

# 120W Constant Voltage-LS Series

LS-120-24 LI1



☒ Approve

**SELV**



## Features

- Class II, SELV, independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor >0.9
- Efficiency ≥91%
- 5 years warranty

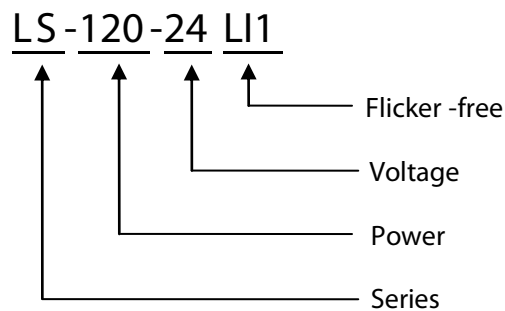
## Applications

- LED strips
- Pendant light

## Description

LS-120-24 LI1 is a 120W constant voltage LED driver that operates from 198-264Vac input with 24V output voltage. With its compact dimensions from 268 x 45 x 30.5mm it is easy to integrate in LED strips and pendant 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  | 198-264VAC  |
|                                  | Frequency(Hz)   | 50/60 Hz  |
|                                  | Power Factor  | >0.9@ 220-240VAC, Full load                                 |
|                                  | Input Current max   | 0.74A MAX. @Full Load, 198VAC                               |
|                                  | Start-up time   | <0.5 S  |
|                                  | Unload Power Consumption  | ≤0.5W   |
|                                  | Inrush Current  | 55A Max. @Full Load, 240 VAC                                |
|                                  | THD   | <10% @ 220-240VAC, Full load                                |
|                                  | Leakage Current   | <0.7mA(240VAC)  |
|                                  | Output  | Constant Voltage  |
| Current Range                    |   | 5A Max .  |
| Rated power                      |   | 120 W Max.  |
| Voltage Accuracy                 |   | ±5%   |
| Voltage Regulation               |   | ±1% @Full Load  |
| Load Regulation                  |   | ±1%   |
| Hold-up Time                     |   | ≥10ms/230VAC @ full load                                    |
| Voltage Ripple& Noise *Note.2    |   | ≤1% @Full Load,240VAC                                       |
| Output LF Voltage ripple(<120Hz) |   | ≤1% @Full Load,240VAC                                       |
| Efficiency(Typ.)                 |   | ≥91% @Full Load,240VAC                                      |
| Protection                       | Over Load Protection  | 105-150% rated output power<br>Protection type: Auto Resume |
|                                  | Over Voltage protection   | >25.2Vdc<br>Protection type: Auto Resume                    |
|                                  | Short circuit Protection  | Protection type: Auto Resume                                |
|                                  | Over Temperature protection   | Protection type: Auto Resume                                |
| Environment                      | Operating Temperature   | -20 ...+ 40   |
|                                  | tc  | 85  |
|                                  | Storage Temperature   | -20 ...+60  |
|                                  | Life time   | >44,000h@40 °C, full load                                   |
|                                  | Temperature coefficient   | ±0.03%/ (0-40 °C)   |
|                                  | Humidity  | 20%-90%RH   |
| Others                           | Dimension   | 268 X45 X30.5 (LXWXH)mm                                     |
| Safety & EMC                     | Safety standards  | EN 61347 -1; EN61347 -2-13; EN62493                         |
|                                  | Withstand voltage   | Input-Output : 3750V/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 —1000V;              |
| Note                             | <p>1. All parameters NOT specially mentioned are measured at 240VAC 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> |   |

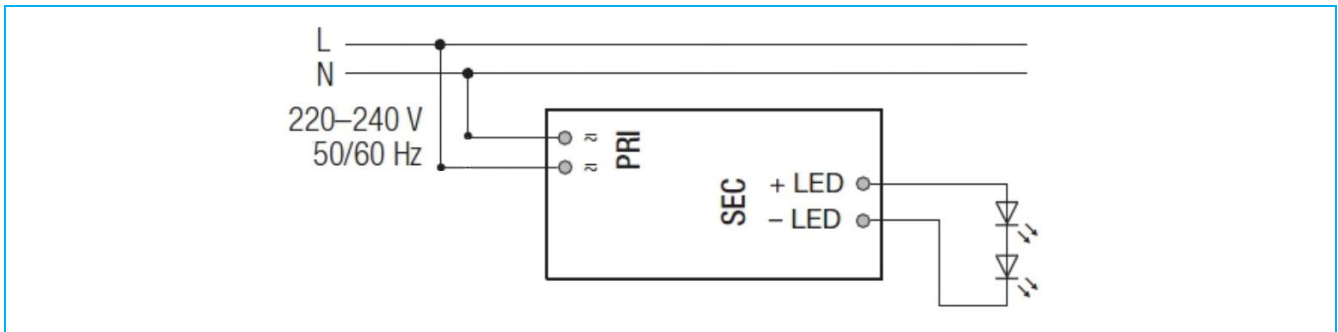
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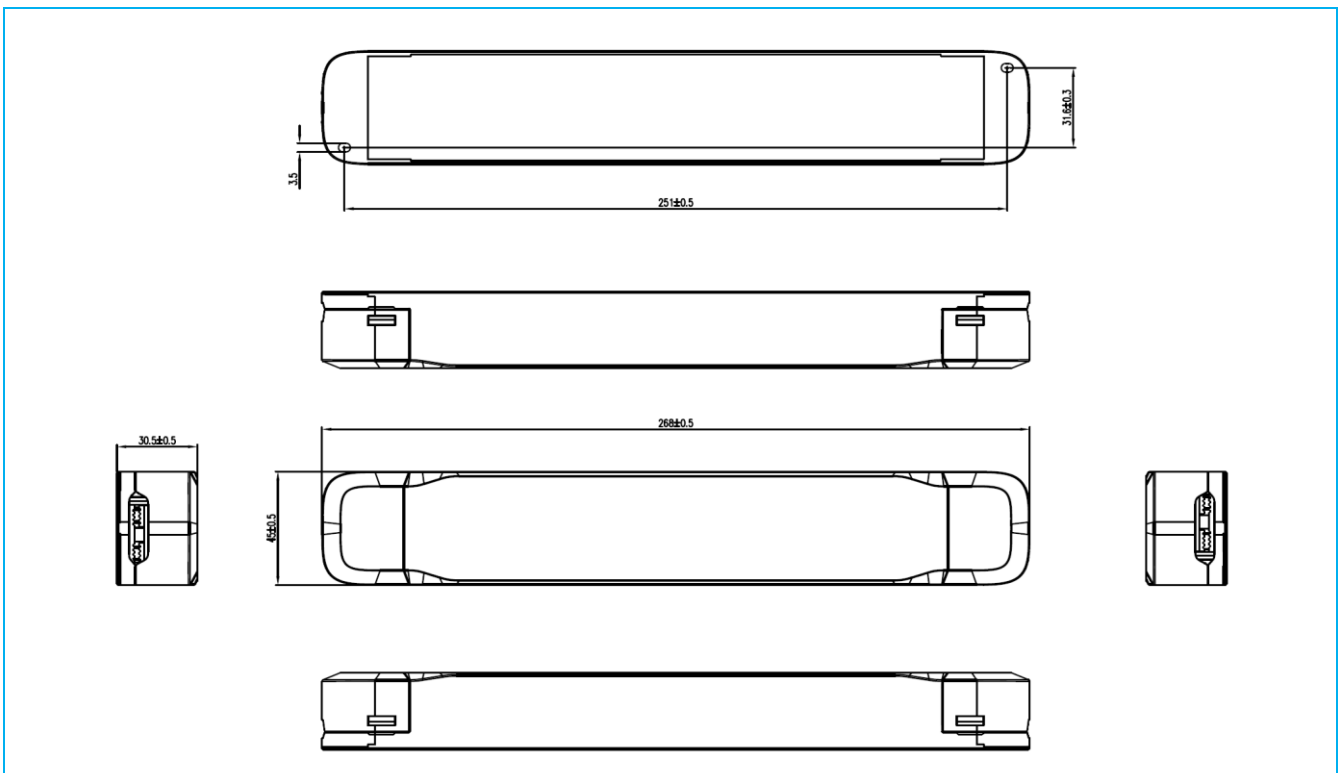
## ☒ Model list

| No. | Model number   | Input         |                 |                | Output               |                            |               |
|-----|----------------|---------------|-----------------|----------------|----------------------|----------------------------|---------------|
|     |                | Voltage (VAC) | Max.Current (A) | Frequency (Hz) | Constant voltage (V) | Normal working current (A) | Max. Power(W) |
| 1   | LS -120-24 LI1 | 220-240       | 0.74            | 50/60          | 24                   | 0-5                        | 120           |

## ☒ Wiring diagram



## ☒ 2D diagram

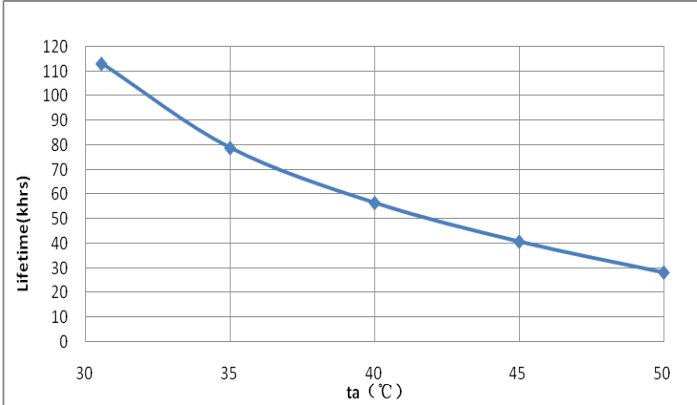


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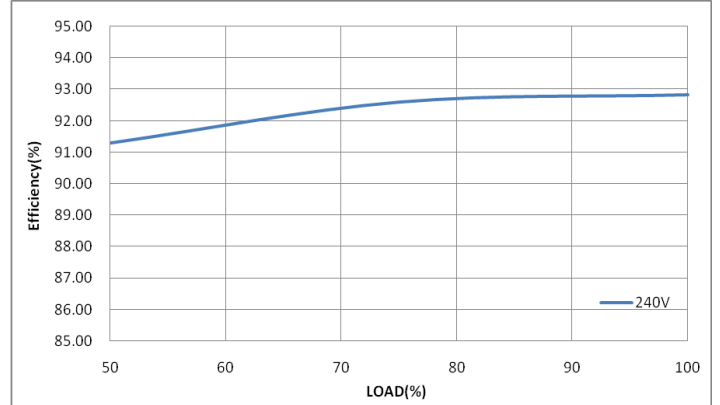
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## Curve for LS-120-24 LI1

Lifetime vs. Ambient Temperature Curve



Efficiency vs. Load



## Operating window

