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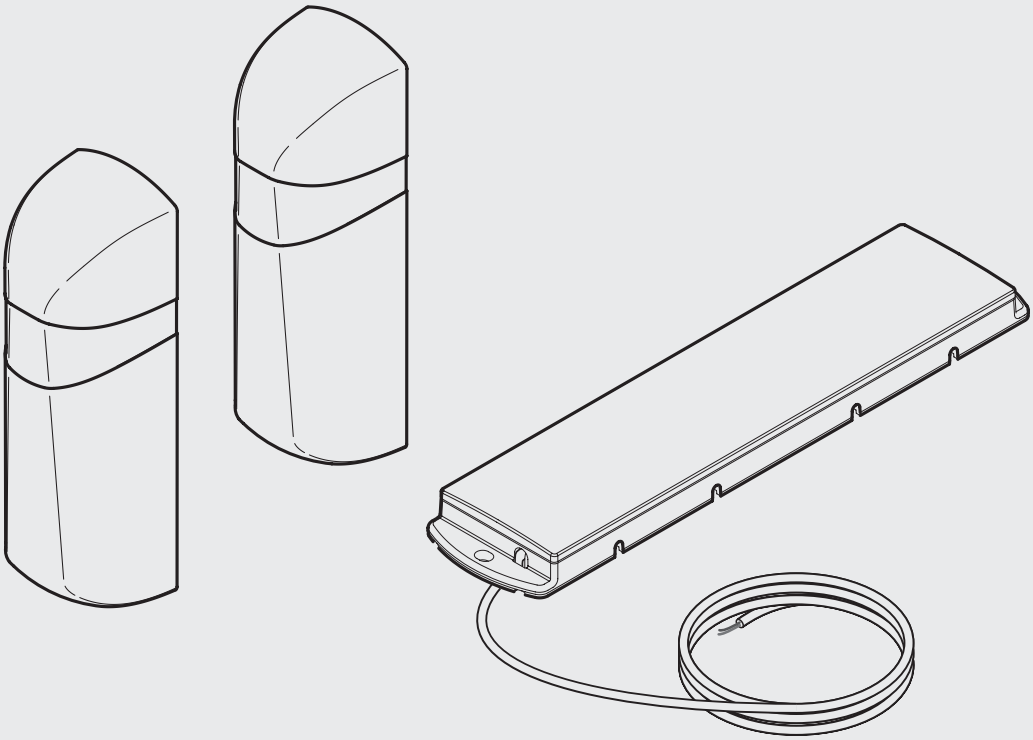
RF/RF.SUN



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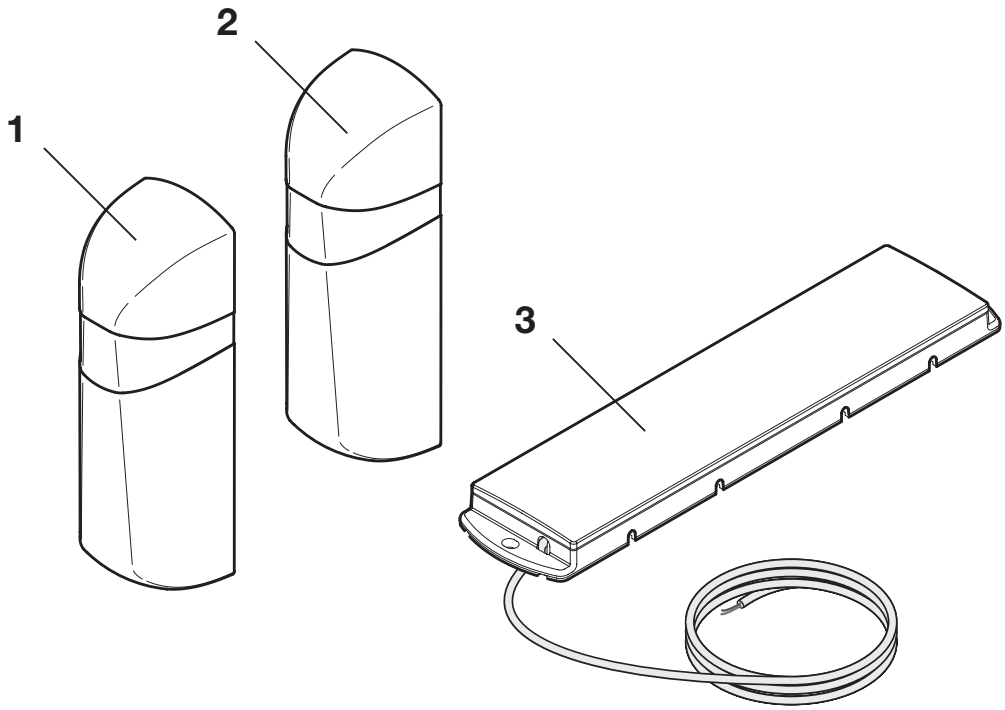

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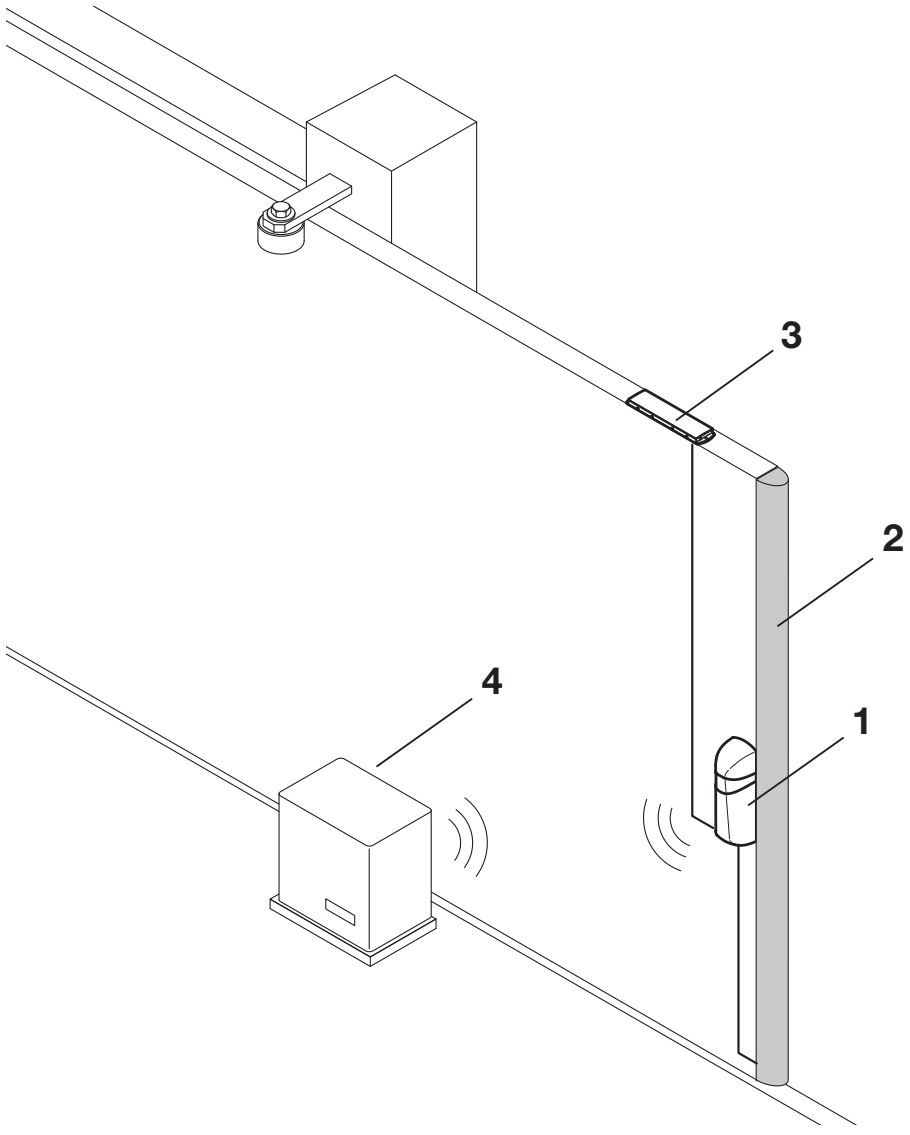

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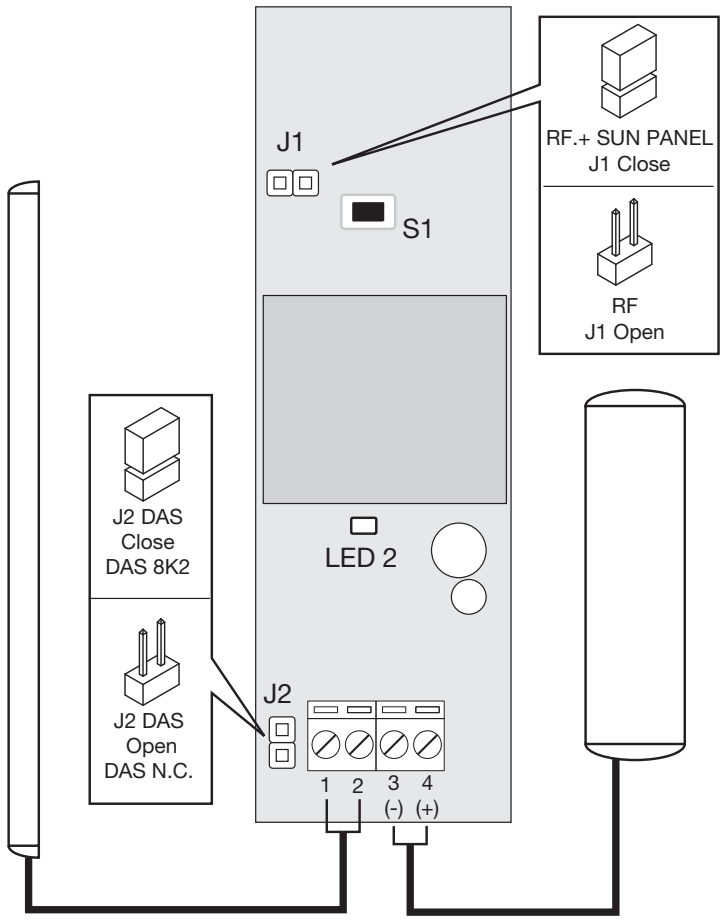
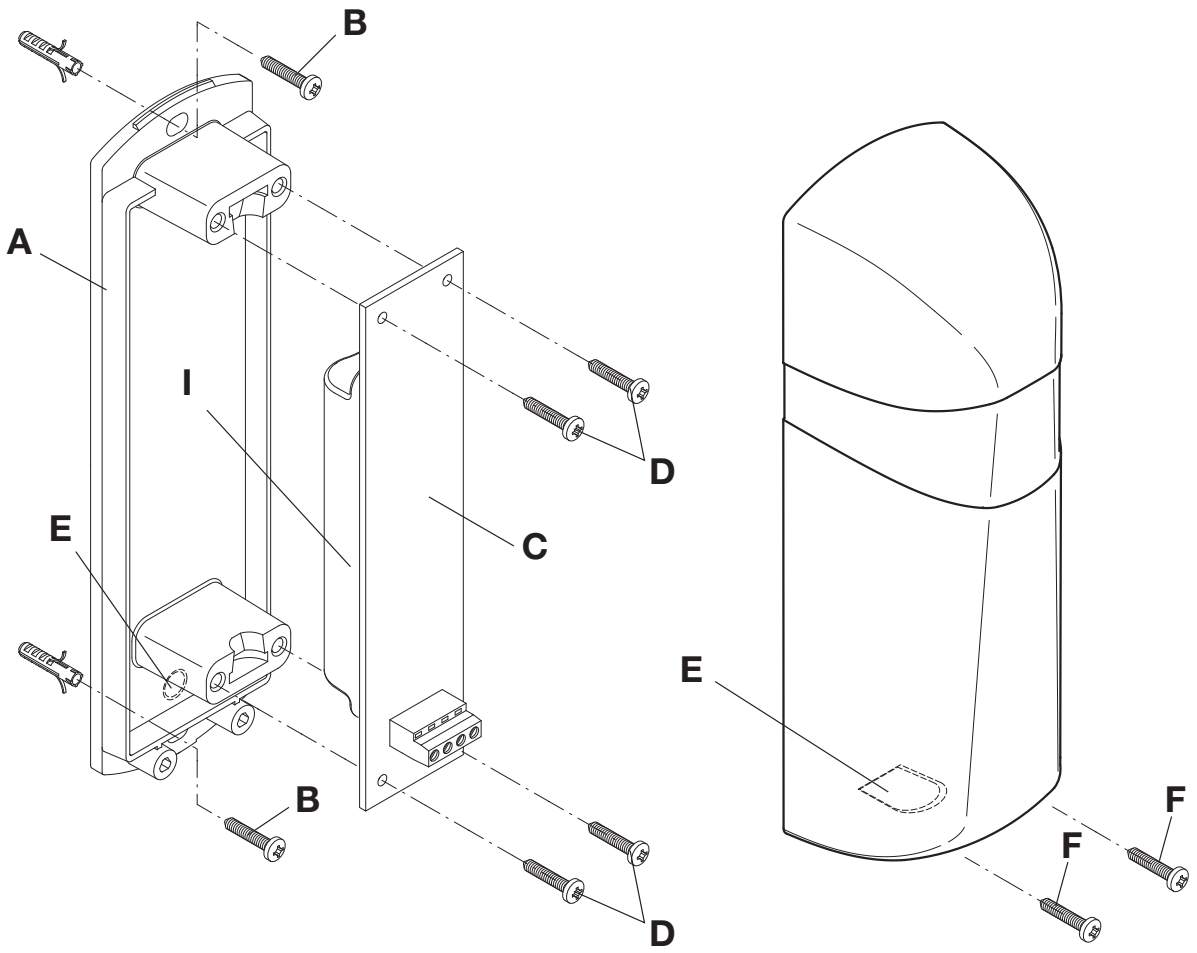

J1
S1
RF.+ SUN PANEL
J1 Close
RF
J1 Open
J2 DAS
Close
DAS 8K2
J2 DAS
Open
DAS N.C.
LED 2
J2
1 2 3 4
(-) (+)

4


B
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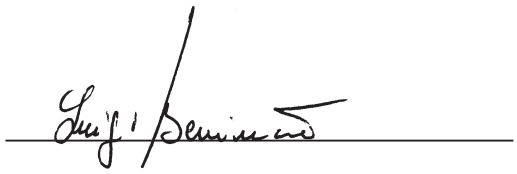
EC Declaration of Compliance

Manufacturer: **Automatismi Benincà** SpA.
Address: Via Capitello, 45 - 36066 Sandrigo (VI) - Italy
This is to certify that:
The radio-transmitter/radio-receiver for movable sensitive safety edges **RF-RF.SUN-SC.RF**.
is compliant with the following regulations:
Directive on the electromagnetic compatibility: **89/336/CCE, 93/68/CEE**
Directive on low voltage:**73/23/CEE, 93/68/CEE**
ETSI EN 301 489-3 V1.4.1 (2002)
ETSI EN 301 489-1 V1.4.1 (2002)
ETSI EN 300 220-3 V1.1.1 (2000)
EN 60950-1 (2001)

Benincà Luigi, Legal Officer.
Sandrigo, 07/07/2011.



TECHNICAL DATA

DEVICE FOR RF MOBILE SAFETY EDGES	
Power supply	2 batteries, 1.5V, alkaline 2.7Ah
Max range in optimal conditions	100 m
Useful range	30 m
Protection level	IP 44
Operating temperature	-20 °C / +70° C
Duration of batteries	3 years with 10 openings/day
Operating frequency	868 MHz

DEVICE FOR RF MOBILE SAFETY EDGES	
Power supply	2 batteries 1.2 NiMh (1800mAh), AA rechargeable
Max range in optimal conditions	100 m
Useful range	30 m
Protection level	IP 44
Operating temperature	-20°C / +70°C
Duration of batteries (without load)	150 days
Operating frequency	868 MHz

SUN SOLAR PANEL	
Solar cell	Amorphous silicon
Overall dimensions	43x185x12mm
Recharge current	30 mA with 50000 Lux (sun) 10 mA with 20000 Lux (changeable) 0,5 mA with 2000 (clwdy)
Recharge voltage	4.5V
Charge time	96h

RF / RF.SUN

DESCRIPTION

Radio-transmitter for sensitive safety edges, to be applied on movable closures, pursuant to EN 12978 standard.
This allows for the bi-directional communication via radio between the device on mobile edge and the SC.RF receiver mounted on the control unit.
It is available in 2 versions (Fig. 1):
1 RF*: Powered with two alkaline batteries, AA type.
2 RF.SUN: It is powered with two NiMh batteries, recharged by solar panel SUN (Fig. 1 – ref. 3) to be installed on the movable closure.
Both sensitive edges of the resistive type (8K2) and edges of the mechanical type can be used on both models with normally closed contact.

OPERATION

A typical installation of the RF.SUN transmitter on the leaf of a sliding motor is shown in figure 2.

1 RF or RF SUN transmitter. The status of the sensitive edge is sent via radio to the SC.RF receiver.
2 Sensitive safety edge of the resistive or mechanical type.
3 The SUN solar panel provides for the recharging of the battery inside the RF.SUN device
4 The SC.RF radio receiver sends information on the status of the sensitive edge to the control unit.

Note: SC.RF is provided with two separate communication channels, each of them is able to store up to 4 RF/RF.SUN devices. Therefore, up to eight sensitive safety edges can be mounted.
Each single transmitter requires a special learning proceeding to communicate with the receiver, by using the push-button S1 (Fig. 3), as indicated in the manual supplied with SC.RF.

WIRE CONNECTIONS (Fig. 3)

1-2 Input, sensitive safety edge.
3-4 Input, power supply from solar panel.
3- black (white).
4+ red (brown).
J1 Selection jumper, power supply.
Open jumper: The device is powered by inside battery only
Closed jumper: The device is powered by inside battery which is recharged through SUN panel.
J2 Jumper to select the sensitive safety edge. Open jumper: safety edge of the mechanical type
Closed jumper: safety edge of the resistive type, 8K2

FITTING (Fig. 4)

A Bottom
B Screws for fitting to wall
C Printed board
D Fitting screws
E Presetting for the passage of cables
F Closing screws
I Niche for two batteries, AA 1.5V

REPLACEMENT OF THE BATTERY

After a certain period, more or less long according to conditions of use, alkaline batteries supplied with the RF device should be replaced.
They can be replaced by standard AA alkaline batteries.

The NiMh batteries supplied with SUN.RF feature a much longer duration. They need to be replaced only when their rechargeable capacity is ended and must be mandatorily replaced with similar batteries.

All batteries are considered as special waste!

Do not leave in the environment but dispose the batteries according to regulations in force.

INDICATOR LED

LED 2, shown in Figure 3, performs the diagnostics function of the device.
Press key S1 for a short period of time:
- if the LED starts flashing, this means that the sensitive safety edge has not hit any obstacle
- if the LED switches on with fixed light, this means that an obstacle has been detected. The transmitter is sending an alarm signal to the receiver.

IMPORTANT NOTICE

For the correct operation of the device, the following should be carefully followed:
1 The solar panel must be mounted where it will get direct sun exposure. The transparent panel must be turned upwards.
2 Check that during the day the panel is not shaded (trees, buildings, etc.).
3 Clean the solar panel periodically from dust and dirt.
4 The better the exposure of the panel, the better the performance and reliability of the device.

If the panel is mounted in areas with little sun exposure, 2 solar panels can be connected in parallel.

5 If correctly installed and maintained perfectly efficient, the system will be able to operate for a very long period of time. At the end of this period, the battery should be however replaced due to the maximum number of recharge cycle reached.
6 A correctly installed and maintained device will comply with the safety level set out be regulations in force. However, the manufacturer shall be held harmless for any damages or injuries caused by incorrect installation, incorrect maintenance, unintended or incorrect use of the device.

DISPOSAL

When the product is out of order, it must be disposed according to regulations in force on waste disposal and recycling of the various components (metal, plastics, electrical wires, etc.). For this purpose, it is advisable to contact your installer or a specialised company.