

## Technical Specification

### Safety and environmental conditions

CE marking	LV directive 2014/35/EU RoHS directive 2015/863/EU WEEE directive 2012/19/EU
Standard	EN-IEC 61439-2:2011 EN-IEC 60269-3:2013

This product is designed to be safe under the following conditions:

### Specification

<b>Environmental conditions</b> Operating temperature: Relative humidity: Protection degree: Installation class: Pollution degree:	-5°C - +55°C 5% - 85%, non condensing IP23 2 (double insulation) 2
<b>Application conditions</b> Umax: Frequency: Imax: Fuse: Strain relief:	400V 50Hz 63A (mantle terminals) 1x D01 (E14), max 6A Yes, maximum 3 ground cables 18 ±0,5mm or 12,5 ±0,5mm and 1 light poles cord 8 ±0,5mm
Maximum wire cross section and torque:	Terminal N, 1, 2, 3: 2x 16mm <sup>2</sup> , 2-4Nm Terminal 4, 5: 2,5mm <sup>2</sup> , 1-2Nm Terminal 6, 7: 1,5 mm <sup>2</sup> spring 84mm
Diameter ø Height	279,5mm
<b>Storage</b> Temperature: Relative humidity:	-20°C - +70°C 5% - 85%, non condensing
Approval	-

### Specification per type

	5L4311..
Fuse included	Yes, 6A
Phase selectable	Yes
Covered mantle terminals	Yes
Weight	597gr
Surge Protection Device (SPD)	Citel MLPC 1-230L-R* Protection level 10kA/10kV Spring terminal connection for max 1,5 mm <sup>2</sup>

\*Please consult [www.citel.fr](http://www.citel.fr) for more information about the MLPC1-230L-R

Please be aware, product liability, fulfillment to requirements and warranty are all expired when modifications on the product are made.

ELEQ reserves the right to carry out modifications on its products, in order to improve them, without prior notice.

## Safety instruction

All activities for installation, commissioning and maintenance of this connection box must be performed by qualified personnel that has the knowledge of applicable safety precautions. This guide assumes that the reader of this document has sufficient electro-technical knowledge to understand the content of this document.

### General

The LS-84 is a connection box for public lighting and intended to be used in lighting poles. The connection box shall be mounted in a weather protected and dry location. In the connection box the incoming (ground) cable can be connected. If desired, looped circuits wiring to the next lighting pole is possible. The cable of the armature shall be connected on the outgoing terminals.

Fuses protect the installation against overload and short-circuiting.

### Explanation of symbols



This product is designed according to the EN-IEC 61439-2:2011 standards and meets the requirements of the Low Voltage Directive 2014/35/EU.



Read the installation guide before mounting the product. Unprofessional work activities on electrical installations may result in a threat of danger to the life and health of human beings and livestock!



#### RoHS Directive 2015/863/EU

ELEQ states that it uses qualified components in its products only from manufacturers which meet the requirements of the European Directive for the "Restriction of use of certain Hazardous Substances"



#### WEEE Directive 2012/19/EU

This equipment should not be disposed as unsorted municipal waste. Contact a qualified recycler for disposal.



mastering electricity  
worldwide

## LS-84 Connection Box for Public Lighting Installation Guide



5L4311

LS-84 phase selectable

5L4311

5L4311WX

Read this installation guide before installing the product

—part of a smart world—

ELEQ b.v.  
Tuksweg 130, 8331 LH Steerwijk, The Netherlands  
+31 (0) 521 533 333 info@eleq.com www.eleq.com

—part of a smart world—

ELEQ b.v.  
Tuksweg 130, 8331 LH Steerwijk, The Netherlands  
+31 (0) 521 533 333 info@eleq.com www.eleq.com

Ensure that the installation is voltage free

### Attention

A double isolated connection box may only be replaced by a double isolated connection box. The double isolated connection box cannot be replaced by a regular connection box with automatic earthing.

## Functional Description

This connection box is intended to be fitted with one D01 fuse. The fuse capacity is limited to max 6A. The phase to be connected to the fuse has to be chosen by the black selection pin (screw type).

## Assembly

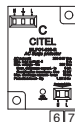
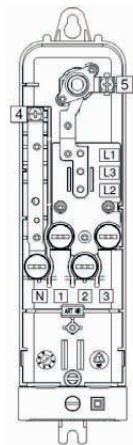
### Attention

Remove the fuse during assembly of the connection boxes

1. Ensure a safe working area during assembly, maintenance and inspection of the connection box. Disconnect the power of the primary circuit and make sure it cannot be enabled unintentionally.
2. Remove the transparent lid, fuse, selection pin and the intermediate cover.
3. Mount the connection box with the upper and lower connection in the lighting pole.
4. Remove the cover with SPD (pull off the mantle terminals). There is a possibility to hook this on top of the connection box.
5. Connect the incoming and (if present) outgoing ground cable to terminals N, 1, 2, 3.
6. Replace the cover with SPD on the mantle terminals.
7. **For in-line connection of the SPD:** connect the outgoing cable to the armature to terminals 6 and 7 (spring connection).

**For parallel connection of the SPD:** connect the outgoing cable to the armature to terminals 4 and 5 (screw connection).

8. Tightly mount strain relief block.
9. Check if the connections are mounted properly and firmly.
10. Mount the intermediate cover and the selection pin.
11. Install the fuse. Note: fuse type: D01 (E14), max 6A.
12. Mount the transparent lid and screw tightly.



### Incoming

N = Neutral  
1 = Phase L1  
2 = Phase L2  
3 = Phase L3

### Outgoing (SPD in-line)

6 = Neutral wire to armature  
7 = Phase wire to armature

### Outgoing (SPD parallel)

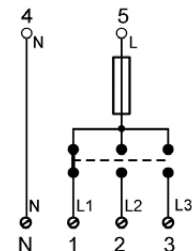
4 = Neutral wire to armature  
5 = Phase wire to armature

If required, incoming terminals N, 1, 2, 3 can also be looped to the next lighting pole.

### Attention

Terminal box is provided with phase selection: the phase to be connected to the fuse has to be chosen by the black selection pin (screw type).

## Wiring Diagram



## Maintenance and inspection

- The connection box should be situated on a dry and clean location.
- The connection box should be mounted firmly.
- The connections should be mounted firmly.
- Indicator on SPD is on when power is switched on.

### Attention

Always avoid working on live parts of an installation.

## Disassembly instruction

1. Disconnect the power of the main circuit and make sure it cannot be enabled unintentionally.
2. Unmount the transparent lid.
3. Remove the fuse, selection pin and the intermediate cover
4. Remove the strain relief block.
5. Disconnect the armature cables.
6. Remove the SPD
7. Disconnect the ground cables
8. Disconnect the connection box from the lighting pole.