

60W Constant Current power supply



■ Approve



Features

- Class II, SELV, Independent
- Input Voltage: 220-240VAC
- Protections: SCP/OLP/OVP
- Power Factor: 0.85C-0.95
- Efficiency: 88%(Typ.)
- 5 years warranty
- IP20

Applications

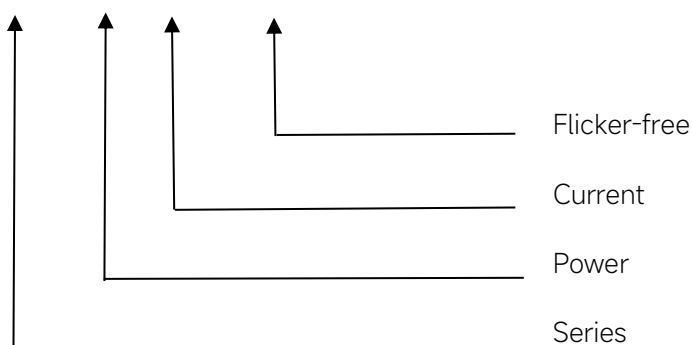
- LED panel, LED down light
- LED spot light

◆ Description

FLS-60-1700 LA EXC is a 60W constant current LED driver with 1100 to 1700mA output current. With it's compact dimensions from 150x 45x 30mm. It is easy to integrate in LED Panel, spot and down lights product. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

◆ Model code

FLS-60-1700 LA EXC



◆ Specification

Output	Constant Current (mA)	1100mA	1200mA	1300mA	...	1700mA
	Voltage Range(VDC)	24-42V				
	Unload voltage Max.(VDC)	55VDC				
	Current Accuracy	±5%				
	Output HF current ripple(≥1KHz)	±5%				
	Output LF current ripple(≤120Hz)	±5%				
	SVM	≤0.4				
	Pst	≤1				
	Efficiency(Typ.)	88%@220-240VAC, full load				
Input	Rated input voltage(VAC)	220-240VAC				
	Range of input voltage(VAC)	198-264VAC				
	Range of input voltage(VDC)	176-280VDC				
	Frequency(Hz)	0/50/60 Hz				
	Displacement factor	≥0.9				
	Power Factor	0.85C-0.95				
	Input Current max	0.4A				
	Start-up time	< 0.5S				
	No Load Power	≤0.5W				
	THD (Typ.)	<10%@220-240VAC, full load				
Protection	Over Load Protection	103-130%				
		YES/Auto Resume				
	Over Voltage Protection	50VDC				
		YES/Auto Resume				
	Short circuit Protection	YES/Auto Resume				
Over Temperature Protection	YES/Auto Resume					
Environment	Operating Temperature	-20°C~+45°C				
	Humidity	20%-90%RH				
	Tc	80°C				
	Storage Temperature	-25°C~+60°C				
	Life time	> 50000h@Tc=80°C				
Surface	Dimension	150x45x30mm				
standards	EN 61347-1,EN 61347-2-13; IEC 61347-1,IEC 61347-2-13; GB 19510.1,GB 19510.14; EN 62384; EN IEC 55015,EN IEC 61000-3-2,EN 61000-3-3; GB/T 17743,GB 17625.1; 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 230VAC 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

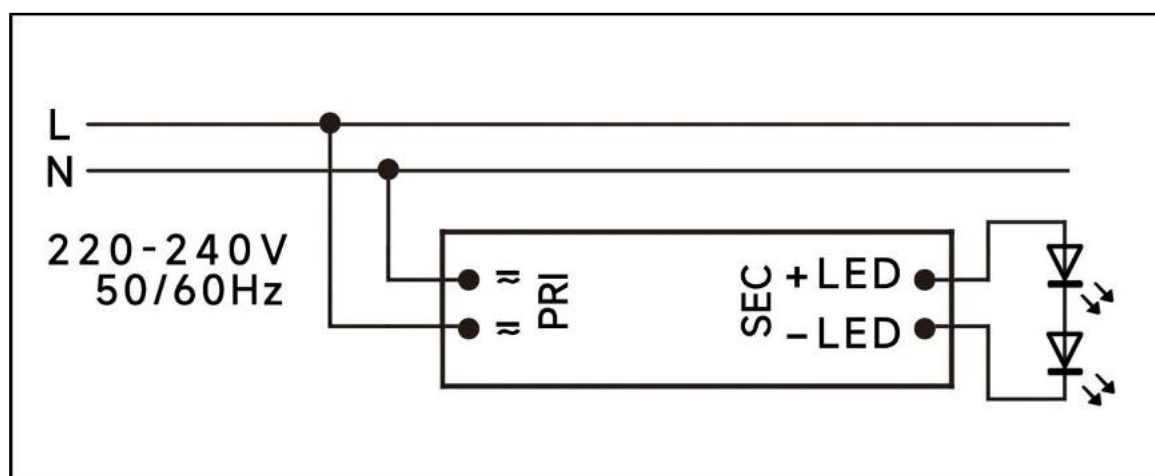
Number	Output				Switch position		
	Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)	1	2	3
1	1100mA	24-42	55	46.2	--	--	--
2	1200mA			50.4	ON	--	--
3	1300mA			54.6	--	ON	--
4	1400mA			58.8	--	--	ON
5	1500mA			63	ON	--	ON
6	1600mA	24-36	55	57.6	--	ON	ON
7	1700mA	24-36		61.2	ON	ON	ON

* Factory default

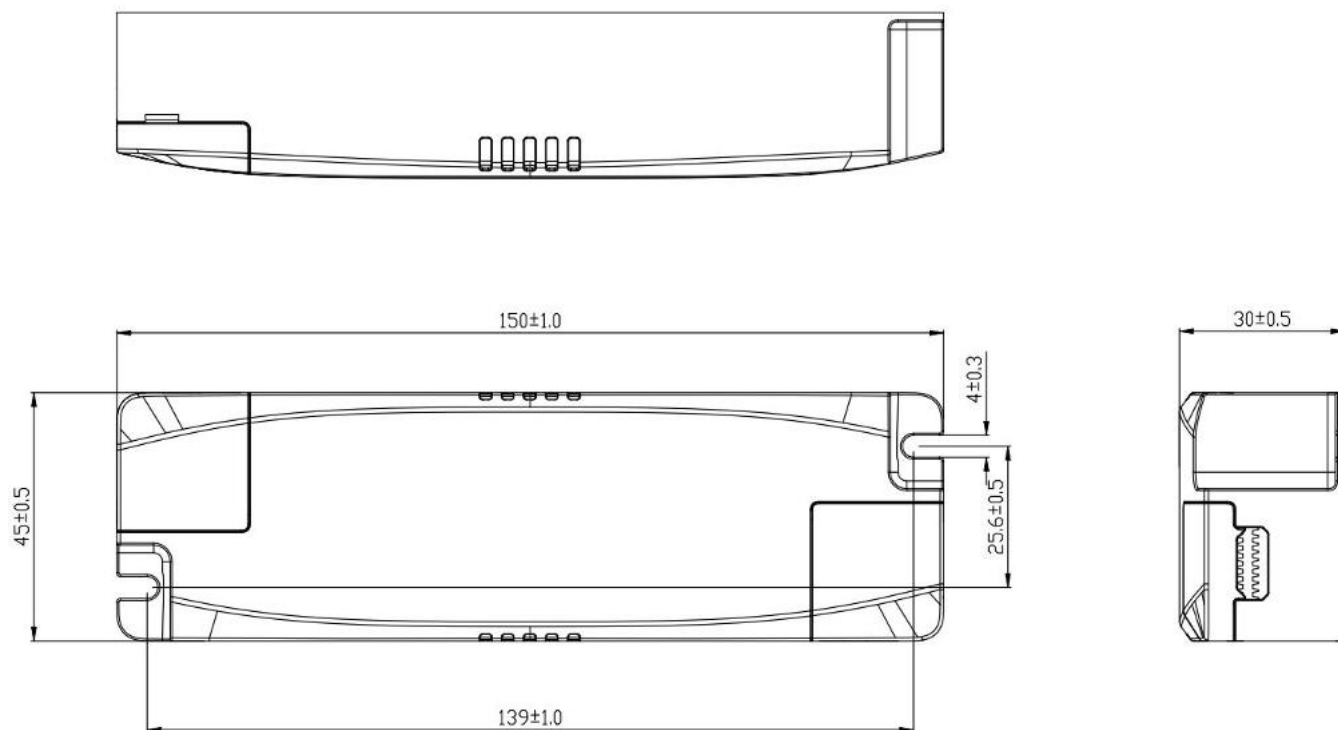
◆ Circuit Breaker

I_{peak}	Twidth	B10	B16	B20	C10	C16	C20
45.8A	222 μ s	8pcs	12pcs	16pcs	13pcs	21pcs	26pcs

◆ Wiring diagram



◆ 2D diagram

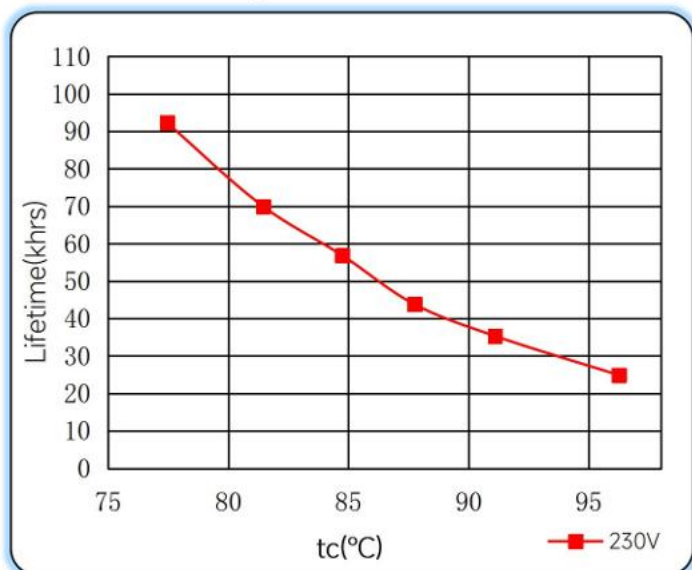


◆ Wiring & Connections

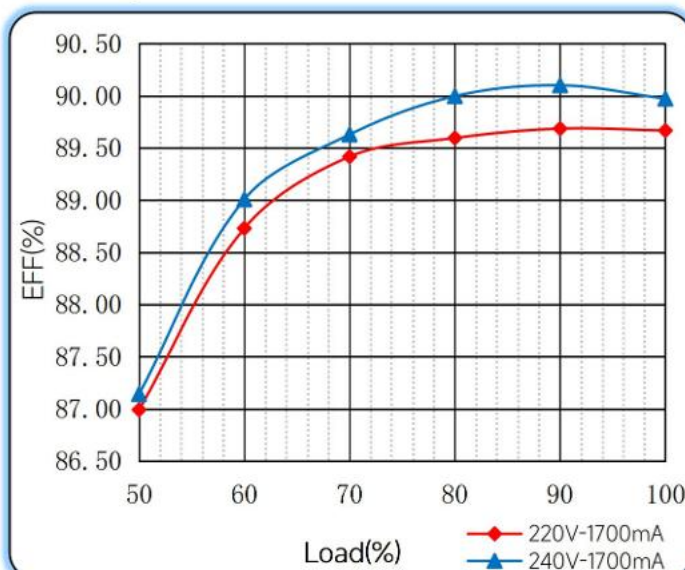
Specification item		Value (Unit)
Input	Input wire cross-section	0.5...1.5 mm ²
	Input wire gauge.	16...20 AWG
	Input wire strip length	7...9mm
Output	Output wire cross-section	0.5...1.5 mm ²
	Output wire gauge.	16...20 AWG
	Output wire strip length	7...9mm

◆ Curve for FLS-60-1700 LA EXC, $I_o=1700\text{mA}$

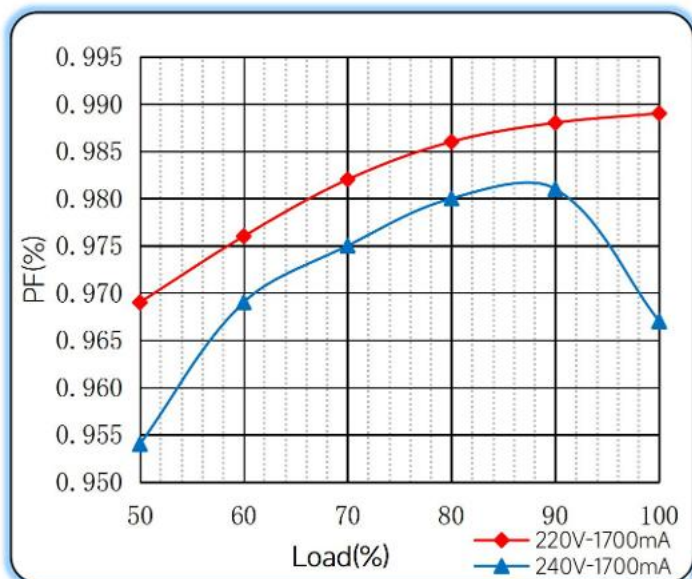
Lifetime vs. Temperature Curve



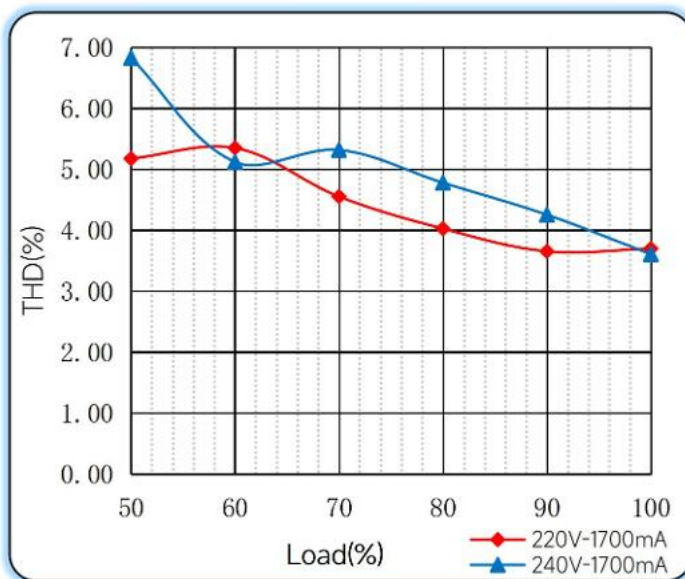
Efficiency vs. Load



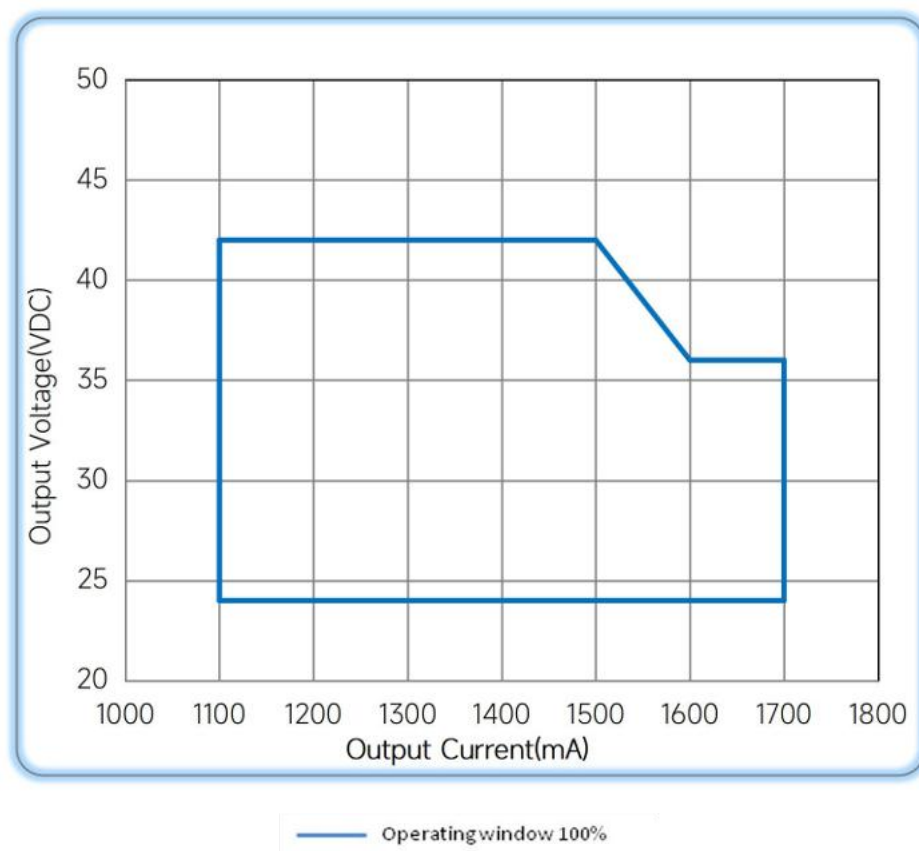
Power Factor Characteristics



THD vs. Load



◆ Operating window



◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2022/05/15
Curve		Added	B	2022/11/30
Name	FLS-60-1700 LD ECO	FLS-60-1700 LA EXC	C	2022/12/10
Unload voltage Max.(VDC)	50VDC	55VDC	D	2023/04/07

Tel: +86-0757-86256822, +86-0757-86256831

E-mail: sales@eaglerise.com

Website : <https://lighting.eaglerise.com>



EAGLERISE



Manual