

35W Constant Current power supply



■ Approve



Description

FMS-35-350 N-S LN is a 35W constant current LED driver that operates from 198-264VAC input with 80 to 350mA output current and a forward voltage range from 198-280VDC. The output current is adjustable by NFC. With it's compact dimensions from 280x30x16mm 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.

Features

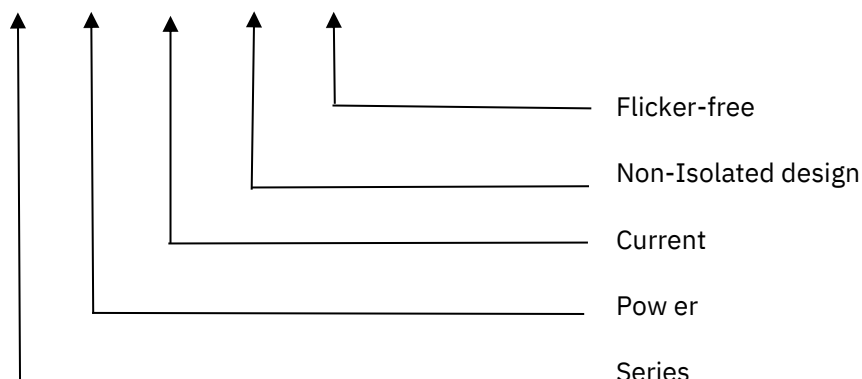
Class I, Non-Isolated design, built-in Input Voltage 220-240VAC
 Protections: SCP/OLP/OVP/OTP
 Power Factor : 0.95(Typ.)
 Efficiency : 91%(Typ.)
 Adjustable Output Current with NFC
 5 years warranty

Applications

Linearlight

Model code

FMS-35-350 N-S LN



Specification

Output	Constant Current(mA)	80-350mA
	Voltage Range(VDC)	50-220VDC
	Unload voltageMax.(VDC)	<400VRMS
	Current Accuracy	±5%
	Output HF current ripple(≥1KHz)	±15%
	Output LF current ripple(≤120Hz)	±3%
	SVM <0.15@fullLoad,	220-240V
	Pst <0.15@fullLoad,	220-240V
	Efficiency(Typ.)	≥91%@fullLoad, 220-240V
Input	Rated input voltage(VAC)	220-240VAC
	Range of input voltage(VAC)	198-264VAC
	Range of input voltage(VDC)	198-280VDC
	Frequency(Hz)	0/50/60Hz
	Displacement factor	≥0.95
	Power Factor	≥0.95@fullLoad, 220-240V
	Input Current max	0.23A Max
	Start-up time	<0.5S
	No Load Power	≤0.5W
	THD(Typ.)	<10%@fullLoad, 220-240V
	Protection	Over Load Protection
YES/Auto Resume		
Over Voltage Protection		<400V RMS
		YES/Auto Resume
Short circuit Protection		YES/AutoResume
Over Temperature Protection	YES/AutoResume	
Environment	Operating Temperature	-25°C-60°C
	Humidity	10%-90%
	Tc	75°C
	Storage Temperature	-40°C-70°C
	Lifetime	>50000h,@Tc=75°C
Surface	Dimension	280X30X16(LXWXH)mm
Standards	EN61347-1; EN61347-2-13;EN62384; 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 & 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.The DC input for this product is only used for emergency lighting and applies to functional and safety requirements , EMC is not considered.</p>	

Parameter

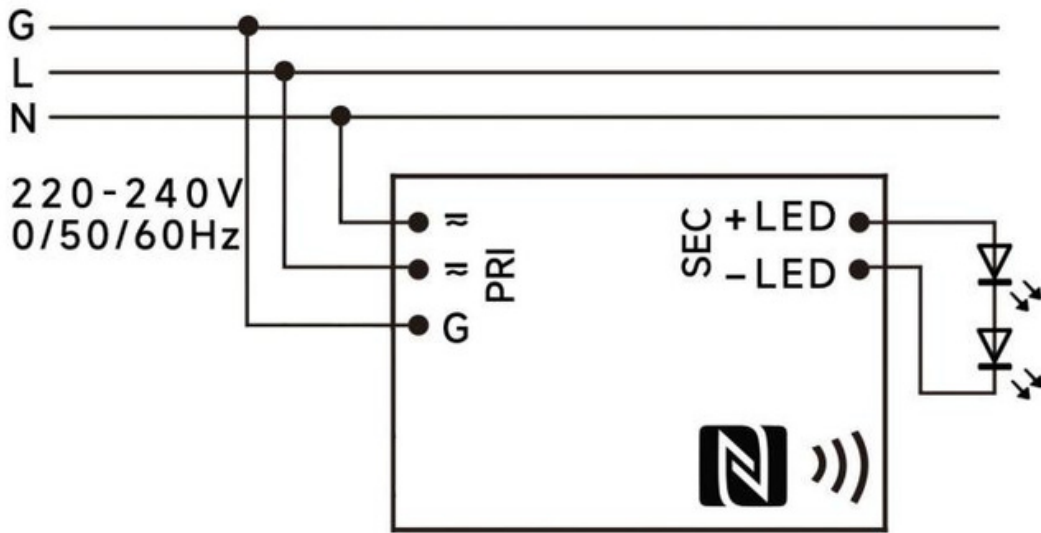
Number	Output			
	Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)
*1	80mA	50-220VDC	400	17.6
2
3	159mA	50-220VDC	400	34.98
4
5	350mA	50-100VDC	400	35

* Factory default

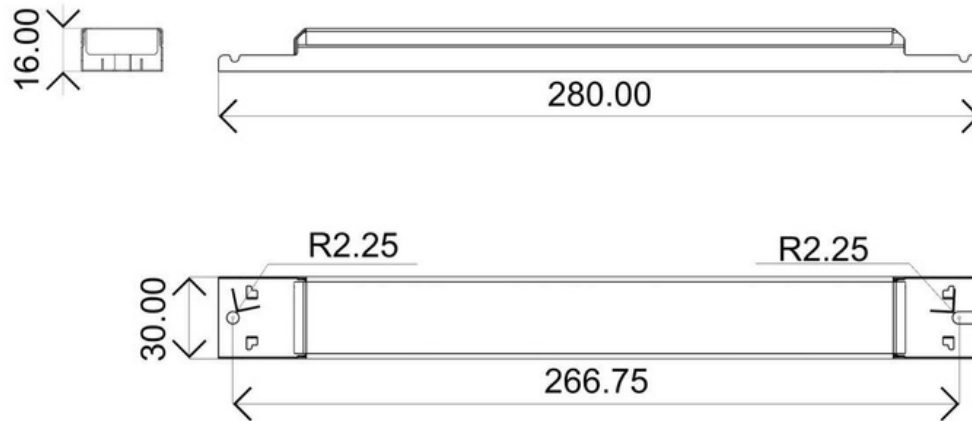
Circuit Breaker

I _{peak}	T _w idth	B10	B16	B20	C10	C16	C20
31.1A	122 μs	22pcs	35pcs	44pcs	34pcs	55pcs	69pcs

Wiring diagram



2D diagram

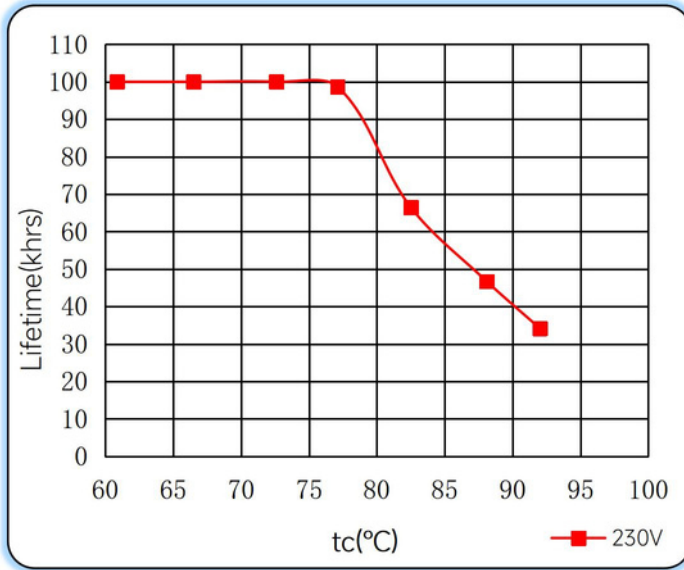


Wiring & Connections

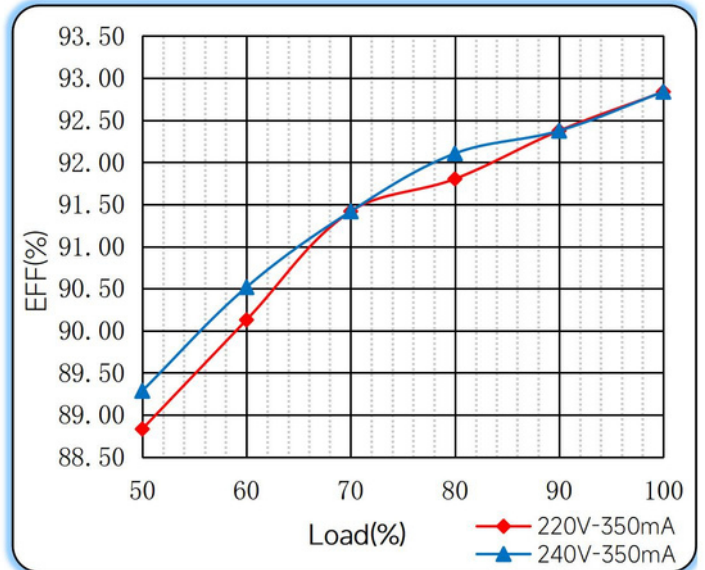
	Specification item	Value (Unit)
Input	Input wire cross-section	0.5...1.5 mm ²
	Input wire gauge.	16...20 AWG
	Input wire strip length	7...9mm
Output	Output wire cross-section	0.5...1.5 mm ²
	Output wire gauge.	16...20 AWG
	Output wire strip length	7...9mm

Curve for FMS-35-350 N-S LN, $I_o=350mA$

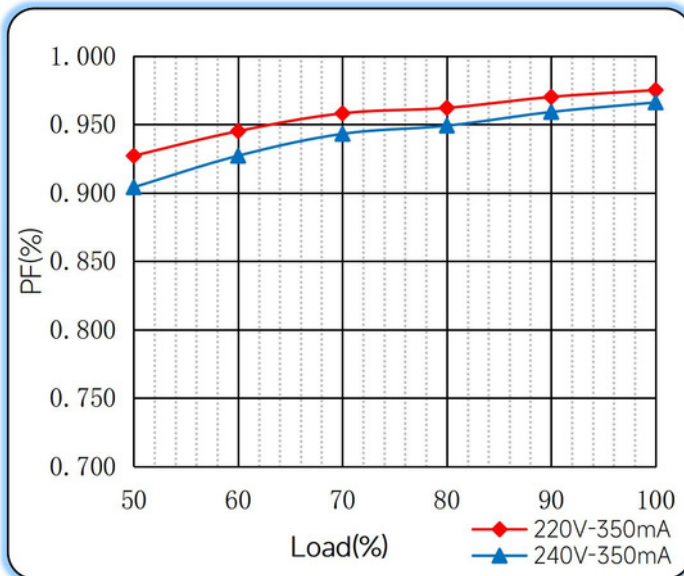
Lifetime vs. Temperature Curve



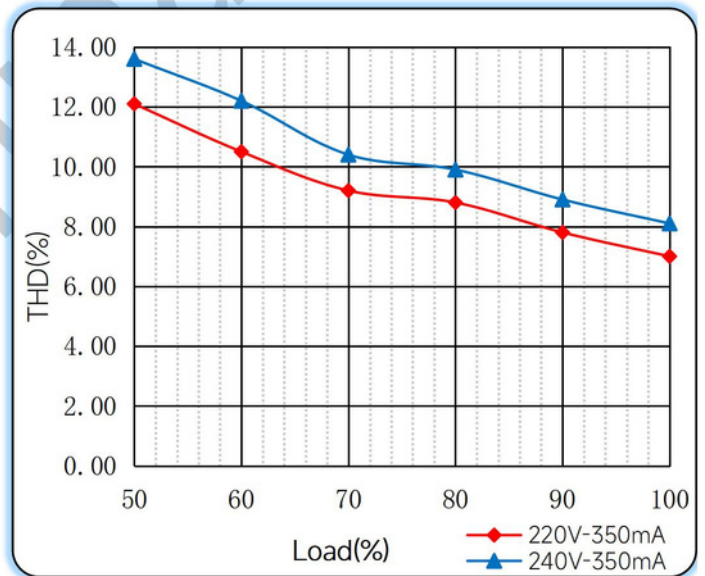
Efficiency vs. Load



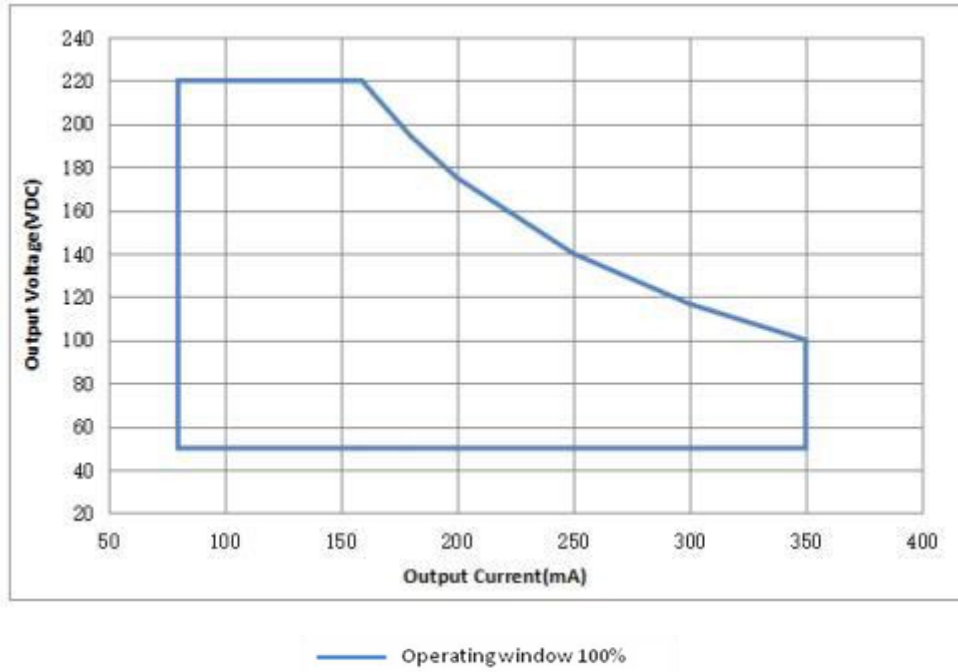
Power Factor Characteristics



THD vs. Load



Operating window



Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2022/05/15
Curve		Added	B	2023/01/11