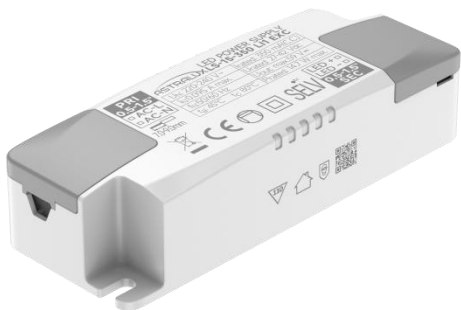


## 15W Constant Current power supply



■ Approve



### Features

- For luminaires of protection Class II, SELV, independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor  $\geq 0.95$
- Efficiency: 84%
- 5 years warranty

### Applications

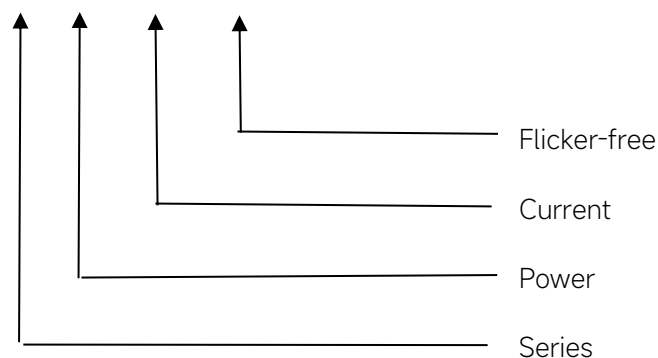
- LED panel, LED down light
- LED spot light

### ◆ Description

LS-15-XXX LI1 EXC is a 15W constant current LED driver that operates from 198-264Vac input with 350mA output current. With it's compact dimensions from 102 x 38.2 x 25mm it is easy to integrate in LED Panel, spot, down lights. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

### ◆ Model code

LS-15-XXX LI1 EXC



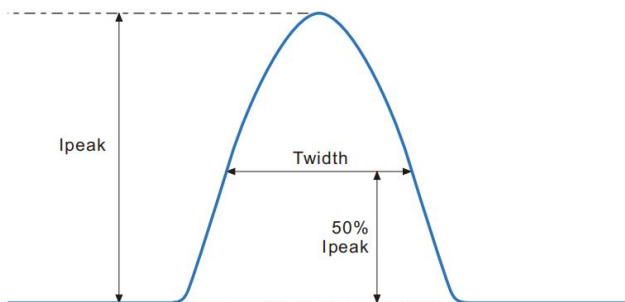
## ◆ Specification

Output	Constant Current (mA)	350
	Voltage Range(VDC)	27-42
	Unload voltage Max.(VDC))	59V
	Current Accuracy	±5%
	Output HF current ripple(≥1KHz)	±5%
	Output LF current ripple(≤120Hz)	±3%
	SVM	≤0.4
	P <sub>st</sub>	≤1
	Efficiency(Typ.)	84%
Input	Rated input voltage	220-240VAC
	Range of input voltage	198-264VAC
	Maximum voltage	300VAC@1 h maximum,unit might not operate in this abnormal condition
	Frequency(Hz)	50/60 Hz
	Displacement factor(Typ.)	≥0.95
	Power Factor	≥0.95
	Input Current max	0.095A
	Start-up time	< 0.5S
	No Load Power	≤0.5W
	THD (Typ.)	< 10%
Protection	Over Load Protection	103-130%
		YES/Auto Resume
	Over Voltage Protection	59VDC
		YES/Auto Resume
capability	Surge capability (L-N)	1KV
	Surge capability (L/N-Ground)	NA
Environment	Operating Temperature	-20°C~+45°C
	Humidity	10%-90%RH
	Tc	80°C
	Storage Temperature	-25°C~+60°C
	Life time	> 50000h@Tc=75°C
	Noise	≤20dB(A)@10cm
Surface	Dimension	102x38.2x25mm
	material	PC
Standards	Safety	GB19510. 1, GB19510. 14;IEC61347- 1, IEC61347-2- 13;EN61347- 1, EN61347-2- 13;EN62384
	EMC	GB/T17743, GB17625. 1;EN55015, EN61000-3-2, EN61000-3-3, EN61547;EN61000-4-2,3,4,5,6,8,11

	Energy Efficiency	Erp2.0 EU 2019/2020
	RoHS	RoHS (2011/65/EU) (EU)2015/863
Note	<p>1.All parameters not specially mentioned are measured at 230VAC input , full load and 25°C of ambient temperature.</p> <p>2.Ripple &amp; Noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uF &amp; 47 uF parallel capacitor.</p> <p>3.Switch and dimmer are not recommended to connect between this product output and luminaries.</p> <p>4.The over-temperature protection of the product is provided by the IC.</p> <p>5.All Eaglerise power supply are complied with EMI regulations. Since they are belong to component and will be installed inside system enclosure. When they are integrated into a system, the EMI characteristics of the system must be re-verified again.</p>	

## ◆ Inrush Current

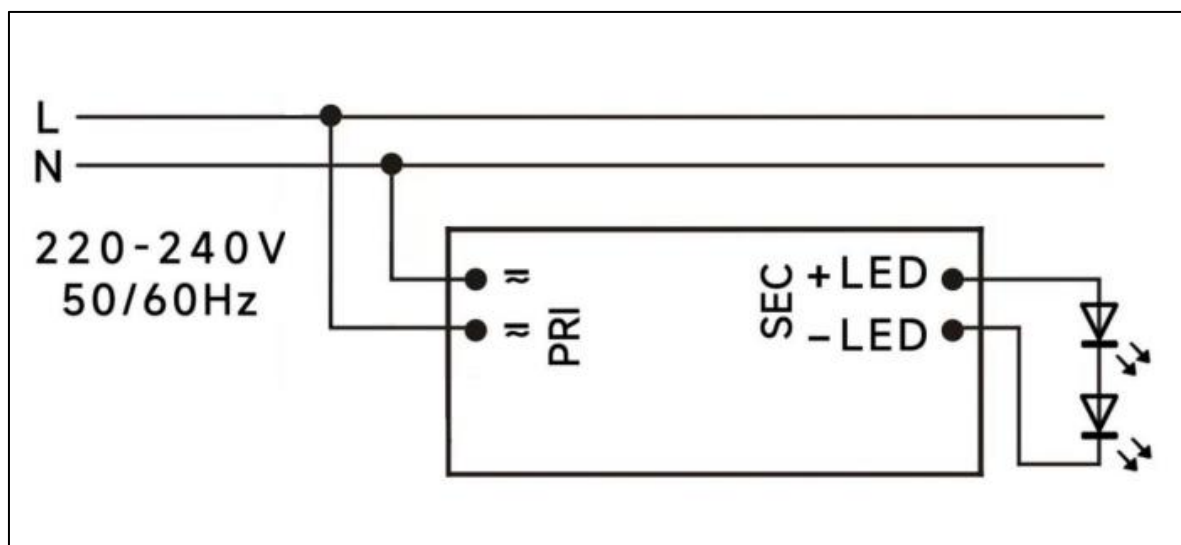
I <sub>peak</sub>	T <sub>width</sub>	B10	B16	B20	C10	C16	C20
14.6A	118μs	49pcs	78pcs	98pcs	81pcs	130pcs	163pcs



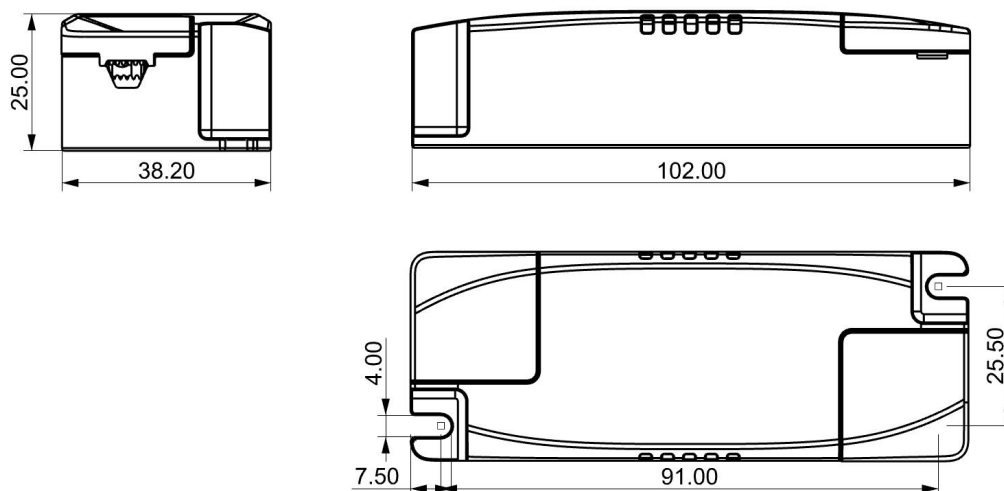
### Remarks:

- 1.The number of drives mounted under different MCBs in the table is the maximum value. Please do not exceed this number during installation.
- 2.Different brands and models of miniature circuit breakers, the number of drives mounted will be slightly different.

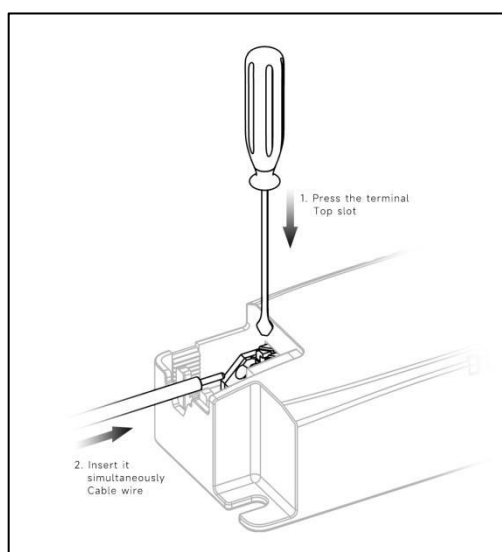
## ◆ Wiring diagram



## ◆ 2D diagram



## Terminal



## ◆ Wiring & Connections

Specification item		Value (Unit )
Input	Input wire cross-section	0.5...1.5 mm <sup>2</sup>
	Input wire gauge.	16...20 AWG
	Input wire strip length	7...9mm
Output	Output wire cross-section	0.5...1.5 mm <sup>2</sup>
	Output wire gauge.	16...20 AWG
	Output wire strip length	7...9mm

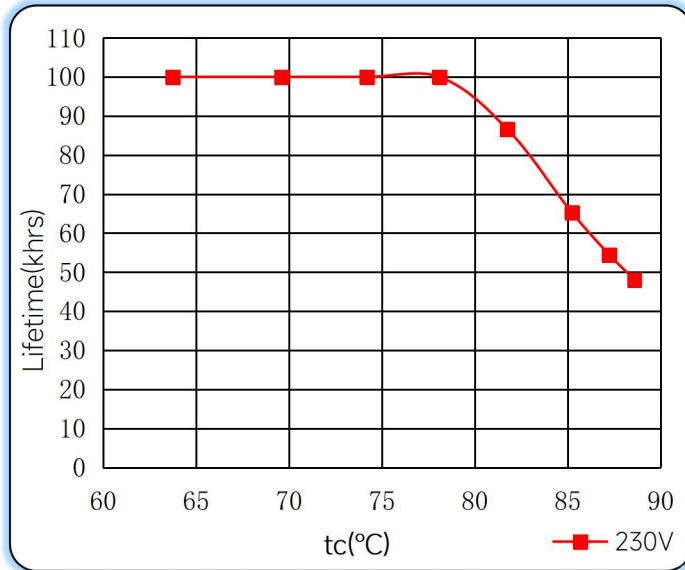
## ◆ Recommended wire

Wire cross-section	Wire type
2*0.5mm <sup>2</sup>	H03VVH2-F 2core
2*0.75mm <sup>2</sup>	H03VVH2-F 2core
1.5mm <sup>2</sup>	CCC 08(RV-90)
16AWG(1.25mm <sup>2</sup> )	UL1015

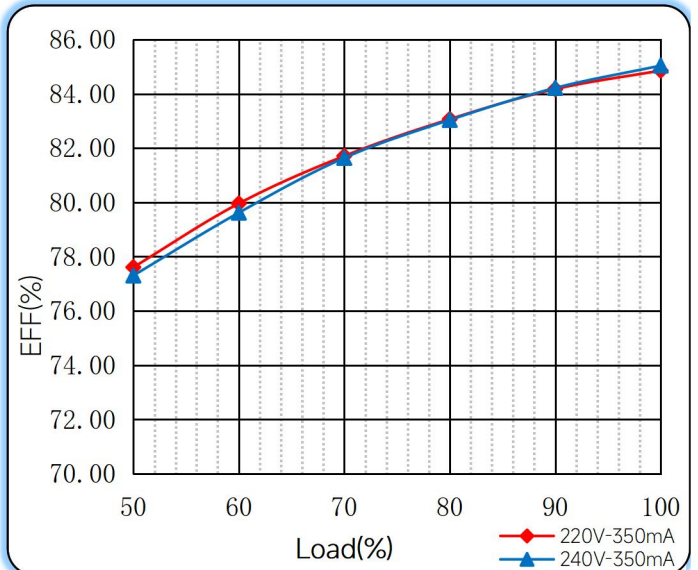
Note: Solid wire is risky to use on an angled terminal. Stranded wire is recommended for this kind of use.

## ◆ Curve for LS-15-350 LI1 EXC, $I_o=350\text{mA}$

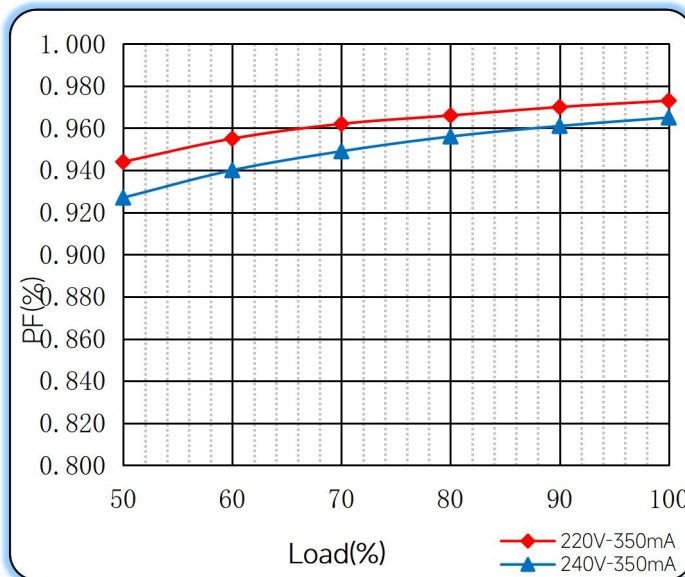
Lifetime vs. Temperature Curve



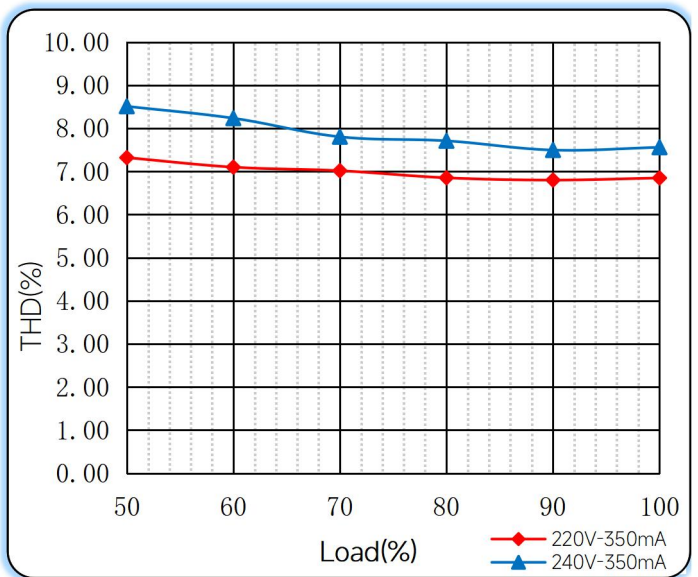
Efficiency vs. Load



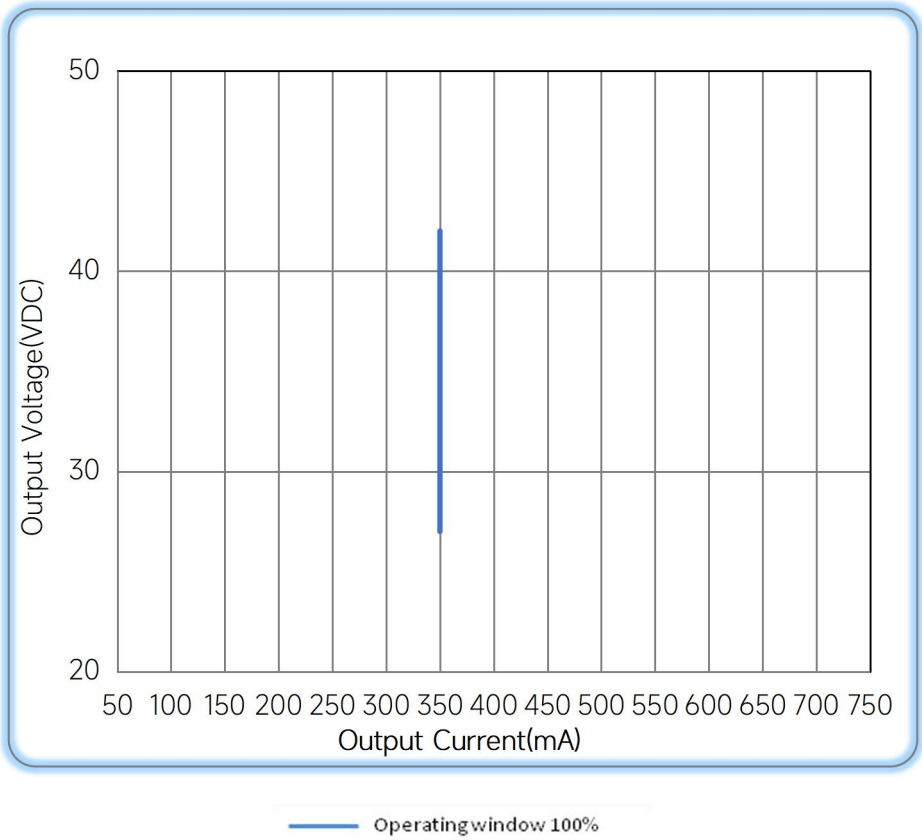
Power Factor Characteristics



THD vs. Load



◆ Operating window



◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2024/01/09

Remark:The final interpretation of the contents of the specification belongs to Astralux.

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