

INFRARED PHOTOCELLS SEFB2408



MANUAL
INSTALLATION

SEFB2408



Thank you for choosing this product.

You are recommended to read carefully this manual before installing the product.

SUMMARY

1 - DESCRIPTION

2 - TECHNICAL SPECIFICATIONS

3 - INSTALLATION PHASES

4 - ELECTRICAL CONNECTIONS

5 - ADJUSTMENT

6 - BATTERY INFORMATION

1 - DESCRIPTION

The infrared photocells type SEFB2408 are a people and property safety device mainly for usage with automatic closing systems.

The system is composed by a couple of fixed optic infrared devices, TX and RX, operating at 880 nm wavelength.

The transmitter is battery powered, equipped with 2 x 3,6V - 2,4Ah Thionyl Chloride Lithium batteries.

The expected battery life is about 15 months in worst conditions.

The rated range is 8 mt, under all operating conditions (rain, fog, dust).

The reduced dimensions allow an easy installation procedure on any type of structure.

ITEM	Q/tý
SEAL	2
TRANSMITTER	1
RECEIVER	1
COVER	2
COVER FIXING SCREWS	4
PHOTOCELLS FIXING SCREWS	8
PLUGS	8



2 - TECHNICAL SPECIFICATIONS

Infrared emission with diode:	GaAlAs
Pulse modulation for diode:	128 Hz
Duty cycle	1:4000
Internal clock	32768 Hz
Wavelength emission:	880 nm
Power supply TX:	3,6V
Battery voltage	2 x 3,6V
Battery capacity	2,4Ah
Battery type	ER14505
Expected battery life	15 months
Power supply RX	12 / 24 Vac/dc
Current consumption Transmitter	400 µA
Current consumption Receiver	30 mA
Double contact relay with serial exchange:	yes
TX output contacts:	1 NO / 1 NC
Max DC power on relay contacts:	24W / 48V
Max AC power on relay contacts:	60 VA / 48 V
Operating temperature:	-20°C / +55°C
Housing protection:	IP55
Rated range in all conditions:	8 m
Dimensions (mm):	90 x 60 x 22

NOTE

The transmitter is equipped with an extra NC input which can be used for the connection to a safety edge.

See Fig. 8b

3 - INSTALLATION PHASES

- 1 - Locate the best fixing position taking into account the right distances from the ground;
- 2 - Mark the location of the fixing holes using the drilling template supplied with the photocells (Fig. 2);
- 3 - Drill the fixing holes. (Hole diam: 5mm) (Fig. 3);
- 4 - Locate the plugs (Fig. 4);
- 5 - Assemble the seal and the photocells (Fig. 5);
- 6 - Mount the photocell with the screws supplied (Fig. 7);
- 7 - Make the electrical connections (Fig. 9a and 9b);
- 8 - Fit the cover using the the screws supplied (Fig. 8).

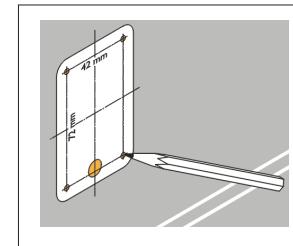


Fig. 2

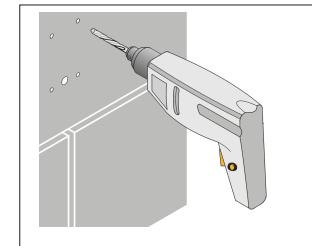


Fig. 3

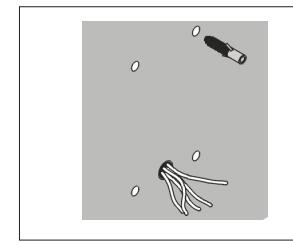


Fig. 4

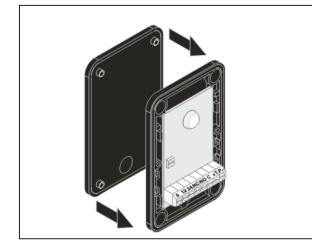


Fig. 5

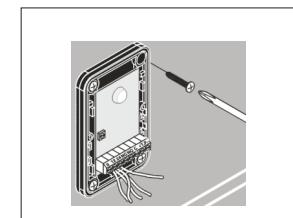


Fig. 7

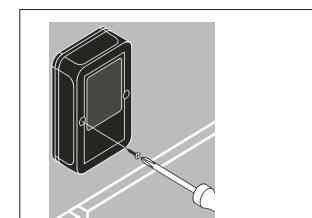


Fig. 8

Advice

Use silicon to seal the place where the cables go through .

Advice

When two sets of photocells are installed, cross the transmitter photocells with the receiver photocells and keep a distance of 95 centimetres between the sets, for a 8 metres passage (fig. 6).

Power the receiver (fig. 9a):

12 Vac/dc :Terminals 0 - 12

24 Vac/dc :Terminals 0 - 24

Connect the output contacts (fig. 9a):

- NC Contact : Terminals C - NC (normally closed contact)

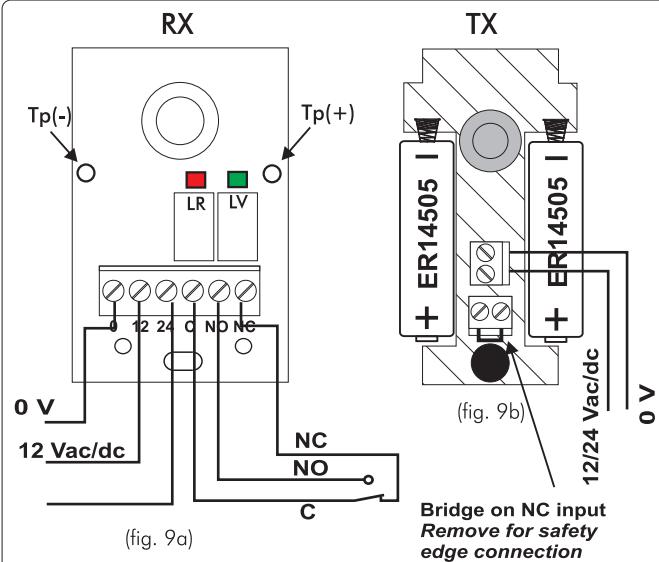
- NO Contact : Terminals C - NO (normally open contact)

Advice

TX Recommended cable : 2 x AWG22 (Optional)

RX Recommended cable : 4 x AWG22

4 - ELECTRICAL CONNECTIONS



5 - ADJUSTMENT

Alignment

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

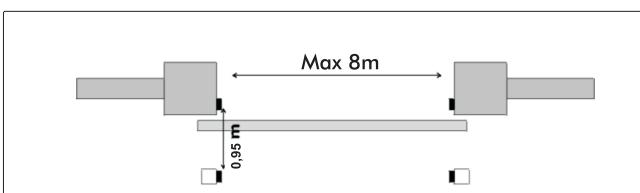


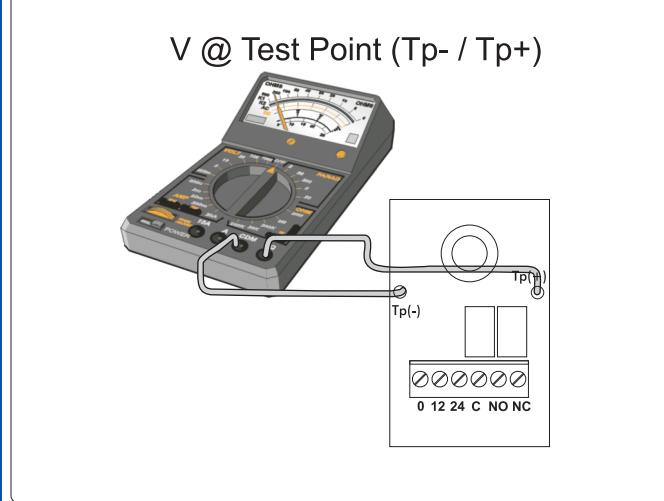
Fig. 6

A voltmeter on the alignment test points will help the installation of the photocells :

0 V = no signal , Red led On , Green off

3 V= minimum useful signal , Red off , Green led On,

5 V= max alignment , Red off , Green led On



6 - BATTERY INFORMATION

ATTENTION : At the end of the battery life there is a sudden reduction of ranging, with a photocell receiver alarm condition.

In case of batteries unloaded, place the 2 Thionyl Chloride Lithium batteries of the transmitter between the 2 contacts.

Respect the right polarity as indicated on this manual.

NOTE: Please dispose of the batteries correctly, they are hazardous waste.

ATTENTION: the disposal of the unloaded batteries must have effected making use of the special containers.

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.



USA Automatic LTD

118 Hillside Drive
Lewisville, TX 75057

1-866-711-0001

www.sentrygateopener.com