

## 40W Constant Current -FMS Series



### 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

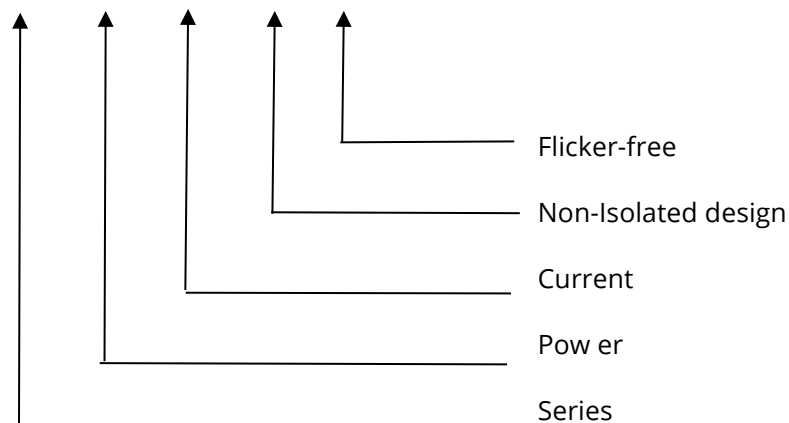
Linear light

## Description

FMS-40-350 N-S LD E is a 40W constant current LED driver that operates from 176-264Vac input with 200 to 350mA output current. The output current is adjustable by DIP Switch. With it's dimensions from 168 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 voltage and over temperature.

## Model code

FMS-40-350 N-S LD E \_



## Specification

	Constant Current	200mA	250mA	300mA	350mA
Output	Voltage Range	57-114VDC			
	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%@Fullload,220-240V			
	Input	Rated input voltage	220-240VAC		
Range of input voltage		198-264VAC			
Rated input voltage(VDC)		220-240VDC			
Range of input DC voltage(VDC)		176-280VDC			
Frequency(Hz)		50/60Hz			
Displacement factor		≥0.9			
Power Factor		≥0.95@Fullload,220-240V			
Input Current max		0.25A			
Start-uptime		<0.5S			
No Load Power		≤0.5W			
THD(Typ.)		<10%@Fullload,220-240V			
Protection	Over Voltage Protection	YES/AutoResume			
	Short circuit Protection	YES/AutoResume			
	Over Temperature Protection	YES/Auto Resume			
Environment	Operating Temperature	Ta≥75° C, reducing the output current			
	Humidity	-20°C~+50°C 20%-90%RH			
	Tc	80°C			
	Storage Temperature	-25°C~+60°C			
	Lifetime	>50000h@Tc=80°C,230VAC			
	Ripple&Noise	≤20dB(A)@20cm			
Surface	Dimension	168x30x21(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	EU2019/2020			
	RoHS	RoHS(2011/65/EU)(EU)2015/863			

Note	<p>1.All parameters not specially mentioned are measured at 230VAC input, full load and 25°C of ambient temperature.</p> <p>2.Ripple &amp; Noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uF &amp; 47 uF parallel capacitor.</p> <p>3.Switch and dimmer are not recommended to connect between this product output and luminaries.</p>
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## Parameter

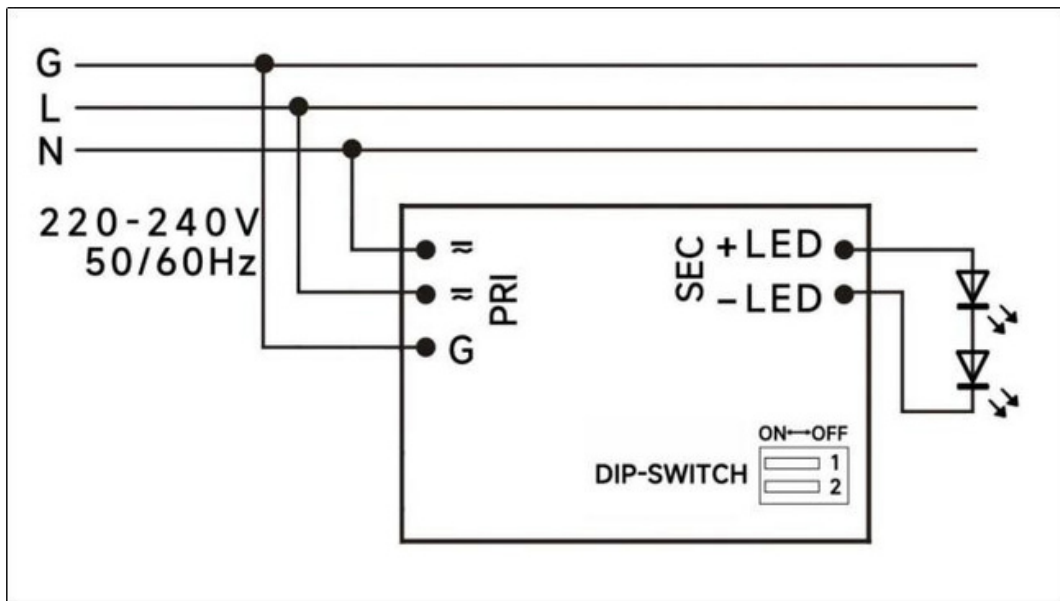
Number	Output				Switch position	
	Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)	1	2
1	200mA	57-114	250	22.8W	--	--
2	250mA			28.5W	ON	-
3	300mA			34.2W	--	ON
*4	350mA			39.9W	ON	ON

\* Factory default

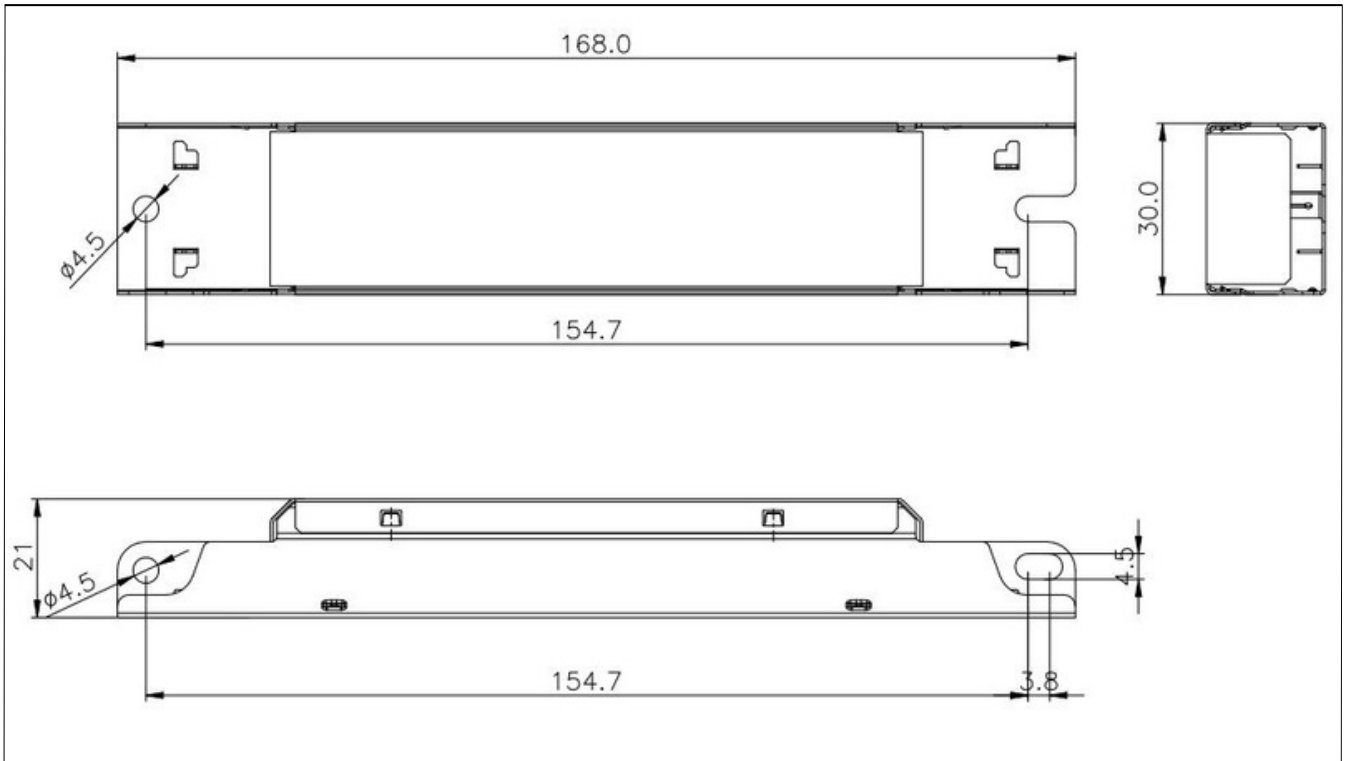
## Circuit Breaker

Ipeak	Twidth	B10	B16	B20	C10	C16	C20
17.6A	<b>162 μs</b>	29pcs	46pcs	58pcs	32pcs	51pcs	64pcs

## Wiring diagram



## 2D diagram

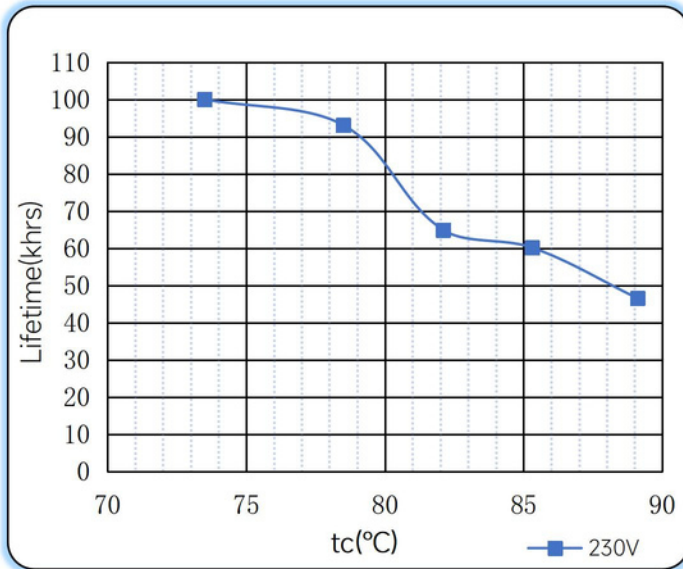


## Wiring & Connections

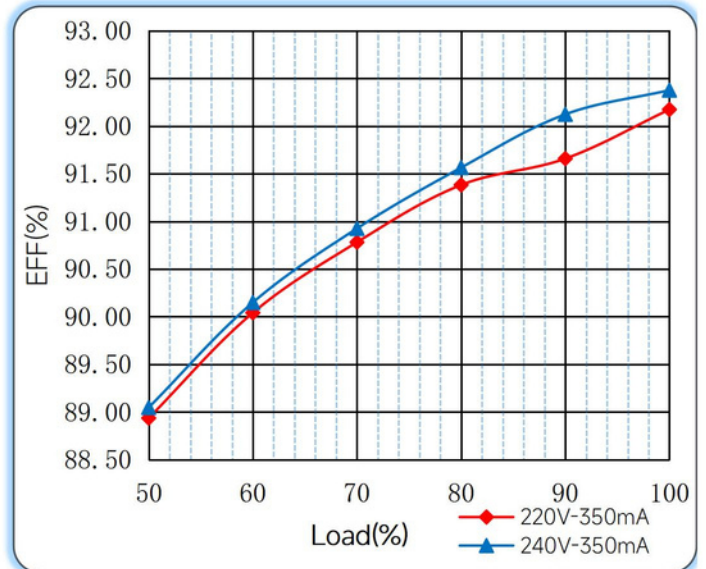
	Specification item	Value (Unit)
Input	Input wire cross-section	0.5...1.5 mm <sup>2</sup>
	Input wire gauge.	16...20 AWG
	Input wire strip length	7...9mm
Output	Output wire cross-section	0.5...1.5 mm <sup>2</sup>
	Output wire gauge.	16...20 AWG
	Output wire strip length	7...9mm

### Curve for FMS-40-350 N-S LD E, $I_o=350\text{mA}$

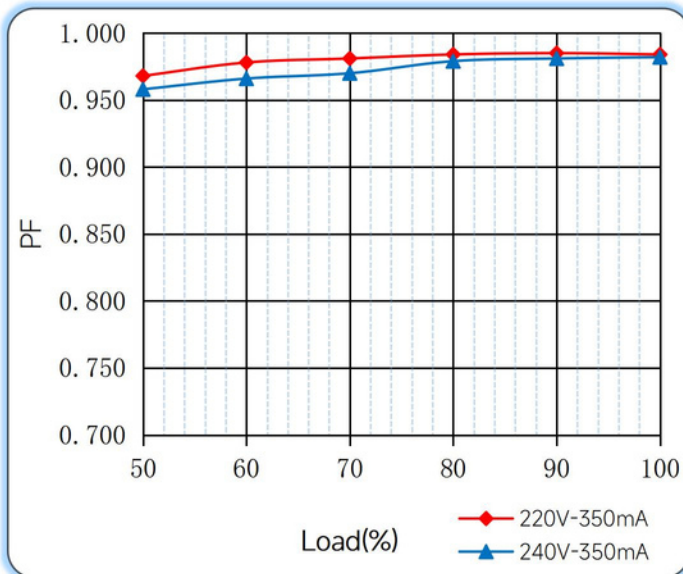
Lifetime vs. Temperature Curve



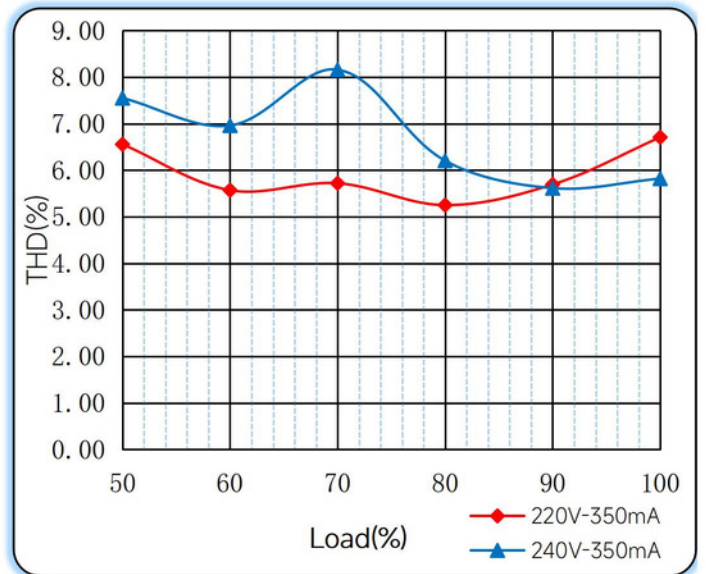
Efficiency vs. Load



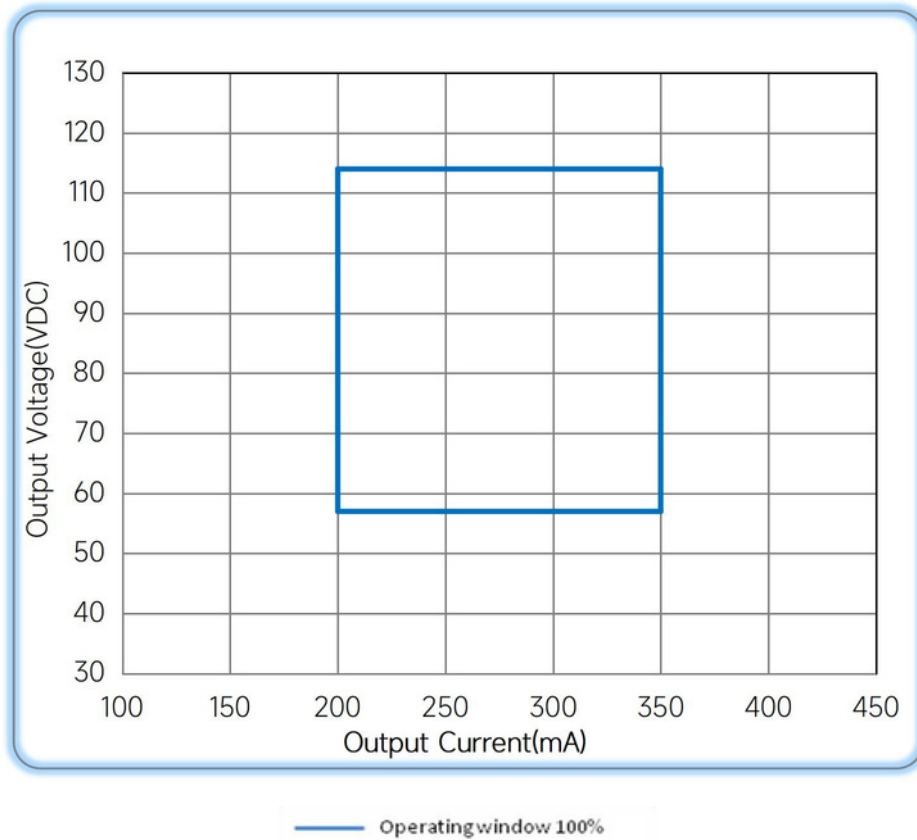
Power Factor Characteristics



THD vs. Load



## Operating window



## Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2023/05/12
		Updated	B	2023/05/30