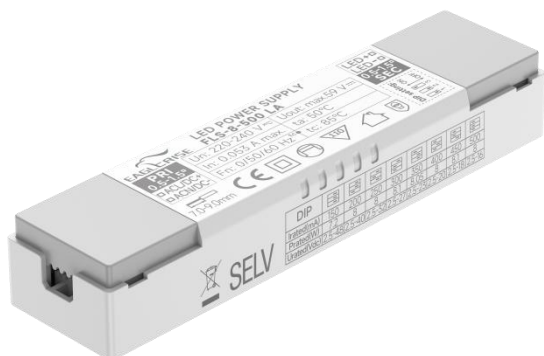


8W Constant Current Power Supply



■ Approve



Features

- For luminaires of protection Class II, SELV, Independent
- Input Voltage: 220-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor: 0.9(Typ.)
- Efficiency: 82%(Typ.)
- Adjustable Output Current with dip-switch
- 5 years warranty
- IP20

Applications

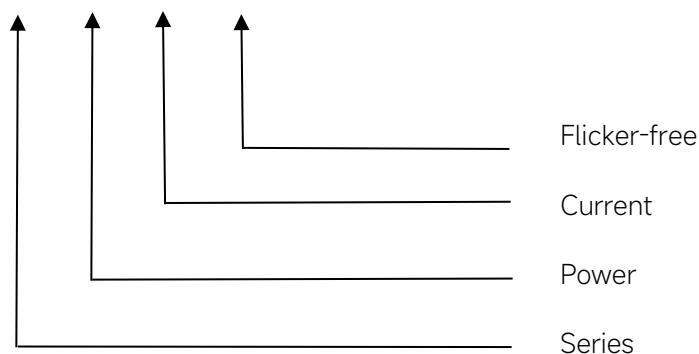
- LED down light

◆ Description

FLS-8-500 LA is a 8W constant current LED driver with 150 to 500mA output current and a forward voltage range from 2.5 to 48Vdc. The output current is adjustable by DIP Switch. With it's compact dimensions from 115x30x20.5 mm. It is easy to integrate in LED down light product. The side covers are available as accessories and allow to use the LED driver independent.

◆ Model code

FLS-8-500 LA



◆ Specification

Output	Constant Current (mA)	150	200	250	300	350	400	450	500	
	Voltage Range(VDC)	2.5-48	2.5-40	2.5-32	2.5-27	2.5-23	2.5-20	2.5-18	2.5-16	
	Unload voltage Max.(VDC)	59V								
	Current Accuracy	±9%	±7%	±5%						
	Output LF current ripple(≤120Hz)	≤±5%								
	SVM	≤0.4								
	Pst	≤1								
	Efficiency(Typ.)	≥82%@Full Load,230V								
Input	Rated input voltage(VAC)	220-240V								
	Range of input voltage(VAC)	198-264VAC								
	Maximum voltage	300VAC@1 h maximum,unit might not operate in this abnormal condition								
	Range of input voltage(VDC)	176-280VDC								
	Frequency(Hz)	0/50/60 Hz								
	Displacement factor	0.9 @Full Load,230V								
	Power Factor	0.9 @Full Load,230V								
	Input Current max	0.053AMax								
	Start-up time	< 0.5S								
	No Load Power	≤0.5W								
	THD (Typ.)	≤20%@Full Load,230V								
Protection	Over Load Protection	103-130%								
		YES/Auto Resume								
	Short circuit Protection	YES/Auto Resume								
	Over Temperature Protection	YES/Auto Resume								
capability	Surge capability (L-N)	1KV								
	Surge capability (L/N-Ground)	NA								
Environment	Operating Temperature	-20°C~~+45°C								
	Humidity	20%-90%RH								
	Tc	85°C								
	Storage Temperature	-25°C~~+60°C								
	Life time	> 50000h@Tc=80°C								
	Ripple&Noise	≤20dB(A)@20cm								
Surface	Dimension	115x30x20.5mm								
	material	PC								
Standards	Safety	GB19510. 1, GB19510. 14;IEC61347- 1, IEC61347-2- 13;EN61347- 1, EN61347-2- 13; EN62384;								
	EMC	GB/T17743, GB17625. 1;EN55015, EN61000-3-2, EN61000-3-3, EN61547;EN61000-4-2,3,4,5,6,8,11, EN61547;EN61000-4-5								
	Energy Efficiency	Erp2.0 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. 3.Switch and dimmer are not recommended to connect between this product output and luminaries. 4.The over-temperature protection of the product is provided by the IC. 5..All Eaglerise power supply are complied with EMI regulations. Since they are belong to component and will be installed inside system enclosure. When they are integrated into a system, the EMI characteristics of the system must be re-verified again. 6. Working temperature during DC input was tested at Ta=40°C	

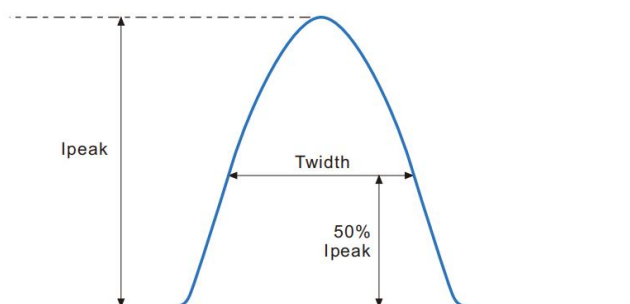
◆ Parameter

Number	Output			Switch position				
	Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)	1	2	3	4
1	150mA	2.5-48V	59V	7.2W	--	--	--	--
2	200mA	2.5-40V		8W	--	--	--	ON
3	250mA	2.5-32V		8W	--	--	ON	--
4	300mA	2.5-27V		8.1W	--	--	ON	ON
5	350mA	2.5-23V		8.05W	--	ON	--	--
6	400mA	2.5-20V		8W	--	ON	--	ON
7	450mA	2.5-18V		8.1W	--	ON	ON	--
*8	500mA	2.5-16V		8W	--	ON	ON	ON

* Factory default

◆ Inrush Current

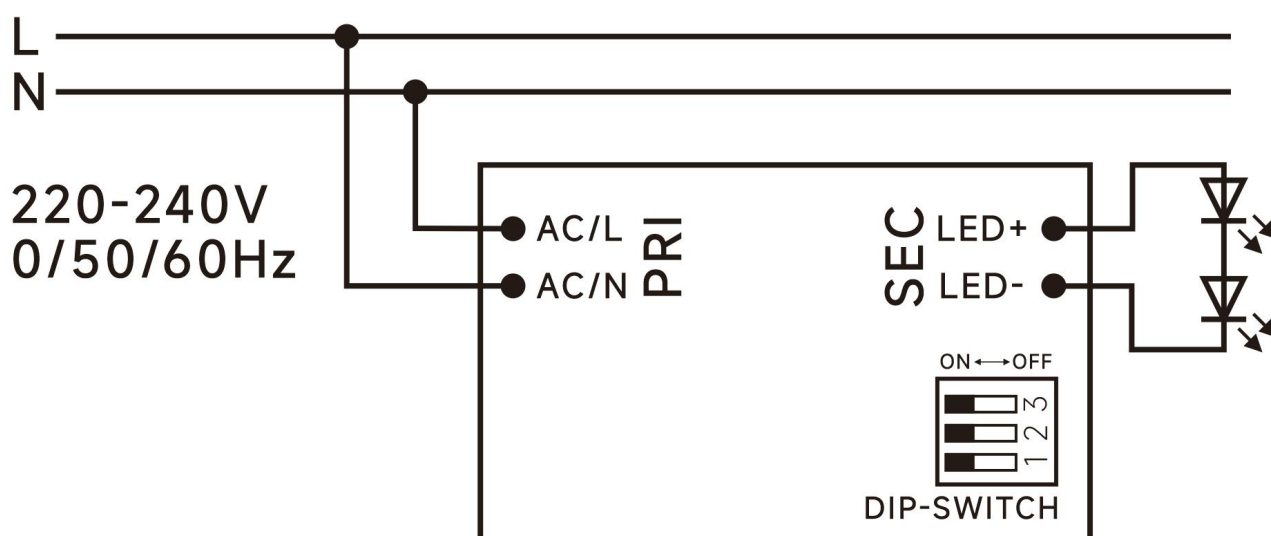
I_{peak}	Twidth	B10	B16	B20	C10	C16	C20
2.24A	52 μ s	150pcs	241pcs	301pcs	150pcs	241pcs	301pcs



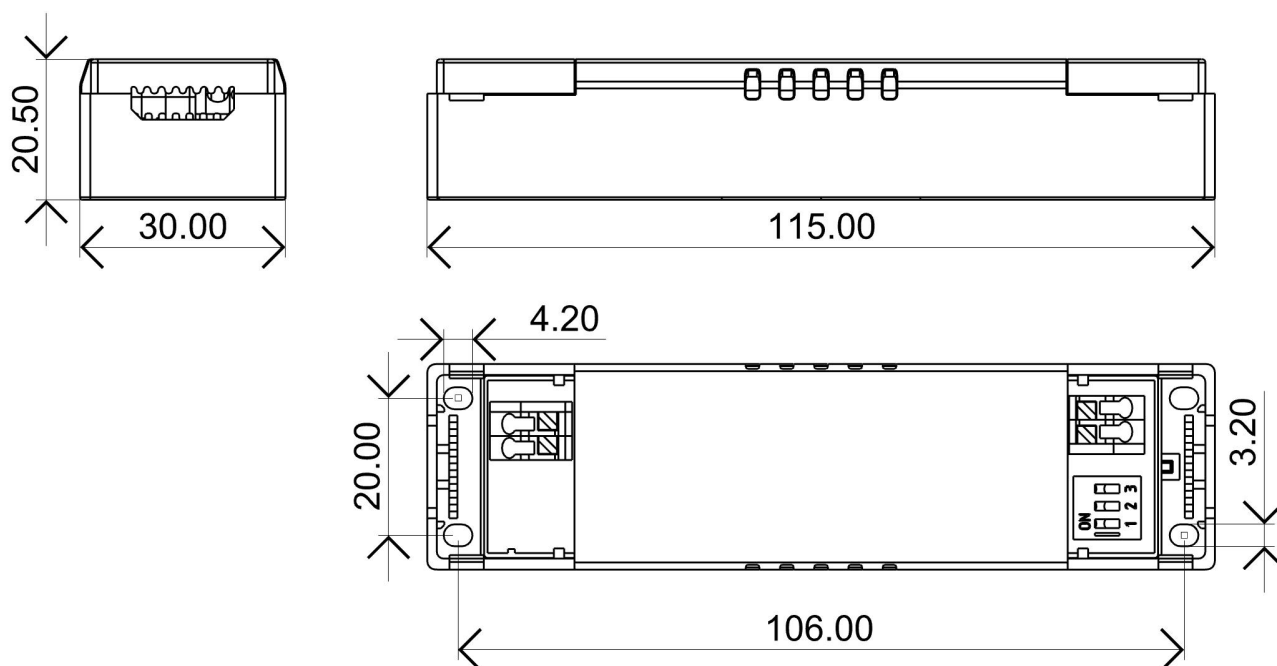
Remarks:

- 1.The number of drives mounted under different MCBs in the table is the maximum value. Please do not exceed this number during installation.
- 2.Different brands and models of miniature circuit breakers, the number of drives mounted will be slightly different.

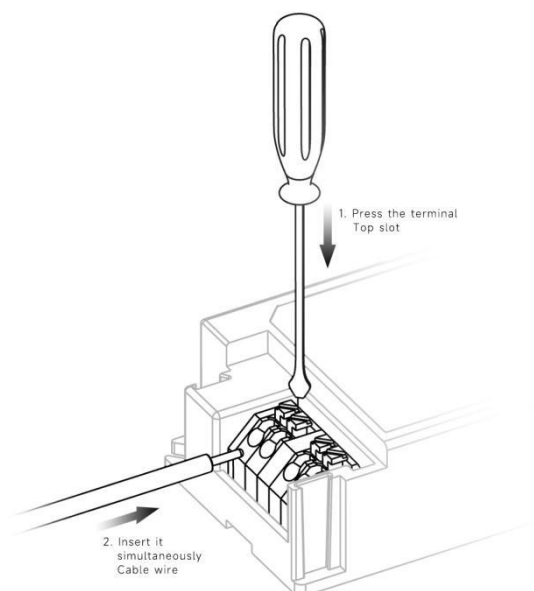
◆ Wiring diagram



◆ 2D diagram



Terminal



◆ Wiring & Connections

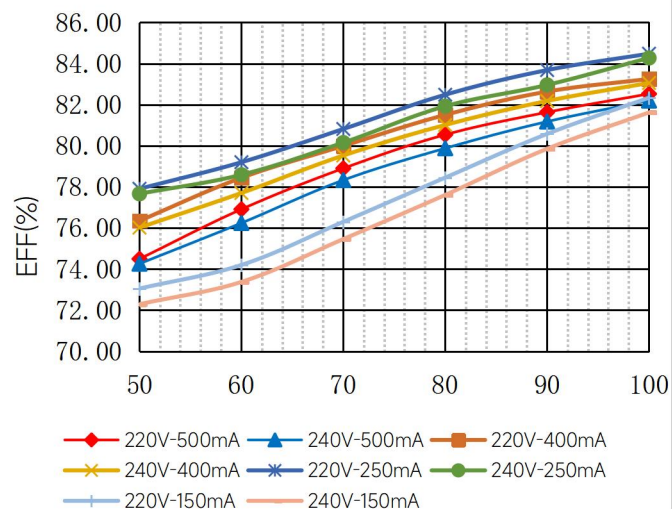
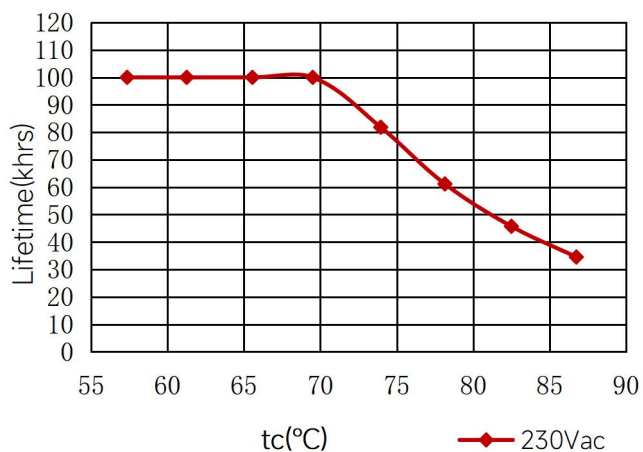
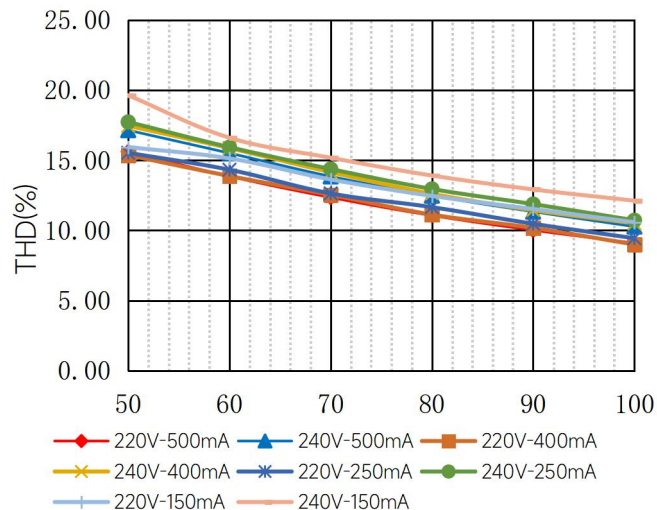
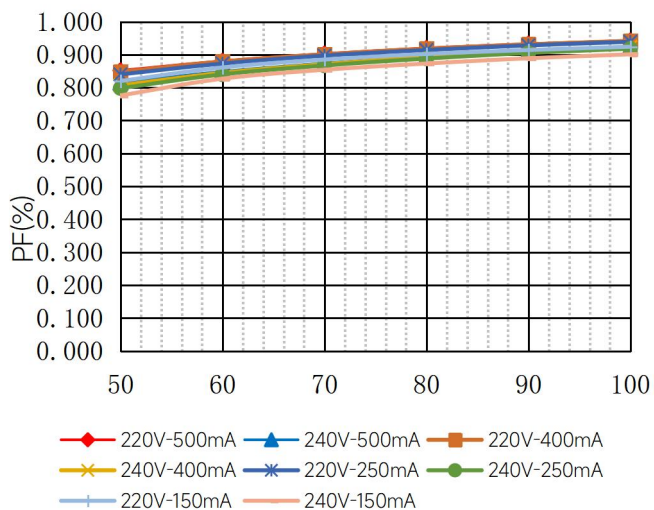
Specification item		Value (Unit)
Input	Input wire cross-section	0.5...1.5 mm ²
	Input wire gauge.	16...20 AWG
	Input wire strip length	7...9mm
Output	Output wire cross-section	0.5...1.5 mm ²
	Output wire gauge.	16...20 AWG
	Output wire strip length	7...9mm

Note: Solid wire is risky to use on an angled terminal. Stranded wire is recommended for this kind of use.

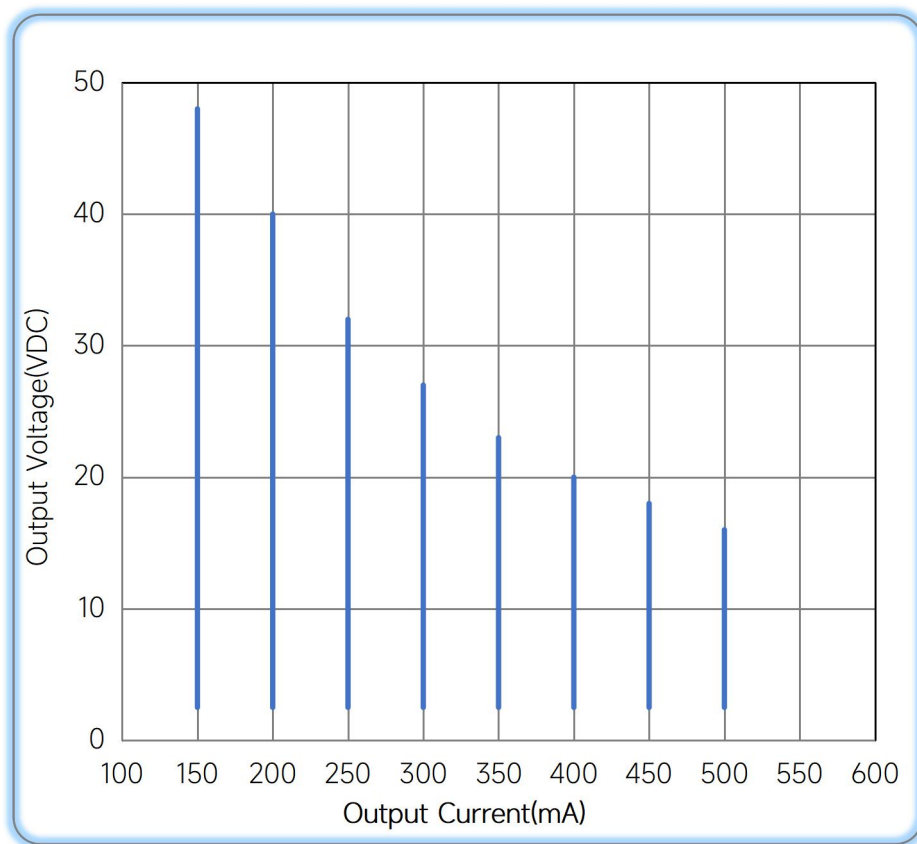
◆ Packaging

Model	Product Dimensions(mm)	weight/piece	Outer carton dimension(mm)	Quantity/carton	Net weight/carton(Kg)	Gross weight/carton(Kg)
FLS-8-500 LA	115X30X20.5	0.06	370X277X215	243	14.6	15.4

◆ Curve for FLS-8-500 LA, $I_o=150/250/400/500\text{mA}$

Lifetime vs. Temperature Curve
Efficiency vs. Load

Power Factor Characteristics
THD vs. Load


◆ Operating window



— Operating window 100%

◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2025/06/26
Operating Temperature	-20°C~+50°C	-20°C~+45°C	B	2025/09/08
Current Accuracy	±8%@150mA	±9%@150mA	C	2025/11/25

Remark:The final interpretation of the contents of the specification belongs to Eaglerise Electric & Electronic (China) Co., Ltd.

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