

16W Constant Current power supply



■ Approve

CECB  CCC SELV

Features

- Class II, SELV, Built-in
- Input Voltage: 220-240VAC
- Protections: SCP/OLP/OVP
- Power Factor: 0.6C
- Efficiency: $\geq 82\%$
- 5 years warranty

Applications

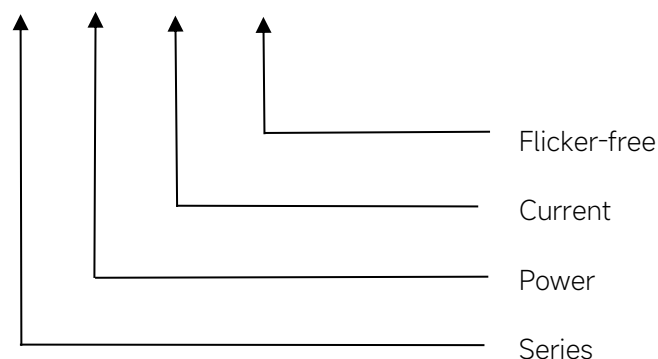
- LED down light, LED spot light, LED ceiling light

◆ Description

CS-15-XXX SB is a 16W constant current LED driver with 250 to 400mA output current. With it's compact dimensions from $\Phi 42.5 \times 21 \text{mm}$. It is easy to integrate in LED down, spot and ceiling lights product. To ensure trouble-free operation, protection is provided against output short circuit, over load and over voltage.

◆ Model code

CS-15-XXX SB



◆ Specification

Output	Constant Current (mA)	250	280	300	350	400
	Voltage Range(VDC)	27-42				27-40
	Unload voltage Max.	59VDC				
	Current Accuracy	±7%	±5%			
	Output HF current ripple(≥1KHz)	±5%				
	Output LF current ripple(≤120Hz)	±5%				
	SVM	≤0.4				
	Pst	≤1				
	Efficiency(Typ.)	≥82%@Full load,230V				
Input	Rated input voltage	220-240VAC				
	Range of input voltage	198-264VAC				
	Maximum voltage	300VAC@1 h maximum,unit might not operate in this abnormal condition				
	Frequency(Hz)	50/60 Hz				
	Displacement factor	≥0.7				
	Power Factor	0.6C				
	Input Current max (mA)	140	155	170	200	220
	Start-up time	< 0.5S				
	No Load Power	≤0.5W				
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				
Capability	Surge capability (L-N)	1KV				
	Surge capability (L/N-Ground)	NA				
Environment	Operating Temperature	-20℃~-+70℃				
	Humidity	20%-90%RH				
	Tc	100℃				
	Storage Temperature	-25℃~-+80℃				
	Life time	> 50000h@Tc=80℃				
	Noise	≤20dB(A)@10cm				
Surface	Dimension	Φ42.5 x 21mm				
	material	PC				
Standards	Safety	GB19510. 1, GB19510. 14;IEC61347- 1, IEC61347-2- 13;EN62384				
	EMC	GB/T17743, GB17625. 1;EN55015, EN61000-3-2, EN61000-3-3, EN61547;EN61000-4-5				
	Energy Efficiency	Erp2.0 EU 2019/2020				

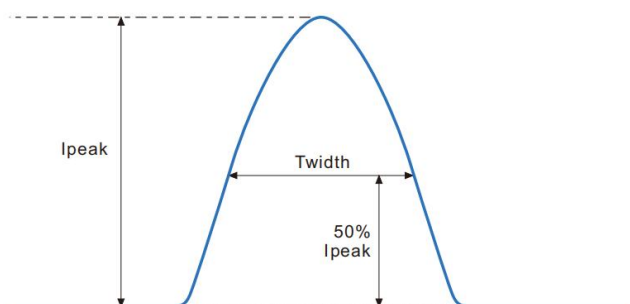
	RoHS	RoHS (2011/65/EU) (EU)2015/863
Note	1.All parameters not specially mentioned are measured at 230VAC input , full load and 25°C of ambient temperature. 2.Ripple & Noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor. 3.Switch and dimmer are not recommended to connect between this product output and luminaries. 4.Surge capability (L/N-Ground) was measured with a metal plate 2-3mm underlay. 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.	

◆ Model list

Number	Model number	Output			
		Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)
1	CS-15-250 SB	250	27-42	59	10.5
2	CS-15-280 SB	280			11.8
3	CS-15-300 SB	300			12.6
4	CS-15-350 SB	350			14.7
5	CS-15-400 SB	400	27-40		16

◆ Inrush Current

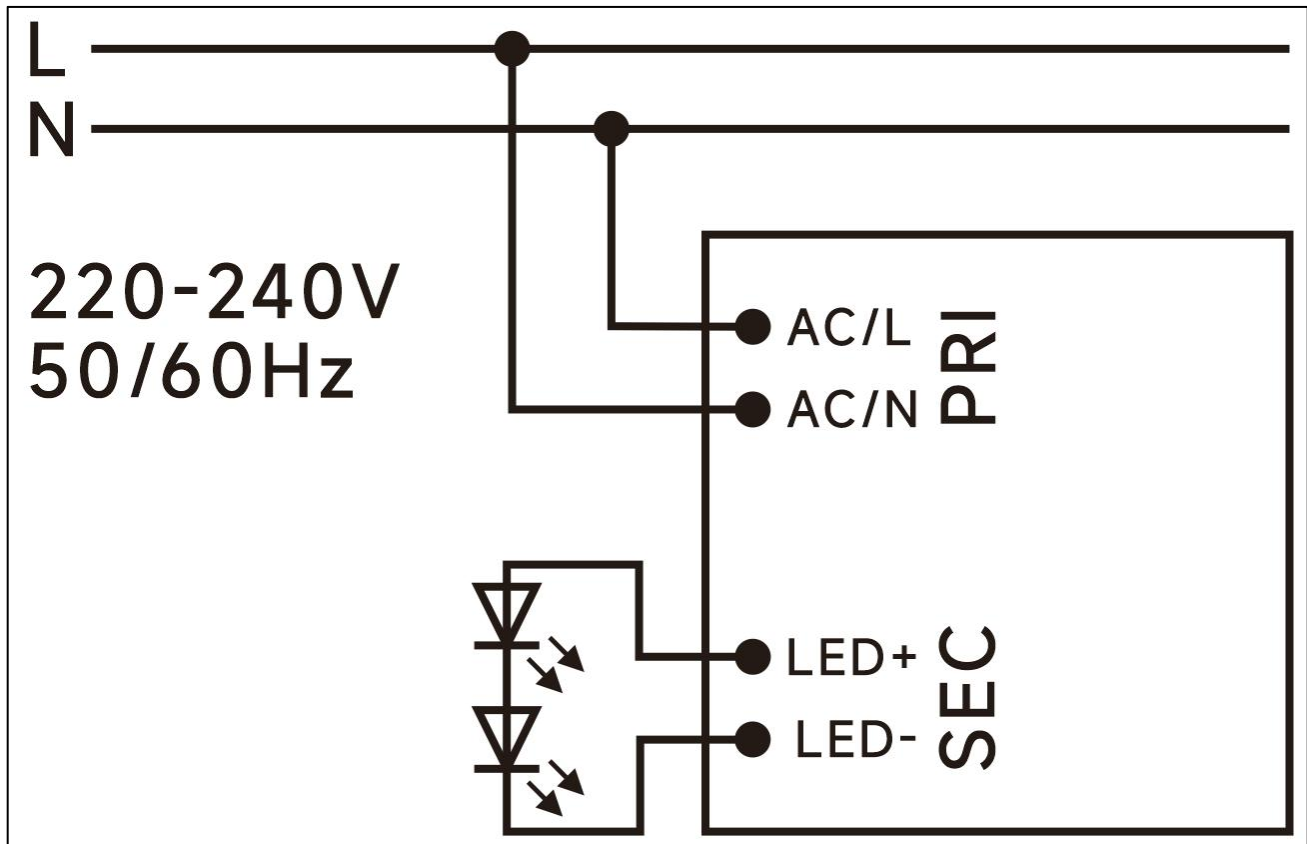
I _{peak}	T _{width}	B10	B16	B20	C10	C16	C20
8.44A	104μs	36pcs	58pcs	72pcs	36pcs	58pcs	72pcs



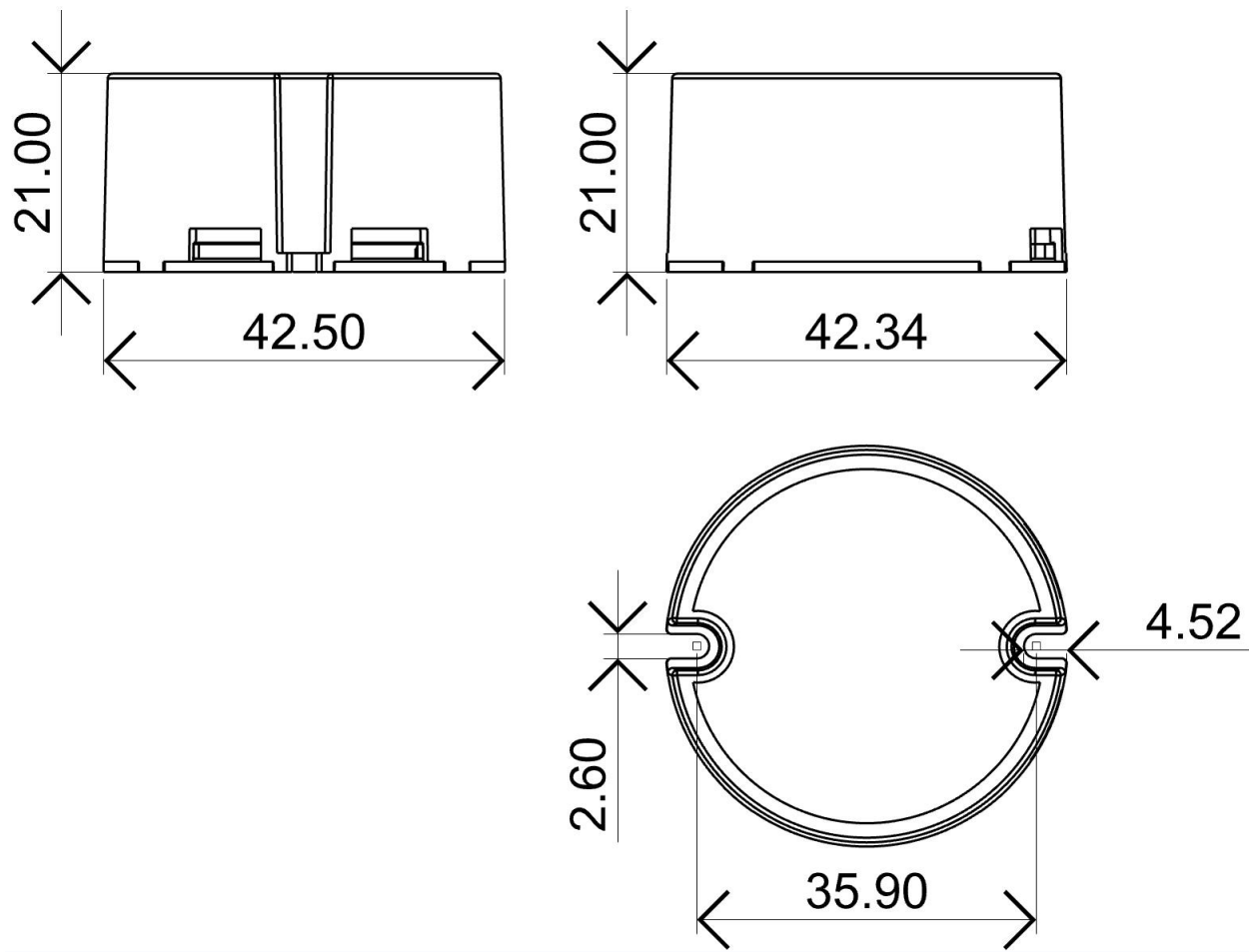
Remarks:

- 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



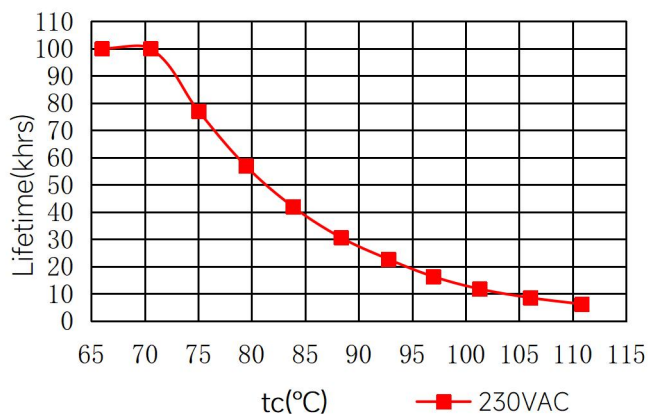
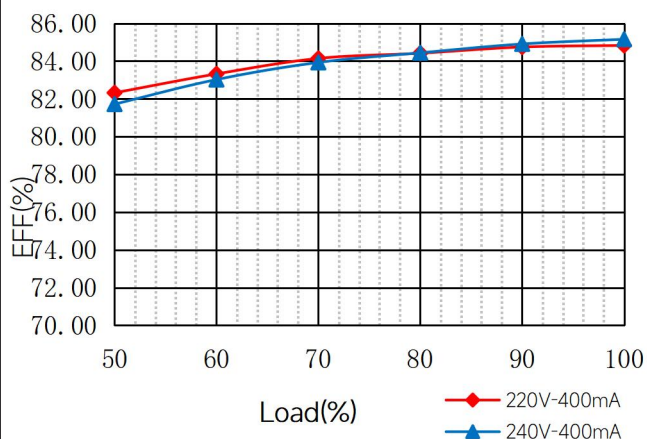
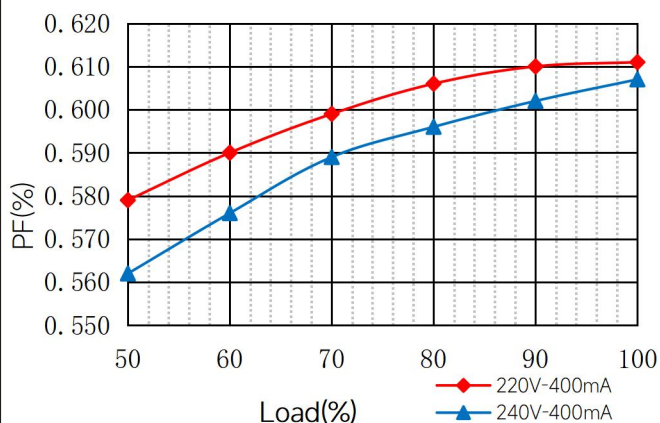
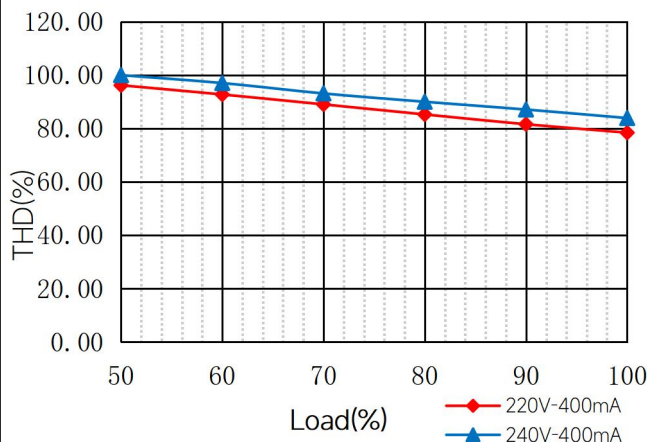
◆ 2D diagram



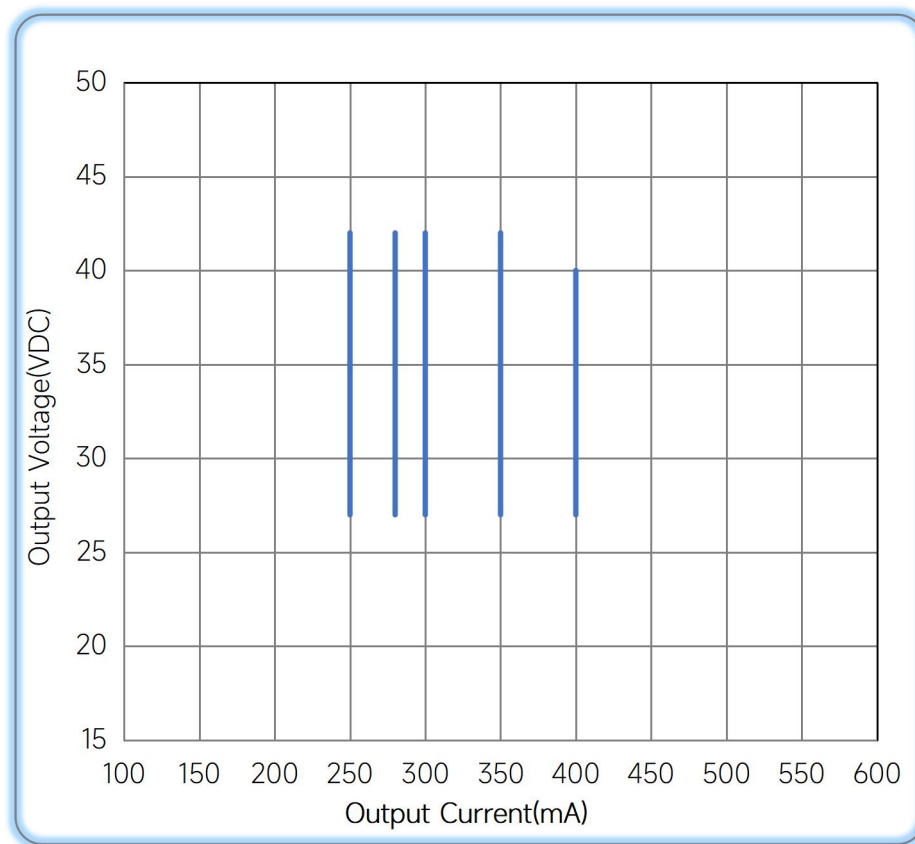
◆ Packaging

Model	Product Dimensions(mm)	weight/piece(Kg)	Outer carton dimension(mm)	Quantity/carton	Net weight/carton(Kg)	Gross weight/carton(Kg)
CS-15-XXX SB	Φ42.5x21	0.045	370x275x215	432	19.5	20.1

◆ Curve for CS-15-400 SB, $I_o=400\text{mA}$

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	2025/02/12
Surge capability (L-N)	2KV	1KV	B	2025/12/25

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

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EAGLERISE



Manual