



## Light curtains

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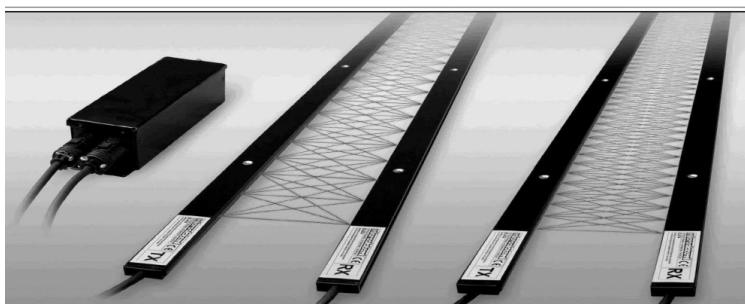
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**microsistemi**<sup>®</sup> CE   
OPTOELETTRONICA - AUTOMAZIONE - SICUREZZA  
**EL194E** BARRIERE MULTIRAGGIO PER PROTEZIONE PORTE ASCENSORI  
LIGHT CURTAINS TO PROTECT LIFT DOORS



## Safety and usage cautions

Before installing our products, we recommend you to consult the section about safety and usage cautions at the link below



- ❗ The control unit should be fixed on the top of the cabin. TX and RX detectors must be jointed to the control unit by the two signal cables that can be connected – without distinction – to both of the two connectors of the control box. Cables should be fastened firmly and properly with the pertinent clips. As their working life depends on their precise mounting it's necessary to check if their sliding is properly continuous. Redundant cables could be packaged into loops. Check to keep them away from other cables to avoid possible electromagnetic interferences.

EL light curtains mounting can be either dynamic or static in the lift car doors.

**Static Installation:** Both TX and RX detectors must be installed firmly so that they do not swing when the cabin is lifting up or down. During the installation make sure that the TX and RX detectors are as much as possible parallel and aligned within each other while accepting a significant misaligning. Make sure also that no projecting object or no swinging element obstructs the beams even temporarily. Should you install the barrier in the sunlight (panoramic plants) it's better to fix the RX on the side that is less exposed to sunshine.

**Dynamic Installation:** First of all it's necessary to check the right sliding of the cabin doors and adjust them so as to obtain a continuous slipping without wavings or jolts. RX and TX detectors must be perfectly fixed to both the

cabin door sides using our fixing kit. Highest accepted misaligning: +/- 20 mm vertically, +/- 3 mm horizontally. It's advisable to install the RX and TX detectors as back as possible in comparison with the edge of the doors. It's preferable to fasten the RX on the side less exposed to the sunshine.

Cables should be fastened firmly and properly with the pertinent clips included in the barrier set. The signal cables have been designed to support a high number of door movements providing that the mounting was correct. Therefore, we advise you to put the cables in movement making sure their sliding is properly continuous as shown in the illustrating diagram.

The manufacturer disclaims all responsibility and do not provide any warranty for damages affecting the cables due – in its final opinion- to a wrong wiring.

LED diagnostic: After installation, check the Led's on the RX light curtain as indicated:

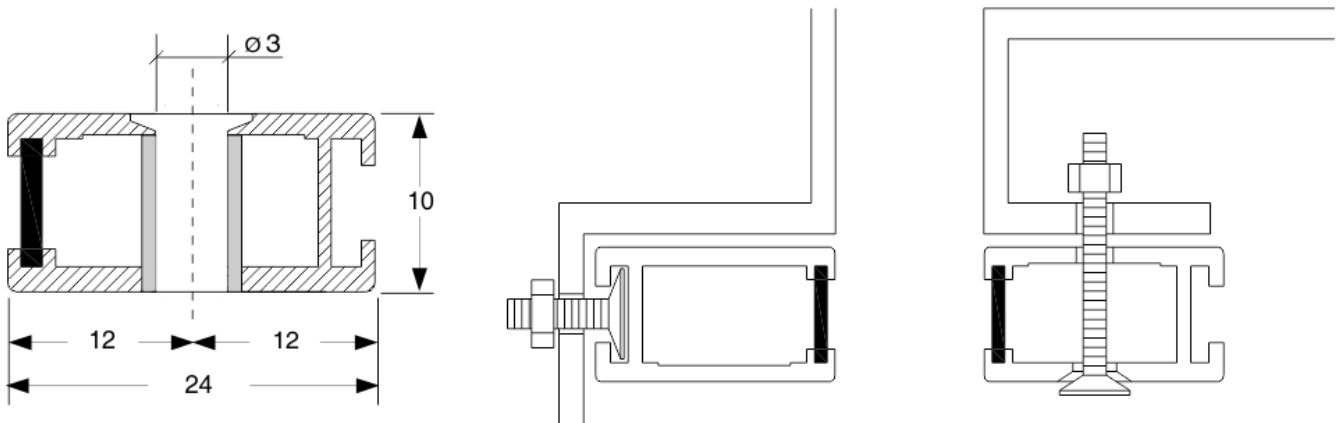
- Green LED (power) : ON
- Red LED (obstruction) : Normally OFF (switched on in case of obstruction of the rays)

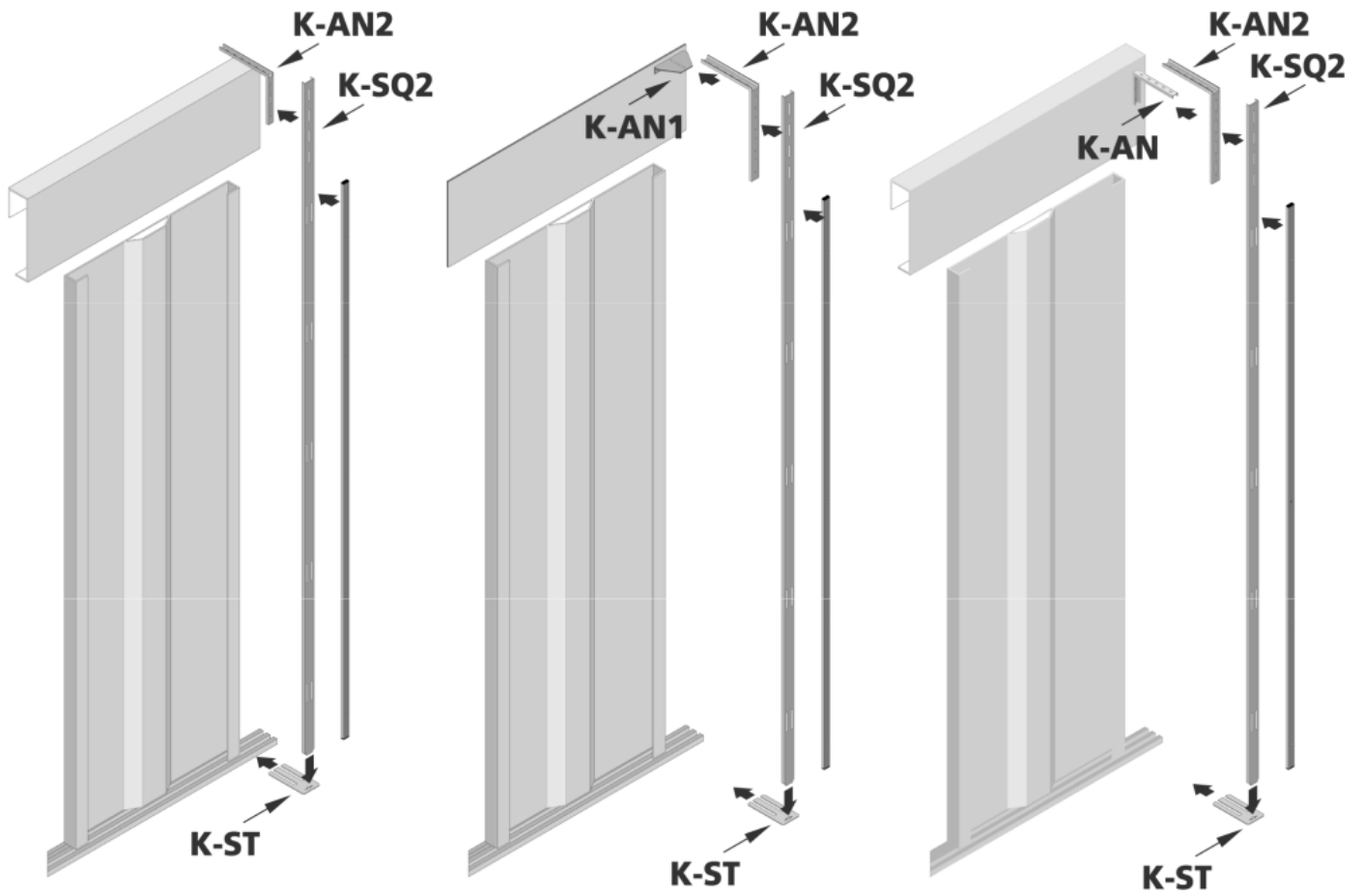
Daily maintenance:

- Keep the external light curtain's surface clean, especially keep the light filter plate clean and avoid attaching any sticker that might influence the receiving of the infrared light.
- Check the wiring of the cables, the status of the cable clips, the power cables and the signal cables.
- Do not wash the detectors by water jets and/or solvents. Use a soft and damped cloth to keep the light filter plate cleaned.

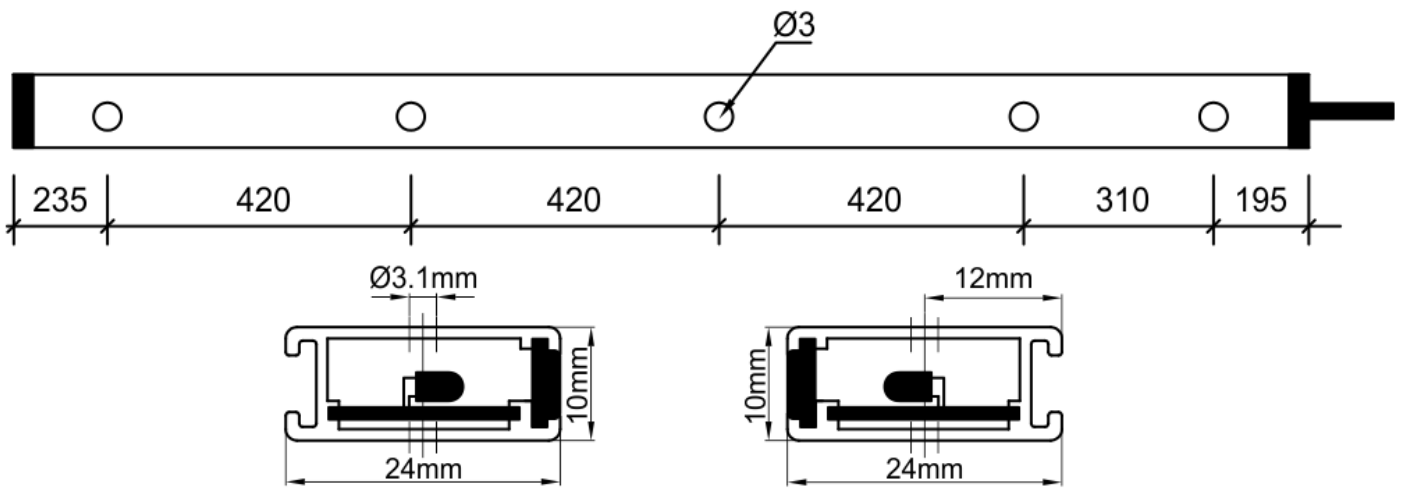
## Installation

### Dimensions and fixing systems

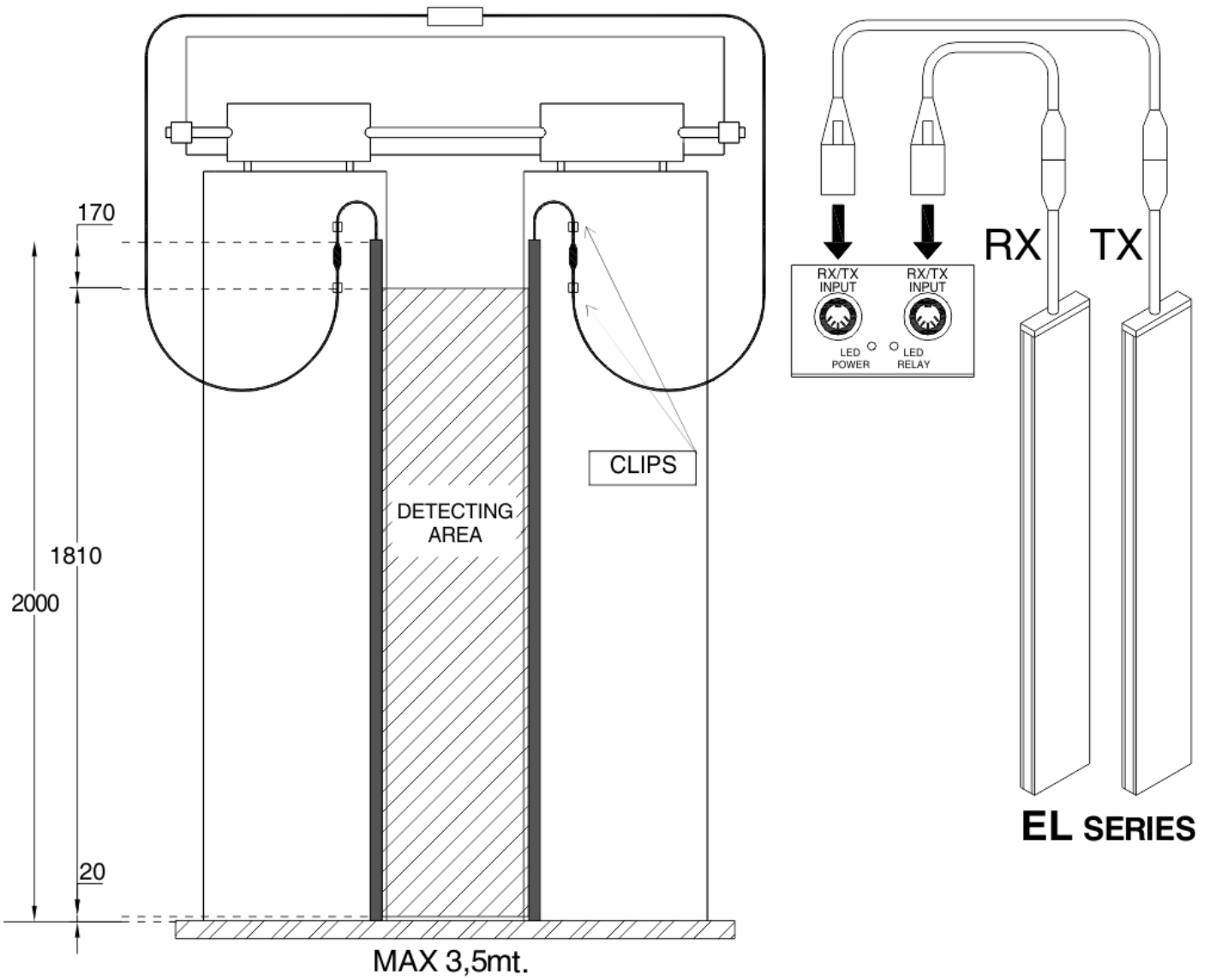




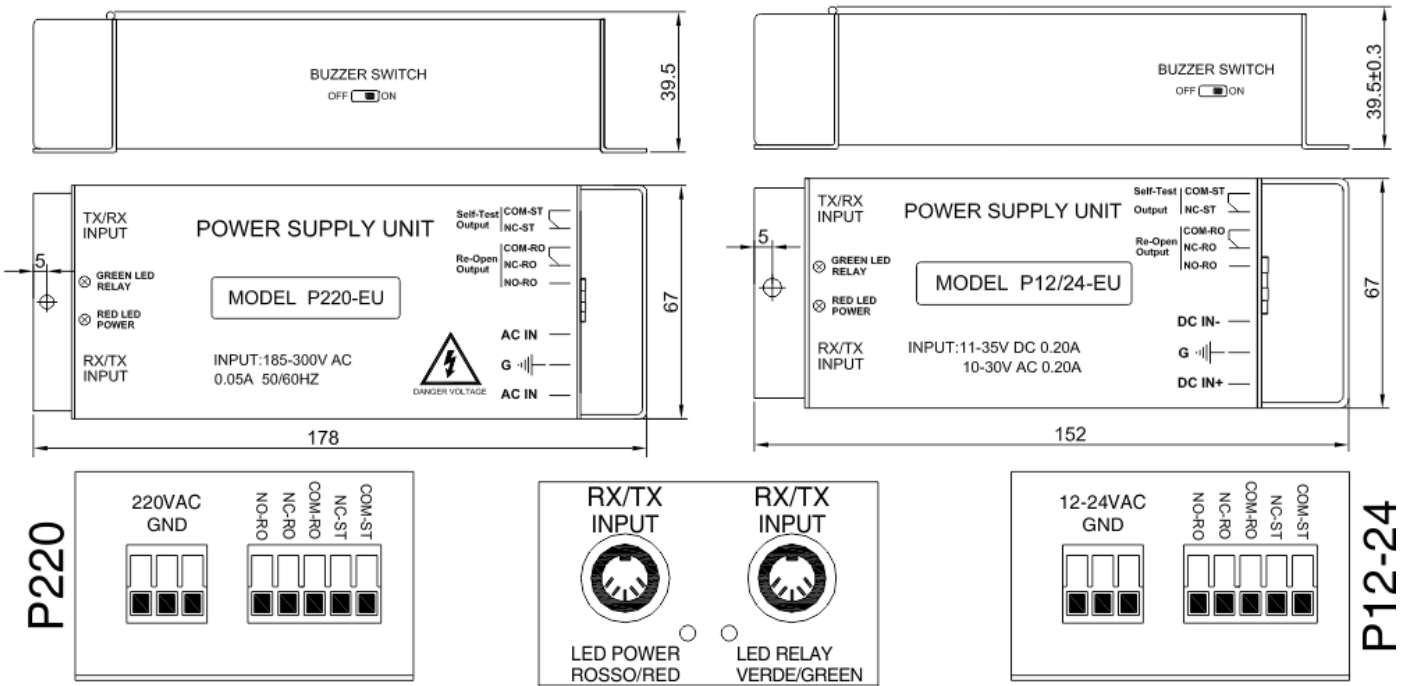
Drilling center distances



Cables fixing mode



**Power supply 12/24V – 220V**



Green relay led:

ON: Normal working – OFF: Obstruction or error

## Datasheet

Power supply voltage	220A ac (EL194E-01) 11÷35V dc ; 10÷30V ac (EL194E-02)
Number of beams	194
Range	0 ÷ 3,5 mt.
Degree of protection	IP44
Power consumption	≤ 4 W
Operating temperature	-20° C ÷ +65°C
Output	Com / N.O. / N.C. Relay contact
Output contact	30V DC 2A 125V AC 1A
Optical Ray	Infrared 900 nm
Approvals	2004/108/EC, 2006/95/EC
Dimensions	10X24X2000 mm
Control unit dimensions	152X68X40 mm OR 179X68X40 mm
Cables' lenght	4 mt.
Response time	< 90 ms
Light immunity	100000 LUX
Displacement at 0mm	Vertical: ±20mm; Horizontal: ±3mm
Installation	Static or Dynamic
Self Test Mode	Periodic self-testing. In case of power failure or self testing faulty, self test output COM-ST and NC-ST will open.

Updated on 23 Marzo 2021