

PHOTOCELL

SAFETY - PHOTOCELL

The photocell is an electronic device that uses the technology of the modulated active infrared beams. By interrupting the infrared ray beam, it allows to activate a contact (relay). The safety assembly by photocell is made up of an emitter that sends out a light beam (like a torch) and a receiver that has an electronic cell which is sensitive to that type of light.

OPERATION

The emitter sends out a horizontal infrared beam, creating a line of invisible light across the whole width of the gap that is projected onto the receiver, which has a photocell that reacts to light by closing the contact of a relay. When the beam is sealed by an opaque body, the cell reacts to the lack of light by opening an electrical contact that is used in the control panel to stop and reverse the manoeuvre. If the door is open, it will not descend until the infrared beam is completely free. The emitted light is polarised in one direction and the receiver cell must receive it at that angle, making it very difficult for the receiver to be affected by a reflected light.



Figure 1. Photocell assembled at the foot of the door



Figure 2. Photocell XUX and Carlo Gavazzi

CHARACTERISTICS

- ✓ Sometimes the emitter and the receiver are in a single control box IP, then a catadioptric mirror, located at the other end, is used to return the reflected light.
- ✓ As the photocells include lenses and mirrors, they are easily affected by moisture and dirt; in damp environments or outdoors cells with mirrors cannot be used. In very wet places the IP protection must be increased, or to use heating systems to avoid fogging.

XUX	
Characteristic	Details
Power supply	24...240 V AC / DC
Temperatures	-25...+55 °C
Work area	0...40 m
Type of exit	Relay (1 NA + 1 NC)

CARLO GAVAZZI	
Characteristic	Details
Power supply	12...24 V AC / DC
Temperatures	-20...+60 °C
Work area	0...30 m
Type of exit	Relay (1 NA + 1 NC)

CERTIFICATE AND STANDARDIZATIONS

It has been designed to meet the EN 12445; EN 12453 and EN 12978 standards.

The information contained in this descriptive sheet is general for the referenced product. In no case is it binding or contractual. Portes Bisbal S.L. reserves the right to modify the features herein.