

16W Constant Current -LS Series

LS-16-XXX LI1



■Approve



■Features

- Class II, SELV, independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP
- Power Factor 0.9C
- Efficiency ≥85%
- 5 years warranty

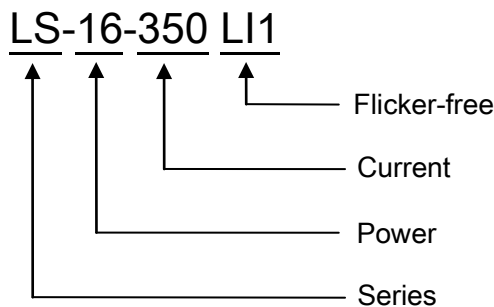
■Applications

- LED panel
- LED spot lights
- LED down lights
- COB lights

■Description

LS-16-XXX LI1 is a 16W constant current LED driver with 300 to 700mA output current. With it's compact dimensions from 100 x 38 x 25mm it is easy to integrate in LED Panel, spot, down lights and COB lights. 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 voltage range	176-280V				
	Frequency(Hz)	0/50/60 Hz				
	Power Factor	0.9C@Full Load,240VAC				
	Input Current max	0.12A MAX. @Full Load,176VAC				
	Start-up time	< 0.5S				
	Unload Power Consumption	≤0.5W				
	Inrush Current	20A Max.				
	THD	14% Typ.				
	Leakage Current	< 0.5mA(240VAC)				
Output	Constant Current Max. *Note.3	350mA	400mA	450mA	...	700mA
	Unload voltage Max.	56VDC	50VDC	46VDC	...	33VDC
	Voltage Range(VDC)	20-46VDC	24-42VDC	21.5-36VDC	...	14-23VDC
	Rated power	16.1W Max.	16.8W Max.	16.2W Max.	...	16W Max.
	Current Accuracy	±5%				
	Voltage Regulation	±3% @Full Load				
	Load Regulation	±5%				
	Hold-up Time	1s max.@Full Load				
	Ripple& Noise *Note.2	≤21mAp-p	≤24mAp-p	≤27mAp-p	...	≤42mAp-p
	Efficiency(Typ.)	≥85%				
Protection	Over Load Protection	103-120%				
		Protection type: Auto Resume				
	Over Voltage Protection	> 56VDC	> 50VDC	> 46VDC	...	> 33VDC
		Protection type: Auto Resume				
Environment	Short circuit Protection	Protection type: Auto Resume				
	Over Temperature protection	NA				
	Operating Temperature	-20°C...+45°C				
	tc	80°C				
	Storage Temperature	-25°C...+60°C				
Safety & EMC	Life time	> 30,000h@45°C				
	Humidity	10%-90%RH				
	Dimension	100X38X25(LXWXH)mm				
	Safety standards	EN 61347-1; EN61347-2-13;				
	Withstand voltage	Input-Output : 3750V/5mA/1min				
Note	Isolation resistance	Input-Output : ≥4MΩ@500VDC				
	EMI	EN55015; EN61000-3-2 Class C; EN61000-3-3				
	EMS	EN 61547; EN 61000-4-2; EN 61000-4-5 —1000V;				

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 390mA or from 300mA to 700mA and increasing in multiples of 50mA. Please see Model list below and contact EAGLERISE for details.

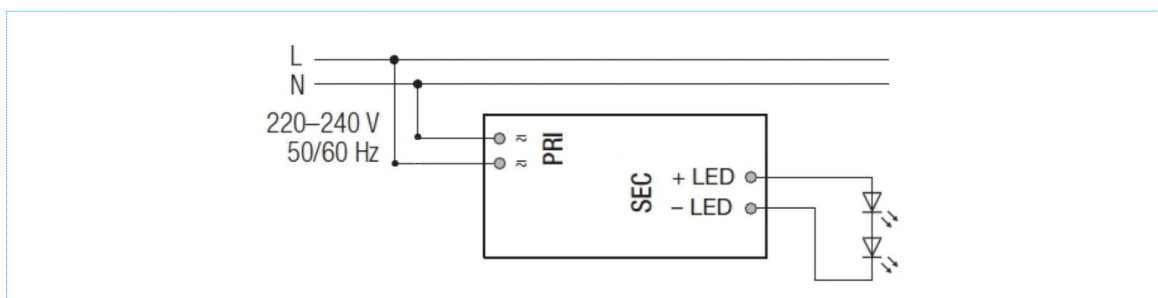
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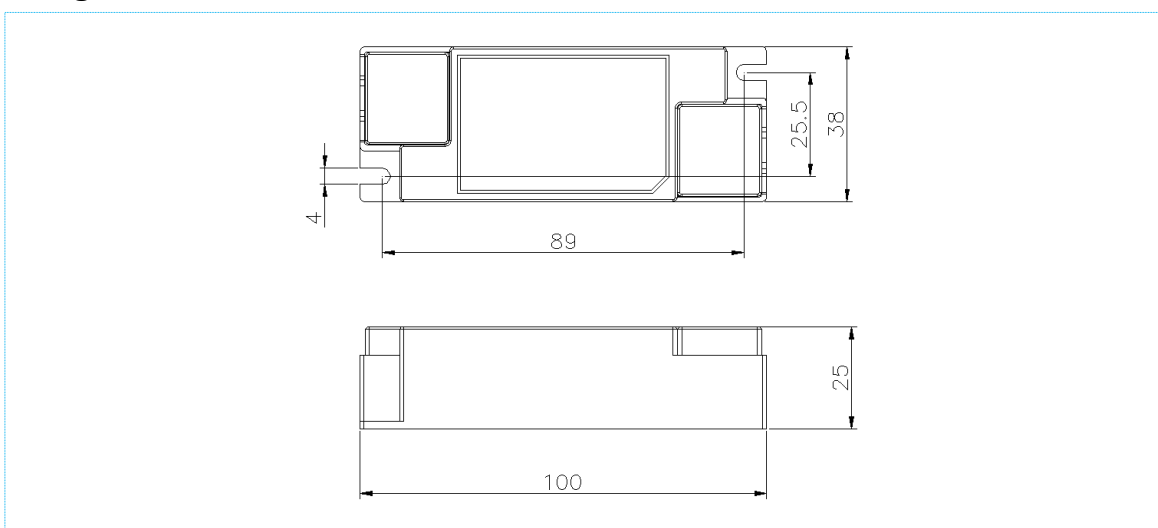
■Model list

No.	Model number	Input			Output			P(W)
		Voltage (VAC)	Current (A)	Frequency (Hz)	Constant current (mA)	Normal working voltage (VDC)	No load working voltage (VDC)	
1	LS-16-300 LI1	220-240	0.12	50/60	300	20-46	56	13.8
2	LS-16-350 LI1	220-240	0.12	50/60	350	20-46	56	16.1
3	LS-16-390 LI1	220-240	0.12	50/60	390	24-42	50	16.4
4	LS-16-400 LI1	220-240	0.12	50/60	400	24-42	50	16.8
5	LS-16-450 LI1	220-240	0.12	50/60	450	21.5-36	46	16.2
6	LS-16-500 LI1	220-240	0.12	50/60	500	19-32	42	16
7	LS-16-550 LI1	220-240	0.12	50/60	550	18-30	40	16.5
8	LS-16-600 LI1	220-240	0.12	50/60	600	16-27	37	16.2
9	LS-16-650 LI1	220-240	0.12	50/60	650	15-25	35	16.3
10	LS-16-700 LI1	220-240	0.12	50/60	700	14-23	33	16.1

■Connection diagram



■2D diagram

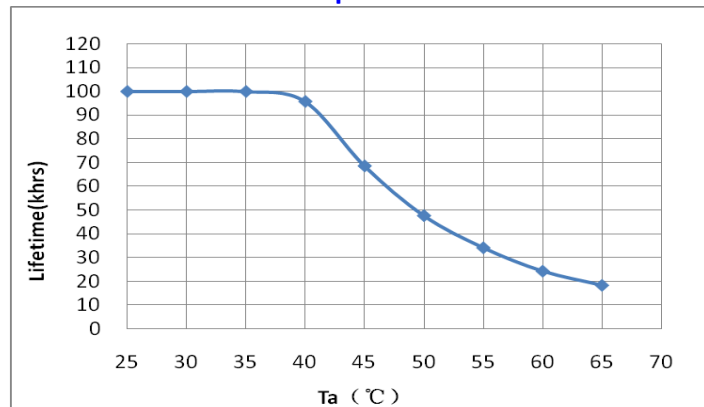


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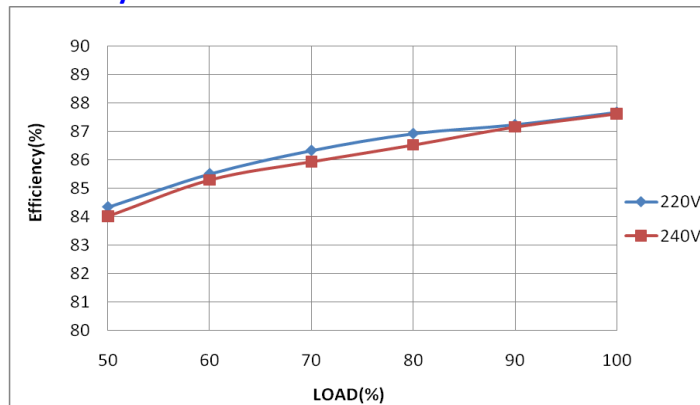
LS-16-XXX LI1

■Curve for LS-16-350 LI1

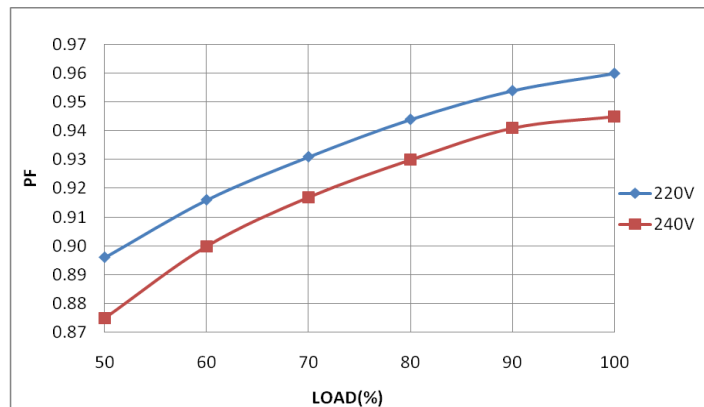
Lifetime vs. Ambient Temperature Curve



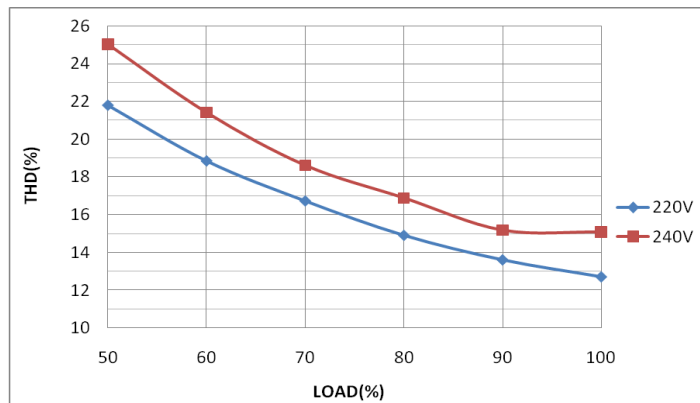
Efficiency vs. Load



Power Factor Characteristics



THD vs. Load



■Operating window

