

12W Constant Current power supply



■ Approve



Features

- Class II, SELV, independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor : 0.6C
- Efficiency : 83%

Applications

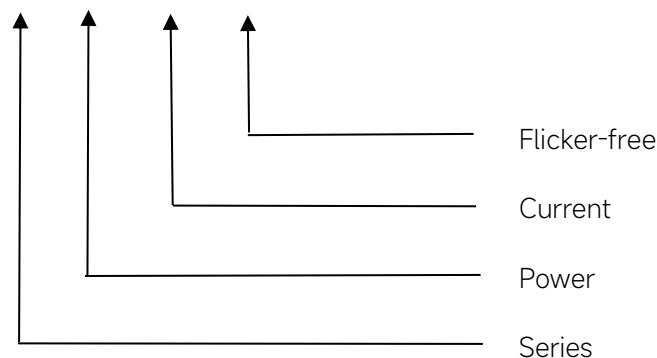
- Wall light
- COB light
- Spot light

◆ Description

LC-12-XXX SI ECO is a 12W constant current LED driver that operates from 176-264Vac input with xxx mA output current. With it's compact dimensions from 92 x 36 x 25mm it is easy to integrate in LED Panel, spot, down and COB light products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

◆ Model code

LC-12-XXX SI ECO



◆ Specification

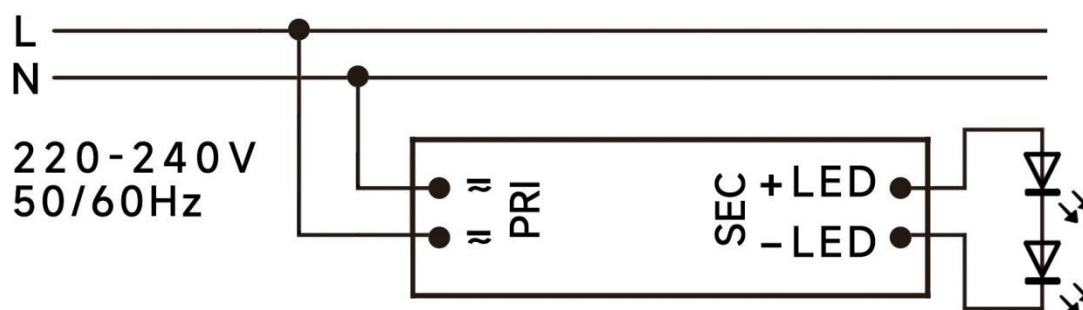
Input	Rated input voltage	220-240VAC				
	Range of input voltage	198-264VAC				
	Frequency(Hz)	50/60 Hz				
	Displacement factor	≥0.7@Full load, 230VAC				
	Power Factor	0.6C@Full Load, 240VAC				
	Input Current max	150mA	180mA	200mA	...	190mA
	Start-up time	< 0.5 S				
	Unload Power Consumption	≤0.5W				
	Leakage Current	<0.7mA				
Output	Constant Current Max.	250mA	300mA	350mA	...	600mA
	Unload voltage Max.	59V	59V	57V	...	31V
	Voltage Range(VDC)	30-42V	30-42V	27-40V	...	11-20V
	Rated power	10.5	12.6W	14W	...	12W
	Current Accuracy	±5%				
	Hold-up Time	1000mS@Full Load				
	Output HF current ripple(≥1KHz)	±5%				
	Output LF current ripple(≤120Hz)	±5%				
	SVM	≤0.4@Full Load				
	P _{st}	≤1@Full Load				
	Standby Power	≤500mW				
	Efficiency(Typ.)	≥83%				
	power range	10.5	12.6W	14W	...	12W
Wiring	Input PIN numbers	2 PINs				
	Input PIN cross section	0.5-1.5mm ²				
	Output PIN numbers	2 PINS				
	Output PIN cross section	0.5-1.5mm ²				
Protection	Over Load Protection	103-120%				
		YES/Auto Resume				
	Over Voltage Protection	59V	59V	57V	...	31V
		YES/Auto Resume				
	Short circuit Protection	YES/Auto Resume				
	Over Temperature Protection	YES/Auto Resume				
Environment	Type of protection	IP20				
	Operating Temperature	-20°C...+45°C				
	Humidity	20%-90%RH				
	T _c (Max)	75°C				
	Storage Temperature	-20°C...+60°C				
	Insulation grade	Class II				

	Life time	> 50,000h@ta=40°C,230VAC
Surface	Dimension	92X36X25 (LXWXH)mm
	Shell material	PP (94-V0)
	Shell color	White
Safety & EMC	Safety standards	EN 61347-1; EN61347-2-13
	Withstand voltage	Input-Output: 3.75KV/5mA/1min
	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 —500V;
	Certifications	CB/CE/CCC/ENEC/RCM
	ErP	EU 2019/2020
	ROHS	ROHS (2011/65/EU) (EU)2015/863
Others	Warranty	
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 250mA to 600mA. Please see Model list below and contact LC for details.	

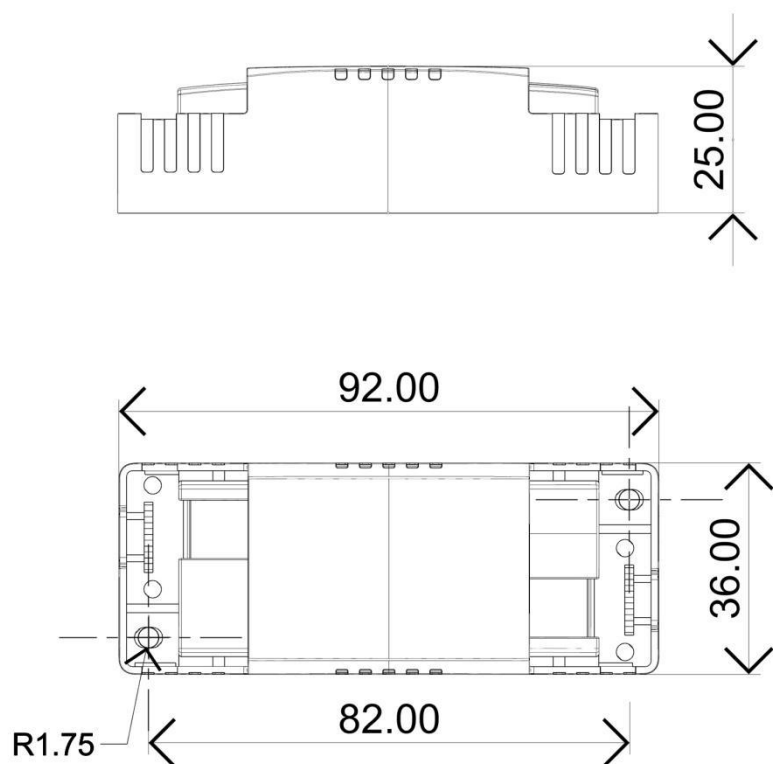
◆ Parameter

Number	Model number	Input			Output			
		Voltage (VAC)	Current (A)	Frequency (Hz)	Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)
1	LC-12-250 SI ECO	220-240	0.15	50/60	250	30-42	59	10.5
2	LC-12-300 SI ECO	220-240	0.18	50/60	300	30-42	59	12.6
3	LC-12-350 SI ECO	220-240	0.2	50/60	350	27-40	57	14
4	LC-12-500 SI ECO	220-240	0.19	50/60	500	14-26	39	13
5	LC-12-600 SI ECO	220-240	0.19	50/60	600	11-20	31	12

◆ Wiring diagram



◆ 2D diagram



单位：MM

◆ Curve for LC-12-XXX SI ECO, $I_o=XXXmA$

◆ Operating window

Operating window 100%

◆ Revision Updates

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