

12W LED Driver Constant Current

SS-12-XXX MB-G



■ Approve

SELV CE

■ Features

- Class II&I, SELV, built-in
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP
- Power Factor 0.8
- Efficiency $\geq 83\%$
- 5 years warranty

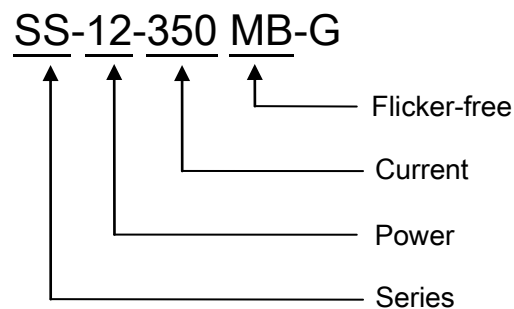
■ Applications

- LED strips
- Spot light
- Wall light

■ Description

SS-12-XXX MB-G is a 12W constant current LED driver that operates from 176-264Vac input with 250 to 700mA output voltage. With its compact dimensions from 60 x 34 x 23.5mm it is easy to integrate in LED strips, spot and wall 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			
	Frequency(Hz)	50/60 Hz			
	Power Factor	> 0.8@Full Load,230VAC			
	Input Current max	0.12A MAX. @Full Load,176VAC			
	Start-up time	< 0.5S			
	Unload Power Consumption	≤0.5W			
	Inrush Current	20A Max. @ Full Load, 230VAC			
	THD	60% Typ. @ Full Load, 230VAC , Class-A			
	Leakage Current	< 0.7mA(240VAC)			
Output	Constant Current *Note.3	250mA	300mA	...	700mA
	Unload voltage Max.	60VDC	50VDC	...	28VDC
	Voltage Range(VDC)	28.5-48VDC	24-40VDC	...	10-18VDC
	Rated power	12W Max.	12W Max.	...	12.6W Max.
	Current Accuracy	±5%@Full Load,230VAC			
	Voltage Regulation	±5% @Full Load , 220-240VAC			
	Load Regulation	±5%@220-240VAC			
	Hold-up Time	1s max.@Full Load			
	Ripple& Noise *Note.2	≤±5% @Full Load,230VAC			
	Output LF current ripple(<120Hz)	≤±3% @Full Load,230VAC			
	Efficiency(Typ.)	≥83%@Full Load,230VAC			
Protection	Over Load Protection	103-120% Protection type: Auto Resume			
	Over Voltage Protection	> 60VDC	> 50VDC	...	> 28VDC
	Short circuit Protection	Protection type: Auto Resume			
Environment	Operating Temperature	-20°C...+50°C			
	tc	80°C			
	Storage Temperature	-40°C...+60°C			
	Life time	> 44000h@50°C			
	Temperature coefficient	±0.03%/°C(0-50°C)			
Humidity	20%-90%RH				
Others	Dimension	60X34X23.5(LXWXH)mm			
Safety & EMC	Safety standards	EN 61347-1; EN61347-2-13			
	Withstand voltage	Input-Output : 3750V/5mA/1min			
	Isolation resistance	Input-Output : ≥4MΩ@500VDC			
	EMI	EN55015(Class I&II); 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 250mA to 700mA and increasing in multiples of 50mA. Please see Model list below and contact EAGLERISE for details.				

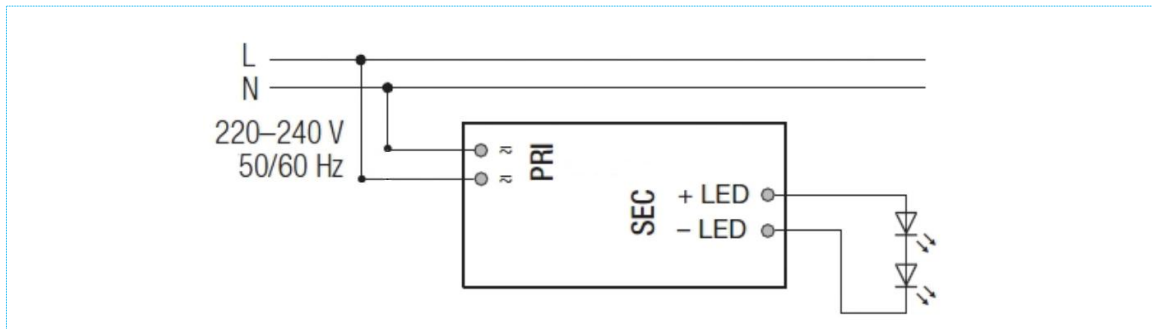
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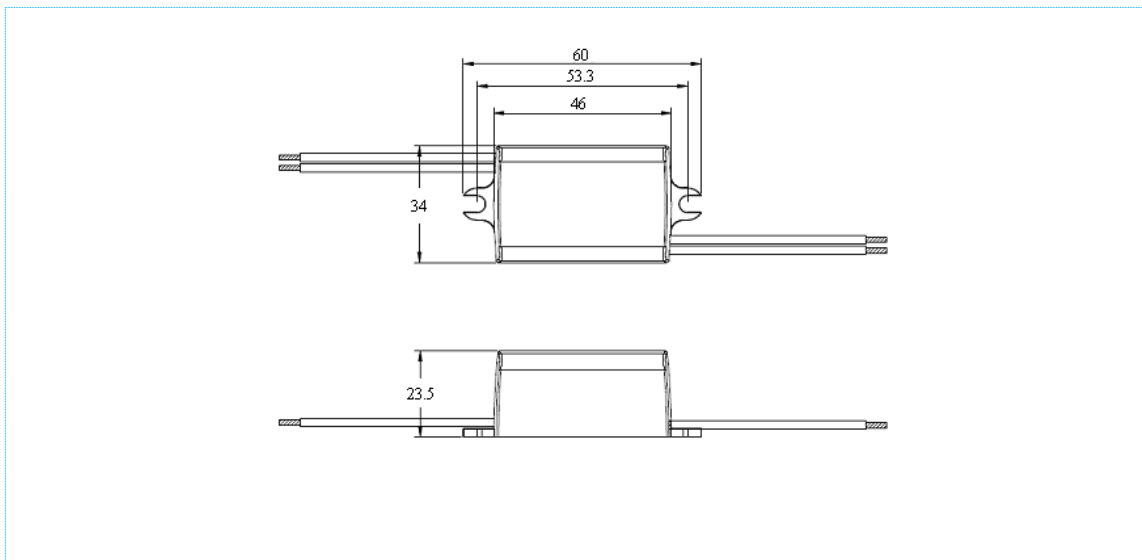
Model list

No.	Model number	Input			Output			
		Voltage (VAC)	Max.Current (A)	Frequency (Hz)	Constant current (mA)	Normal working voltage (VDC)	No load working voltage (VDC)	Max. Power(W)
1	SS-12-250 MB-G	220-240	0.12	50/60	250	28.5-48	60	12
2	SS-12-300 MB-G	220-240	0.12	50/60	300	24-40	50	12
3	SS-12-350 MB-G	220-240	0.12	50/60	350	20-34.5	45	12.1
4	SS-12-400 MB-G	220-240	0.12	50/60	400	18-30	40	12
5	SS-12-450 MB-G	220-240	0.12	50/60	450	16-27	35	12.2
6	SS-12-500 MB-G	220-240	0.12	50/60	500	14.5-24	34	12
7	SS-12-550 MB-G	220-240	0.12	50/60	550	13-22	32	12.1
8	SS-12-600 MB-G	220-240	0.12	50/60	600	12-20	30	12
9	SS-12-650 MB-G	220-240	0.12	50/60	650	11-18.5	28	12
10	SS-12-700 MB-G	220-240	0.12	50/60	700	10-18	28	12.6

Wiring diagram



2D diagram

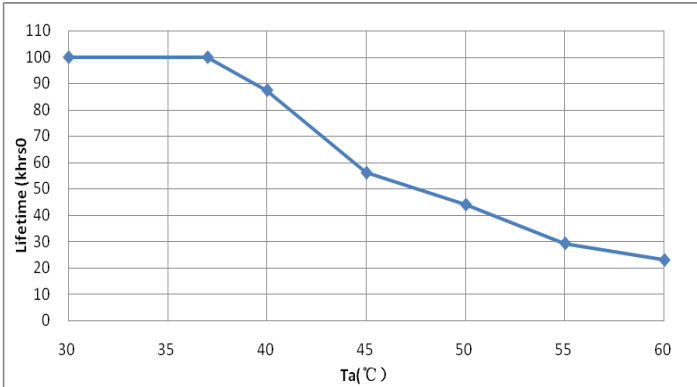


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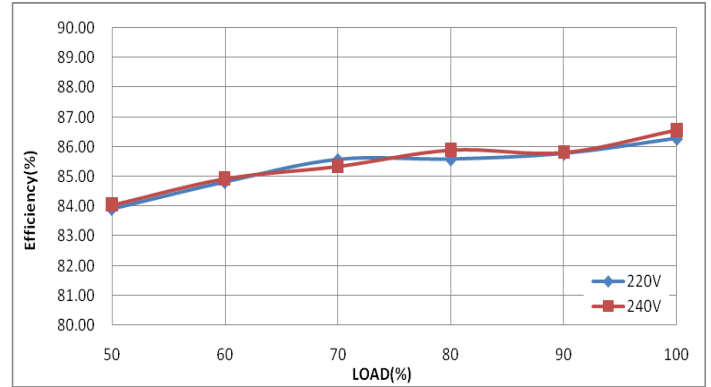
SS-12-XXX MB-G

Curve@SS-12-300 MB-G

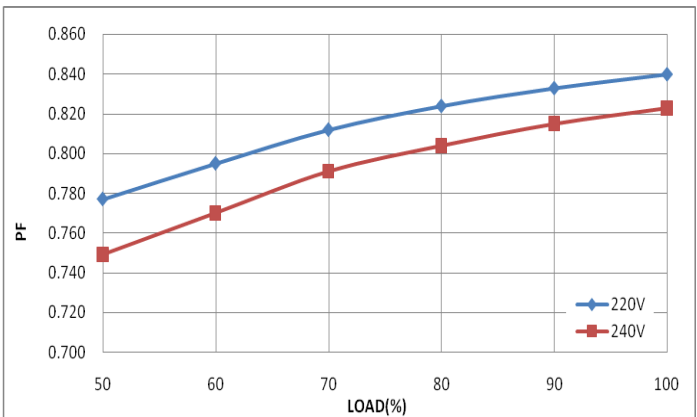
Lifetime vs. Ambient Temperature Curve



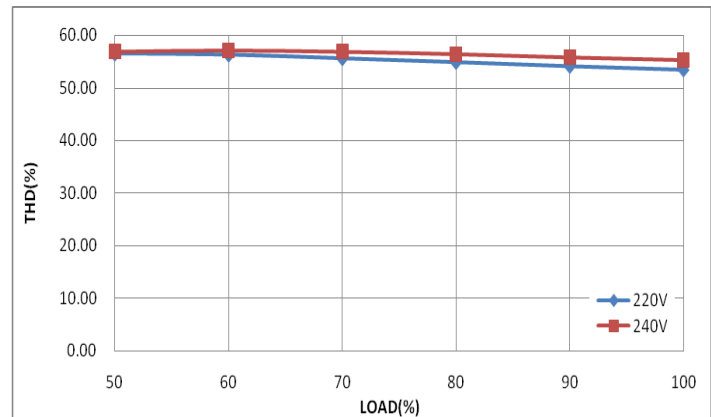
Efficiency vs. Load



Power Factor Characteristics



THD vs. Load



Operating window

