	38pcs



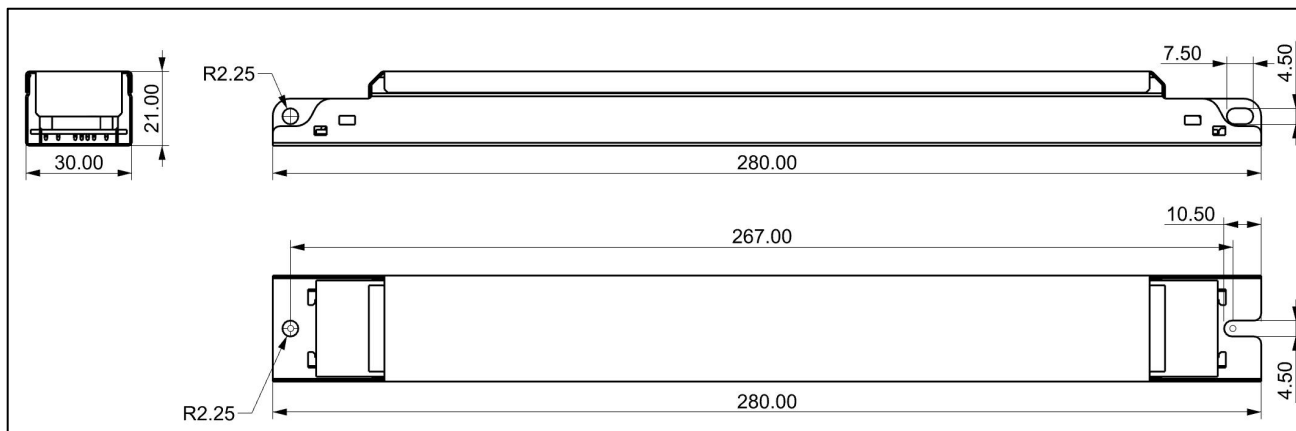
Remarks:

- 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



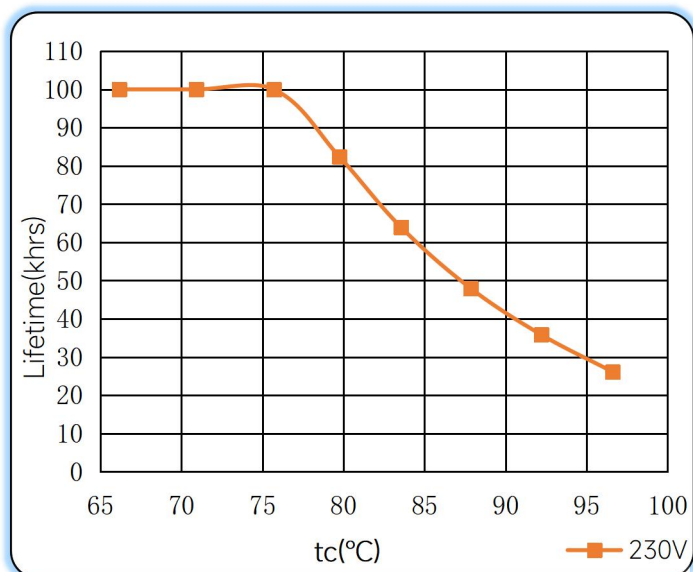
◆ Wiring & Connections

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

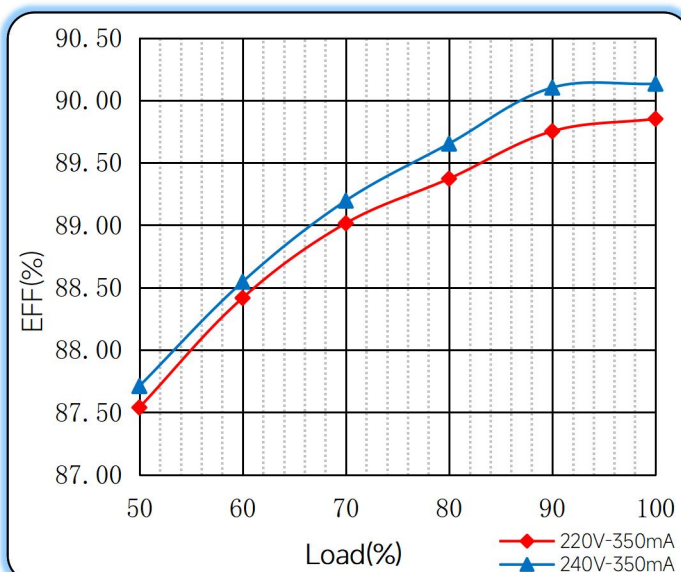
Note: Solid wire is risky to use on an angled terminal. Stranded wire is recommended for this kind of use.

Curve for FMS-60-350 0-10 LD-F, $I_o=350\text{mA}$

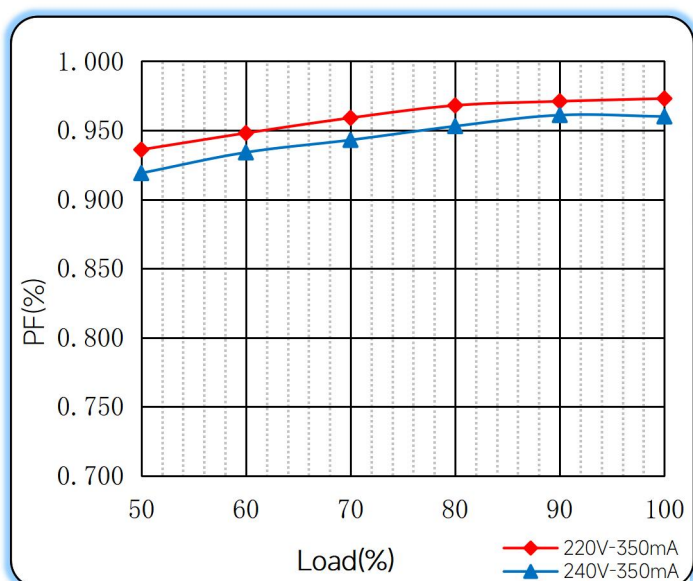
Lifetime vs. Temperature Curve



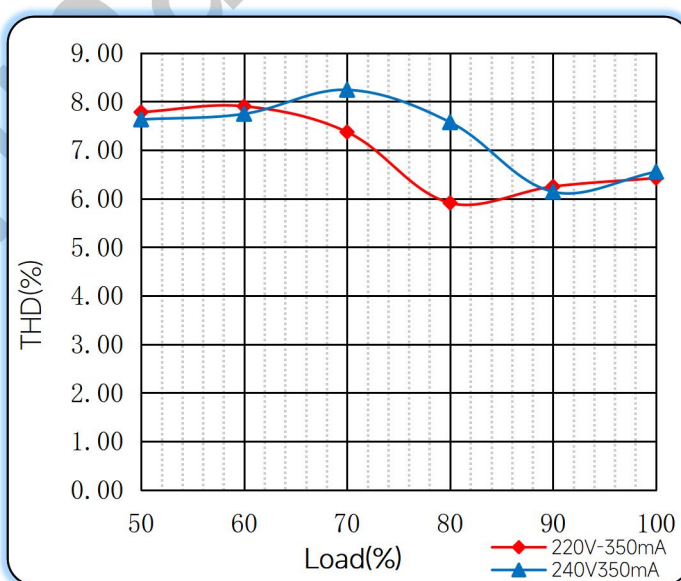
Efficiency vs. Load



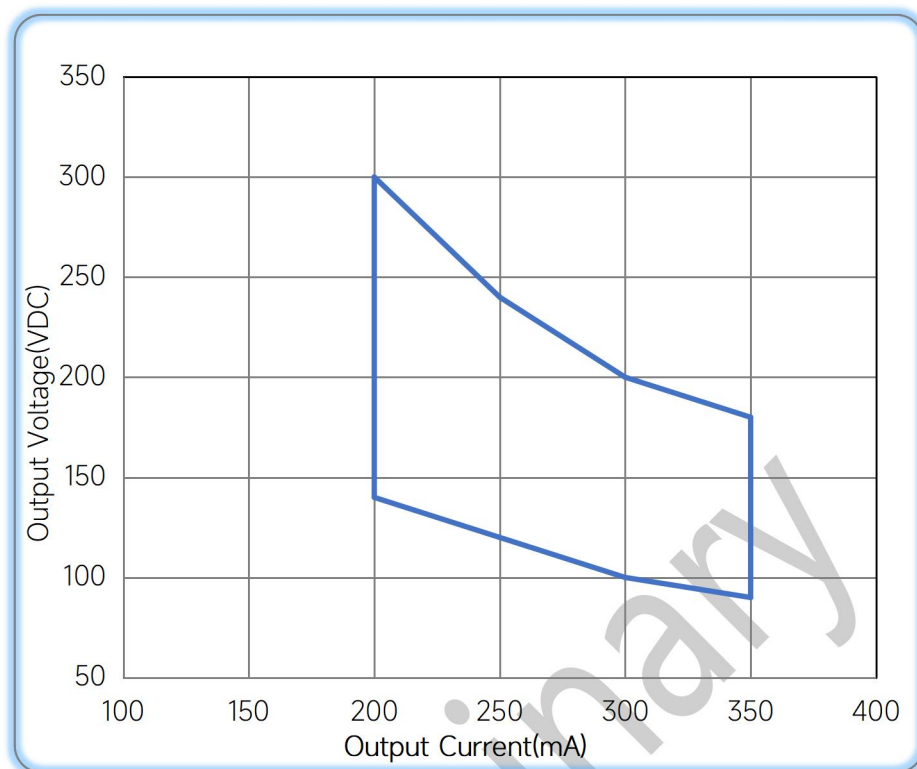
Power Factor Characteristics



THD vs. Load



◆ Operating window



— Operating window 100%

◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2023/05/03
Current Accuracy	±5%	±8%	B	2023/11/27

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