

## 80W Constant Current -FMS Series



■ Approve



### Features

- Class I, non-isolated, built-in
- Input Voltage :220-240VAC
- Protections: SCP/OLP/OVP
- Power Factor >0.9
- Efficiency ≥90%
- Adjustable Output Current with dip-switch
- 5 years warranty

### Applications

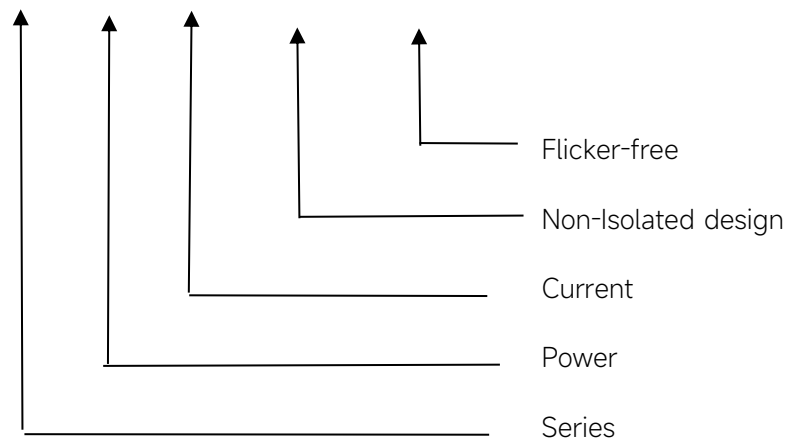
- Linear light

### ◆ Description

FMS-80-700 N-S LD is an 80W non-Isolated design constant current LED driver that operates from 198-264Vac input with 300 to 700mA output current. The output current is adjustable. by dip-switch. With it's long dimensions from 280 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-80-700 N-S LD



## ◆ Specification

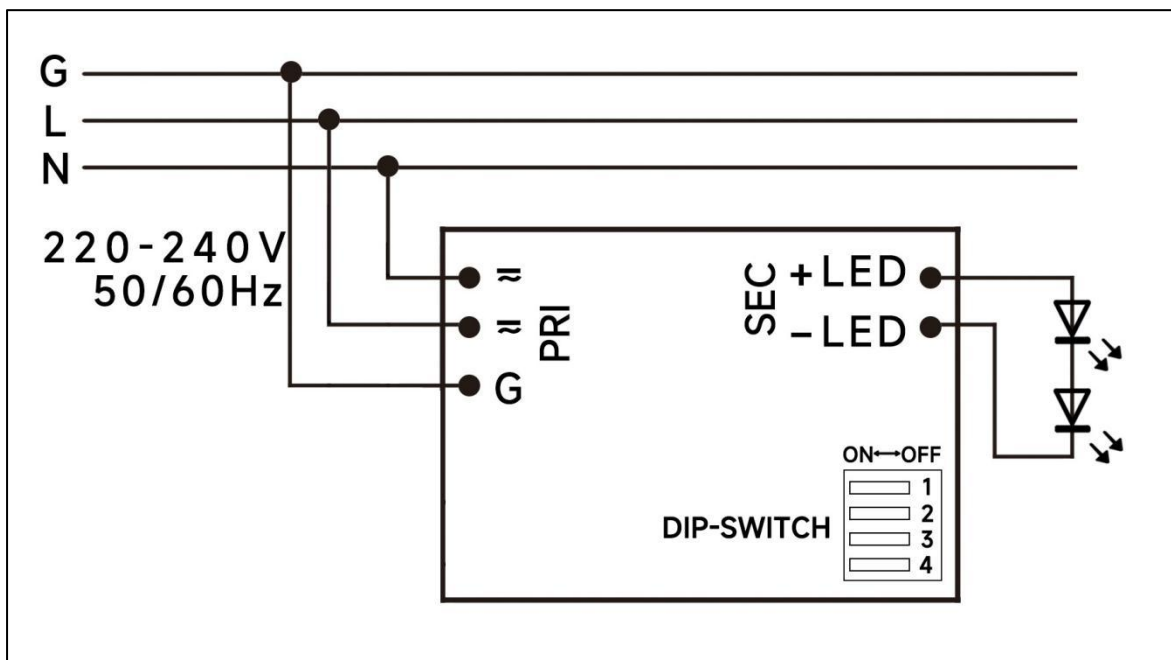
	Constant Current	300mA	350mA	...mA	700mA
Output	Voltage Range	30-180VDC			
	Unload voltage Max.	250VDC			
	Current Accuracy	±7%			
	Output HF current ripple(≥1KHz)	±3%			
	Output LF current ripple(≤120Hz)	±3%			
	SVM	≤0.4			
	Pst	≤1			
	Efficiency(Typ.)	≥90%			
	Input	Rated input voltage	220-240VAC		
Range of input voltage		198-264VAC			
Frequency(Hz)		50/60 Hz			
Displacement factor		≥0.9			
Power Factor		≥0.9			
Input Current max		0.53A			
Start-up time		< 0.5S			
No Load Power		≤0.5W			
THD (Typ.)		<10%			
Protection	Over Load Protection	103-230% YES/Auto Resume			
	Over Voltage Protection	> 250VDC YES/Auto Resume			
	Short circuit Protection	YES/Auto Resume			
Environment	Operating Temperature	-20°C~+50°C			
	Humidity	5%-85%RH			
	Tc	75°C			
	Storage Temperature	-40°C~+85°C			
	Life time	> 50000h@Tc=75°C,230VAC			
Surface	Dimension	280X30X21(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.				

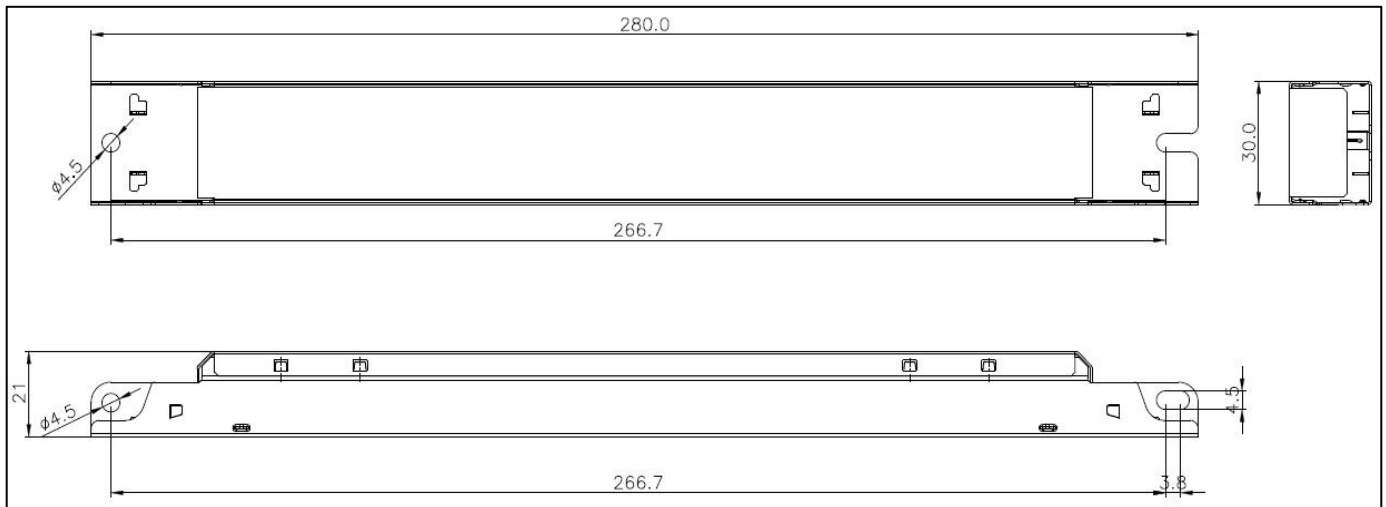
## ◆ Parameter

Number	Output				Switch position			
	Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)	1	2	3	4
1	300mA	30-180VDC	250VDC	54W	--	--	--	--
2	350mA	30-180VDC		63W	--	--	--	ON
3	400mA	30-160VDC		64W	--	--	ON	--
4	450mA	30-160VDC		72W	--	--	ON	ON
5	500mA	30-160VDC		80W	--	ON	--	--
6	550mA	30-145VDC		80W	--	ON	--	ON
7	600mA	30-133VDC		80W	--	ON	ON	--
8	650mA	30-123VDC		80W	--	ON	ON	ON
9	700mA	30-114VDC		80W	ON	ON	ON	ON

\* Factory default

## ◆ Wiring diagram

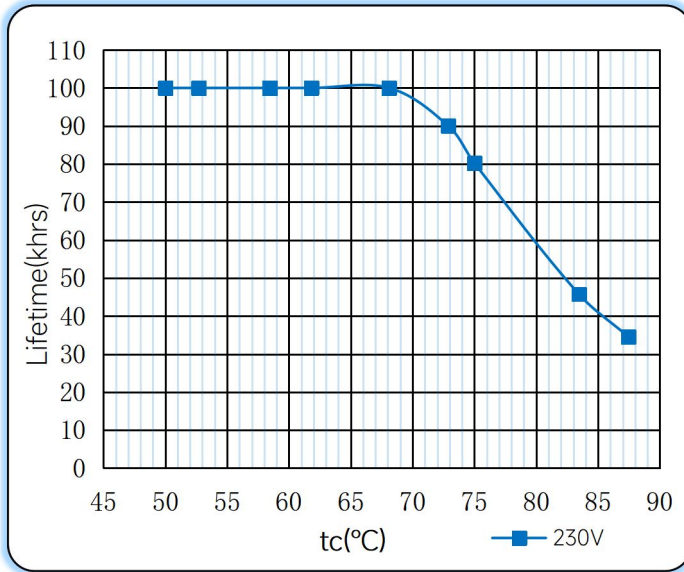


**◆ 2D diagram**

**◆ Wiring & Connections**

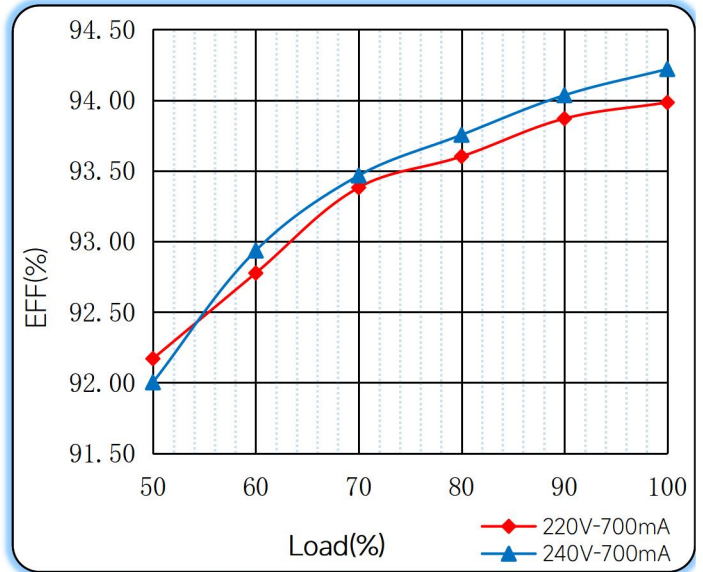
	Specification item	Value (Unit )
Input	Input wire cross-section	0.5...1.5 mm <sup>2</sup>
	Input wire gauge.	16...20 AWG
	Input wire strip length	7...9mm
Output	Output wire cross-section	0.5...1.5 mm <sup>2</sup>
	Output wire gauge.	16...20 AWG
	Output wire strip length	7...9mm

## ◆ Curve for FMS-80-700 N-S LD, $I_o=700\text{mA}$

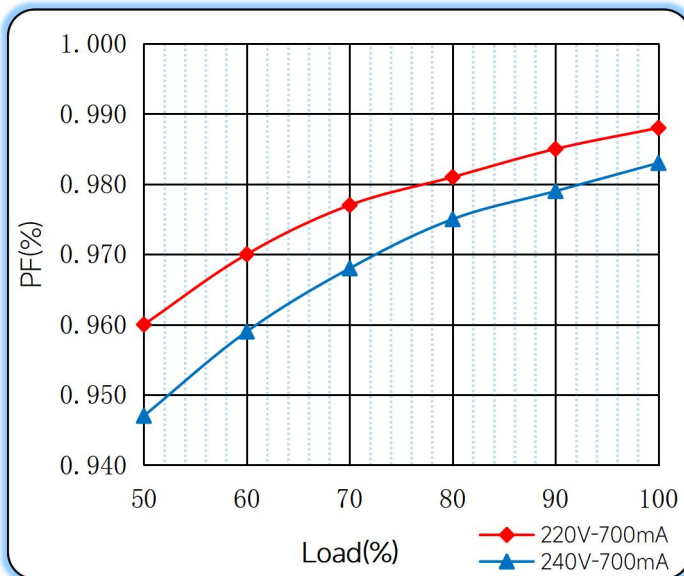
### Lifetime vs. Temperature Curve



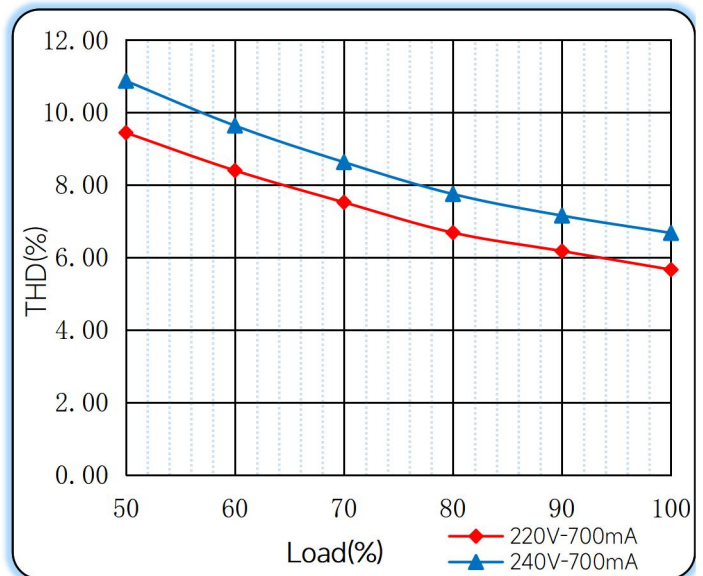
### Efficiency vs. Load



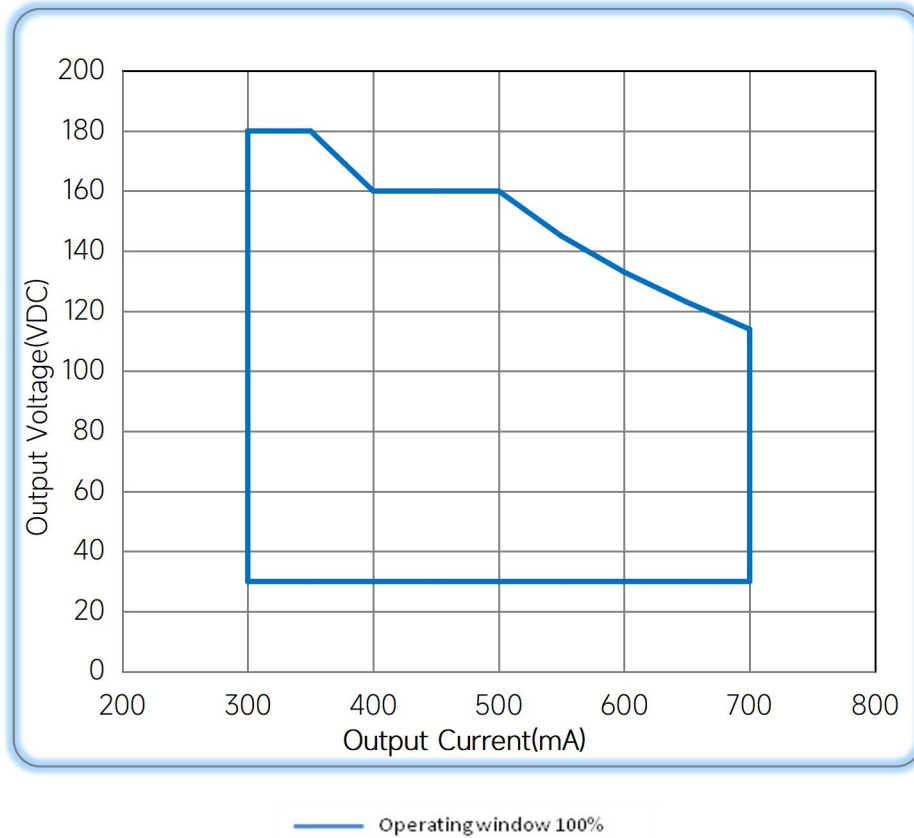
### Power Factor Characteristics



### THD vs. Load



◆ **Operating window**



◆ **Revision Updates**

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