

## 12W Constant Current 0-10V-FLS Series



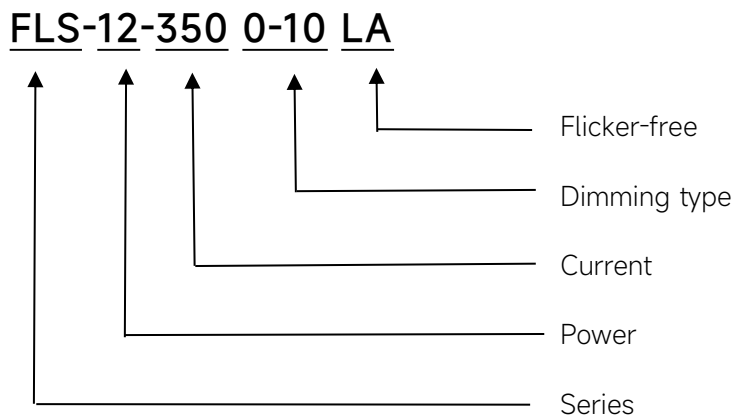
■ Approve

CE SELV

### ◆ Description

FLS-12-350 0-10 LA is a 12W constant current LED driver that operates from 176-264Vac input with 120 to 350mA output current and a forward voltage range from 12 to 40Vdc. The output current is adjustable by DIP Switch. With its compact dimensions from 125 x 45 x 27.5mm it is easy to integrate in LED Panel and down light products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

### ◆ Model code



### Features

- Class II, SELV, independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP
- Power Factor 0.9C
- Efficiency  $\geq 80\%$
- Support 0-10V Dimming
- 5 years warranty

### Applications

- LED panel light, Down light

## ◆ Specification

Output	Constant Current (mA)	350mA
	Voltage Range(VDC)	12-40VDC
	Unload voltage Max.(VDC)	50VDC
	Current Accuracy	±5%
	Output LF current ripple(≤120Hz)	≤21mA <sub>p-p</sub> @Full Load,240VAC
	SVM	≤0.4
	Pst	≤1
	Efficiency(Typ.)	≥80%
Input	Rated input voltage(VAC)	220-240VAC
	Range of input voltage(VAC)	176-264VAC
	Range of input voltage(VDC)	176-280VDC
	Frequency(Hz)	0/50/60 Hz
	Displacement factor	≥0.7
	Power Factor	0.9C
	Input Current max	0.1A MAX. @Full Load,176VAC
	Start-up time	< 0.5S
	No Load Power	≤0.5W
	THD (Typ.)	≤10%
Dimming	Dimming	YES
	Dimming mode	0-10V
	Dimming depth	1%
	Dimming current range	5 ~100%
Protection	Over Load Protection	103-120% YES/Non-auto Resume
	Over Voltage Protection	> 50VDC YES/Non-auto Resume
	Short circuit Protection	YES/Non-auto Resume
	Over Temperature Protection	YES/Auto Resume
Environment	Operating Temperature	-20°C...+45°C
	Humidity	20%-90%RH
	Tc	80°C
	Storage Temperature	-20°C...+45°C
	Life time	> 30,000h@45°C
Surface standards	Dimension	125X45X27.5(LXWXH)mm
Others	EN 61347-1; EN61347-2-13; EN62384	
	ErP	EU 2019/2020
	RoHS	RoHS (2011/65/EU) (EU)2015/863

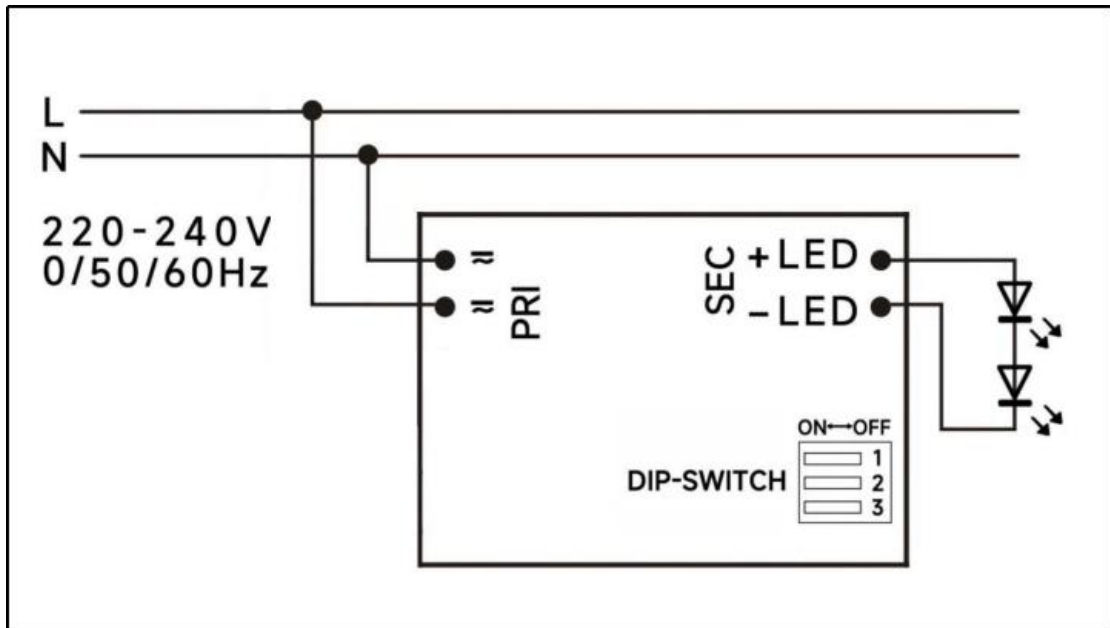
Note	<p>1.All parameters NOT specially mentioned are measured at 230VAC input , full load and 25°C of ambient temperature.</p> <p>2.Ripple &amp; Noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uF &amp; 47 uF parallel capacitor.</p>
------	---

### ◆ Parameter

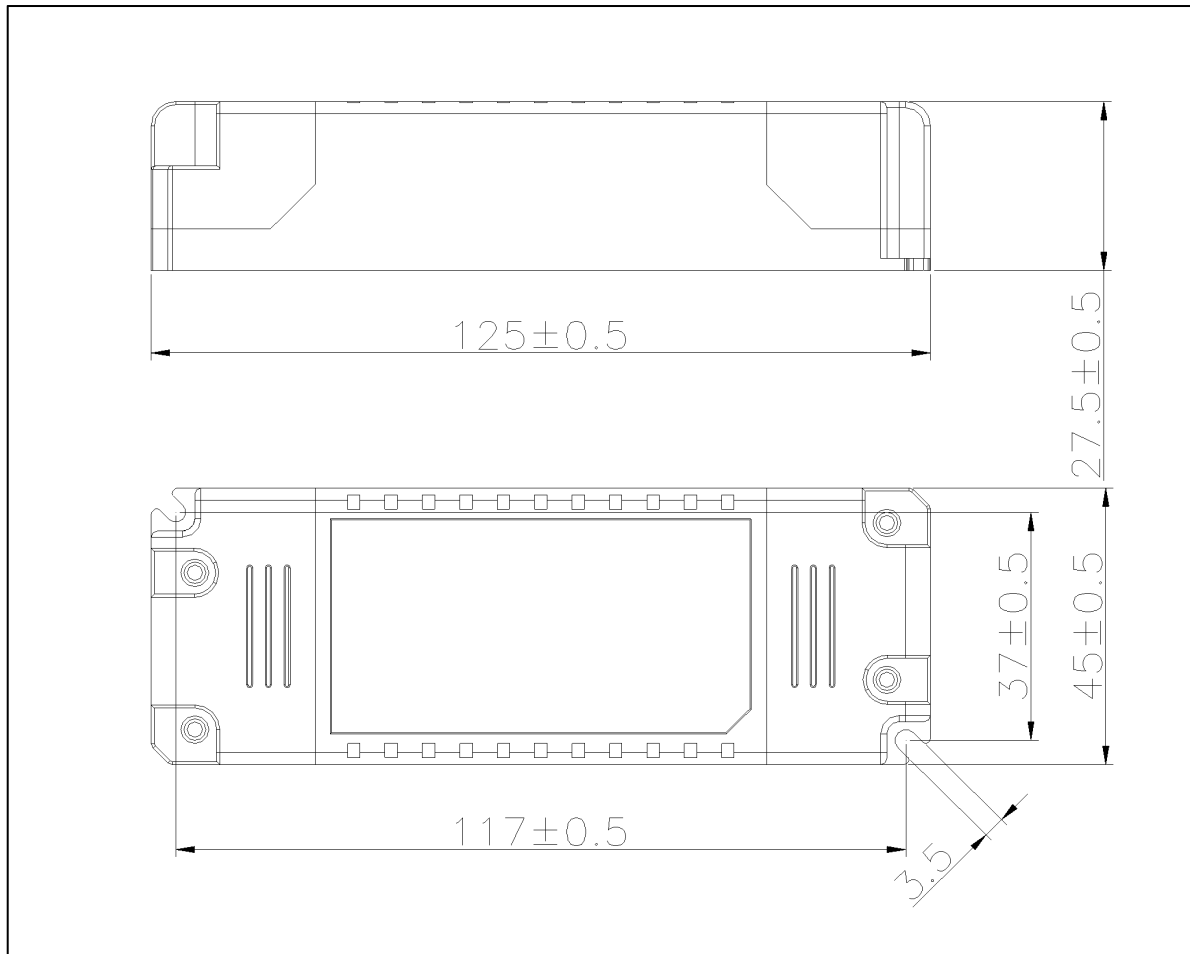
Number	Output				Switch position		
	Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)	1	2	3
1	120mA	12-40VDC	50VDC	4.8W	--	--	--
2	150mA	12-40VDC		6W	ON	--	--
3	200mA	12-40VDC		8W	ON	--	ON
4	300mA	12-40VDC		12W	ON	ON	--
5	350mA	12-34.5VDC		12.1W	ON	ON	ON

\* Factory default

### ◆ Wiring diagram



## 2D diagram

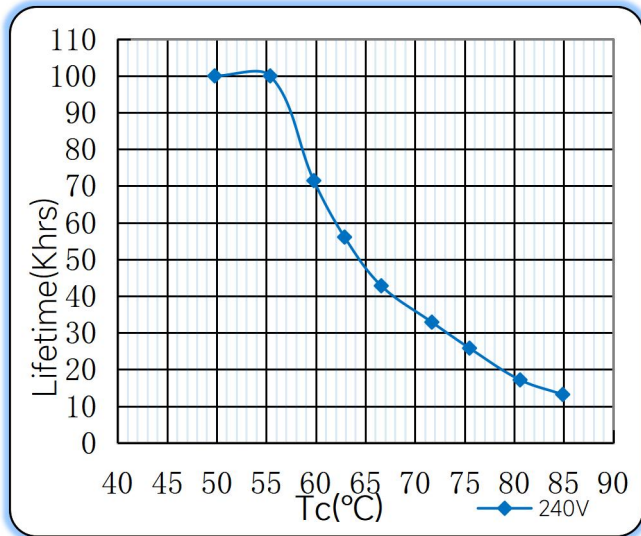


## ◆ Wiring & Connections

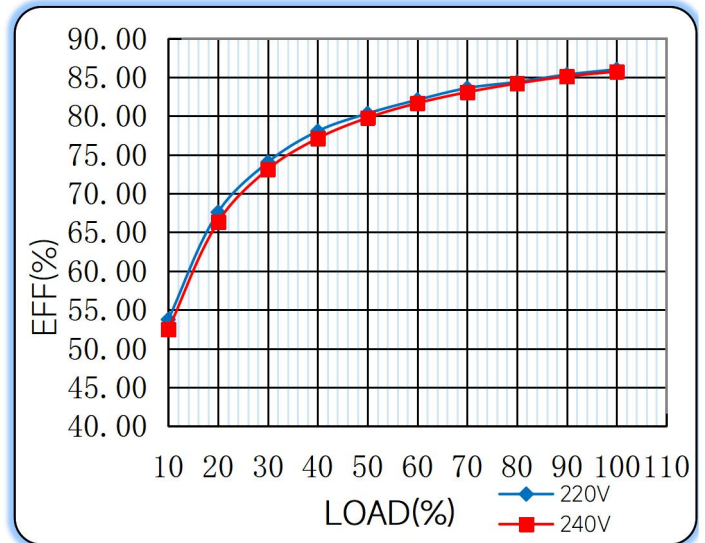
Specification item		Value (Unit )
Input	Input wire cross-section	0.5...1.5 mm <sup>2</sup>
	Input wire gauge.	16...20 AWG
	Input wire strip length	7...9mm
Output	Output wire cross-section	0.5...1.5 mm <sup>2</sup>
	Output wire gauge.	16...20 AWG
	Output wire strip length	7...9mm

**Curve for FLS-12-350 0-10 LA,  $I_o=350mA$**

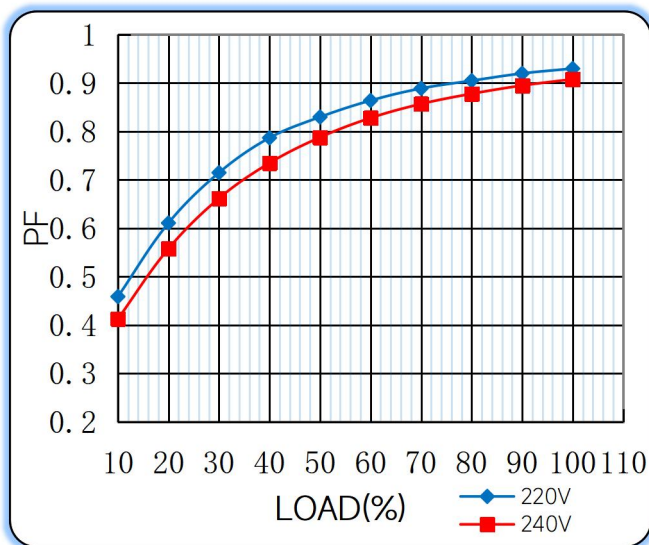
**Lifetime vs. Temperature Curve**



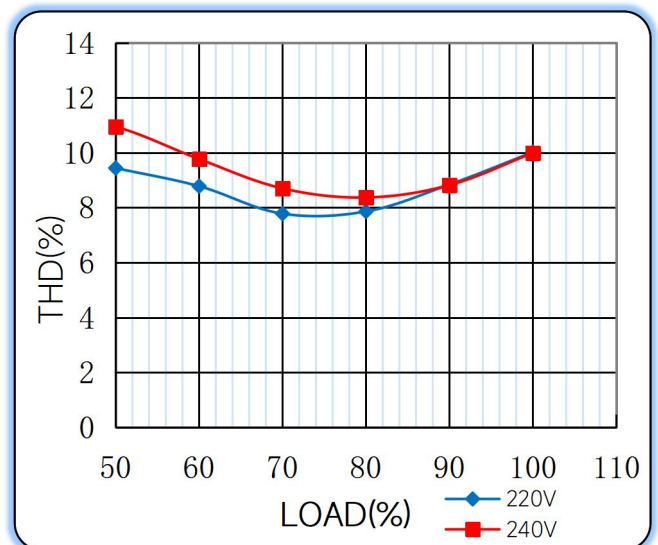
**Efficiency vs. Load**



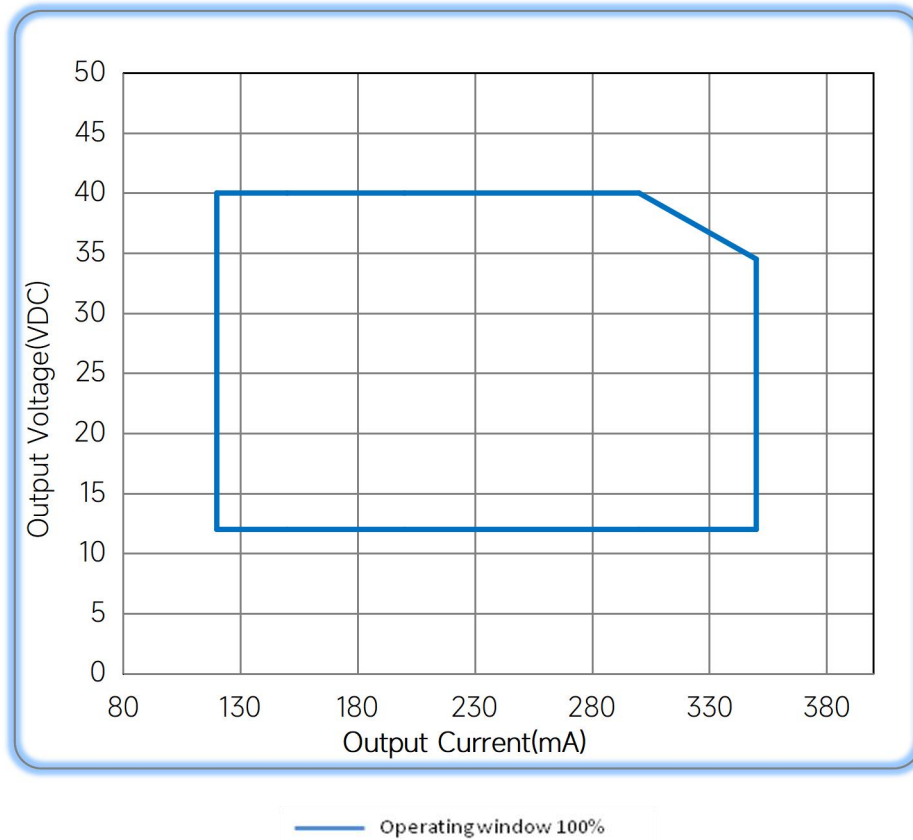
**Power Factor Characteristics**



**THD vs. Load**



## Operating window



## ◆ Revision Updates

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



**Citi-el**  
LED up your business

+7 (499) 647-80-74

zakaz@citi-el.ru

www.citi-el.ru