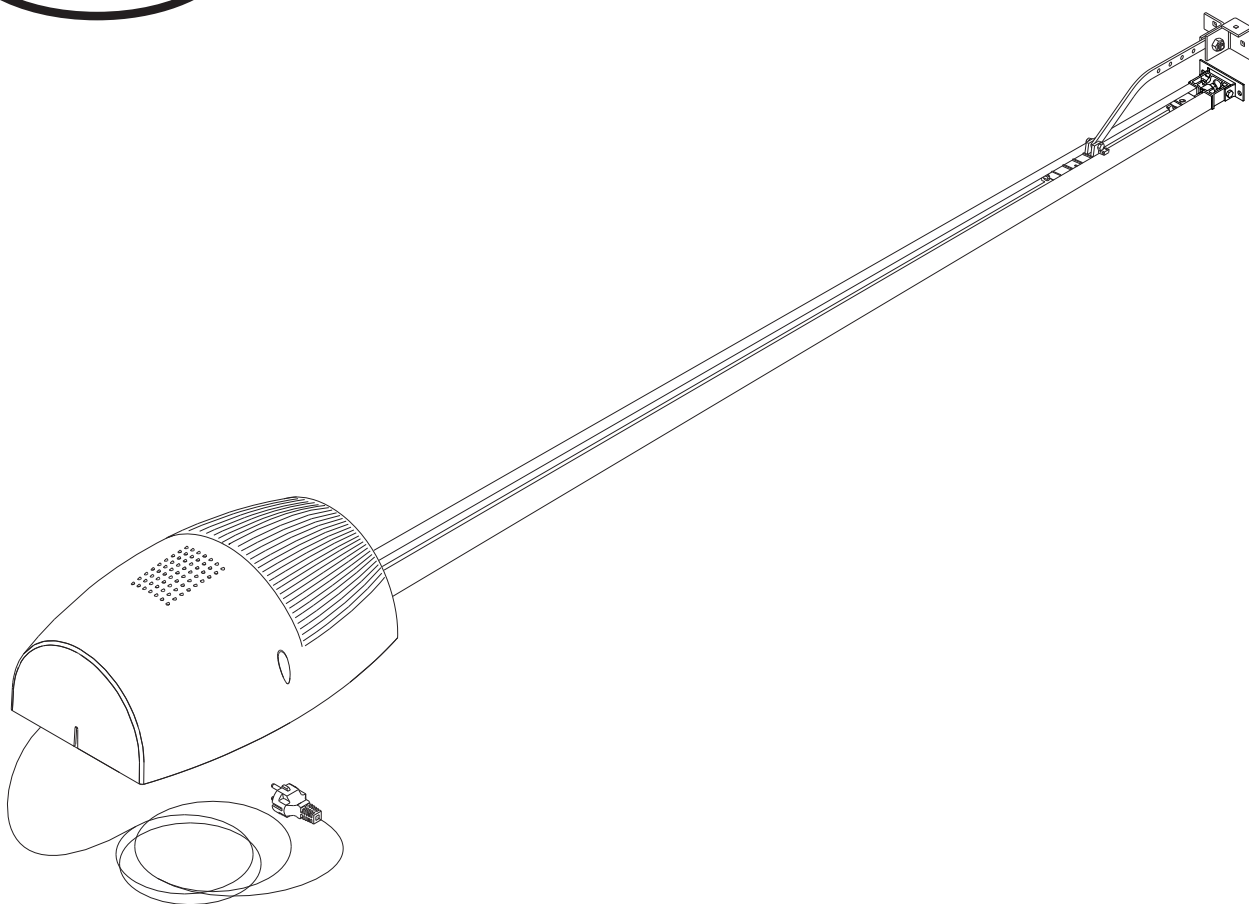




- I** AUTOMAZIONI PER PORTE BASCULANTI E SEZIONALI
- GB** AUTOMATION FOR OVERHEAD AND SECTIONAL GARAGE DOORS
- F** AUTOMATION POUR PORTES BASCULANTES ET SECTIONALES
- D** GARAGENTORANTRIEB FÜR SCHWING UND SEKTIONALTÖRE
- E** AUTOMATIZACIONES PARA PUERTAS BASCULANTE Y SECCIONALES
- P** AUTOMATIZAÇÕES PARA PORTAS BASCULANTES DE MOLAS E SECCIONAIS



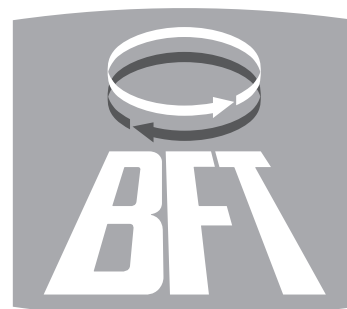
**BOTTICELLI  
VENERE**



**ISTRUZIONI D'USO E DI INSTALLAZIONE**  
**INSTALLATION AND USER'S MANUAL**  
**INSTRUCTIONS D'UTILISATION ET D'INSTALLATION**  
**MONTAGE- und BEDIENUNGSANLEITUNG**  
**INSTRUCCIONES DE USO Y DE INSTALACION**  
**INSTRUÇÕES DE USO E DE INSTALAÇÃO**



**AZIENDA CON SISTEMA DI GESTIONE  
 INTEGRATO CERTIFICATO DA DNV  
 = UNI EN ISO 9001:2000 =  
 UNI EN ISO 14001:2004**



**DICHIARAZIONE DI CONFORMITÀ / DECLARATION OF CONFORMITY / DÉCLARATION DE CONFORMITÉ  
KONFORMITÄTSEKRLÄRUNG / DECLARACION DE CONFORMIDAD / DECLARAÇÃO DE CONFORMIDADE**  
(Dir. 98/37/EEC allegato / annex / on annexe / anlage / adjunto / ficheiro IIB)

Fabbricante / Manufacturer / Fabricant / Hersteller / Fabricante / Fabricante:

BFT S.p.a.

Indirizzo / Address / Adresse / Adresse / Dirección / Endereço:

Via Lago di Vico 44  
36015 - Schio  
VICENZA - ITALY

- Dichiara sotto la propria responsabilità che il prodotto: / Declares under its own responsibility that the following product:  
/Déclare sous sa propre responsabilité que le produit: / Erklärt auf eigene Verantwortung, daß das Produkt: / Declara, bajo su propia responsabilidad, que el producto: / Declara, sob a sua responsabilidade, que o produto:

Motoriduttore per porte sezionali mod. / Gearmotor for sectional doors mod. / Motoréducteur pour portes multi-lames mod. /  
Getriebemotor für Sektionaltore Modell. / Motorreductor para puertas seccionales mod. / Motoredutor para portas seccionais mod.

## BOTTICELLI

- È costruito per essere incorporato in un macchinario che verrà identificato come macchina ai sensi della DIRETTIVA MACCHINE. / Has been produced to be incorporated into a machinery, which will be identified as a machine according to the MACHINERY DIRECTIVE. / A été construit pour l'incorporation successive dans un équipement qui sera identifié comme machine conformément à la DIRECTIVE MACHINES. / Dafür konstruiert wurde, in ein Gerät eingebaut zu werden, das als Maschine im Sinne der MASCHINEN-DIREKTIVE identifiziert wird. / Ha sido construido para ser incorporado en una maquinaria, que se identificará como máquina de conformidad con la DIRECTIVA MAQUINAS. / Foi construído para ser incorporado numa maquinaria, que será identificada como máquina em conformidade com a DIRECTIVA MÁQUINAS
- È conforme ai requisiti essenziali di sicurezza delle Direttive: / It also complies with the main safety requirements of the following Directives: / Est conforme aux exigences essentielles de sécurité des Directives: / Es entspricht den grundlegenden Sicherheitsbedingungen der Direktiven: / Es conforme a los requisitos esenciales de seguridad de las Directivas: / Está conforme aos requisitos essenciais de segurança das Directivas:

BASSA TENSIONE / LOW VOLTAGE / BASSE TENSION / NIEDERSpannung / BAJA TENSION / BAIXA TENSÃO  
73/23/CEE, 93/68/CEE (EN60335-1 ('03), EN60335-2-95) (e modifiche successive / and subsequent amendments / et  
modifications successives / und ihren nachfolgende Änderungen / e modificações sucessivas / y modificaciones sucesivas).

COMPATIBILITÀ ELETTROMAGNETICA / ELECROMAGNETIC COMPATIBILITY / COMPATIBILITÉ ÉLECTROMAGNÉTIQUE /  
ELEKTROMAGNETISCHE KOMPATIBILITÄT / COMPATIBILIDAD ELECTROMAGNETICA / COMPATIBILIDADE  
ELECTROMAGNÉTICA 89/336/CEE, 91/263/CEE, 92/31/CEE, 93/68/CEE (EN61000-6-1, EN61000-6-2, EN61000-6-3,  
EN61000-6-4, EN55014-1, EN55014-2) (e modifiche successive / and subsequent amendments / et modifications successives /  
und ihren nachfolgende Änderungen / e modificações sucessivas / y modificaciones sucesivas).

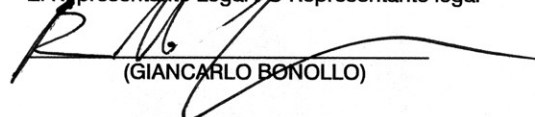
DIRETTIVA MACCHINE / MACHINERY DIRECTIVE / DIRECTIVE MACHINES / MASCHINEN-DIREKTIV / DIRECTIVA  
MAQUINAS / DIRECTIVA MÁQUINAS 98/37/CEE (EN 12453('01), EN 12445 ('01), EN12978 ('03)) (e modifiche successive / and  
subsequent amendments / et modifications successives / und ihren nachfolgende Änderungen / e modificações sucessivas / y  
modificaciones sucesivas).

APPARECCHIATURE RADIO / RADIO SETS / INSTALLATIONS RADIO / RADIOAPPARATE / RADIOEQUIPOS /  
RADIOAPARELHOS 99/5/CEE (ETSI EN 301 489-3 (2000) +ETSI EN 301 489-1 (2000), ETSI EN 300 220-3 (2000)) (e modifiche  
successive / and subsequent amendments / et modifications successives / und ihren nachfolgende Änderungen / e modificações  
sucessivas / y modificaciones sucesivas).

- Si dichiara inoltre che è vietata la messa in servizio del prodotto, prima che la macchina in cui sarà incorporato, sia stata dichiarata conforme alle disposizioni della DIRETTIVA MACCHINE. / We also declare that it is forbidden to start the product before the machinery into which it will be incorporated is declared in compliance with the prescriptions of the MACHINERY DIRECTIVE. / Nous déclarons en outre que la mise en service du produit est interdite, avant que la machine où il sera incorporé n'ait été déclarée conforme aux dispositions de la DIRECTIVE MACHINES. / Es wird außerdem erklärt, daß die Inbetriebnahme des Produkts verboten ist, solange die Maschine, in die es eingebaut wird, nicht als mit den Vorschriften der MASCHINEN-DIREKTIVE konform erklärt wurde. / Se declara, además, que está prohibido instalar el producto antes de que la máquina en la que se incorporará haya sido declarada conforme a las disposiciones de la DIRECTIVA MAQUINAS / Declaramos, além disso, que é proibido instalar o produto, antes que a máquina em que será incorporada, tenha sido declarada conforme às disposições da DIRECTIVA MÁQUINAS

SCHIO, 13/02/2006

Il Rappresentante Legale / The legal Representative  
Le Représentant Légal / Der gesetzliche Vertreter  
El Representante Legal / O Representante legal

  
(GIANCARLO BONOLLO)

Thank you for buying this product, our company is sure that you will be more than satisfied with the product's performance. The product is supplied with a "Warning" leaflet and an "Instruction booklet". These should both be read carefully as they provide important information about safety, installation, operation and maintenance. This product complies with the recognised technical standards and safety regulations. We declare that this product is in conformity with the following European Directives: 89/336/EEC, 73/23/EEC, 98/37/EEC, 99/05/EEC (and subsequent amendments).

## 1) GENERAL OUTLINE

The **BOTTICELLI** system is compatible with the **EElink** protocol for fast installation and maintenance. It is suitable for motorising sectional doors, protruding fully retracting spring operated overhead doors and counterweight overhead doors provided with an appropriate towing arm. The overhead door must not be higher than 3 metres. It is easy to install and fast to fit and does not need the door to be modified. The irreversible gearmotor keeps the door locked in the closing position. The control unit is builtin. It controls the operation relays and the safety devices (photocell, rubber skirt) before performing every manoeuvre.

**This product was designed to motorise the types of door mentioned above. Any other use is considered contrary to that intended by the manufacturer who, therefore, cannot be held responsible for any injuries to persons or animals, or damage to things which might derive from misuse.**

## 2) SAFETY

If correctly installed and used, this automation device satisfies the required safety level standards. However, it is advisable to observe some practical rules in order to avoid accidental problems. Before using the automation device, carefully read the operation instructions and keep them for future reference.

- Keep children, persons and things outside the automation working area, particularly during operation.
- Keep radio control or other control devices out of children's reach, in order to avoid any unintentional automation activation.
- Do not intentionally oppose the leaf movement.
- Do not attempt to open the door manually, if the internal locking system has

not been released by pulling the appropriate wire connected to the carriage (fig.1), or the external lock (**SM1** or **SET/S** fig.2-fig.3) activated.

- Do not modify the automation components.
- In case of malfunction, disconnect the power supply, activate the emergency release to gain access to the automation device and request the assistance of a qualified technician (installer).
- Before proceeding to any external cleaning operation, disconnect the mains powers supply.
- Keep the photocell optical components and luminous signal indication devices clean. Check that the safety devices (photocells) are not obscured by branches or shrubs.
- For any direct assistance to the automation system, request the assistance of a qualified technician (installer).
- Have qualified personnel check the automation system once a year.
- Check the installation frequently, in particular cables, springs and supports to find out any unbalance, sign of wear or damage. Do not use the operator in the case where any repairs or adjustments are required, given that an installation malfunction or an incorrectly balanced door could cause injuries.
- Once a month, check that the motor reverses when encountering an obstacle 50 mm away from the floor. Should operation show to be incorrect, request the assistance of a qualified technician, given that an incorrect adjustment could be dangerous.

## 3) EMERGENCY MANOEUVRE

In case of electric power failure or system malfunction, the manoeuvre must be carried out manually by pulling the wire connected to the carriage, as in fig.1. For garages which are not provided with a second exit, it is compulsory to fit an external key release device like Mod. **SM1** (fig.2) or Mod. **SET/S** (fig.3).

**WARNING:** If the door is not correctly balanced, activation of the carriage manual release could provoke an uncontrolled door movement.

## 4) BULB REPLACEMENT

To replace the courtesy light bulb, remove its transparent cover (fig.4).  
**WARNING:** Only 24V 25W max E14 bulbs must be used.

Fig. 1

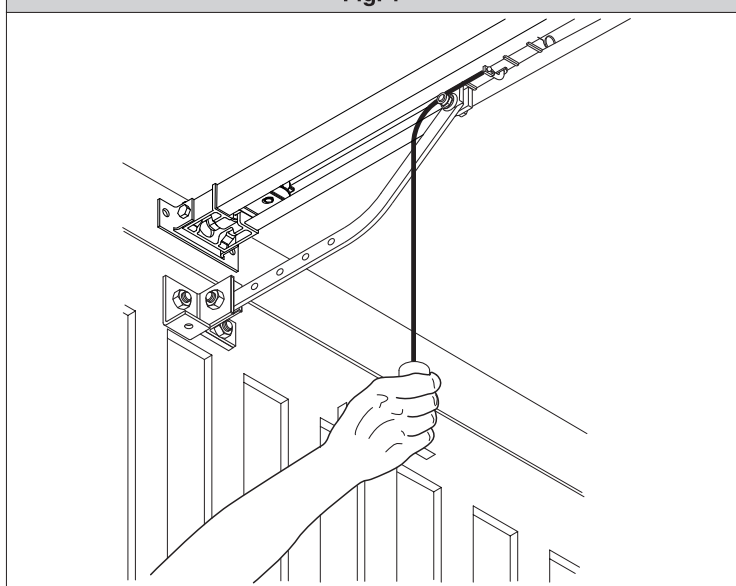


Fig. 2

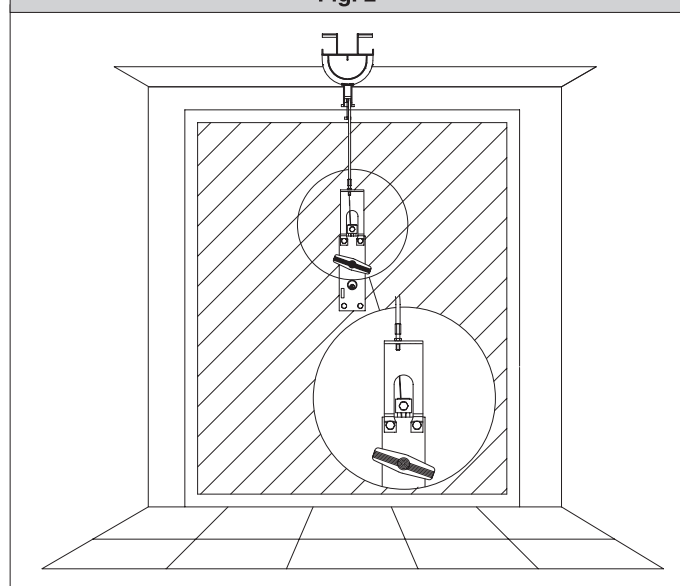


Fig. 3

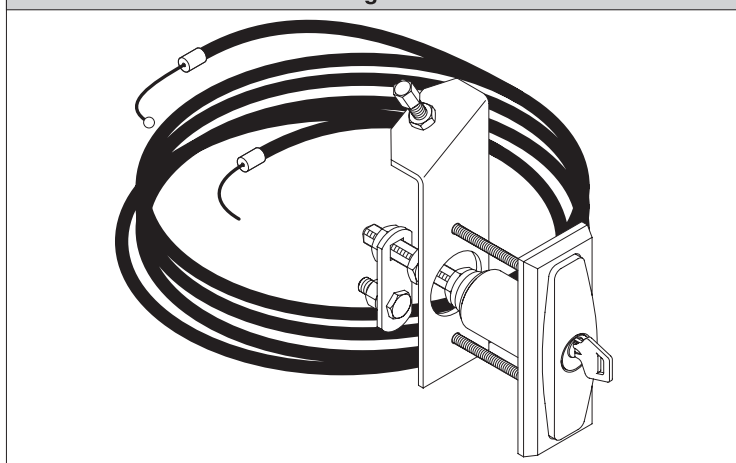
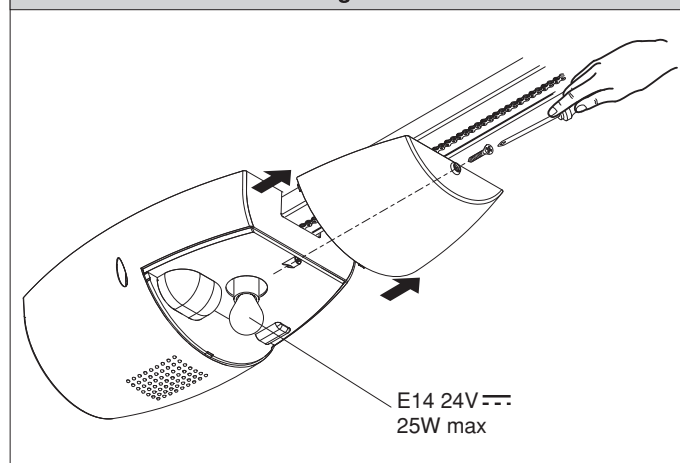


Fig. 4





Thank you for buying this product, our company is sure that you will be more than satisfied with the product's performance. The product is supplied with a "Warnings" leaflet and an "Instruction booklet". These should both be read carefully as they provide important information about safety, installation, operation and maintenance. This product complies with the recognised technical standards and safety regulations. We declare that this product is in conformity with the following European Directives: 89/336/EEC, 73/23/EEC, 98/37/EEC, 99/05/EEC (and subsequent amendments).

## 1) GENERAL SAFETY

**WARNING!** An incorrect installation or improper use of the product can cause damage to persons, animals or things.

- The "Warnings" leaflet and "Instruction booklet" supplied with this product should be read carefully as they provide important information about safety, installation, use and maintenance.
- Scrap packing materials (plastic, cardboard, polystyrene etc) according to the provisions set out by current standards. Keep nylon or polystyrene bags out of children's reach.
- Keep the instructions together with the technical brochure for future reference.
- This product was exclusively designed and manufactured for the use specified in the present documentation. Any other use not specified in this documentation could damage the product and be dangerous.
- The Company declines all responsibility for any consequences resulting from improper use of the product, or use which is different from that expected and specified in the present documentation.
- Do not install the product in explosive atmosphere.
- The construction components of this product must comply with the following European Directives: 89/336/CEE, 73/23/EEC, 98/37/EEC and subsequent amendments. As for all non EEC countries, the abovementioned standards as well as the current national standards should be respected in order to achieve a good safety level.
- The Company declines all responsibility for any consequences resulting from failure to observe Good Technical Practice when constructing closing structures (door, gates etc.), as well as from any deformation which might occur during use.
- The installation must comply with the provisions set out by the following European Directives: 89/336/CEE, 73/23/EEC, 98/37/EEC and subsequent amendments.
- Disconnect the electrical power supply before carrying out any work on the installation. Also disconnect any buffer batteries, if fitted.
- Fit an omnipolar or magnetothermal switch on the mains power supply, having a contact opening distance equal to or greater than 3,5 mm.
- Check that a differential switch with a 0.03A threshold is fitted just before the power supply mains.
- Check that earthing is carried out correctly: connect all metal parts for closure (doors, gates etc.) and all system components provided with an earth terminal.
- Fit all the safety devices (photocells, electric edges etc.) which are needed to protect the area from any danger caused by squashing, conveying and shearing.
- Position at least one luminous signal indication device (blinker) where it can be easily seen, and fix a Warning sign to the structure.
- The Company declines all responsibility with respect to the automation safety and correct operation when other manufacturers' components are used.
- Only use original parts for any maintenance or repair operation.
- Do not modify the automation components, unless explicitly authorised by the company.
- Instruct the product user about the control systems provided and the manual opening operation in case of emergency.
- Do not allow persons or children to remain in the automation operation area.
- Keep radio control or other control devices out of children's reach, in order to avoid unintentional automation activation.
- The user must avoid any attempt to carry out work or repair on the automation system, and always request the assistance of qualified personnel.
- Anything which is not expressly provided for in the present instructions, is not allowed.
- Installation must be carried out using the safety devices and controls prescribed by the EN 12978 Standard.
- Fit any fixed control within sight of the door but away from moving parts, higher than 1.5 m.
- Add a label bearing the following notices:  
"Keep children away from the moving door".  
"WARNING: risk of squashing".  
Regularly check that the door reverses its movement when colliding with an obstacle 50 mm away from the floor and, if necessary, set it correctly.

## 2) GENERAL OUTLINE

The BOTTICELLI system is suitable for motorising sectional doors (fig. 3), protruding fully retracting spring-operated overhead doors (fig. 2) and counterweight overhead doors provided with an appropriate towing arm (fig. 4). The overhead door must not be higher than 3 metres. Its easy installation allows fast fitting without needing the door to be modified. The irreversible gearmotor keeps the door locked in the closing position.

## 3) TECHNICAL SPECIFICATIONS

### 3.1) Actuator

Power supply:	230V~±10%, 50/60Hz single-phase (*)
Motor voltage:	24V
Max. power absorbed from mains:	236W
Lubrication:	permanent grease
Towing and pushing force:	600N
Working stroke:	TRACK L.=2900 working stroke=2400 mm(**) TRACK L.=3500 working stroke=3000 mm(***)
Average speed:	5 m/min
Impact reaction:	integrated torque limiter on control panel
Manoeuvres in 24 hours:	20
Limit switch:	Electronic with ENCODER
Courtesy light:	24V~ 25W max, E14 bulb
Working temperature:	-15°C / +60°C
Degree of protection:	IPX0
Motor head weight:	5kg
Noise level:	<70dB(A)
Dimensions:	see fig.1

(\*) Available in all mains voltages.

(\*\*) By turning the motor head by 90° (Fig.11) the useful stroke will be 2580 mm.

(\*\*\*) By turning the motor head by 90° (Fig.11) the useful stroke will be 3180 mm.

## 4) ACTUATOR INSTALLATION

### 4.1) Preliminary checks

- Check that the door is balanced.
- Check that the door slides smoothly along its entire travel.
- If the door has not been newly installed, check the wear condition of all its components.
- Repair or replace faulty or worn parts.
- The automation reliability and safety are directly influenced by the state of the door structure.
- Before fitting the motor, remove any superfluous ropes or chains and disable any unnecessary appliances.

### 4.2) FITTING

After unpacking, dispose of the parts which make up the package properly, by separating the different type of materials (cardboard, polystyrene, PVC, etc.) according to the national rules in force.

- 1) Remove the existing locking bolt from the cremone bolt of the door.
- 2) In order to fix the track correctly, mark the mid-point of the door, position the BIN on the ceiling and mark the holes (Fig. 6).
- 3) Drill the ceiling with a 10-dia. drill bit following the previously made marks, and insert the Fischer plugs.
- 4) Secure the track at the base, fig.7 (ref.1-2) and fig.8 (ref.3-4-5).
- 5) With the help of an adequate support, lift the entire motor, screw the screws onto the track-holding bracket without fixing them to the door frame (Fig.9A) or, if the height allows it, fit the bracket to the masonry lintel by means of plugs (Fig.9B).
- 6) Lift the motor-driven head until everything rests against the ceiling, and insert the fixing screws which lock the track (including the anchoring bracket screws).
- 7) If the motor head and the track are not fixed directly to the ceiling, see Fig.10 (always check that the track is level and perpendicular to the ceiling).
- 8) In the case where the track is turned by 90° with respect to the motor head, use the reference template in Fig. 11A to cut out the guard, keeping to the measurements indicated. For fixing the BIN to the ceiling, see Fig.6 and in case the track is not fixed directly to the ceiling, see Fig.12.
- 9) In the case where the track is made in two halves, see Fig.13; for the different types of fixing methods, see the previous figures.
- 10) Release the carriage and fix the anchoring brackets to the door panel (Fig.14). The distance allowed between track and sectional door is 108 to 166 mm. In case of greater distance, it is necessary to use the brackets and lower the motor; in case of shorter distance, it is necessary to shorten the towing plate.
- 11) Stick the adhesive labels supplied next to the dangerous points (Fig. 5).

## 5) CHAIN TIGHTENER ADJUSTMENT (BOTTICELLI)

The operator supplied is already calibrated and inspected. Should the chain tension need to be adjusted, proceed as shown in fig. 15.

**WARNING: the anti-tear rubber element must never be completely compressed. Scrupulously check that the rubber does not become totally compressed during operation.**

## 6) ELECTRICAL INSTALLATION SET-UP (Fig.16)

- M)** Actuator  
**Ft)** Transmitter photocell  
**Fr)** Receiver photocells  
**T)** 1-2-4 channel transmitter.

Arrange for the connections of accessories and safety and control devices to reach the motor unit, keeping the mains voltage connections clearly separate from the extra low safety voltage connections (24V) by means of the appropriate cable holder (fig. 8 ref. 5P1).

Proceed to connection following the indications given in the wiring diagram. The cables for connecting the accessories must be protected by a raceway (fig. 8 ref. 5C1).

## 7) VENERE Control panel (Fig.17)

Supply to accessories: .....24V~ (180mA max)  
 .....24V~ Vsafe VENERE (180mA max)  
 Torque limiter setting:.....on closing and opening  
 Automatic closing time:.....from 3 to 120s  
 Blinker connection:.....24V~ max 25W  
 Service light switching-on time:.....90s  
 Incorporated rolling-code radio receiver:.....frequency 433.92 MHz  
 Coding:.....rolling-code algorithm  
 No. combinations:.....4 milliard  
 Antenna impedance:.....50Ohm (RG58)  
 Max no. radio controls to be memorised:.....10  
 Slow-down distance:.....closing: ~24 cm ..... opening: ~24 cm  
 Fuses:.....see figure 17

### 7.1) Terminal board connections (Fig.17)

**WARNINGS - For wiring and installation operations, refer to the current standards and good technical principles.**

The wires supplied with extra low safety voltage (24V) must be kept physically separate from the low voltage wires, or else they must be provided with adequate additional insulation of at least 1mm.

The wires must be clamped by an extra fastener near the terminals, for example by bands.

TERMINAL	DESCRIPTION
JP6	transformer wiring
JP7	motor wiring
1-2	Antenna input for integrated radio-receiver board (1: <b>BRAID</b> . 2: <b>SIGNAL</b> )
3-4	START input (N.O.)
3-5	STOP input (N.C.) If not used, leave the jumper inserted.
3-6	PHOTOCELL input (N.C.) If not used, leave the jumper inserted.
3-7	FAULT input (N.O.) Input for photocells provided with checking N.O. contact
8-9	24 V~ output for blinking light (25 W max)
10-11	24V~ 180mA max output – power supply for photocells or other devices
12-13	24V~ Vsafe 180mA max output – power supply for checking photocell transmitters.

### 7.2) LED (Fig.17)

The led functions are as follows:

**“RADIO”:** Incorporated radio-receiver led.

**“SET”:** Limit device setting led - power ON.

### 7.3) DIP-SWITCH SELECTION (Fig.17)

**DIP1) IBL** – Locks impulses.

ON: During the opening phase, does not accept START commands.

OFF: During the opening phase, accepts START commands.

**DIP2) TEST PHOT**

ON: Enables photocell checking (5-connector photocells must be used - see Fig.17A-).

OFF: Disables photocell checking.

### 7.4) TRIMMER SETTING (Fig.17)

**TCA**

Sets the automatic closing time, after which the gate closes automatically (can be set from 3 to 120 sec). If the trimmer is turned all the way, the TCA is disabled.

**OPENING TORQUE**

Sets the ampere-stop sensitivity on opening.

**CLOSING TORQUE**

Sets the ampere-stop sensitivity on closing.

**NOTE: In case of obstacle detection, the Ampere-stop function halts the leaf movement, reverses the motion for 1 sec. and stays in the STOP state.**

**! WARNING: check that the impact force value measured at the points established by the EN 12445 standard is lower than that specified in the EN 12453 standard.**

**! Incorrect sensitivity setting can cause injuries to persons or animals, or damage to things.**

### 7.5) BUTTONS

**“UP”:** limit device setting and opening command. An autoset operation of the torque will be performed by keeping this button pressed for 5 seconds (Fig.19).

**“DOWN”:** limit device setting and closing command.

**“OK”:** radio programming.

### 8) LIMIT DEVICE SETTING (Fig.18)

- 1) Simultaneously press the “UP” and “DOWN” keys for 5 seconds. The “SET” led blinks to indicate that the limit device setting is activated.
- 2) Bring the leaf to the required closing position, using the “UP” and “DOWN” buttons on the control unit, and keeping in mind that the “DOWN” button closes the leaf, while the “UP” button opens the leaf.
- 3) As soon as the leaf reaches the required closing position, press the “OK” button in order to memorise the limit device closing position. The “SET” led confirms data storage by blinking for 1 second.
- 4) Bring the leaf to the required opening position, using the “UP” and “DOWN” buttons on the control unit, and keeping in mind that the “DOWN” button closes the leaf, while the “UP” button opens the leaf.
- 5) As soon as the leaf reaches the required opening position, press the “OK” button in order to memorise the limit device opening position. The “SET” led confirms data storage by blinking for 1 second and then lites up again.
- 6) Correctly position the “carriage lock” against the carriage (fig.18 ref.6 A-B).

**NOTE 1:** These manoeuvres are carried out in “hold-to-run” mode at reduced speed and with no safety devices activated.

**NOTE 2:** In case of errors, the “SET” led remains off on for 5 seconds.

### 9) OPENING / CLOSING TORQUE AUTOSETTING (Fig.19)

- 1) After reaching the closing end-of-stroke position, press the “UP” button for 5 seconds.
- 2) The “SET” led blinks rapidly and the leaf starts to open until it reaches the opening end-of-stroke.
- 3) 3 second down time.
- 4) The “SET” led blinks rapidly and the leaf starts to close until it reaches the closing end-of-stroke
- 5) After completing the autoset adjust the opening/closing torque trimmers so as to obtain the desired sensitivity to the obstacle.

**Any input activation (START, RADIOTRANSMITTER, STOP, PHOTOCELL) during autosetting will annul the autoset in progress.**

### 10) INTEGRATED RECEIVER

Transmitter versions which can be used:



all Rolling Code transmitters compatible with

### 10.1) ANTENNA INSTALLATION

**Use an antenna tuned to 433MHz.**

**For Antenna-Receiver connection, use RG8 coaxial cable.**

The presence of metallic masses next to the antenna can interfere with radio reception. In case of insufficient transmitter range, move the antenna to a more suitable position.

### 10.2) MANUAL TRANSMITTER PROGRAMMING (Fig.20)

- 1) Press the “OK” button on the control unit.
- 2) When the “RADIO” LED blinks, press the transmitter P1 hidden key, and the “RADIO” LED will stay on permanently.
- 3) Press the key to be memorised on the transmitter, LED “RADIO” will start blinking again.
- 4) To memorise another transmitter, repeat steps 2) and 3).
- 5) To exit the storage mode, wait until the LED is switched off completely.

**10.3) REMOTE TRANSMITTER PROGRAMMING (Fig.20)**

- 1) Press the hidden key (P1) of a transmitter that has been already memorised in standard mode by means of manual programming.
- 2) Press the normal key (T1-T2-T3-T4) of a transmitter that has been already memorised in standard mode by means of manual programming.
- 3) The courtesy lamp blinks. Press the hidden key (P1) of a transmitter to be memorised within 10s.
- 4) The courtesy lamp stays on permanently. Press the normal key (T1-T2-T3-T4) of a transmitter to be memorised.

The receiver exits the programming mode within 10s., within this time new additional transmitters can be memorised.

This mode does not require access to the control panel.


**10.4) TRANSMITTER CANCELLATION (Fig.20)**

To cancel the control unit memory totally, press the "OK" button on the control unit for 10 seconds ("RADIO" LED blinking). Correct memory cancellation will be indicated by the "RADIO" LED staying on permanently. To exit the storage mode, wait until the LED is switched off completely.

**11) EMERGENCY MANOEUVRE**

In case of electric power failure or system malfunction, the manoeuvre must be carried out manually by pulling the wire connected to the carriage, as in fig.21. For garages which are not provided with a second exit, it is compulsory to fit an external key release device like Mod. **SM1** (fig.22) or Mod. **SET/S** (fig.23).

**12) AUTOMATION CHECK**

 Before the automation device finally becomes operational, scrupulously check the following conditions:

- Check that all the safety devices (limit microswitches, photocells, electric edges etc) operate correctly.
- Check that the door (antisquash) thrust is comprised within the limits set out by the current standards, and anyway not too strong for the installation and operating conditions.
- Check that the chain-tightening rubber element is not completely compressed during the manoeuvre.
- Check the manual opening control operation.
- Check the opening and closing operations using the control devices fitted.
- Check the normal and customised operation electronic logics.

**13) AUTOMATION DEVICE USE**

Since the automation device can be remotely controlled by means of a radio control device or a Start button, and therefore when not in sight, all the safety devices must be frequently checked in order to ensure their perfect efficiency. In the event of any malfunction, request immediate assistance from qualified personnel. Children must be kept at a safe distance from the automation operation area.

**14) AUTOMATION CONTROL**

The use of this control device allows the gate to be opened and closed automatically. There are different types of controls (manual, radio control, magnetic card access etc.) depending on the installation requirements and characteristics. For the various control systems, see the relevant instructions. The automation device users must be instructed on control and operation.


**15) ACCESSORIES**

- SM1** External release device to be applied to the cremone bolt already fitted to the overhead door (fig.22).
- SET/S** External release device with retracting handle for sectional doors measuring max 50mm (fig.23).
- ST** Automatic bolt release device for spring-operated overhead doors. Fitted to the control arm, it automatically releases the side door bolts (fig.24).

**16) MAINTENANCE**

Before carrying out any maintenance operation, disconnect the system power supply.

- Periodically check the tension of the chain/belt (twice a year).
- Occasionally clean the photocell optical elements, if installed.
- Have a qualified technician (installer) check the correct setting of the electronic clutch.
- When any operational malfunction is found, and not resolved, disconnect the system power supply and request the assistance of a qualified technician (installer). When the product is out of service, activate the manual release device to allow the door to be opened and closed manually.

 If the power supply cable is damaged, it must be replaced directly by our company or our technical service department or by a technician having similar qualification so as to avoid any risks.

**16.1) FUSE REPLACEMENT (Fig.25)**

**WARNING!** Disconnect the mains voltage.

Remove the rubber protection from the fuse-carrier. Remove the fuse (Fig.25, Ref.A) to be replaced and replace it with a new one. After completing this operation, re-fit the rubber protection.

**17) SCRAPPING**

**Warning! This operation should only be carried out by qualified personnel.**

Materials must be disposed of in conformity with the current regulations. In case of scrapping, the automation devices do not entail any particular risks or danger. In case of materials to be recycled, these should be sorted out by type (electrical components, copper, aluminium, plastic etc.).

**18) DISMANTLING**

**Warning! This operation should only be carried out by qualified personnel.** When the automation system is disassembled to be reassembled on another site, proceed as follows:

- Disconnect the power supply and the entire external electrical installation.
- In the case where some of the components cannot be removed or are damaged, they must be replaced.

**The descriptions and illustrations contained in the present manual are not binding. The Company reserves the right to make any alterations deemed appropriate for the technical, manufacturing and commercial improvement of the product, while leaving the essential product features unchanged, at any time and without undertaking to update the present publication.**

Fig. 1

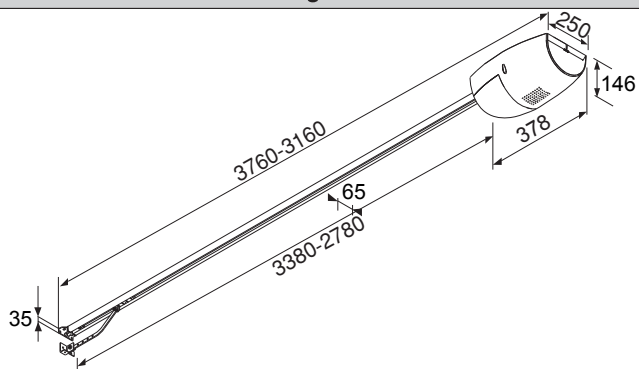


Fig. 2

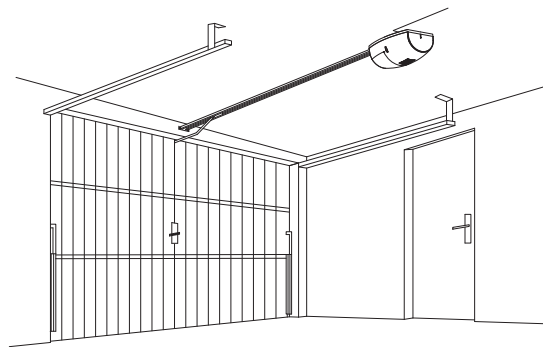


Fig. 3

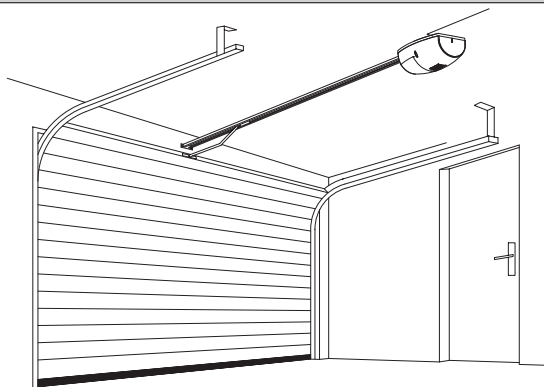


Fig. 4

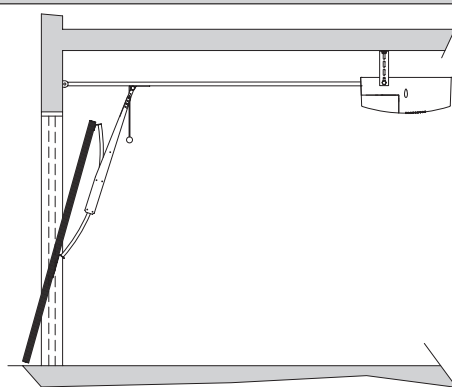


Fig. 5

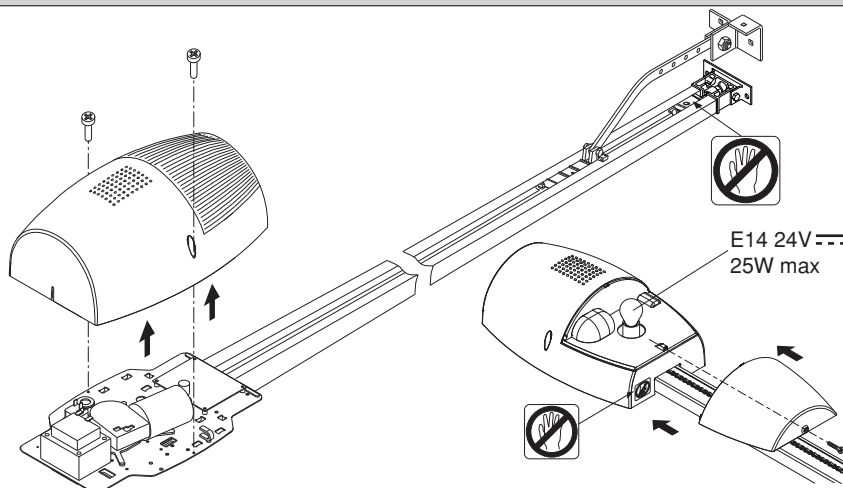


Fig. 7

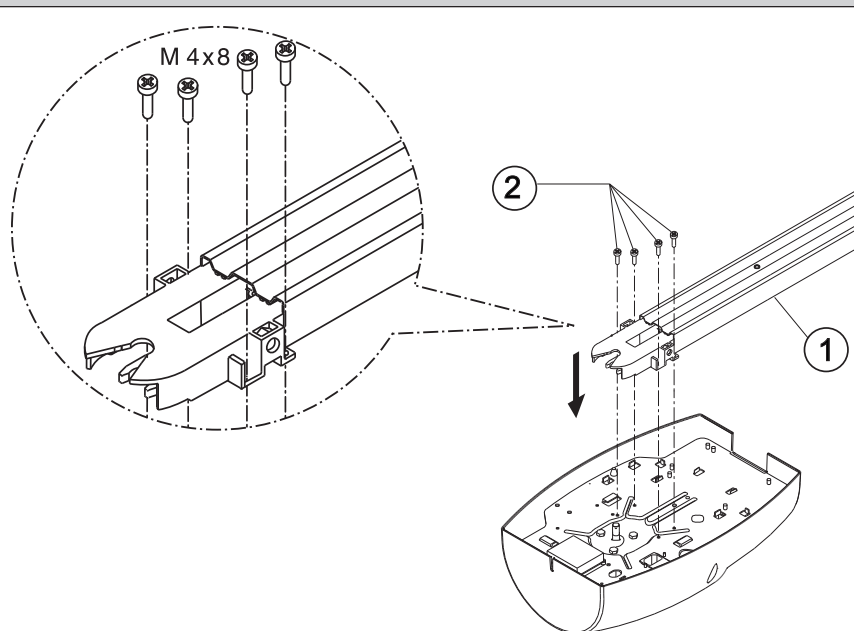
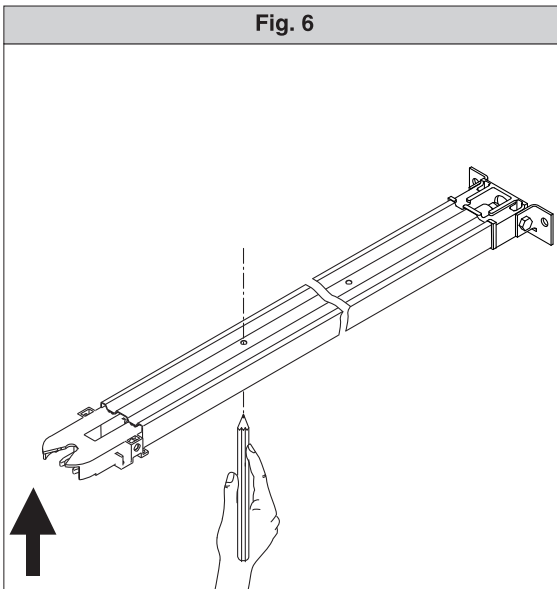


Fig. 6

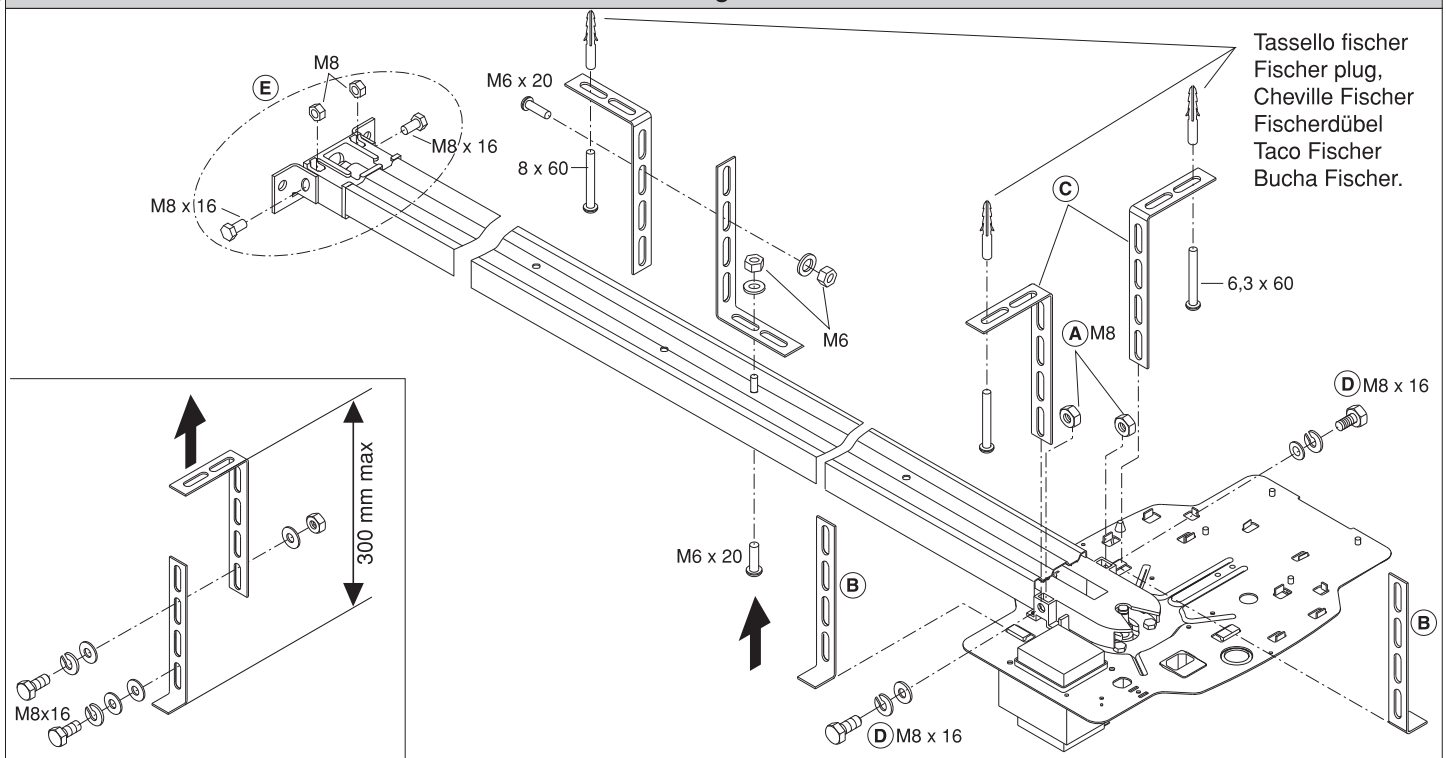




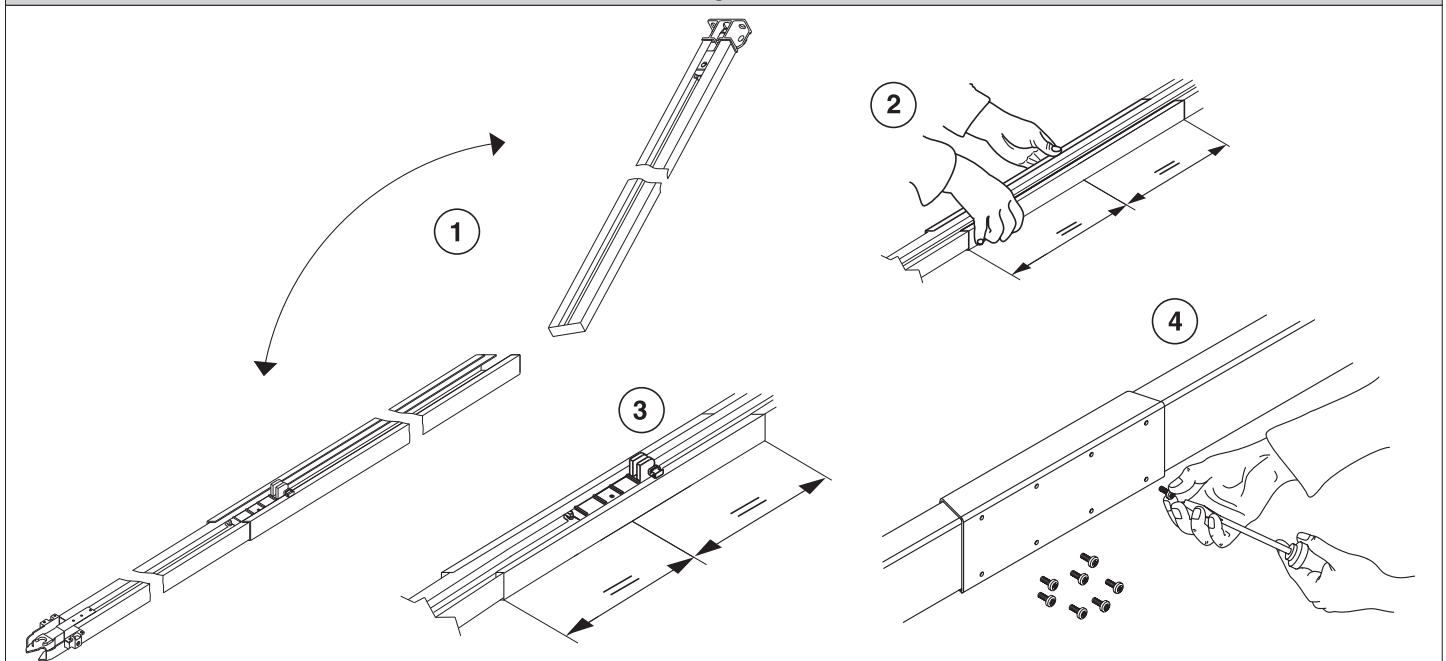




**Fig.12**



**Fig.13**



**Fig.14**

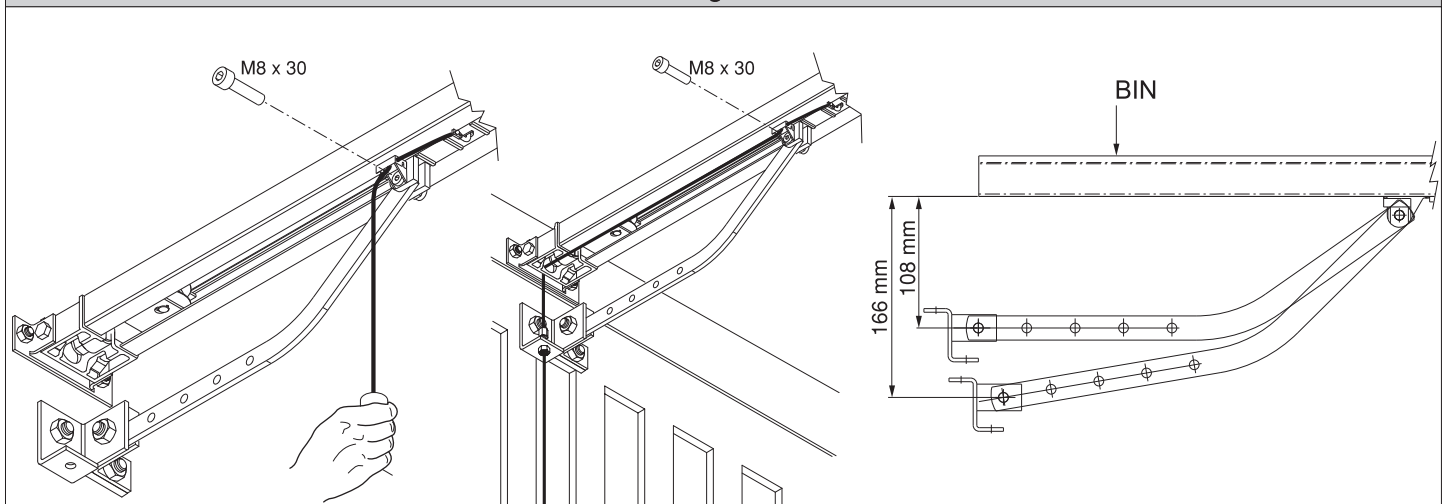


Fig.15

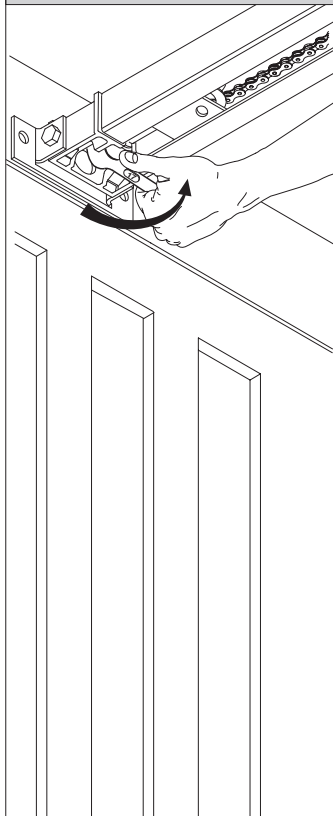


Fig.16

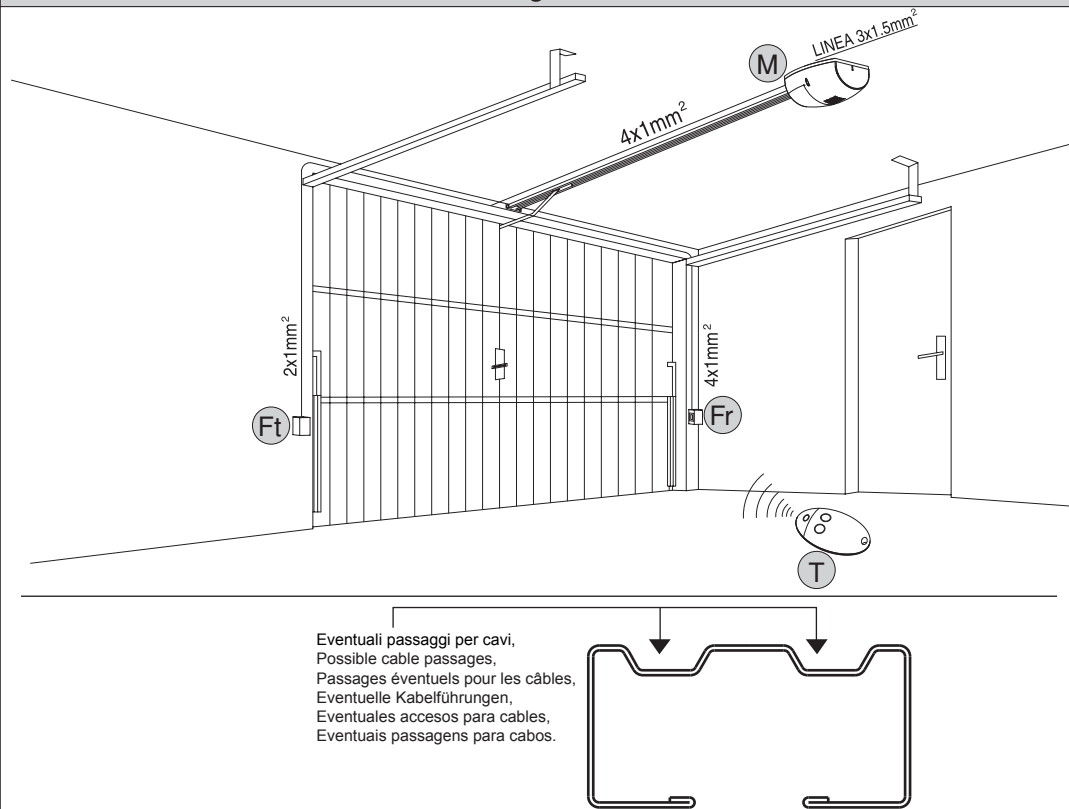
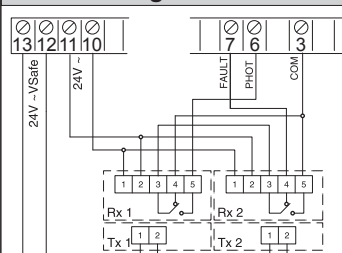
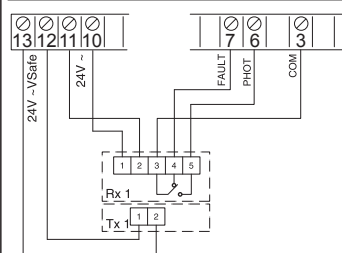


Fig.17

Fig.17A



4 PHOT (2 TX + 2 RX)  
DIP TEST PHOT= ON

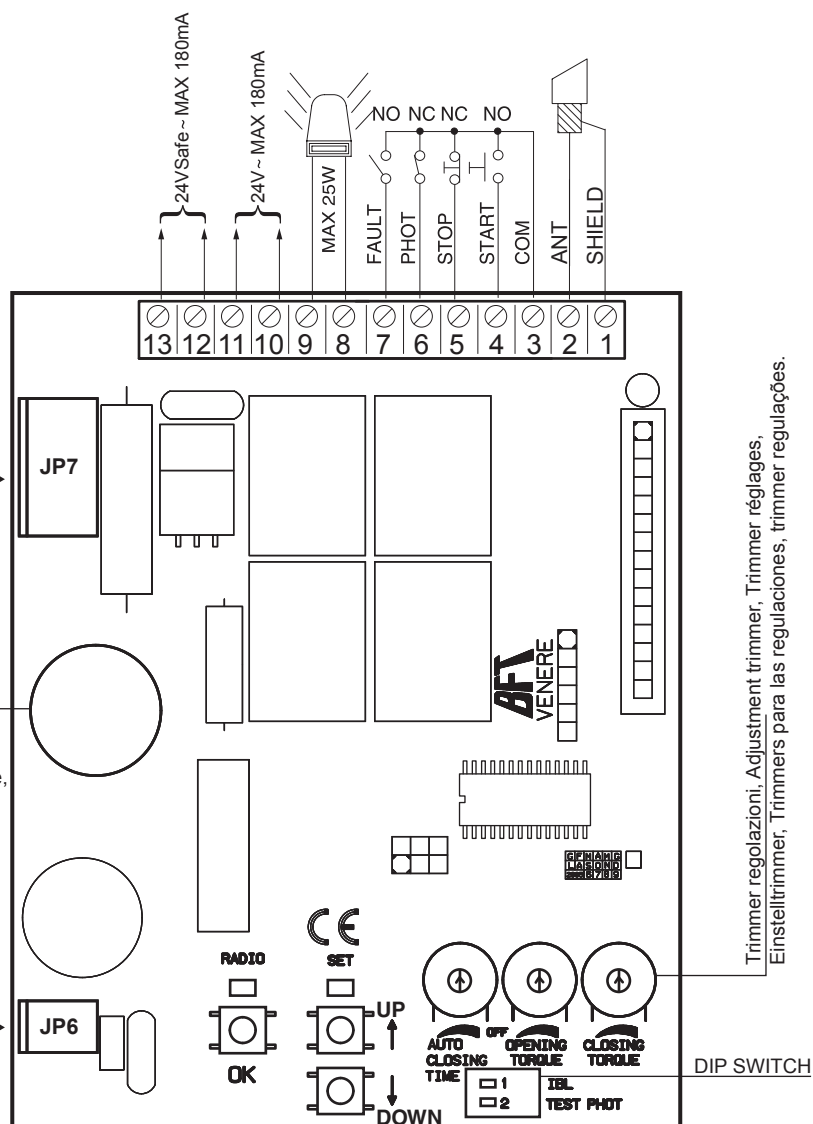
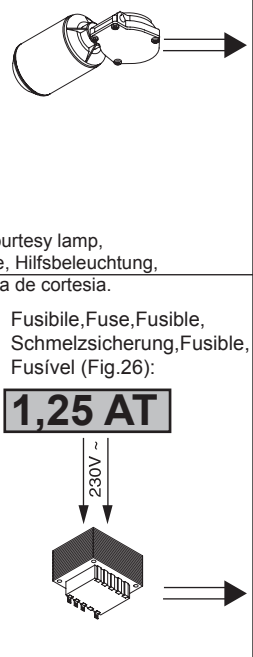
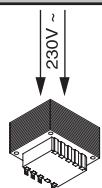


2 PHOT (1 TX + 1 RX)  
DIP TEST PHOT= ON

Luce di cortesia, Courtesy lamp,  
Lampe de courtoisie, Hilfsbeleuchtung,  
Luz interior, lâmpada de cortesia.

Fusibile, Fuse, Fusible,  
Schmelzsicherung, Fusible,  
Fusível (Fig.26):

**1,25 AT**



Trimmer regolazioni, Adjustment trimmer, Trimmer réglages,  
Einstelltrimmer, Trimmers para las regulaciones, trimmer regulações.

DIP SWITCH

Fig. 18

REGOLAZIONE FINECORSO, LIMIT DEVICE SETTING, ÉGLAGE FIN DE COURSE, EINSTELLUNG DER ENDSCHALTER, REGULACION DEL GRUPO DE FIN DE CARRERA, REGULAÇÃO DO FIM-DE-CURSO.

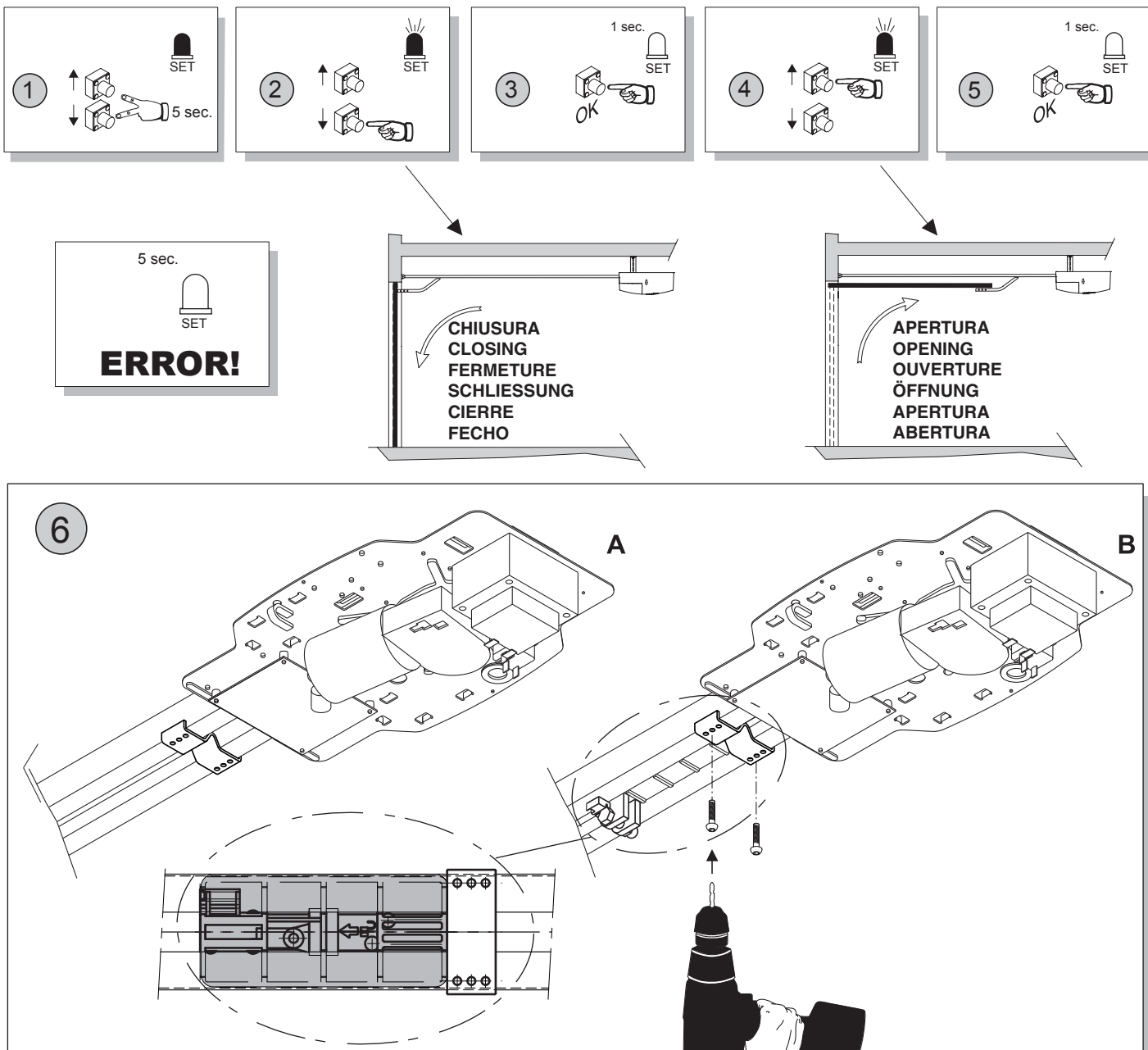


Fig. 19

AUTOSET COPPIA APERTURA / CHIUSURA, OPENING / CLOSING TORQUE AUTOSETTING, RÉGLAGE AUTOMATIQUE COUPLE OUVERTURE / FERMETURE, AUTOSET DREHMOMENT ÖFFNUNG / SCHLISSUNG, AJUSTE AUTOMATICO DEL PAR EN FASE DE APERTURA / CIERRE, AUTOSET BINÁRIO DE ABERTURA / FECHO.

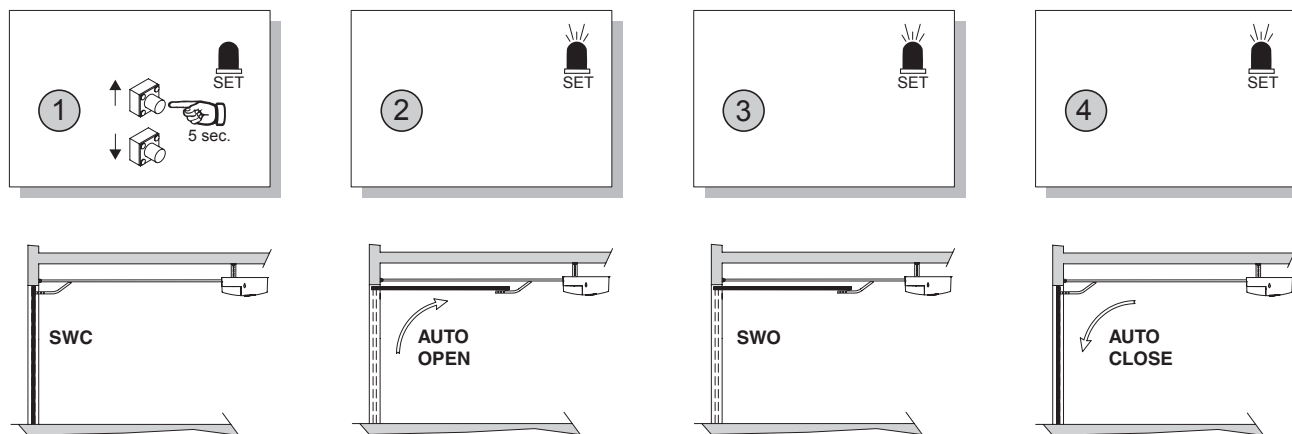
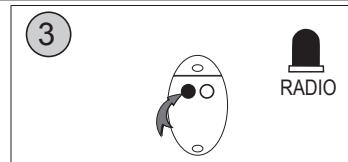
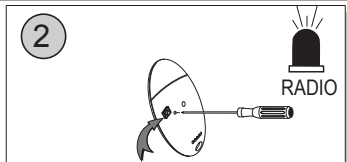
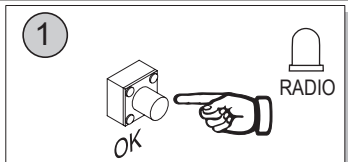
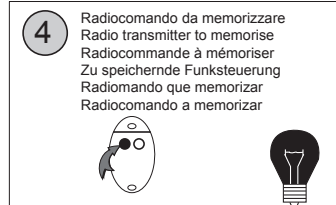
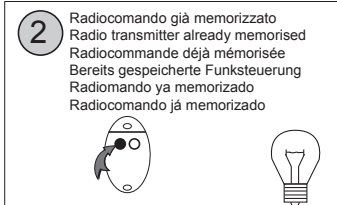


Fig. 20

**PROGRAMMAZIONE TRASMETTITORI MANUALE, MANUAL TRANSMITTER PROGRAMMING, PROGRAMMATION ÉMETTEURS MANUELLE, MANUELLE SENDERPROGRAMMIERUNG, PROGRAMACION DE TRANSMISORES MANUAL, PROGRAMAÇÃO MANUAL DOS TRANSMISORES.**



**PROGRAMMAZIONE TRASMETTITORI REMOTA, REMOTE TRANSMITTER PROGRAMMING, PROGRAMMATION ÉMETTEURS A DISTANCE, FERNPROGRAMMIERUNG DER SENDER, PROGRAMACION DE TRANSMISORES REMOTA, PROGRAMAÇÃO REMOTA DOS TRANSMISORES.**



**CANCELLAZIONE TRASMETTITORI, TRANSMITTER CANCELLATION, TION ÉMETTEURS, LÖSCHEN VON SENDERN, CANCELACION DE TRANSMISORES.**

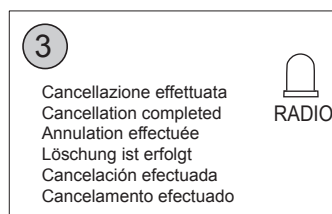
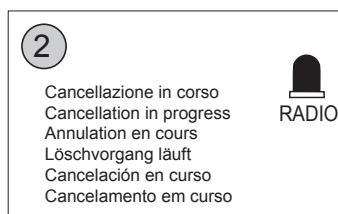
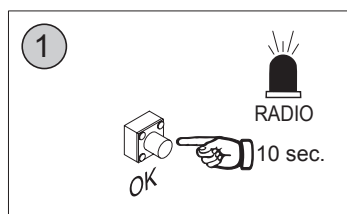


Fig. 21

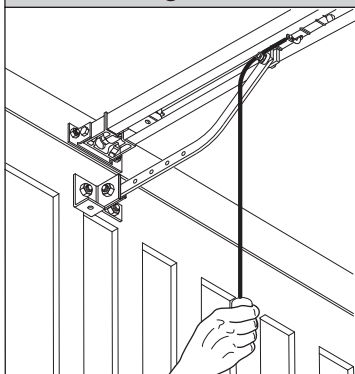


Fig. 22

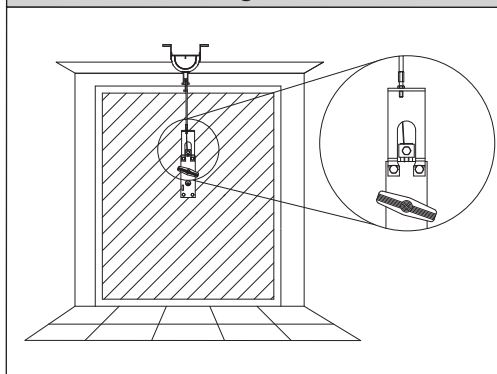


Fig. 23

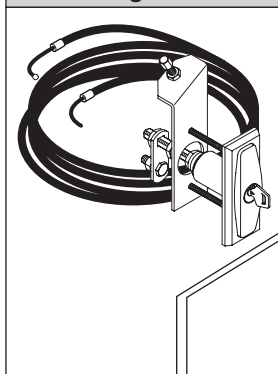


Fig. 24

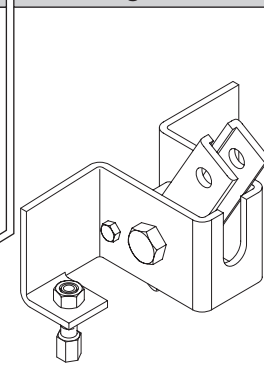


Fig. 25

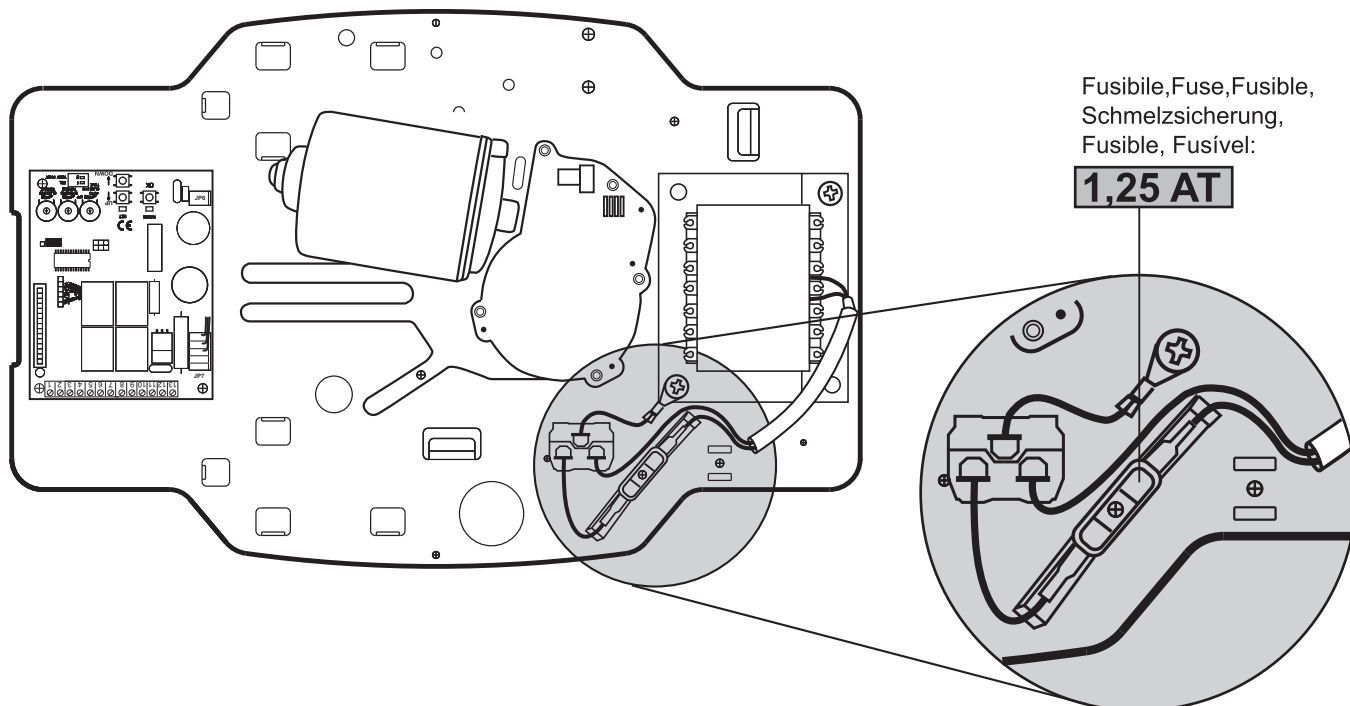




Fig. 26

**Montaggio tappi per operatore BOTTICELLI.**

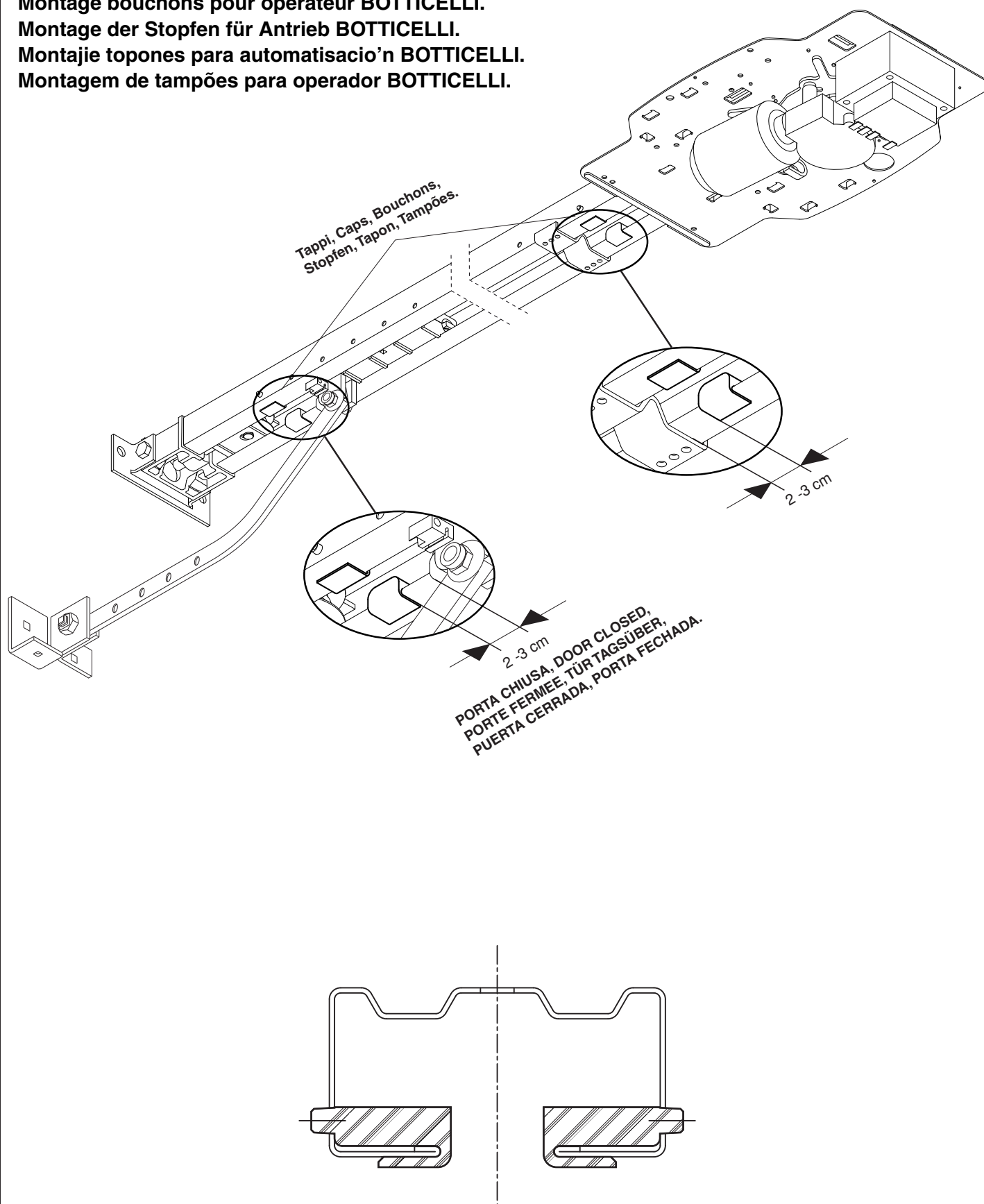
**Assembly of caps for BOTTICELLI operator.**

**Montage bouchons pour opérateur BOTTICELLI.**

**Montage der Stopfen für Antrieb BOTTICELLI.**

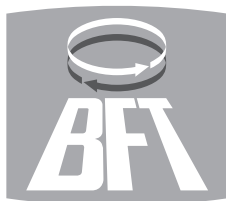
**Montaje topones para automatizacio'n BOTTICELLI.**

**Montagem de tampões para operador BOTTICELLI.**



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