

6W Constant Current -LS Series

LS-6-XXX SB

■Approve

SELV 

■Features

- Class II, SELV, Built-in
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP
- Power Factor >0.5
- Efficiency ≥75%
- 5 years warranty

■Applications

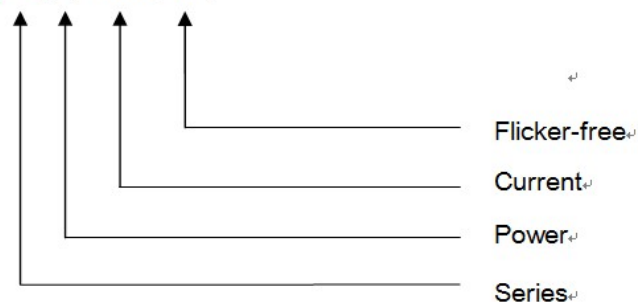
- LED panel
- LED spot light
- LED down light
- LED Wall light

■Description

LS-6-XXX SB is a 6W constant current LED driver with 120mA to 700mA output current. With it's compact dimensions from 46 x 23 x 21mm it is easy to integrate in LED Panel, spot, down light and wall light products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

■Model code

LS-6-300 SB



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■ Specification

Input	Rated input voltage	220-240VAC			
	Range of input voltage	176-264VAC			
	DC voltage range	176-280V			
	Frequency(Hz)	0/50/60 Hz			
	Power Factor	>0.5@Full Load,230VAC			
	Input Current max	0.11A MAX. @Full Load,176VAC			
	Start-up time	< 0.5S			
	Unload Power Consumption	≤0.5W			
	Inrush Current	25A Max. /120μs@230V, Full Load , 50%Ipk-50%Ipk			
	Leakage Current	< 0.7mA(240VAC)			
	Output	Constant Current	120mA	300mA	...
Unload voltage Max.		59VDC	34VDC	...	25VDC
Voltage Range(VDC)		58.5-40VDC	5-20VDC	...	2.5-9VDC
Rated power		4.8W Max.	6W Max.	...	6.3W 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.)		≥75%			
Protection		Over Load Protection	103-150%		
		Protection type: Auto Resume			
	Over Voltage Protection	> 59VDC	> 34VDC		> 25VDC
	Protection type: Auto Resume				
	Short circuit Protection	Protection type: Auto Resume			
Environment	Operating Temperature	-20°C...+50°C			
	tc	80°C			
	Storage Temperature	-25°C...+60°C			
	Life time	> 30,000h@50°C			
	Humidity	20%-90%RH			
Others	Dimension	46X23X21(LXWXH)			
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 —500V;			
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.Output current can be from 120mA to 700mA and increasing in multiples of 50mA. Please see Model list below and contact EAGLERISE for details.				

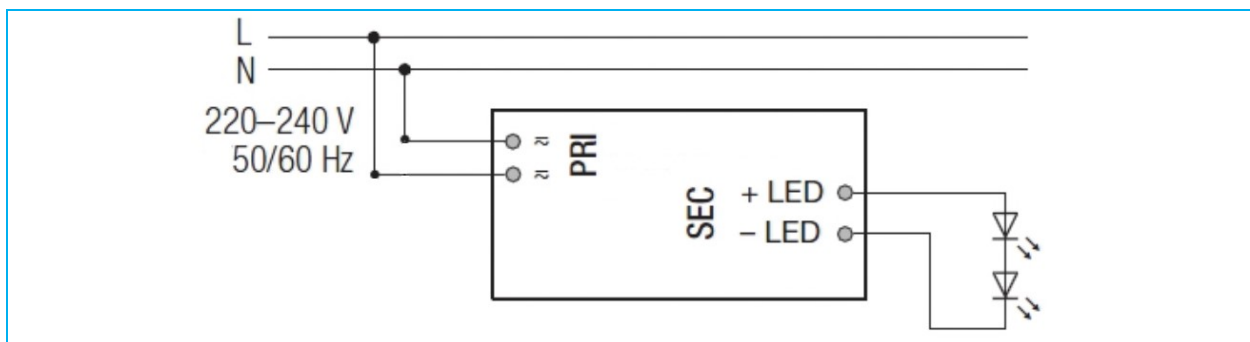
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Model list

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	LS-6-120 SB	220-240	0.11	50/60	120	8.5-40	59	4.8
2	LS-6-150 SB	220-240	0.11	50/60	150	8.5-40	59	6
3	LS-6-200 SB	220-240	0.11	50/60	200	7.5-30	45	6
4	LS-6-250 SB	220-240	0.11	50/60	250	5-24	35	6
5	LS-6-300 SB	220-240	0.11	50/60	300	5-20	34	6
6	LS-6-350 SB	220-240	0.11	50/60	350	5-18	25	6.3
7	LS-6-400 SB	220-240	0.11	50/60	400	5-15	25	6
8	LS-6-450 SB	220-240	0.11	50/60	450	5-13.5	24	6.1
9	LS-6-500 SB	220-240	0.11	50/60	500	2.8-12	23	6
10	LS-6-550 SB	220-240	0.11	50/60	550	2.8-11	22	6.1
11	LS-6-600 SB	220-240	0.11	50/60	600	2.5-10	25	6
12	LS-6-650 SB	220-240	0.11	50/60	650	2.5-9.5	25	6.2
13	LS-6-700 SB	220-240	0.11	50/60	700	2.5-9	25	6.3

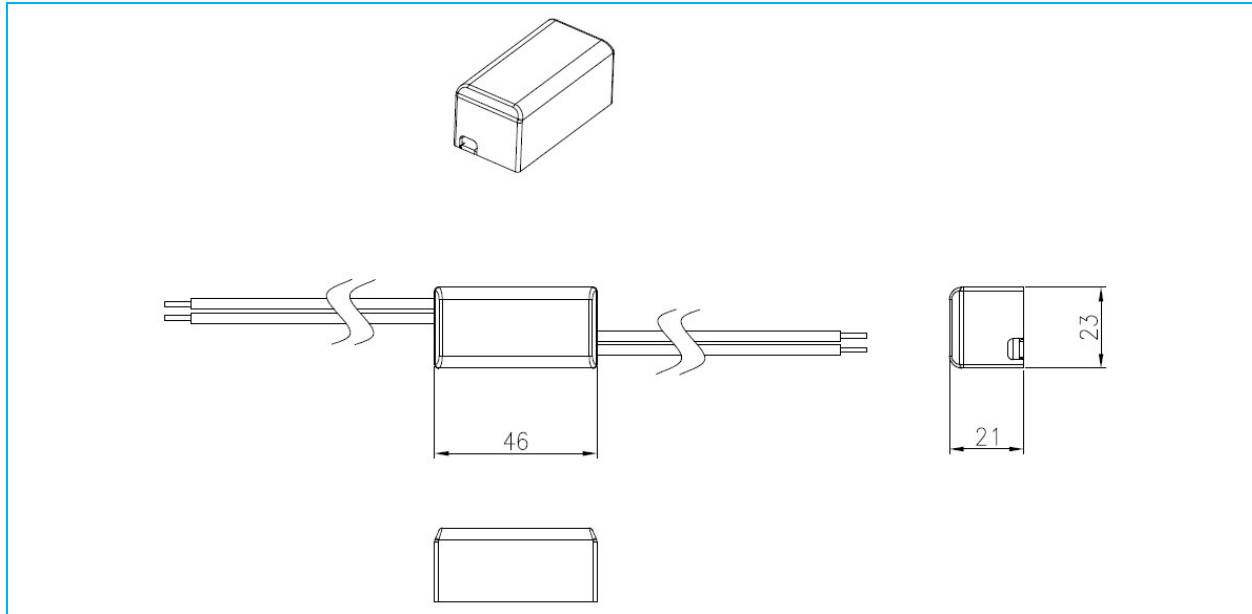
Wiring diagram



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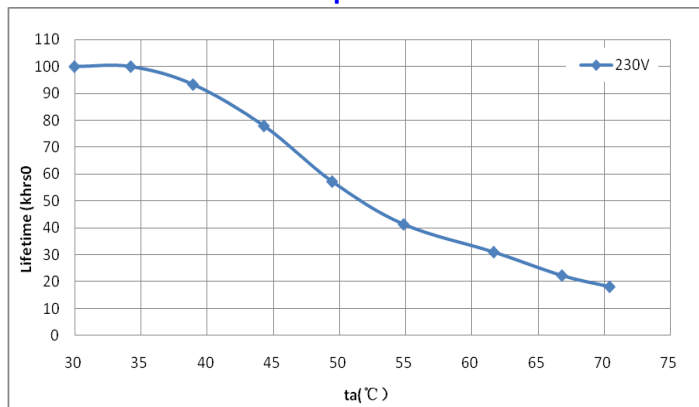
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■2D diagram

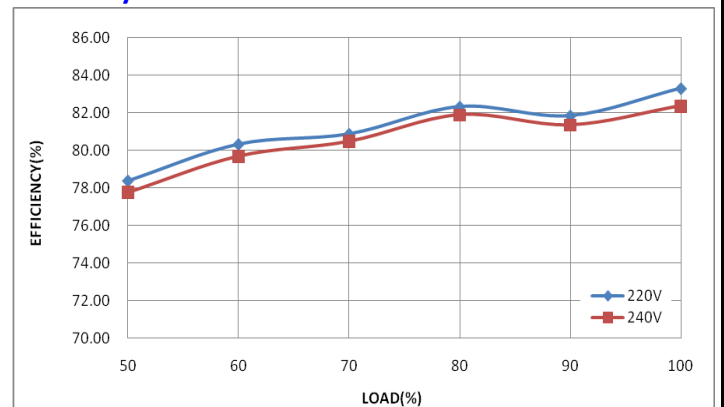


■Curve for LS-6-300 SB

Lifetime vs. Ambient Temperature Curve



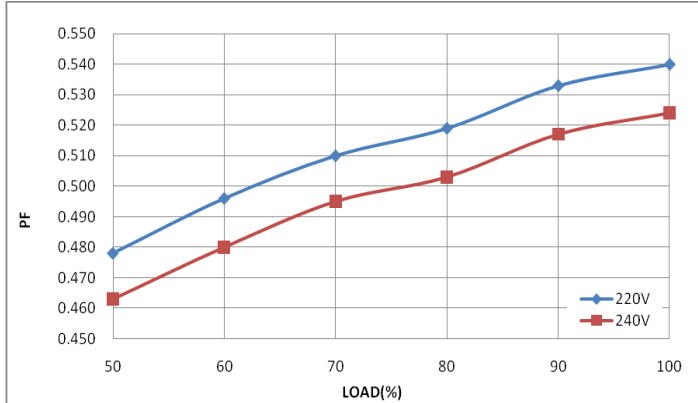
Efficiency vs. Load



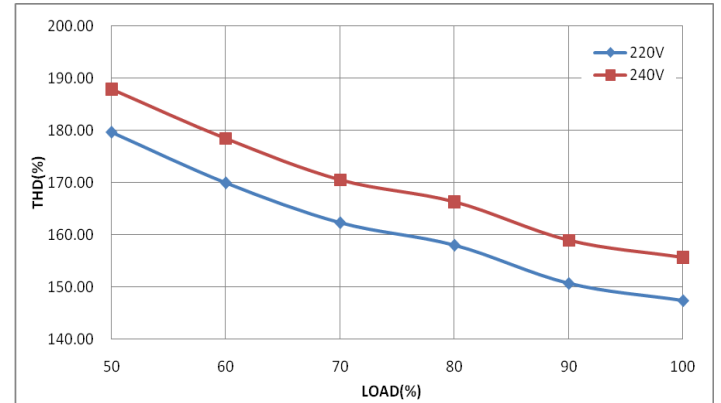
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Power Factor Characteristics



THD vs. Load (EN61000-3-2 Class A)



■ Operating window

