

40W Constant Current -FMS Series



■ Approve



Features

- Class I, non-isolated, built-in
- Input Voltage :220-240VAC
- Protections: SCP/OLP/OVP
- Power Factor >0.95
- Efficiency ≥90%
- Adjustable Output Current with dip-switch
- 5 years warranty

Applications

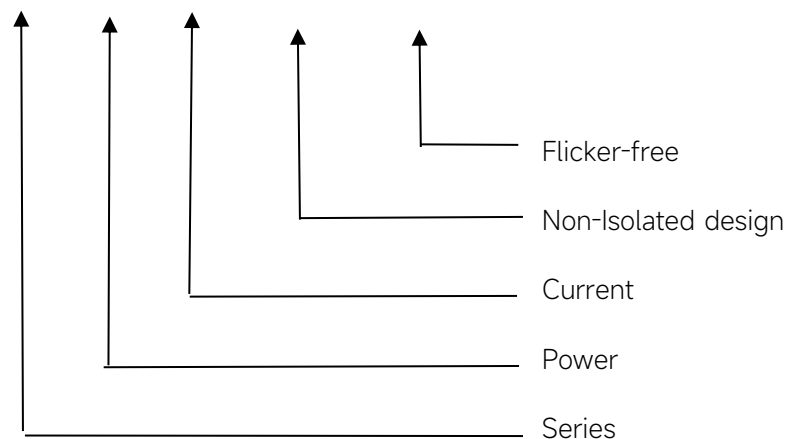
- Linear light

◆ Description

FMS-40-350 N-SELV LD is a 40W constant current LED driver that operates from 176-264Vac input with 200 to 350mA output current. The output current is selectable by DIP Switch. With it's dimensions from 190 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 and over Load.

◆ Model code

FMS-40-350 N-SELV LD



◆ Specification

	Constant Current	200mA	250mA	300mA	350mA
Output	Voltage Range	57-114VDC			
	Unload voltage Max.	320VDC			
	Current Accuracy	±7%			
	Output HF current ripple(≥1KHz)	±4%			
	Output LF current ripple(≤120Hz)	±4%			
	SVM	≤0.4			
	Pst	≤1			
	Efficiency(Typ.)	≥90%			
	Input	Rated input voltage	220-240VAC		
Range of input voltage		176-264VAC			
Range of input DC voltage		176-280VDC			
Frequency(Hz)		0/50/60 Hz			
Displacement factor		≥0.7			
Power Factor		≥0.95			
Input Current max		0.30A			
Start-up time		< 0.5S			
No Load Power		≤0.5W			
THD (Typ.)		<8%			
Protection	Over Load Protection	103-120% YES/Auto Resume			
	Over Voltage Protection	> 130VDC YES/Auto Resume			
	Short circuit Protection	YES/Auto Resume			
Environment	Operating Temperature	-20°C~+50°C			
	Humidity	20%-90%RH			
	Tc	75°C			
	Storage Temperature	-25°C~+60°C			
	Life time	> 50000h@Tc=70°C,230VAC			
Surface	Dimension	190 x 30 x 21(LXWXH)mm			
standards	EN 61347-1; EN61347-2-13; EN62384; EN55015; EN61000-3-2 ; EN61000-3-3; EN 61547;				
Others	ErP	EU 2019/2020			
	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.				

◆ Parameter

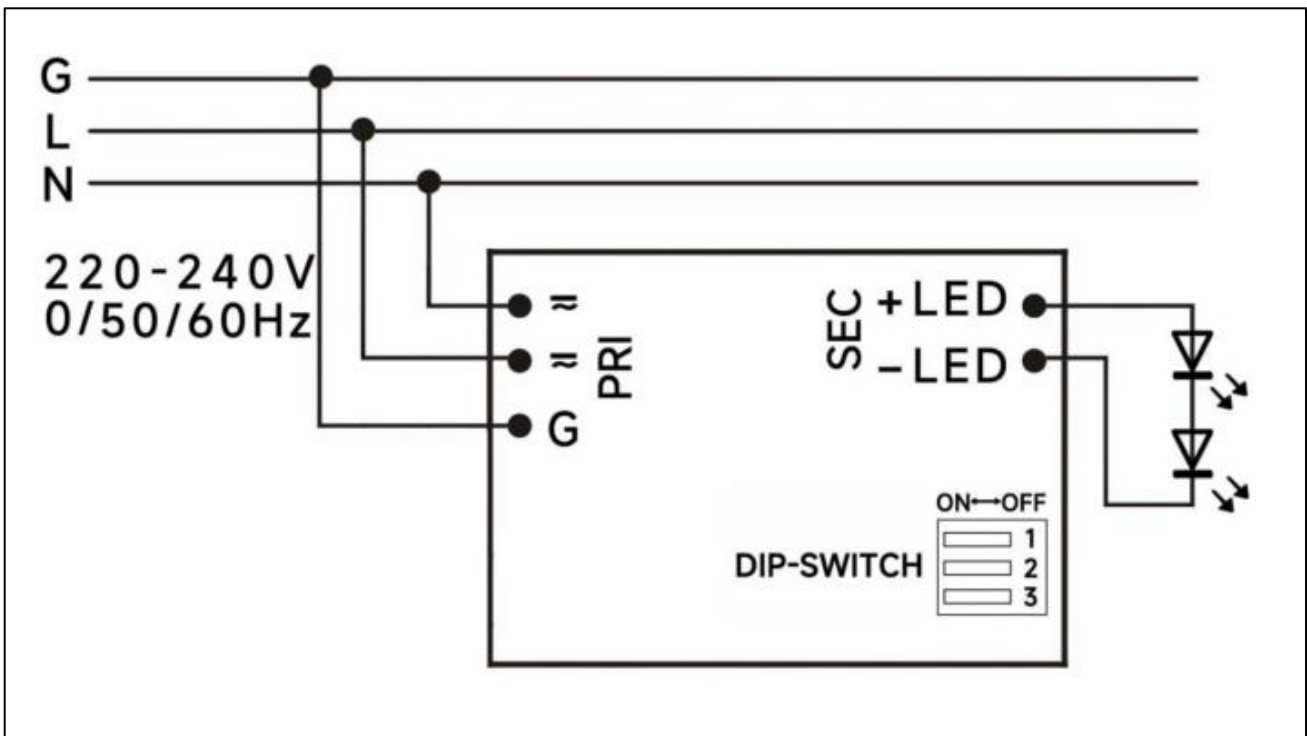
Number	Output				Switch position		
	Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)	1	2	3
1	200mA	54-114	320	22.8W	--	--	--
2	250mA			28.5W	ON	--	--
3	300mA			34.2W	--	ON	--
*4	350mA			39.9W	--	--	ON

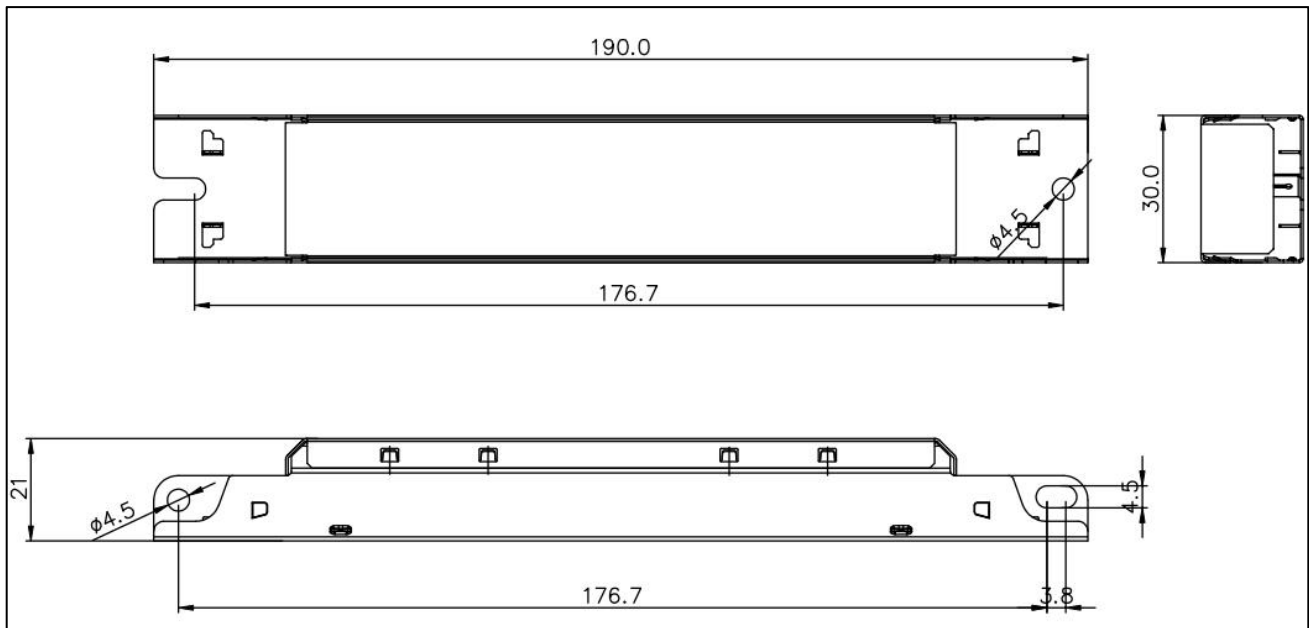
* Factory default

◆ Circuit Breaker

I _{peak}	T _{width}	B10	B16	B20	C10	C16	C20
20A	50μs	26pcs	42pcs	53pcs	26pcs	42pcs	53pcs

◆ Wiring diagram

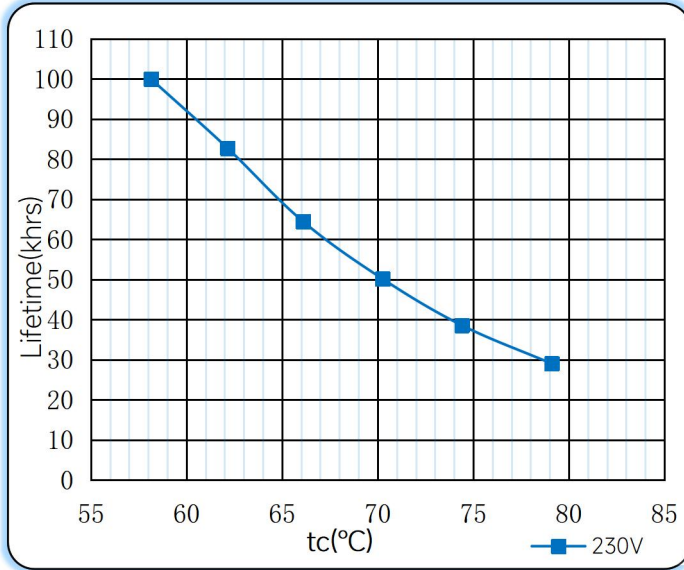


◆ 2D diagram

◆ Wiring & Connections

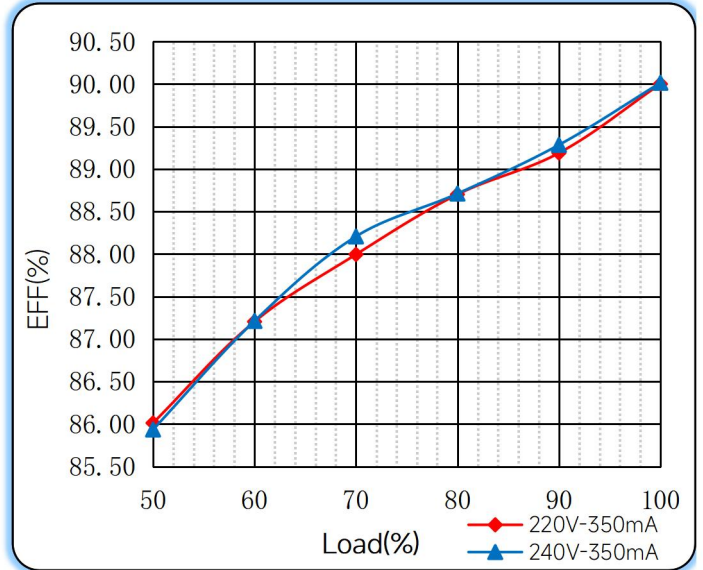
	Specification item	Value (Unit)
Input	Input wire cross-section	0.5...1.5 mm ²
	Input wire gauge.	16...20 AWG
	Input wire strip length	7...9mm
Output	Output wire cross-section	0.5...1.5 mm ²
	Output wire gauge.	16...20 AWG
	Output wire strip length	7...9mm

◆ Curve for FMS-40-350 N-SELV LD, $I_o=350mA$

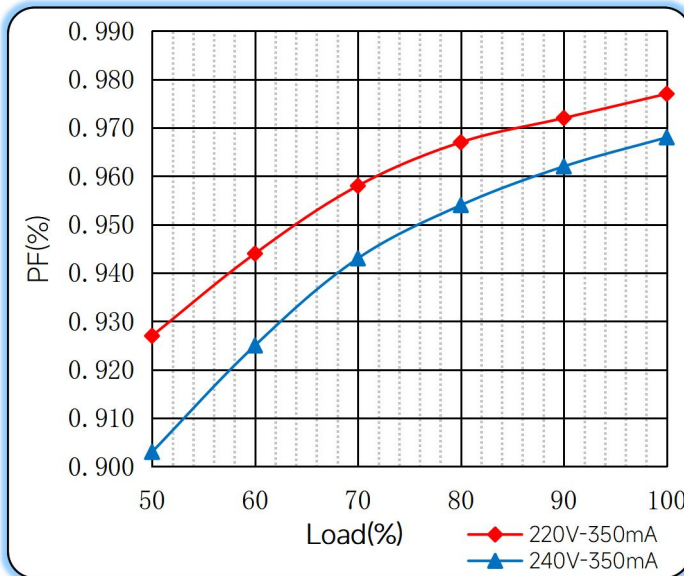
Lifetime vs. Temperature Curve



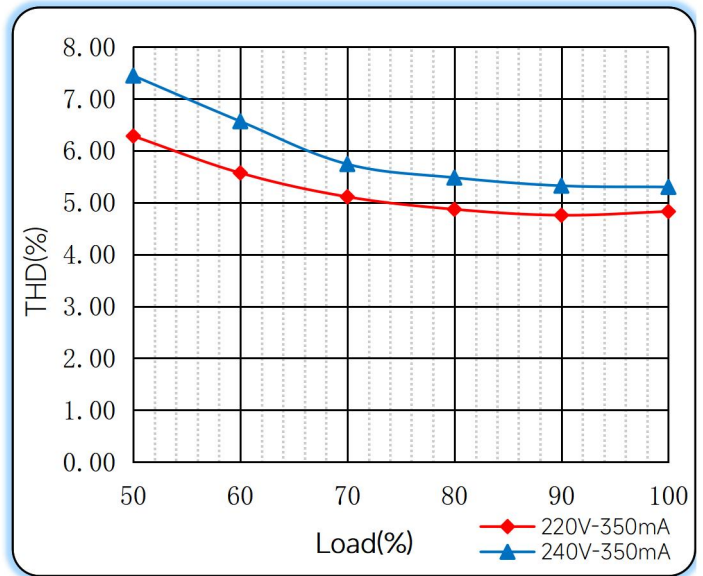
Efficiency vs. Load



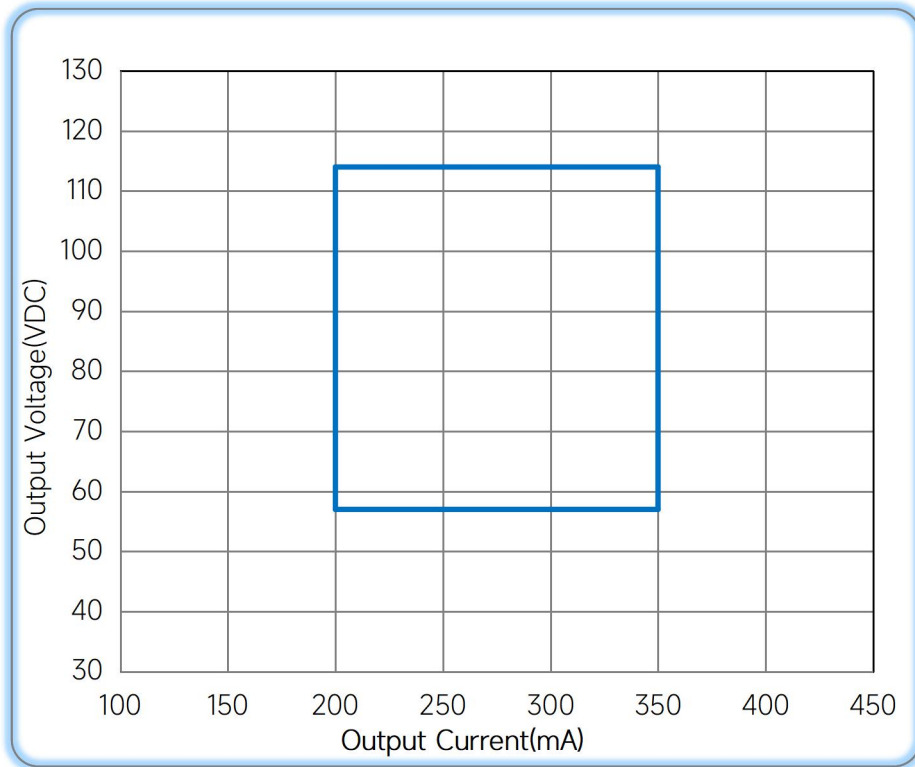
Power Factor Characteristics



THD vs. Load



◆ **Operating window**



— Operating window 100%

◆ **Revision Updates**

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2022/05/15