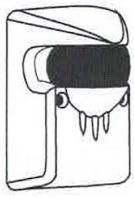
INFRARED PHOTOCELLS S20AV

CE



NOTICES INSTALLATION

USAutomatic

SEF92420AV

Thank you for your choice of this product. You are recommended to read carefully this manual before tinstalling the product.

Description

The infrared photocells type SEF92420AV are a security device designed to the protection of areas in which are operating automatic closing systems.
The alluminium covers allows an antivandalic installation.
The product is composed by a couple of adjustable optic infrared devices TX and RX, operating at 880 nm wavelength.
The rated range is 20 mt under all whether conditions (rain, fog, dust).
The reduced dimensions allow an easy installation procedure on any type of structure.
The adjustable optic both horizontally (±40°) and vertically (±15°) allows the best alignment in any installation condition.

Technical specifications

Infrared emission with diode:	GaAlAs
Continuous modulation:	1,5 KHz
Wavelength emission:	880 nm
Power supply:	9,5 - 24 Vac/dc
Current consumption at 12 Vac/dc	
- receiver:	34 mA
- transmitter:	45 mA
Current consumption at 24 Vac/dc	
- receiver:	34 mA
- transmitter:	42 mA
Double contact relay with serial exchange:	yes
Output contacts:	1 NO / 1 NC
Max DC power on the relay contacts:	24 W / 48 V
Max AC power on the relay contacts:	60 VA / 48 V
Operating temperature:	-10°C /+55°C
Best alignment test point.	
Base plate in thermoplastic rubber.	
IP Grade:	IP55
Rated range in all conditions:	20 m
Dimensions (mm):	98x 68 x 51
Conformity according to:	UNI8612
Marking:	CE

Packing list

Seals	2
Transmitter	1
Receiver	1
Aluminium covers	2
Photocell fixing screws	8
ISO M5 special screws for cover fixing	4
Plastic plugs Ø5	8
Fixing aluminium plates	2
Drilling template	1
Special tool for M5 ontivandalic screws	1

Installation phases

1 - Mark the location of the fixing holes using the drilling template supplied with the photocells (Fig. 1);
2 - Drill the 4 fixing holes for the base (Hole diam: 5mm);
3 - Locate the plugs provided 4 plastic (Fig. 3);
4 - Assemble the fixing plate the seal and the photocells (Fig. 4);
6 - Mount the photocell with the screws supplied (Fig. 5);
7 - Make the electrical connections and power the receiver (Fig. 7) and the transmitter (Fig. 10);
- 12 Vac/dc : terminals 0 - 12;
- 24 Vac/dc : terminals 0 - 24;

8 - After the alignment (Fig. 6) and the adjustment (Fig. 8), (see next paragraph) fit the cover using the special screws with anti-vandalic head making use of the tool supplied (Fig. 13).

Recommended coble cross-section:
- *transmitter photocells 2 x 0,6 mm²*
- *receiver photocells 4 x 0,6 mm²*

Connect the output contact to the terminals C eand NO for a normally open contact or C and NC for a normally closed contact (Fig. 7).

Adjustment

Alignment
Align the transmitter and the receiver so that the beam is established and the red led (LR) goes off (Fig. 6 and Fig. 8).

Sensitivity adjustment
If the distance between the transmitter and the receiver is less than 5 metres remove the bridge on the transmitter (Fig. 12).
Adjust the sensitivity with the trimmer on the receiver (Fig. 8).
The optimum detection is obtained when a voltage of 3,2 Vdc is read across terminals T and P (read the voltage with a voltmeter - Fig. 9).

LED states

On the transmitter
The green led is ON when the transmitter is powered.
On the receiver
- The green led is ON when the receiver is powered (Fig. 11);
- The red led is ON when the beam is not established (Fig. 11).

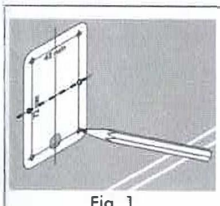


Fig. 1

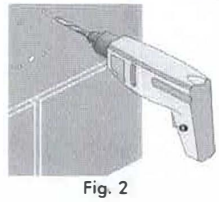


Fig. 2

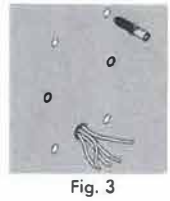


Fig. 3

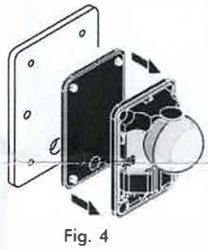


Fig. 4

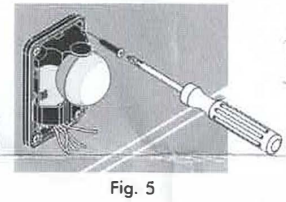


Fig. 5

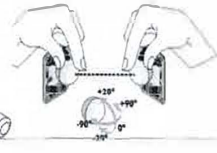


Fig. 6

Receiver

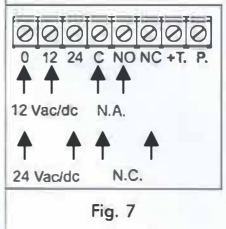


Fig. 7

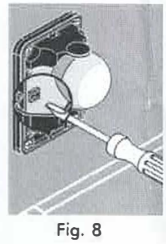


Fig. 8

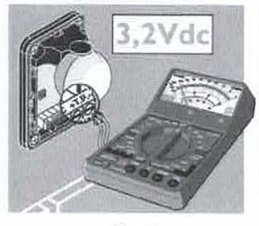


Fig. 9

Transmitter

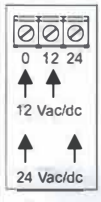


Fig. 10

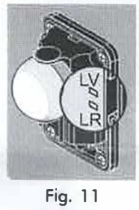


Fig. 11

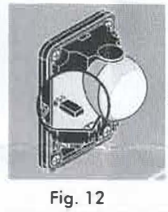


Fig. 12

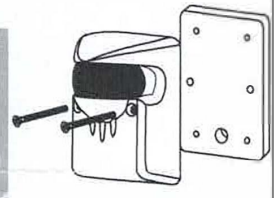


Fig. 13

GUARANTEE

The guarantee period of the product is 24 months, beginning from the manufacturer date. During this period, if the product does not work correctly, due to a defective component, the product will be repaired or substituted at the discretion of the producer. The guarantee does not cover the plastic container integrity. After-sale service is supplied at the producer's factory.

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