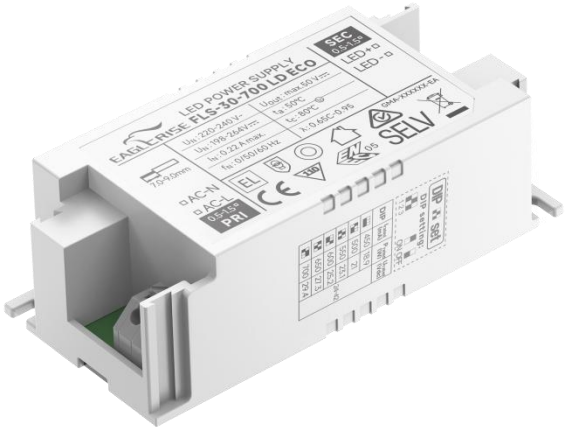
30W Constant Current power supply



■Approve

Features

- Class II，SELV，built-in/independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP
- Power Factor ： 0.96
- Efficiency ： 89%
- 5 years warranty
- IP20

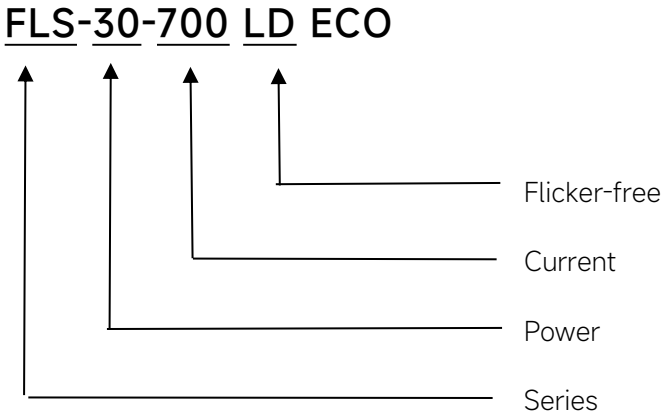
Applications

- LED panel、Down light

◆ Description

FLS-30-700 LD ECO is a 30W constant current LED driver with 450 to 700mA output current and a forward voltage range from 24 to 42Vdc. The output current is adjustable by DIP Switch. With it's compact dimensions from 97 x 43 x 30 mm it is easy to integrate in LED Panel and down light products. The side covers are available as accessories and allow to use the LED driver independent.

◆ Model code



◆ Specification

Output	Constant Current	450mA	500mA	550mA	600mA	650mA	700mA
	Voltage Range	24-42VDC					
	Unload voltage Max.	50VDC					
	Current Accuracy	±5%					
	Output HF current ripple(≥1KHz)	±4%					
	Output LF current ripple(≤120Hz)	±3%					
	SVM	≤0.01					
	P_{st}	≤0.5					
	Efficiency(Typ.)	89%					
Input	Rated input voltage	220-240VAC					
	Range of input voltage	198-264VAC					
	Rated input voltage(DC)	198-280VDC					
	Frequency(Hz)	0/50/60 Hz					
	Displacement factor	≥0.9					
	Power Factor	0.96					
	Input Current max	220mA					
	Start-up time	< 0.5S					
	No Load Power	≤0.5W					
	THD (Typ.)	10%					
Protection	Over Load Protection	103-120%					
		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	-25℃~+50℃					
	Humidity	20%-90%RH					
	Tc	80℃					
	Storage Temperature	-40℃~+80℃					
	Life time	> 50000h@Tc=75℃					
Surface	Dimension	97X43X30mm（With side caps :131X43X30mm）					
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 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.The DC input for this product is only used for emergency lighting and applies to functional and safety requirements，EMC is not considered.

◆ Parameter

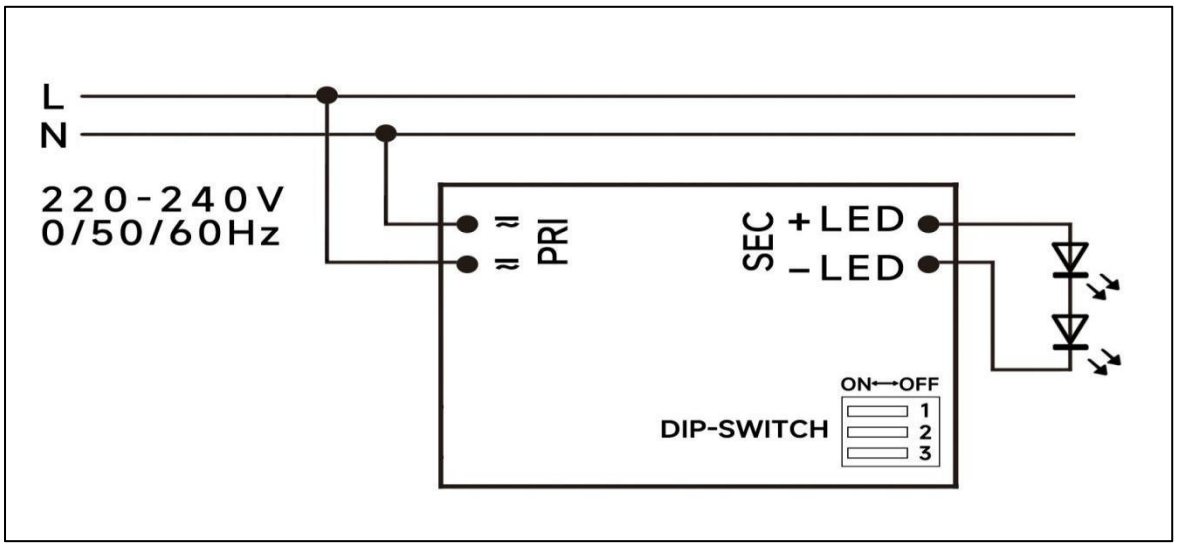
Number	Output	Switch position		
	Current(mA)	1	2	3
1	450mA	--	--	--
2	500mA	ON	--	--
3	550mA	--	ON	--
4	600mA	--	--	ON
5	650mA	ON	--	ON
*6	700mA	--	ON	ON

* Factory default

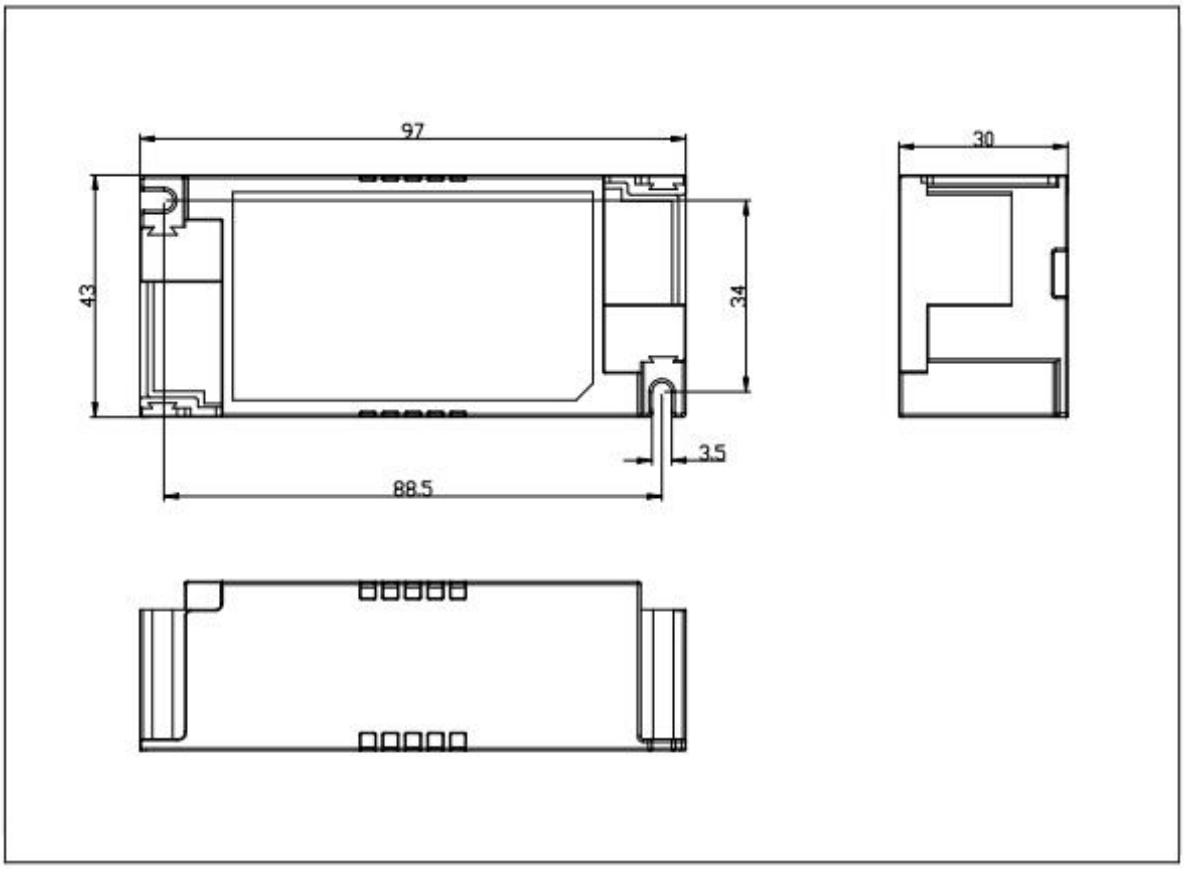
◆ Circuit Breaker

I^{peak}	Twidth	B10	B16	B20	C10	C16	C20
22.1A	**146μs**	25pcs	41pcs	51pcs	36pcs	58pcs	72pcs

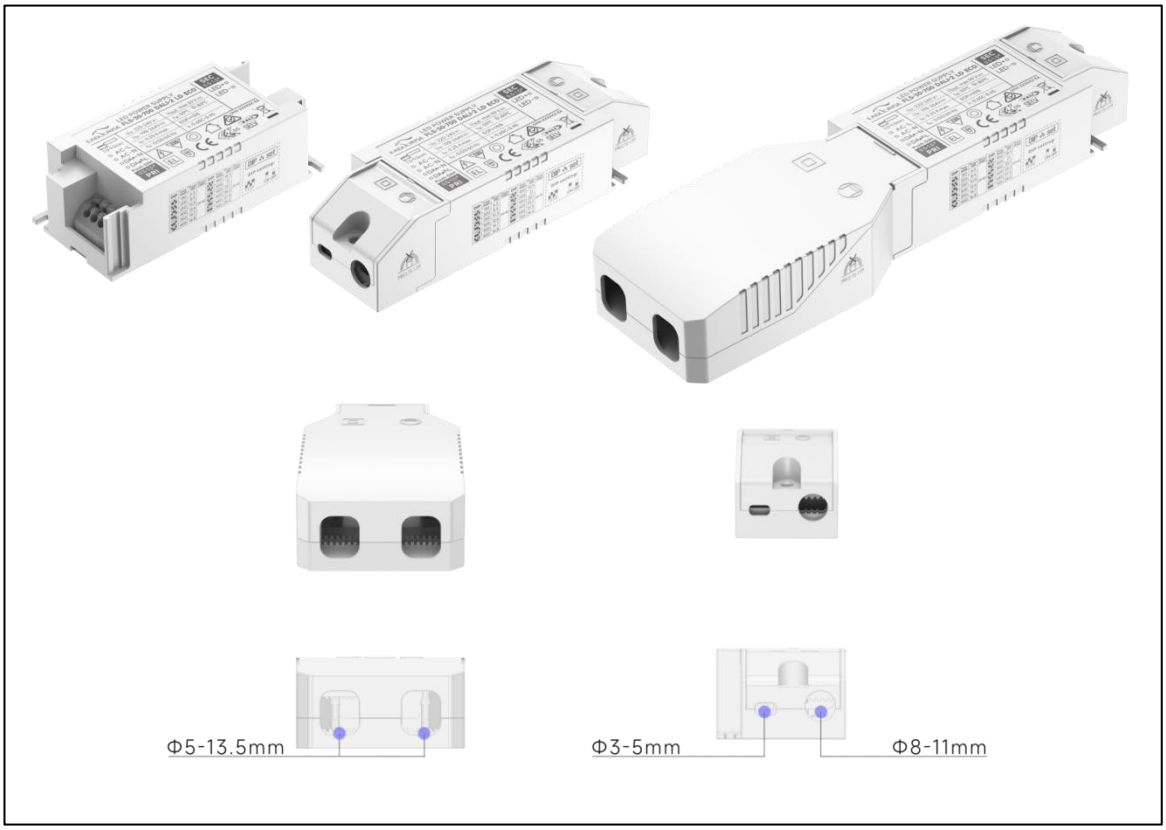
◆ Wiring diagram

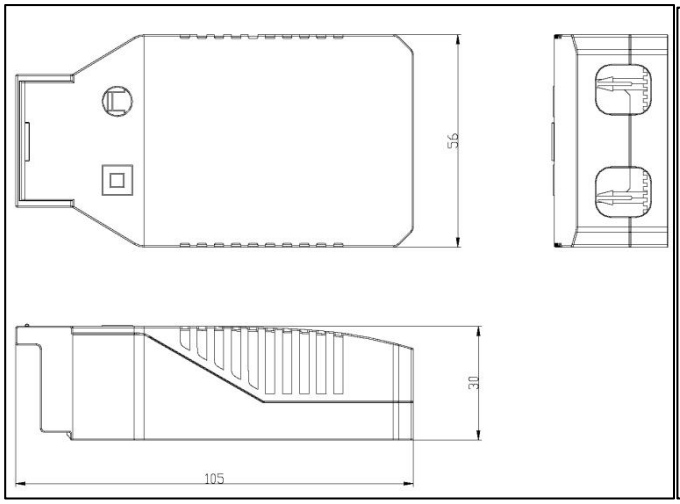


◆ 2D diagram

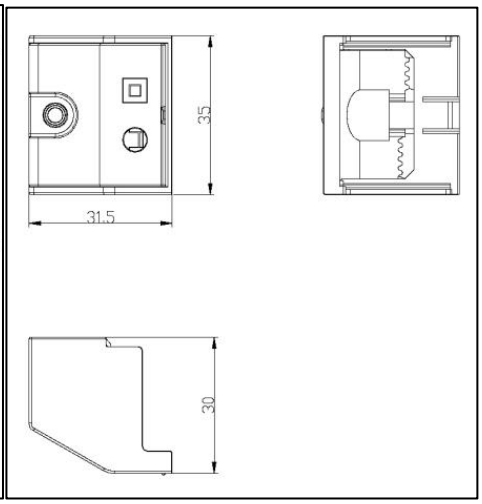


(With side caps)





A caps



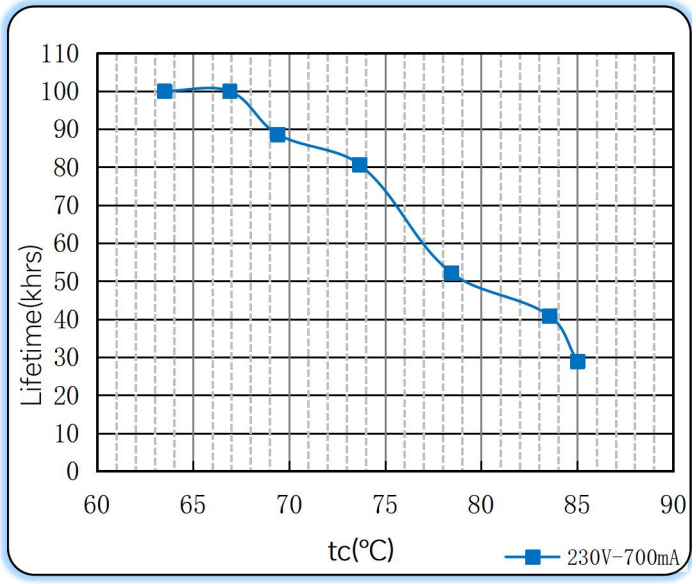
B caps

◆ Wiring & Connections

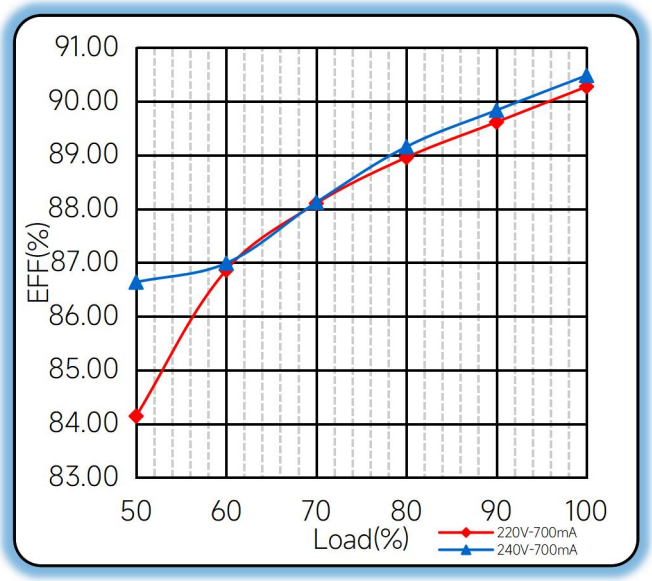
Specification item		Value （Unit ）
Input	Input wire cross-section	0.5...1.5 mm2 （With A side caps：0.75...2.5 mm2）
	Input wire gauge.	16...20 AWG （With A side caps：14...20 AWG ）
	Input wire strip length	7...9mm
Output	Output wire cross-section	0.5...1.5 mm2
	Output wire gauge.	16...20 AWG
	Output wire strip length	7...9mm

◆ Curve for FLS-30-700 LD ECO, Io=700mA

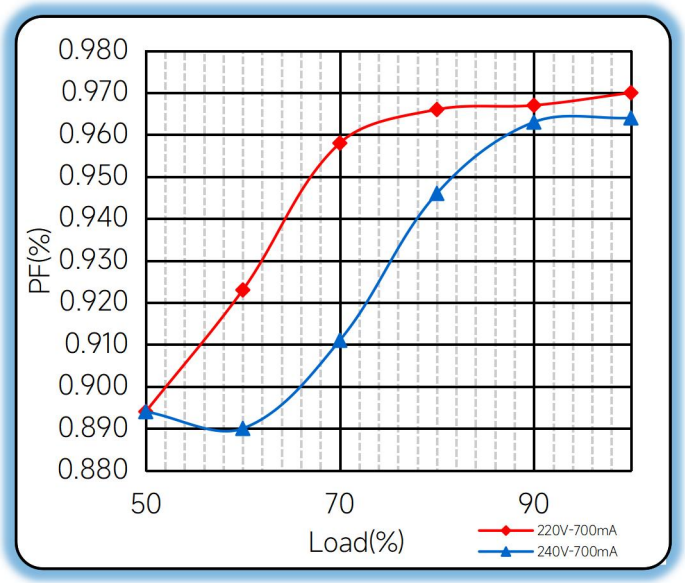
Lifetime vs. Temperature Curve



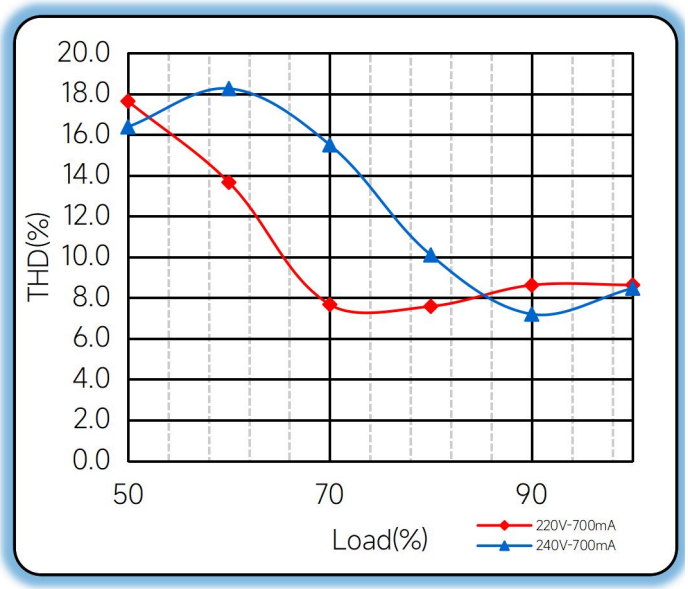
Efficiency vs. Load



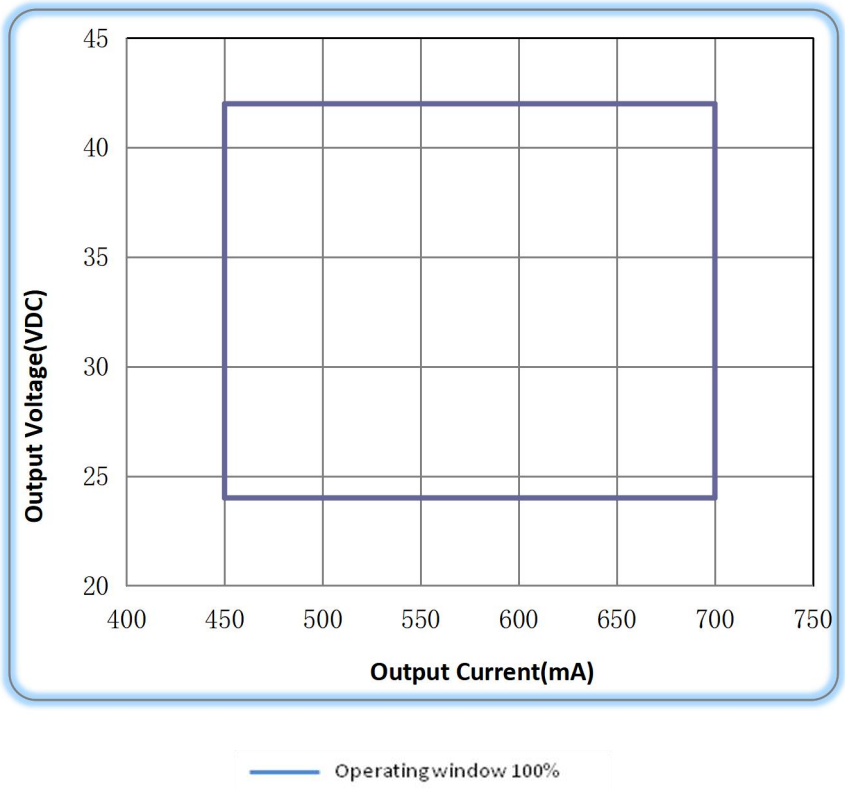
Power Factor Characteristics



THD vs. Load



◆ Operating window



◆ Revision Updates

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

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