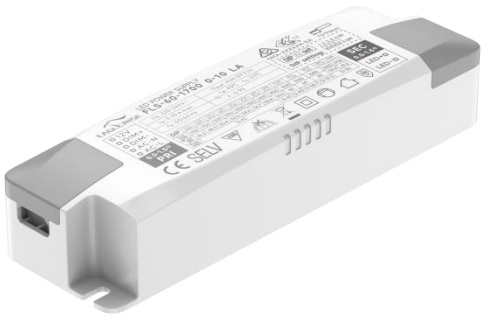
60W 0-10V+RX+PWM Dimming power supply



■Approve

Features

- For luminaries of protection
- Class II, SELV, Independent
- Input Voltage: 220-240VAC
- Protections: SCP/OLP/OVP
- Power Factor: 0.95
- Efficiency: 88%
- Support 0-10V,RX,PWM Dimming
- 5 years warranty

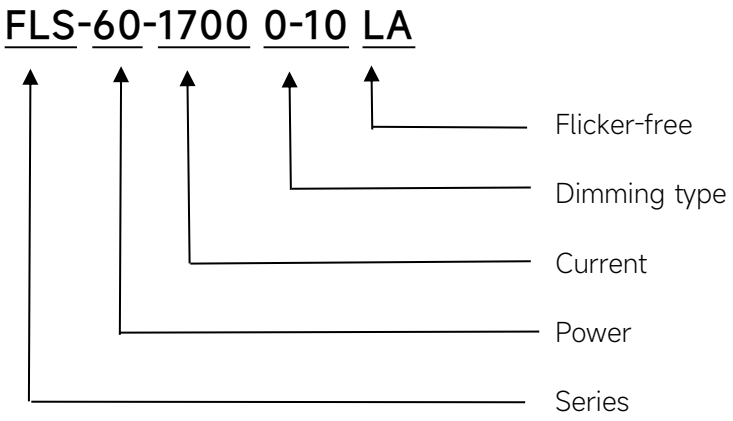
Applications

- LED panel light、Down light

◆ Description

FLS-60-1700 0-10 LA is a 60W constant current LED driver that operates from 198-264Vac input with 1100 to 1700mA output current and a forward voltage range from 12 to 42Vdc. The output current is selectable by DIP Switch. With it's compact dimensions from 150x45x30mm. 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



◆ Specification

Output	Constant Current (mA)	1100mA	1150mA	1200mA	...	1700mA
	Voltage Range(VDC)	12-42VDC			...	12-36VDC
	Unload voltage Max.(VDC)	59VDC				
	Current Accuracy	±5%				
	Output HF current ripple(≥1KHz)	±3%				
	Output LF current ripple(≤120Hz)	±3%				
	Auxiliary Output Voltage	12V				
	Auxiliary Output Current	50 mA				
	SVM	≤0.4				
	Pst	≤1				
	Efficiency(Typ.)	88%@Full load				
Input	Rated input voltage(VAC)	220-240VAC				
	Range of input voltage(VAC)	198-264VAC				
	Frequency(Hz)	50/60Hz				
	Displacement factor	≥0.9@Full load				
	Power Factor	0.95@Full load				
	Input Current max	0.39 A Max				
	Start-up time	<1S				
	No Load Power	≤0.5W				
	THD (Typ.)	<10%@Full load				
Dimming	Dimming	YES				
	Dimming mode	0-10V				
	Dimming depth	1%				
	Dimming current range	1-100%				
Protection	Over Load Protection	103-130%				
		YES/Auto Resume				
	Over Voltage Protection	＞59VDC				
		YES/Auto Resume				
	Short circuit Protection	YES/Auto Resume				
	Over Temperature Protection	YES/Auto Resume				
Environment	Operating Temperature	-20℃~+45℃				
	Humidity	20%-90%RH				
	Tc	85℃				
	Storage Temperature	-25℃~+60℃				
	Life time	>50000h@Tc=80℃				
Surface	Dimension	150x45x30(LXWXH)mm				

Standards	EN 61547; EN 61347-1,EN 61347-2-13; IEC 61347-1,IEC 61347-2-13; GB 19510.1,GB 19510.14; AS 61347.1,AS 61347.2.13; EN 62384; EN IEC 55015,EN IEC 61000-3-2,EN 61000-3-3	
Others	ErP	EU 2019/2020
	RoHS	RoHS (2011/65/EU) (EU)2015/863
Note	1.All parameters not specially mentioned are measured at 230VAC input , full load and 25℃ 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. 3.Switch and dimmer are not recommended to connect between this product output and luminaries.	

◆ Parameter

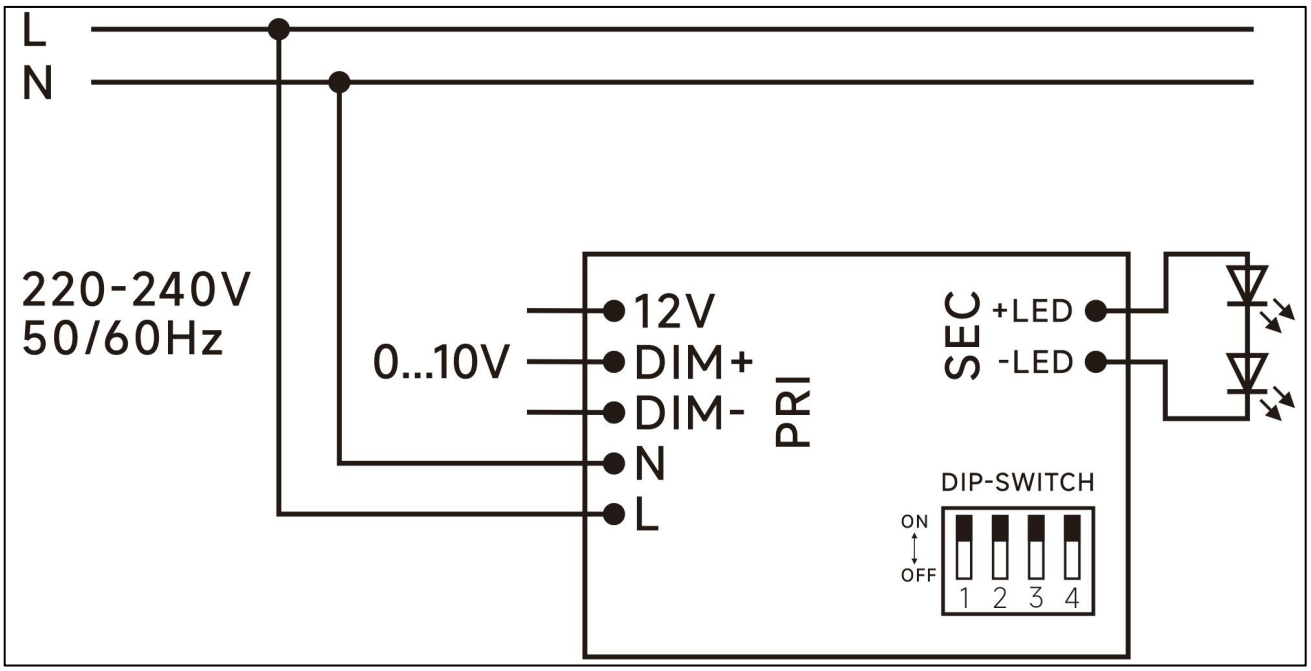
Number	Output				Switch position			
	Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)	1	2	3	4
1	1100mA	12-42	59	46.2	--	--	--	--
2	1150mA			48.3	--	--	--	ON
3	1200mA			50.4	--	--	ON	--
4	1250mA			52.5	--	--	ON	ON
5	1300mA			54.6	--	ON	--	--
6	1350mA			56.7	--	ON	--	ON
7	1400mA			58.8	--	ON	ON	--
8	1450mA	12-41		59.5	--	ON	ON	ON
9	1500mA	12-40		60	ON	--	ON	ON
10	1550mA	12-38.7		60	ON	ON	--	--
11	1600mA	12-37.5		60	ON	ON	--	ON
12	1650mA	12-36		59.4	ON	ON	ON	--
*13	1700mA	12-36	59	61.2	ON	ON	ON	ON

* Factory default

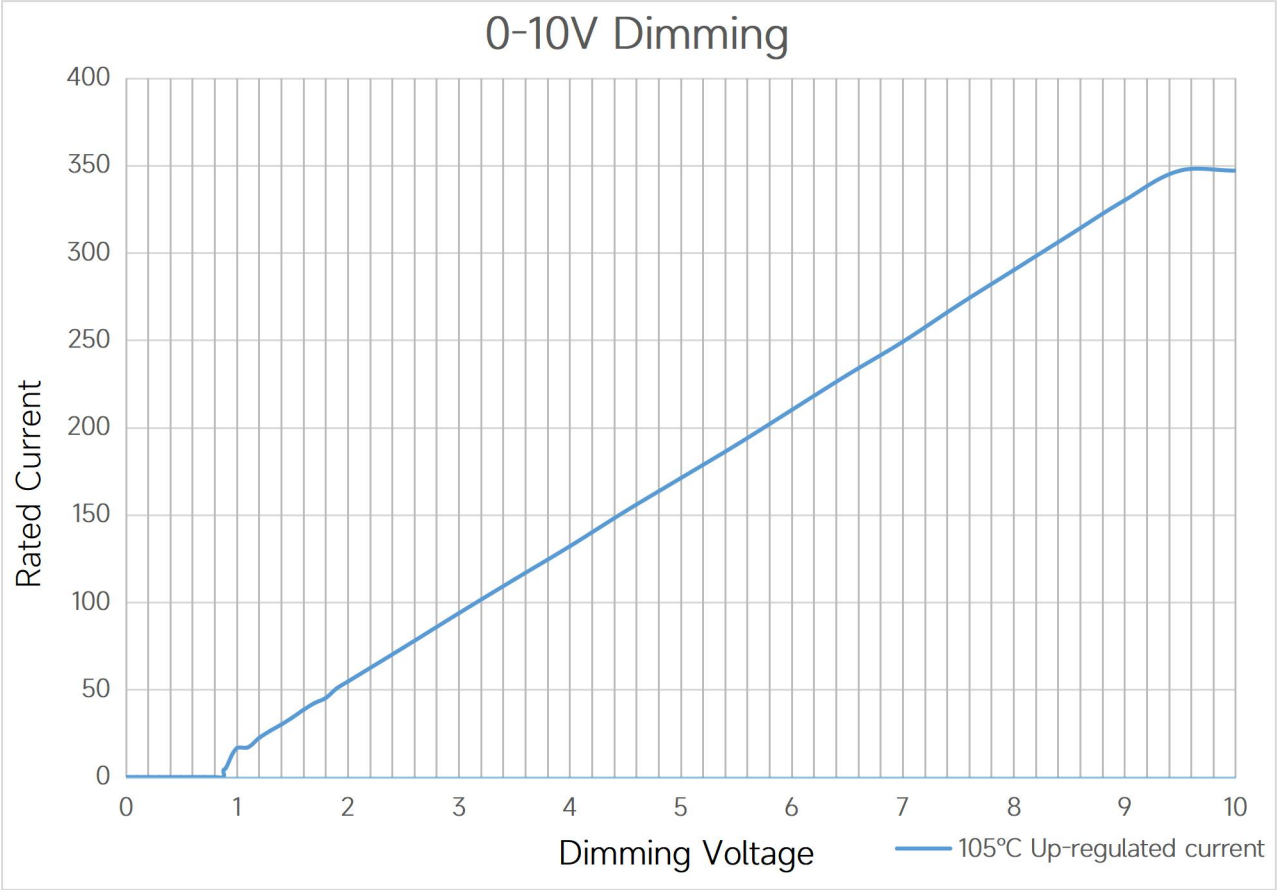
◆ Circuit Breaker

I^{peak}	Twidth	B10	B16	B20	C10	C16	C20
8.2A	**44μs**	20pcs	32pcs	41pcs	20pcs	32pcs	41pcs

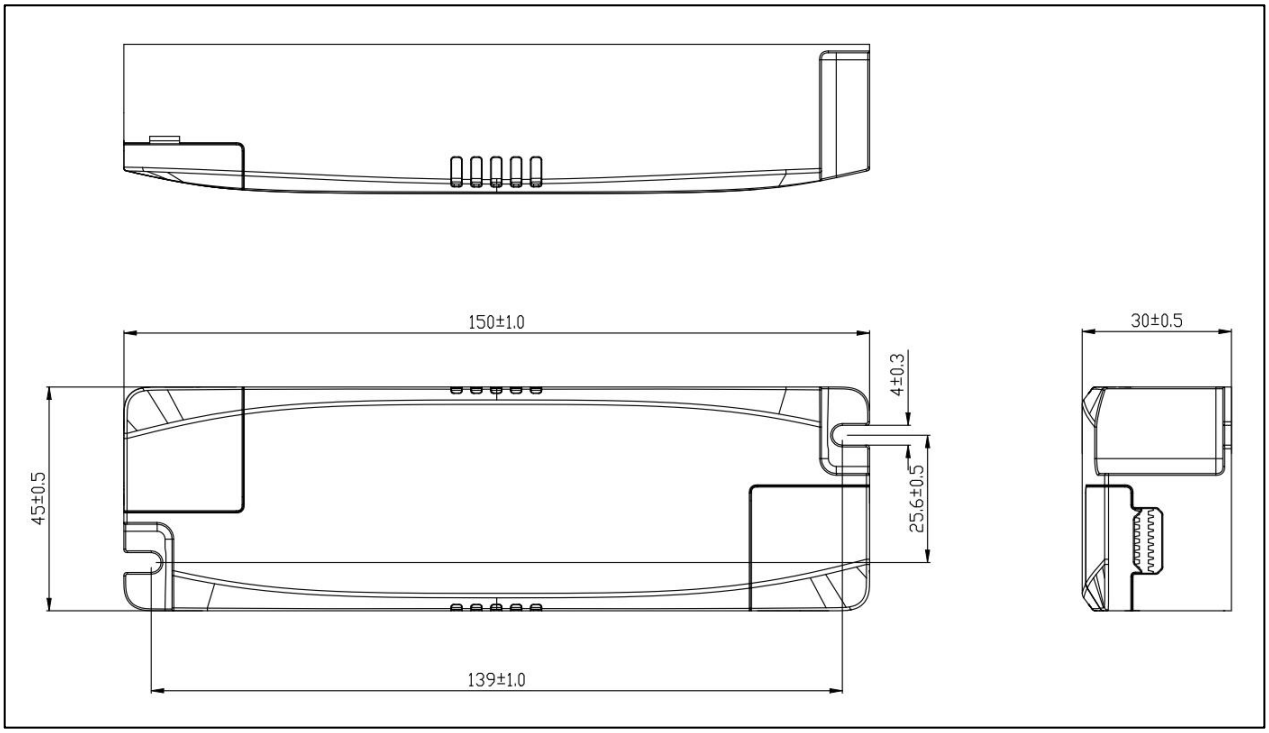
◆ Wiring diagram



◆ The dimming curve



◆ 2D diagram

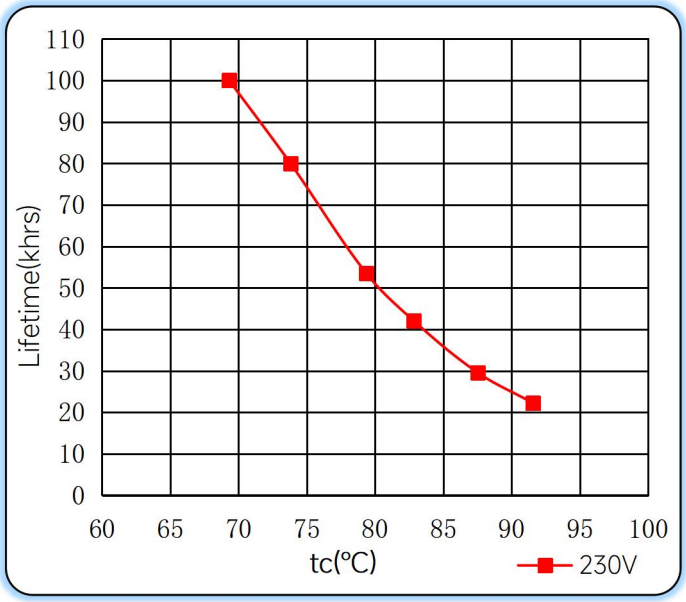


◆ Wiring & Connections

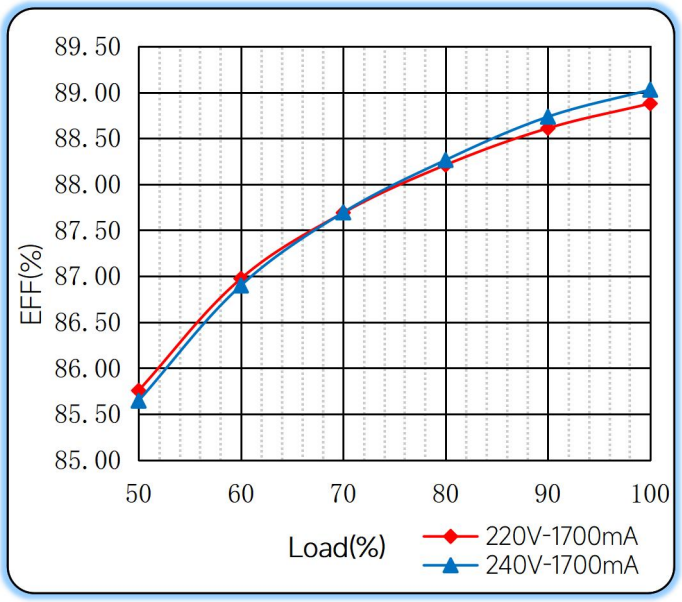
Specification item		Value （Unit ）
Input	Input wire cross-section	0.5...1.5 mm^2
	Input wire gauge.	16...20 AWG
	Input wire strip length	7...9mm
Output	Output wire cross-section	0.5...1.5 mm^2
	Output wire gauge.	16...20 AWG
	Output wire strip length	7...9mm

◆ Curve for FLS-60-1700 0-10 LA, Io=1700mA

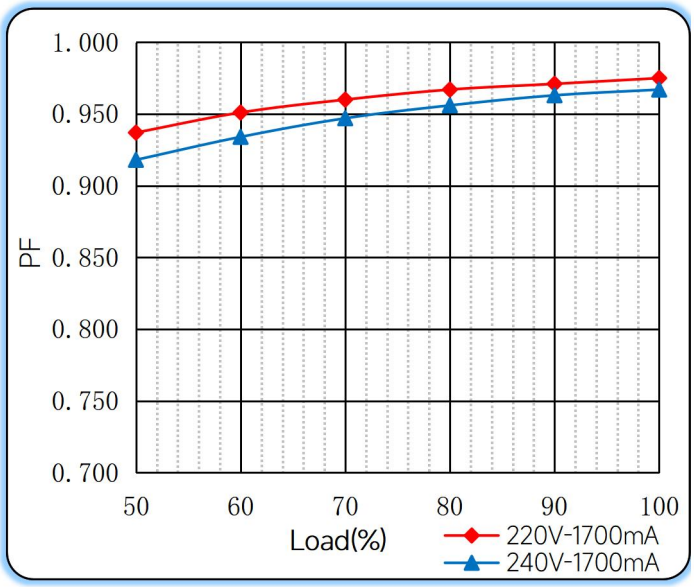
Lifetime vs. Temperature Curve



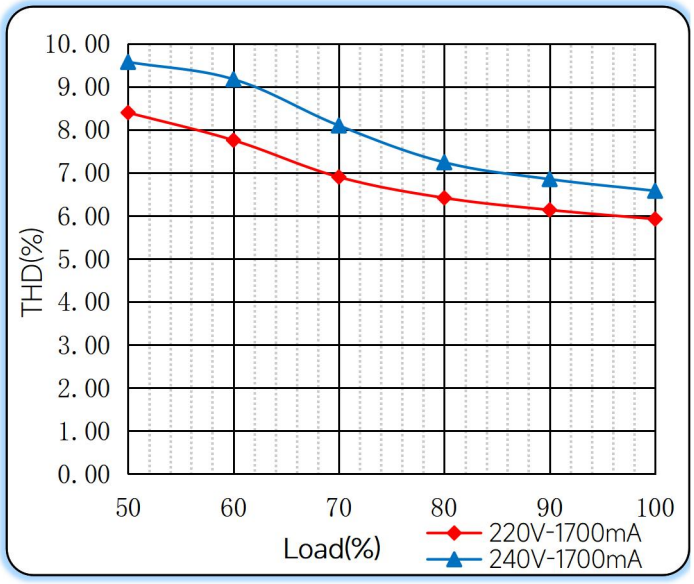
Efficiency vs. Load



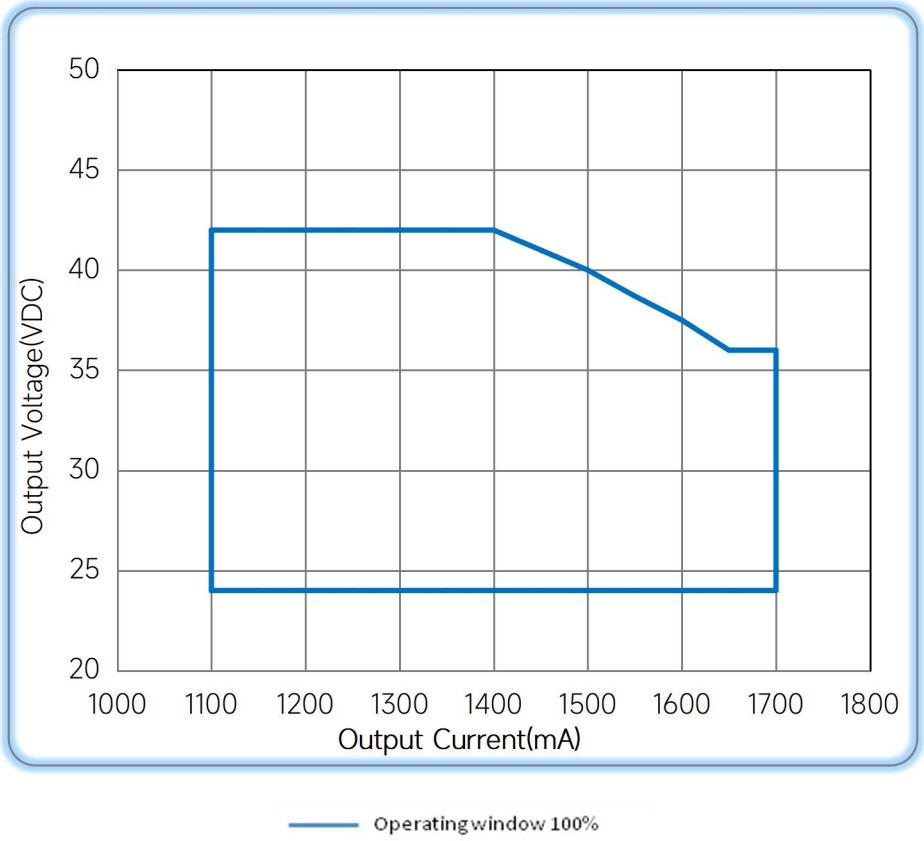
Power Factor Characteristics



THD vs. Load



◆ Operating window



◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2022/12/02
Specification		updated	B	2023/01/03