

12(8)W Constant Current -CS Series

CS-12-XXX SB1(-F),
 CS-8-XXX SB(-F)



■Approve

SELV CE



■Features

- Class II, SELV, Built-in
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP
- Power Factor 0.55
- Efficiency ≥83%
- 5 years warranty

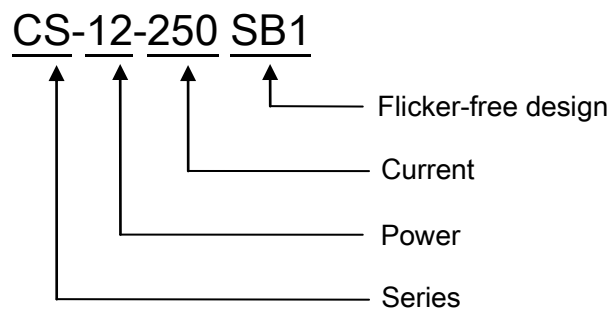
■Applications(Typ.)

- Spot light
- Wall light
- COB light

■Description

CS-12(8)-XXX SB1(-F) is a 5-12W constant current LED driver that operates from 176-264Vac input with 120mA to 300mA output current. With it's compact dimensions from Φ 42x 22mm it is easy to integrate in spot light, wall light and COB light products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

■Model code



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■ Specification

Input	Rated input voltage	220-240VAC				
	Range of input voltage	176-264VAC				
	DC input voltage	176-280V				
	Frequency(Hz)	0/50/60 Hz				
	Power Factor	0.55@Full Load,240VAC				
	Input Current max @Full load, 176Vac	0.07A MAX.	...	0.12A MAX.	0.15A MAX.	0.18A MAX.
	Start-up time	< 0.5S				
	Unload Power Consumption	≤0.5W				
	Inrush Current	30A Max.				
	Leakage Current	< 0.7mA(240VAC)				
	Output	Constant Current Max.	120mA	...	200mA	250mA
Unload voltage Max.		50VDC				
Voltage Range(VDC)		28-42VDC				
Rated power		5W Max.	...	8.4W Max.	10.5W Max.	12.6W Max.
Current Accuracy		±5%@220-240VAC				
Voltage Regulation		±5% @Full Load, 220-240VAC				
Load Regulation		±5%@220-240VAC				
Hold-up Time		1s max.@Full Load				
Ripple& Noise *Note.2		≤±3%				
Efficiency(Typ.)		≥78%	...	≥81%	≥82%	≥83%
Protection	Over Load Protection	103-120%				
		Protection type: Auto Resume				
	Over Voltage Protection	> 50VDC				
	Protection type: Auto Resume					
	Short circuit Protection	Protection type: Auto Resume				
Environment	Operating Temperature	-20°C...+60°C				
	tc	85°C				
	Storage Temperature	-25°C...+60°C				
	Life time	> 30,000h@60°C				
	Humidity	20%-90%RH				
Others	Dimension	Φ42X22(DXH)mm				
Safety & EMC	Safety standards	EN 61347-1; EN61347-2-13; EN62384				
	Withstand voltage	Input-Output : 3750V/5mA/1min				
	Isolation resistance	Input-Output : ≥4MΩ@500VDC				
	EMI	EN55015; EN61000-3-2 Class A; EN61000-3-3				
	EMS	EN 61547; EN 61000-4-2; EN 61000-4-5 —1000V;				
Note	1.All parameters NOT specially mentioned are measured at 240VAC 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.Output current can be from 120mA to 300mA.Please see Model list below and contact EAGLERISE for details.					

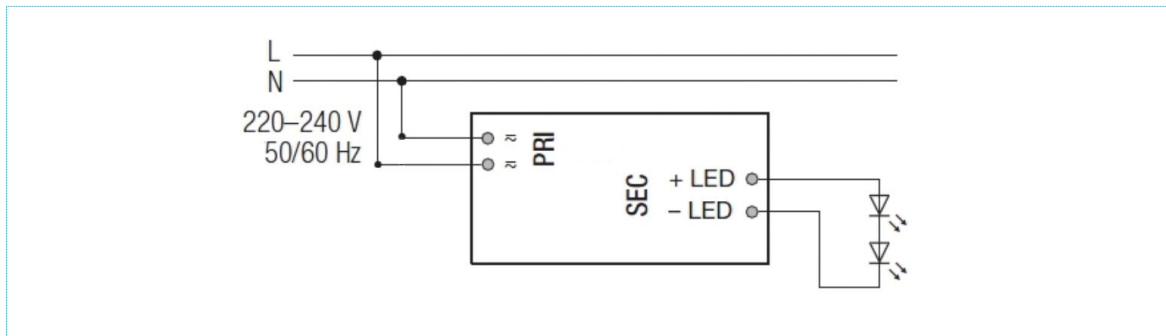
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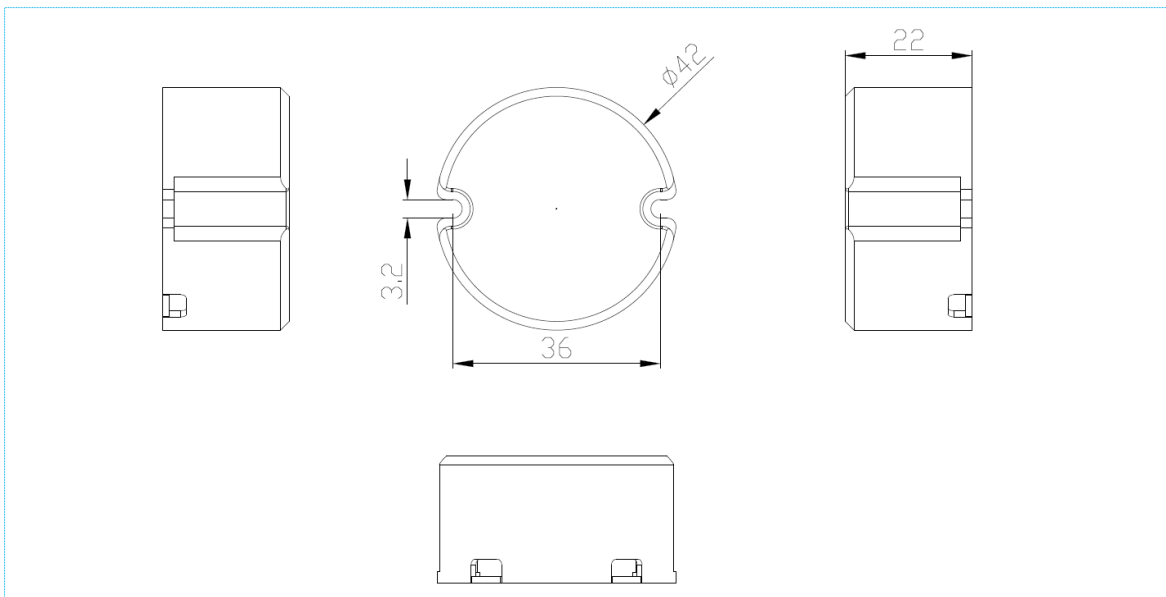
Model list

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-8-120 SB	220-240	0.07	50/60	120	28-42	50	5
2	CS-8-120 SB-F	220-240	0.12	50/60	120	40-67	77	8
3	CS-8-150 SB	220-240	0.09	50/60	150	28-42	50	6.3
4	CS-8-150 SB-F	220-240	0.12	50/60	150	32-54	63	8.1
5	CS-8-180 SB	220-240	0.11	50/60	180	28-42	50	7.6
6	CS-8-180 SB-F	220-240	0.12	50/60	180	27-45	55	8.1
7	CS-8-200 SB	220-240	0.12	50/60	200	28-42	50	8.4
8	CS-12-250 SB1	220-240	0.15	50/60	250	28-42	50	10.5
9	CS-12-250 SB1-F	220-240	0.18	50/60	250	28.5-48	58	12
10	CS-12-300 SB1	220-240	0.18	50/60	300	28-42	50	12.6

Wiring diagram



2D diagram

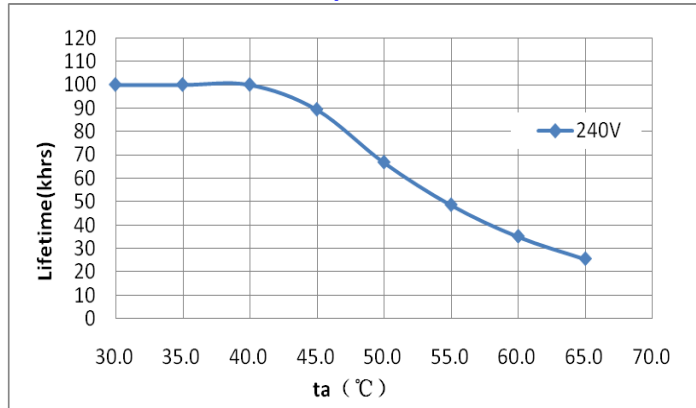


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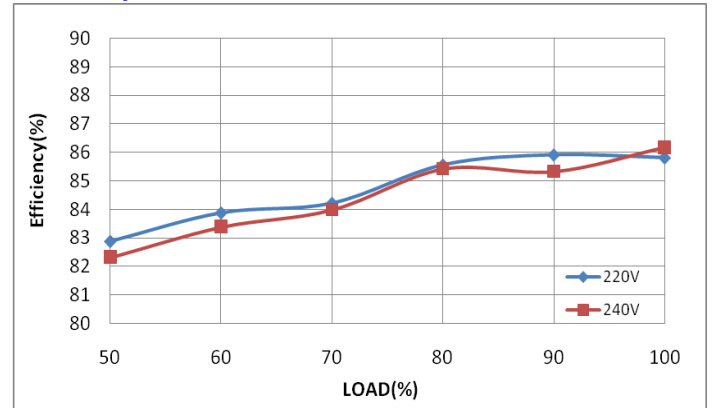
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■Curve for CS-12-250 SB1

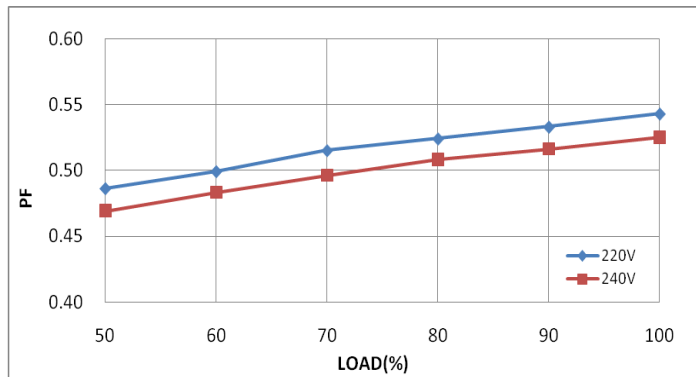
Lifetime vs. Ambient Temperature Curve



Efficiency vs. Load



Power Factor Characteristics



■Operating window

