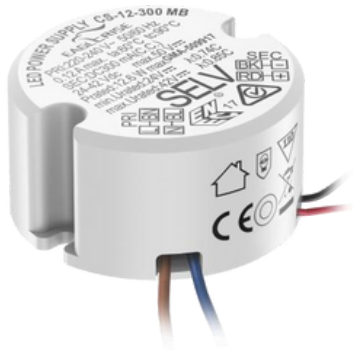


12W Constant Current -CS Series



Features

- Class II, SELV, Built-in
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP light、LED
- Power Factor 0.85C
- Efficiency ≥81%
- 5 years warranty

Applications

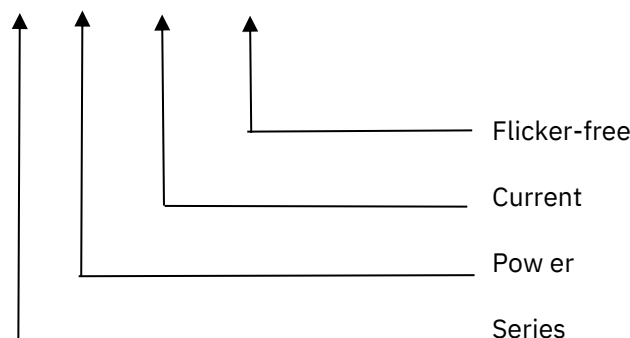
- LED down light、LED spot ceiling light

Description

CS-12-XXX MB is a 12W constant current LED driver with 250mA to 700mA output current. With its compact dimensions from $\Phi 42 \times 22$ mm it is easy to integrate in LED down light、LED spot light、LED ceiling light products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

Model code

CS-12-XXX MB



Specification

Output	Constant Current	250mA	300mA	350mA	...	700mA
	Voltage Range	27-48VDC	24-42VDC	22-40VDC	...	11-17VDC
	Unload voltage Max.	55VDC	50VDC	50VDC	...	25VDC
	Current Accuracy	±5%				
	Output HF current ripple(≥1KHz)	±3%				
	Output LF current ripple(≤120Hz)	±3%				
	SVM	≤0.4				
	Pst	≤1				
	Efficiency(Typ.)	≥83% ...				≥81%
Input	Rated input voltage	220-240VAC				
	Range of input voltage	198- 264 VAC				
	Frequency(Hz)	50/60 Hz				
	Displacement factor	≥0.9				
	Power Factor	0.85C				
	Input Current max	0.12A				
	Start-up time	<0. 5S				
	No Load Power	≤0.5W				
Protection	Over Load Protection	103-120% YES/Auto Resume				
	Over Voltage Protection	> 55VDC	>50VDC	>50VDC	...	>25VDC
	Short circuit Protection	YES/AutoResume				
	Operating Temperature	-20°C~+60°C				
Environment	Humidity	20%-90%RH				
	Tc	90°C				
	Storage Temperature	-20°C~+60°C				
	Lifetime	> 50000h@Tc=75°C,230VAC				
	Dimension	Φ42X22(DXH)mm				
s standards	EN61347-1; EN61347-2-13;EN62384; EN55015;EN61000-3-2 ;EN61000-3-3; EN61547;					
Others	ErP	EU2019/2020				
	RoHS	RoHS(2011/65/EU)(EU)2015/863				
Note	<p>1.All parameters NOT specially mentioned are measured at 230VAC input , full load and 25°C of ambient temperature.</p> <p>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.</p>					

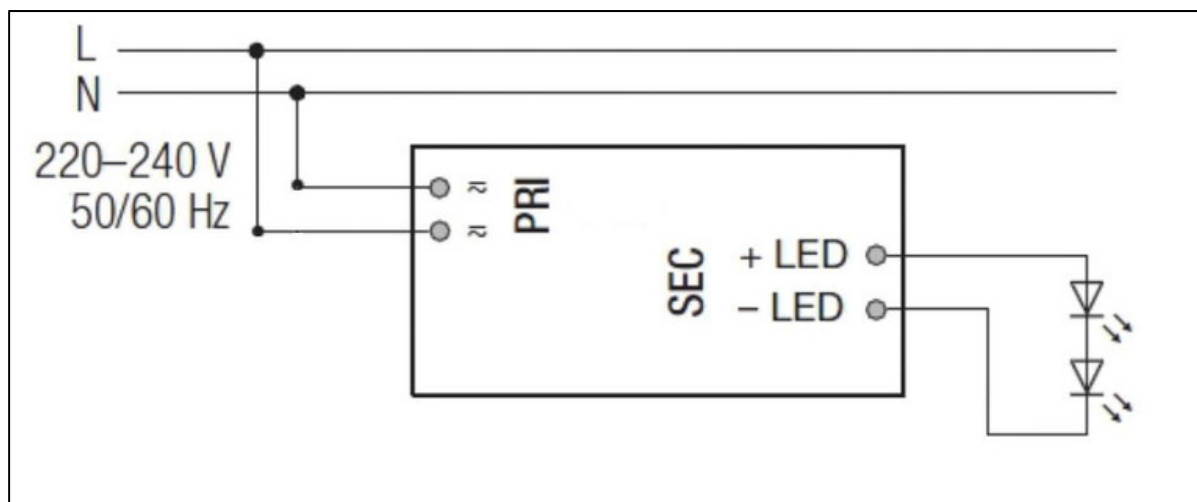
Model list

NO.	Model number	Input			Output			Max.Prated(W)
		Voltage (VAC)	Current (A)	Frequency (Hz)	Constant current (mA)	Normal working voltage (VDC)	No load working voltage (VDC)	
1	CS-12-250 MB	220-240	0.12	50/60	250	27-48	55	12
2	CS-12-300 MB				300	24-42	50	12.6
3	CS-12-350 MB				350	22-40	50	14
4	CS-12-400 MB				400	20-30	40	12
5	CS-12-450 MB				450	16-26	35	11.7
6	CS-12-500 MB				500	15-25	34	12.5
7	CS-12-550 MB				550	14-22	32	12.1
8	CS-12-600 MB				600	12-20	30	12

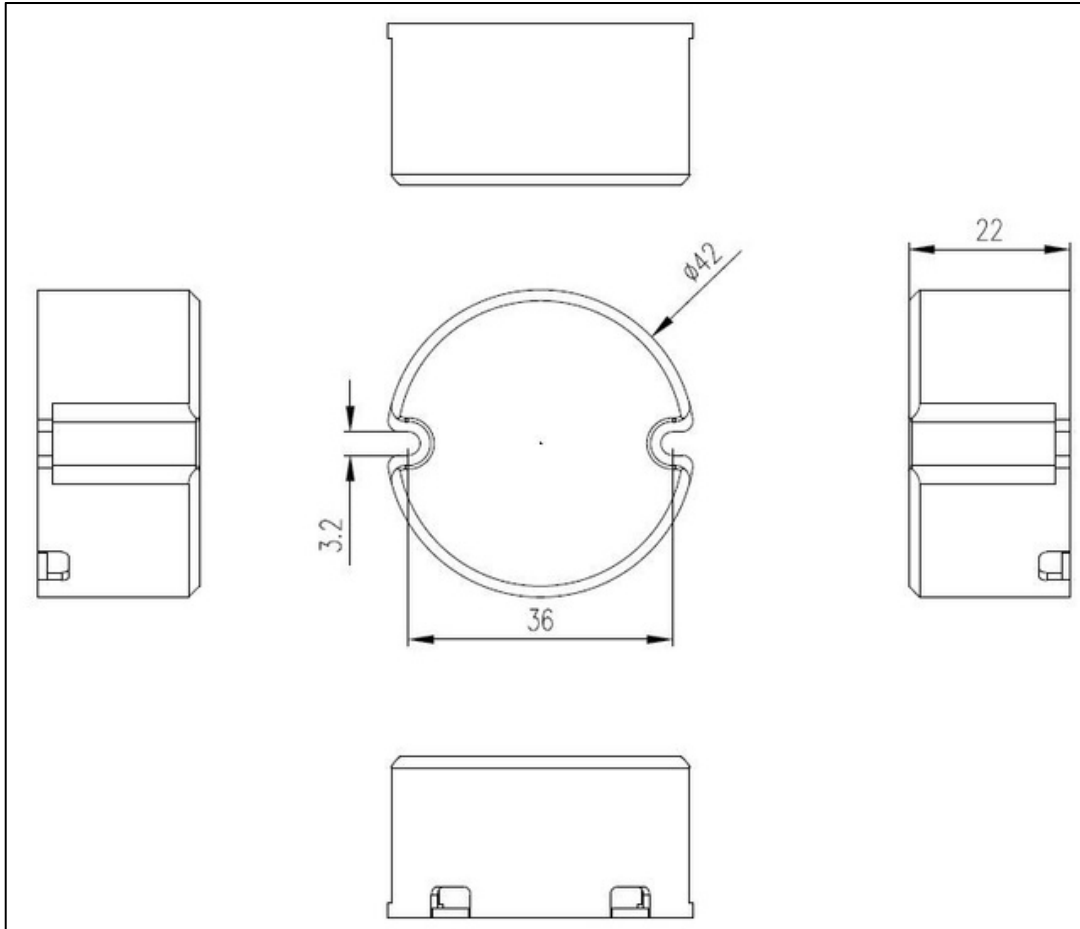
Circuit Breaker

Ipeak	Tw idth	B10	B16	B20	C10	C16	C20
10A	300μs	26pcs	42pcs	53pcs	44pcs	71pcs	88pcs

Wiring diagram

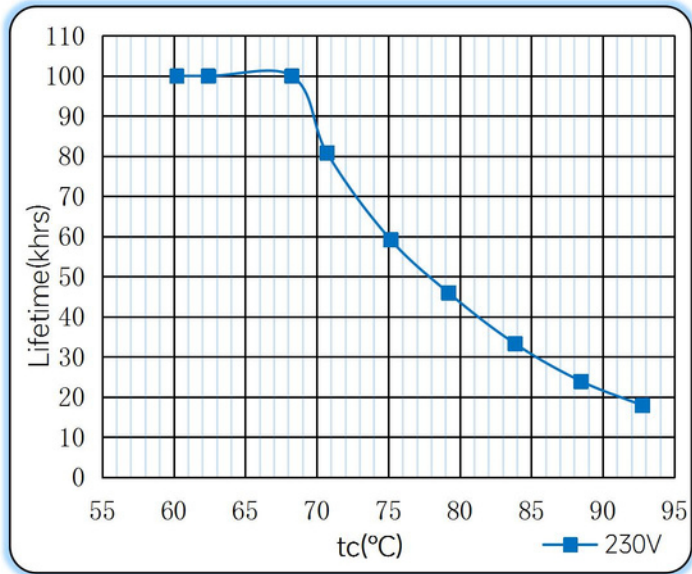


2D diagram

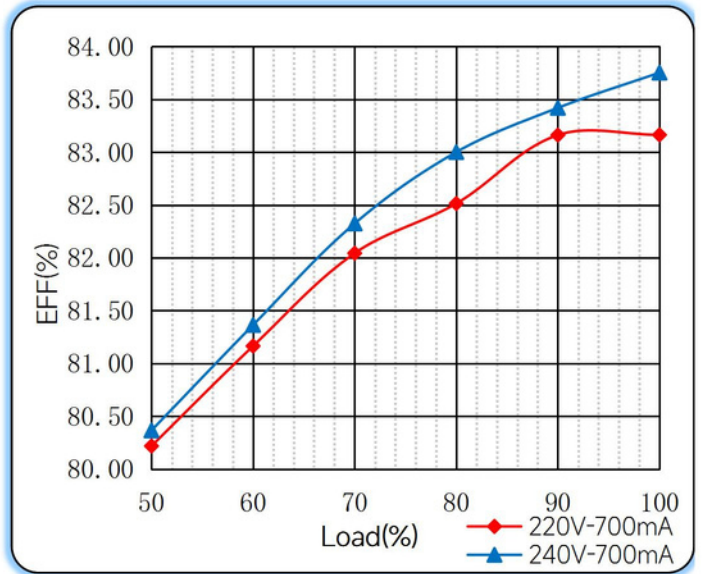


Curve for CS-12-700 MB, $I_o=700mA$

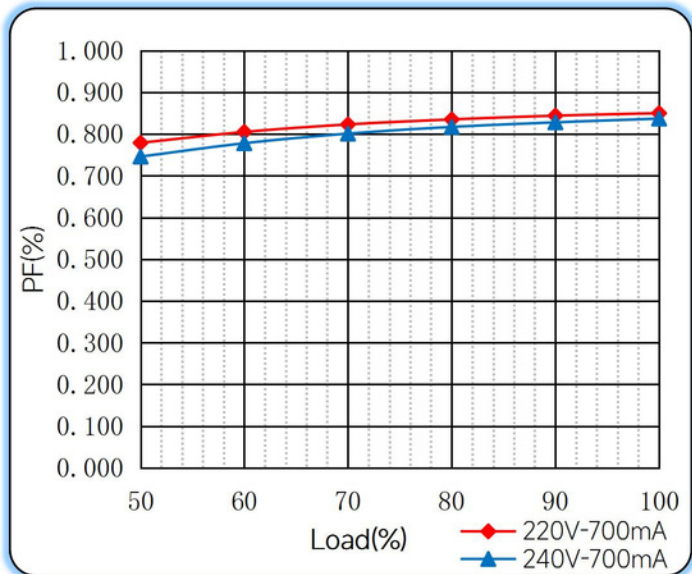
Lifetime vs. Temperature Curve



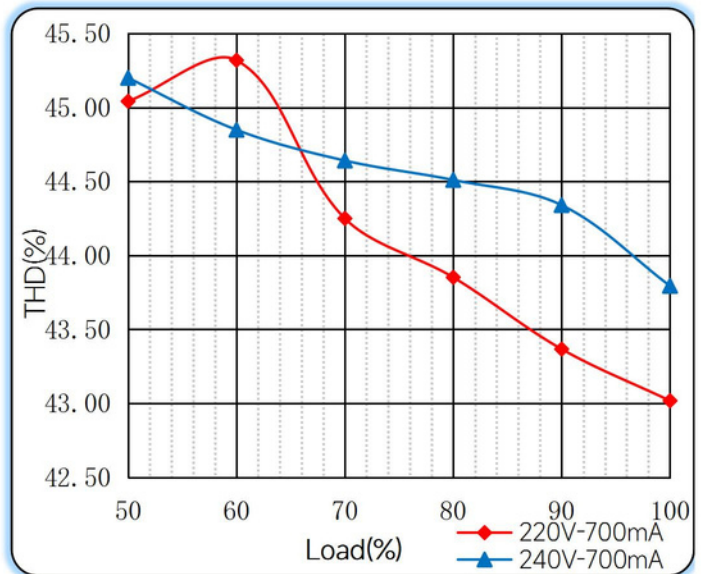
Efficiency vs. Load



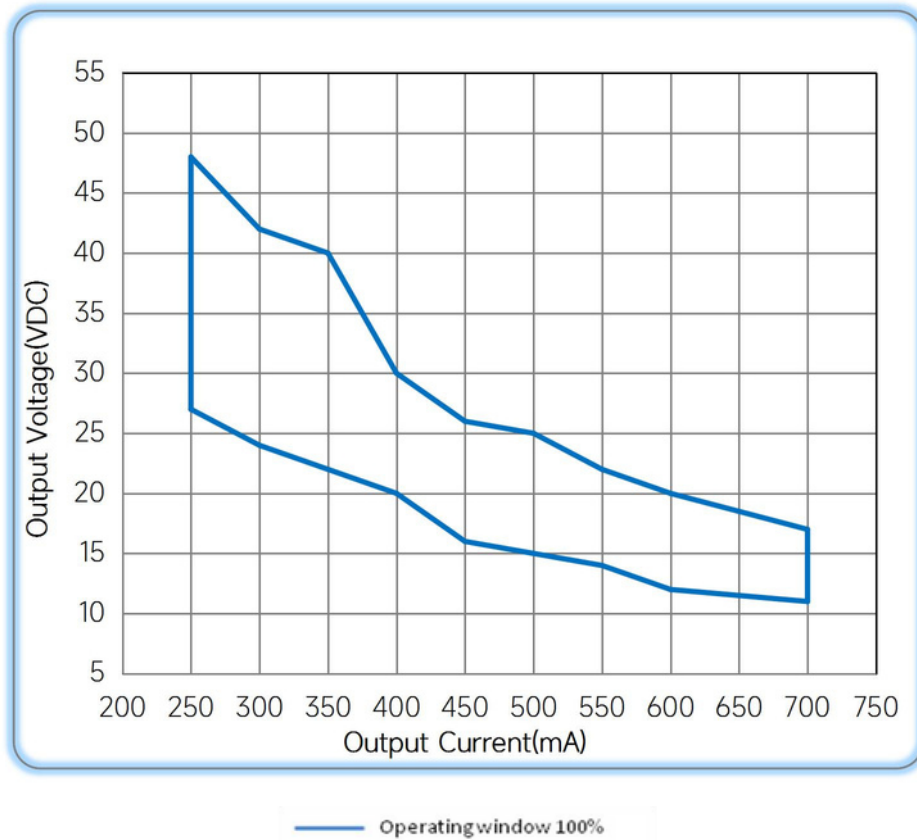
Power Factor Characteristics



THD vs. Load



Operating window



Revision Updates

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