

AUTOMATION SYSTEMS FOR SLIDING GATES

**BX** SERIES



INSTALLATION MANUAL

**BX-246**

English

**EN**

**"IMPORTANT INSTALLATION, SAFETY INSTRUCTIONS"**

**"CAUTION: IMPROPER INSTALLATION MAY CAUSE SERIOUS DAMAGE, FOLLOW ALL INSTALLATION INSTRUCTIONS CAREFULLY"**

**"THIS MANUAL IS ONLY FOR PROFESSIONAL OR QUALIFIED INSTALLERS"**



## 1 Legend of symbols



This symbol tells you to read the section with particular care.



This symbol tells you that the sections concern safety issues.



This symbol tells you what to say to the end-users.

## 2 Conditions of use

### 2.1 Intended use

The BX246 operator is designed to power sliding gates in residential and condominium settings.



Do not install or use unless as otherwise shown in this manual.

### 2.2 Limitations to use

For intensive or condominium use: max gate weight 600kg with max gate length 18 m.

## 3 Reference standards

The company CAME cancelli automatici is ISO 9001:2000 quality certified; it has also obtained the ISO 14001 environmental safeguarding certification. CAME engineers and manufactures all of its products in Italy.

This product complies with the following legislation: *see declaration of compliance*.

## 4 Description

### 4.1 Operator

This product is engineered and manufactured by CAME CANCELLI AUTOMATICI S.p.A. in compliance with current safety standards. Guaranteed 24 months if not tampered with.

The operator is made of a cast aluminium part inside of which operates the irreversible, electromechanical gearmotor and an ABS plastic lining which holds the electronic card, transformer and the clamp to house 2 emergency batteries.

### 4.2 Technical features

#### BX246 OPERATOR

Control panel power supply: 230V A.C. 50/60Hz

Operator power supply: 24V D.C.

Draw: 10 A

Power: 400 W

Reduction ratio: 1/33

Thrust: 700 N

Max speed.: 10 m/min max.

Duty cycle: intensive use

Protection rating: IP54

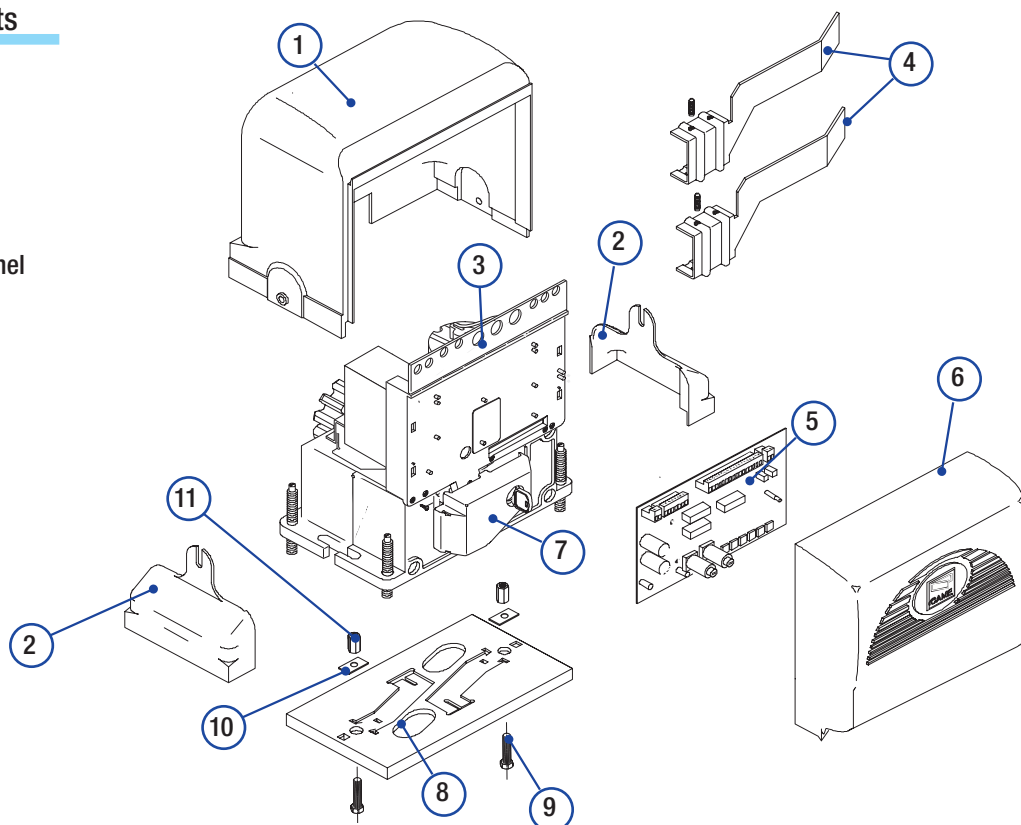
Insulation class: I

Weight: 15 kg



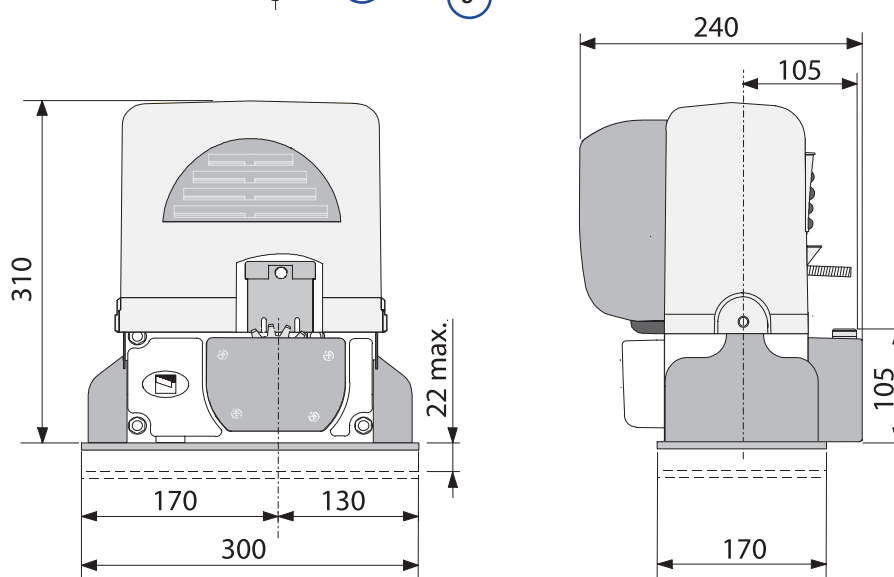
## 4.3 Description of parts

- 1 - Top cover
- 2 - Settings casing
- 3 - Control board support
- 4 - Endstop fins
- 5 - ZD2 electronic card
- 6 - Front cover to control panel
- 7 - Gearmotor release door
- 8 - Securing plate
- 9 - Securing bolt
- 10 - Securing screw plate
- 11 - Nut



## 4.4 Dimensions

(mm)



## 5 Installation

**⚠** Installation must be carried out by expert qualified personnel and in full compliance with current regulations.

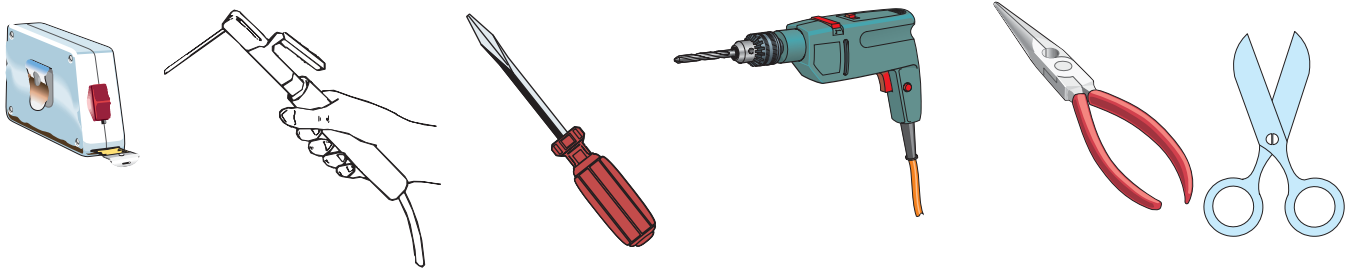
### 5.1 Preliminary checks

**⚠** Before installing, do the following:

- Make sure that the gate is stable, and that the castors are in good working order and properly greased.
- The ground rack must be well secured to the ground, entirely above the surface and free of any irregularities that may obstruct the gate's movement.
- The upper guide rails must not create any friction.
- Make sure that there is a closing and an opening endstops.
- Make sure that the operator is attached to a solid surface and protected from any impacts;
- Make sure you have a suitable omnipolar cut-off device with contacts more than 3 mm apart, and independent (sectioned off) power supply;
- ⚡ Check that any connections inside the container (that provide continuity to the safety circuit) are fitted with additional insulation compared to other internal live parts;
- Make sure you have suitable tubing and conduits for the electrical cables to pass through and be protected against mechanical damage.

## 5.2 Tools and materials

Make sure you have all the tools and materials you will need for the installation at hand to work in total safety and compliance with the current standards and regulations. The following figure illustrates the minimum equipment needed by the installer.



## 5.3 Cable list and minimum thickness

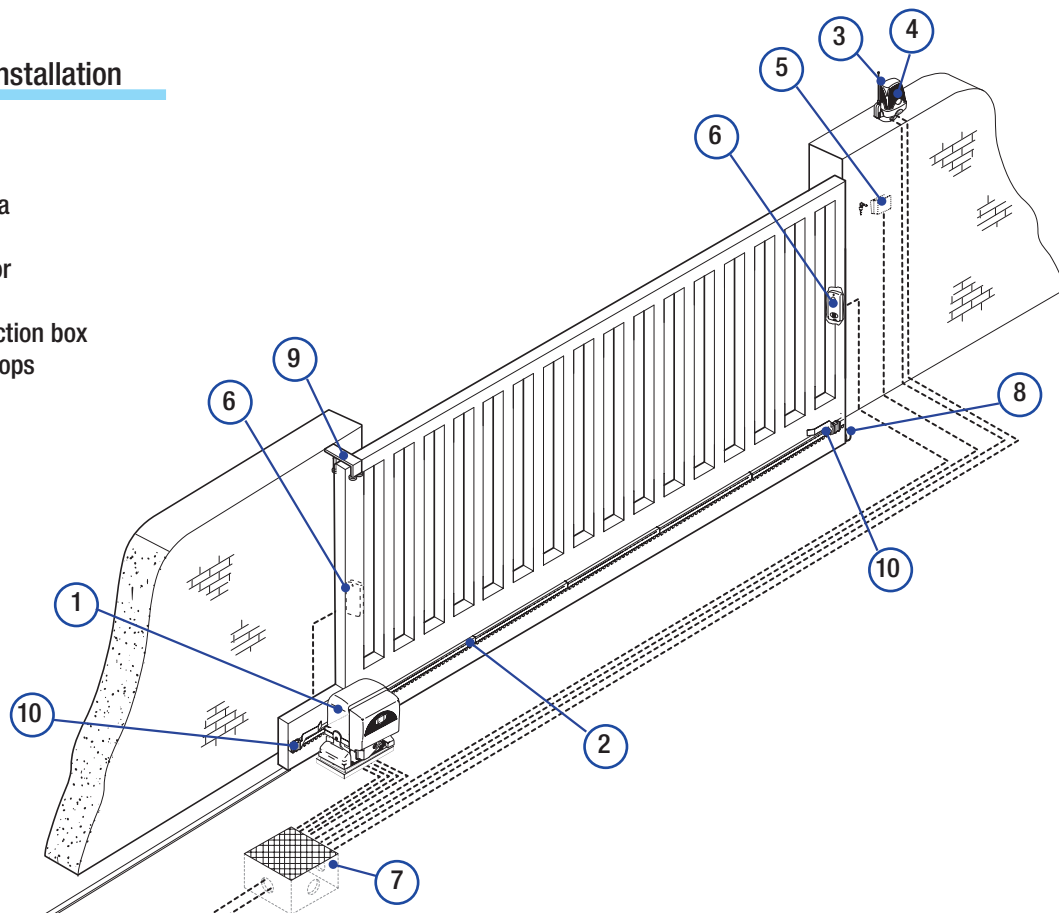
| Connection                      | Type of cable                      | Length of cable 1 < 10 m | Leng. cable 10 < 20 m    | Leng. cable 20 < 30 m   |
|---------------------------------|------------------------------------|--------------------------|--------------------------|-------------------------|
| Control panel power supply 230V | FROR CEI 20-22<br>CEI EN 50267-2-1 | 3G x 1,5 mm <sup>2</sup> | 3G x 2,5 mm <sup>2</sup> | 3G x 4 mm <sup>2</sup>  |
| Flashing light                  |                                    | 2 x 0,5 mm <sup>2</sup>  | 2 x 1 mm <sup>2</sup>    | 2 x 1,5 mm <sup>2</sup> |
| Photocell transmitter           |                                    | 2 x 0,5 mm <sup>2</sup>  | 2 x 0,5 mm <sup>2</sup>  | 2 x 0,5 mm <sup>2</sup> |
| Photocell receiver              |                                    | 4 x 0,5 mm <sup>2</sup>  | 4 x 0,5 mm <sup>2</sup>  | 4 x 0,5 mm <sup>2</sup> |
| Accessories power supply        |                                    | 2 x 0,5 mm <sup>2</sup>  | 2 x 0,5 mm <sup>2</sup>  | 2 x 1 mm <sup>2</sup>   |
| Safety and control devices      |                                    | 2 x 0,5 mm <sup>2</sup>  | 2 x 0,5 mm <sup>2</sup>  | 2 x 0,5 mm <sup>2</sup> |
| Antenna connection              | RG58                               | max. 10 m                |                          |                         |

N.B.: If the cable length differs from that specified in the table, then you must determine the proper cable diameter in the basis of the actual power draw by the connected devices and depending on the standards specified in CEI EN 60204-1.

For connections that require several, sequential loads, the sizes given on the table must be re-evaluated based on actual power draw and distances. When connecting products that are not specified in this manual, please follow the documentation provided with said products.

## 5.4 Standard installation

- 1) BX246 Assembly
- 2) Rack
- 3) Reception Antenna
- 4) Flashing light
- 5) Keyswitch selector
- 6) Safety photocells
- 7) Electric cable junction box
- 8) Mechanical endstops
- 9) Guide rails
- 10) Endstop fins



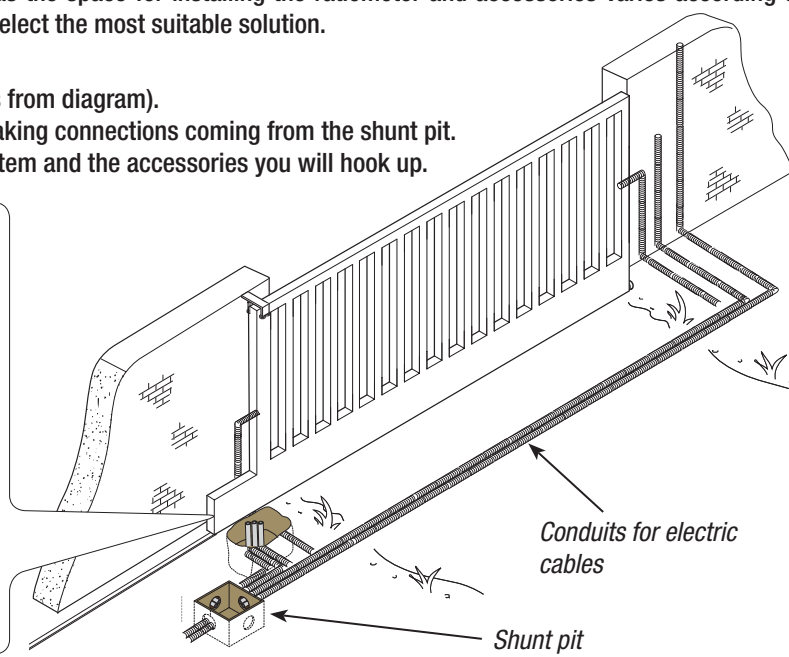
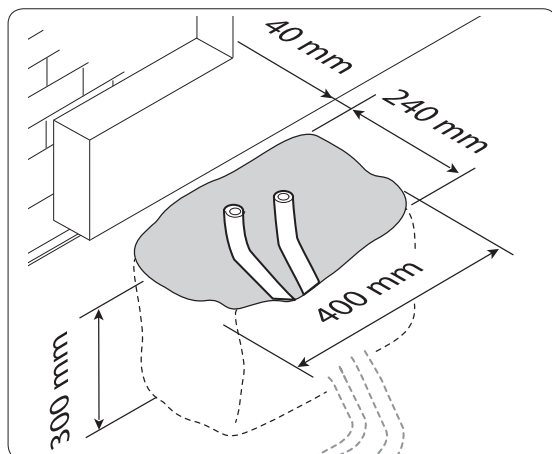
## 5.5 Securing the plate and installing the assembly

**⚠** The following applications are only examples, as the space for installing the ratiomotor and accessories varies according to obstructions. It is thus up to the system installer to select the most suitable solution.

- Dig a pit to the side of the gate (see measurements from diagram).

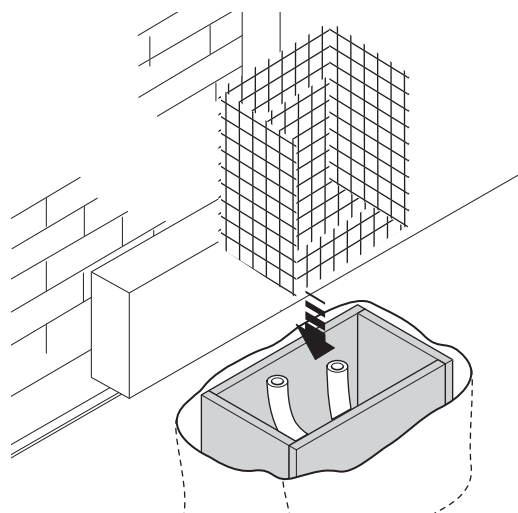
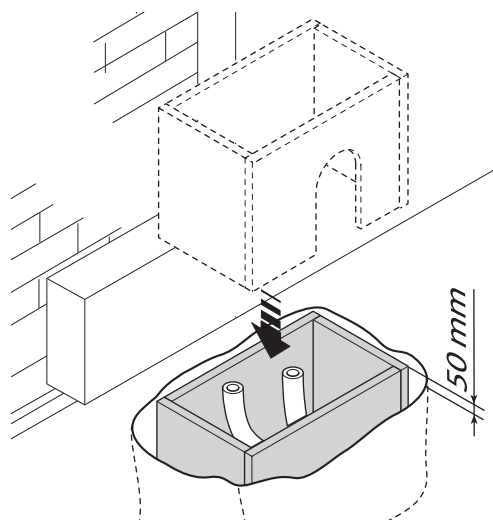
Prepare the corrugated tubes you will need when making connections coming from the shunt pit.

N.B. the number of tubes depends on the type of system and the accessories you will hook up.



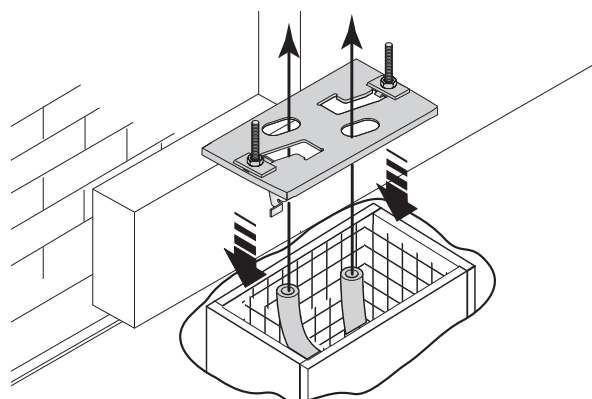
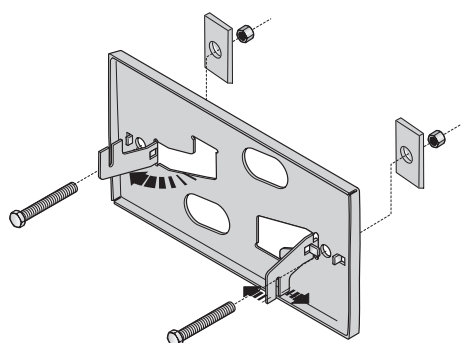
- Prepare a form box that is larger in size than the securing plate and insert it into the pit. The form box should jut 50mm above ground level.

Insert an iron grid inside the from box to reinforce the concrete.

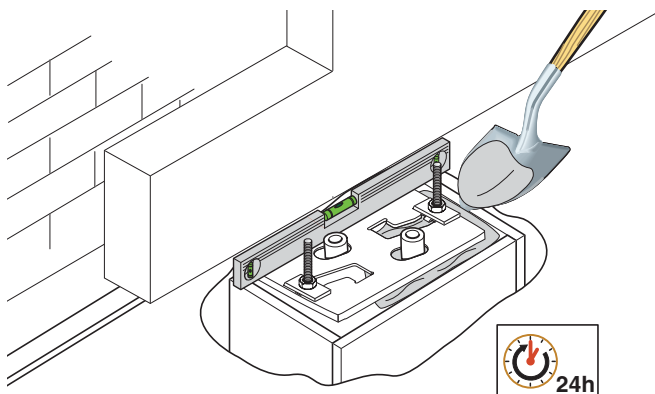
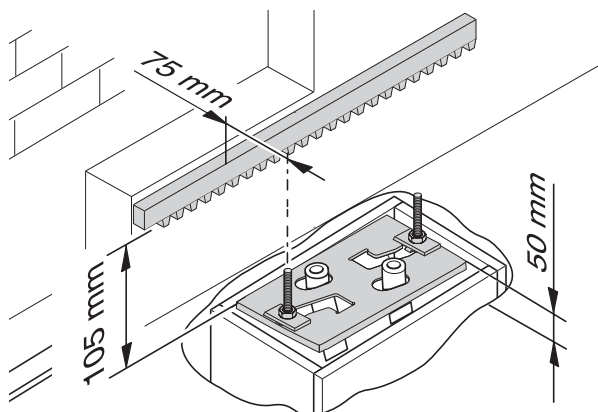


- Prepare the securing plate, insert the bolts into the holes and lock them using the supplied nuts and washers. Extract the preformed brackets using a screw driver or a set of pliers.

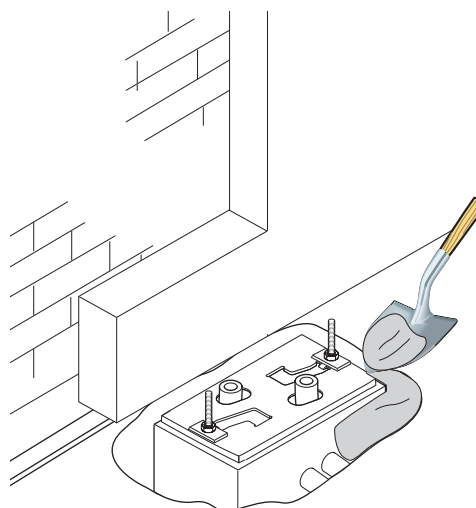
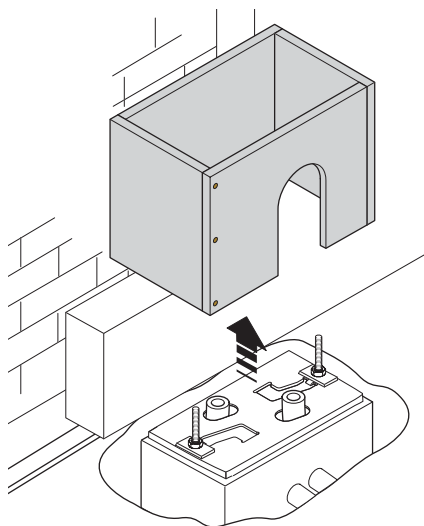
- Position the plate on top of the grid. Careful! The tubes need to pass through the apposite holes.



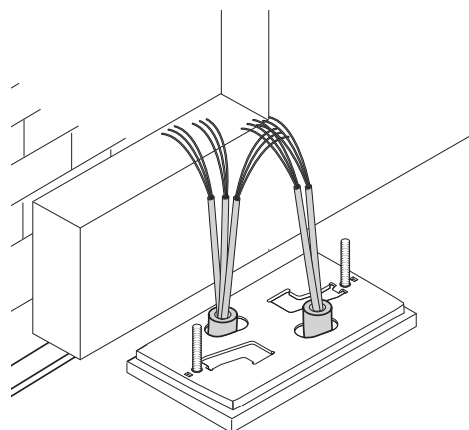
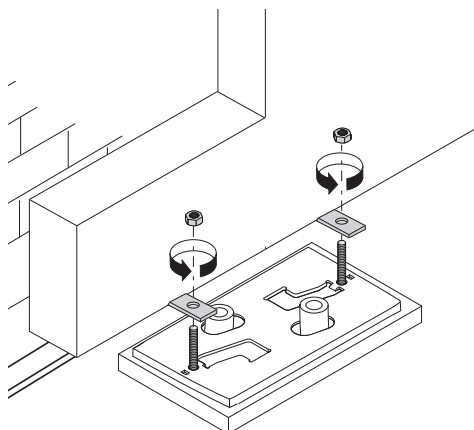
- To position the plate in relation to the rack please see the measurements on the diagram.  
Fill the form box with cement and wait for at least 24 hours for it to solidify.



- Remove the form box, fill the pit around the cement block with soil.

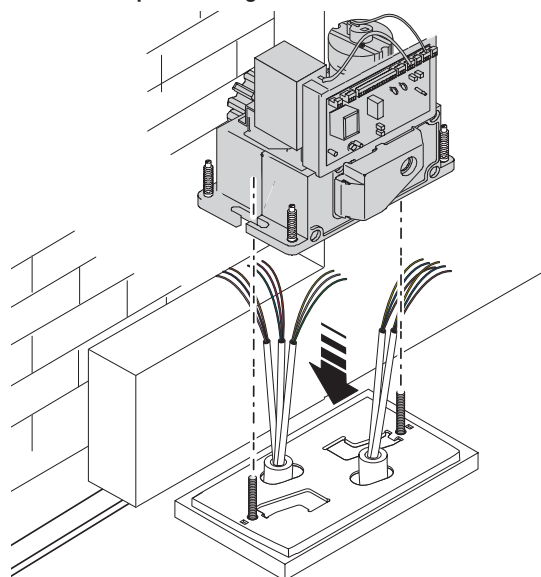
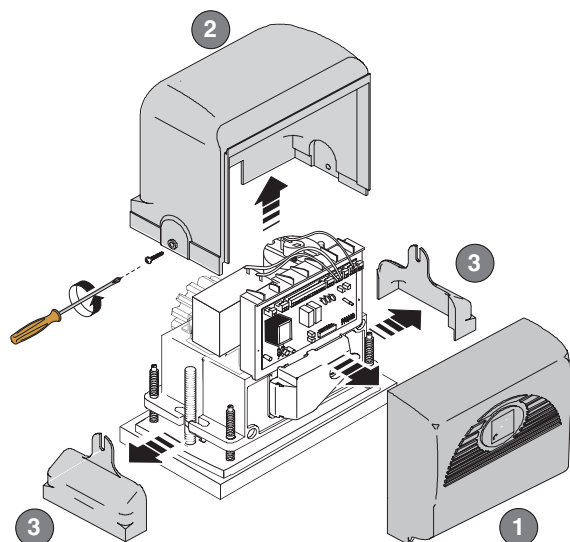


- Unbolt the nuts and washers from the bolts. The securing plate must be clean, perfectly aligned and with the bolt threads completely on the surface.  
Insert the electric cables into the tubes until they exit about 400mm.

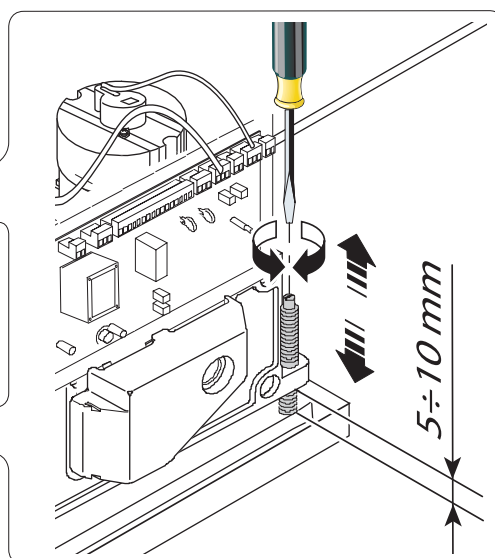
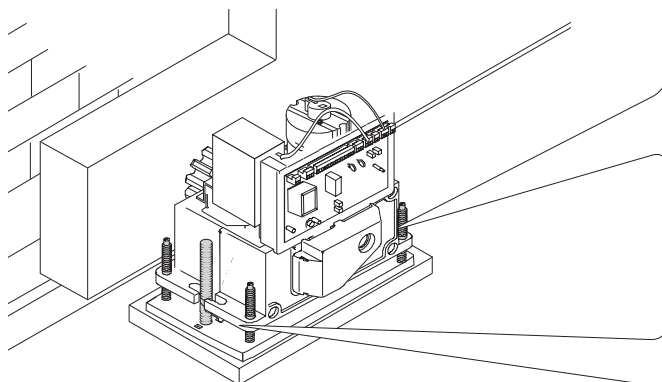




- Remove the cover from the gearmotor by loosening the side bolts, perforate the cable shafts using a screwdriver or a pair of scissors and position the gearmotor atop the plate. Careful! The electric cables must pass through the cable shafts.



- Lift the gearmotor from the securing plate by about 5 to 10mm by using the threaded steel-levelling feet to allow any later adjustments between the pinion and the rack.



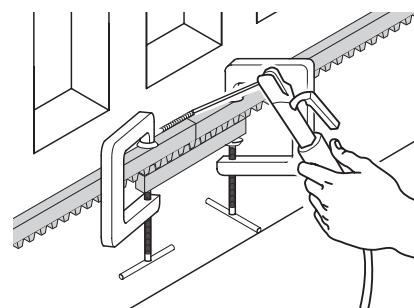
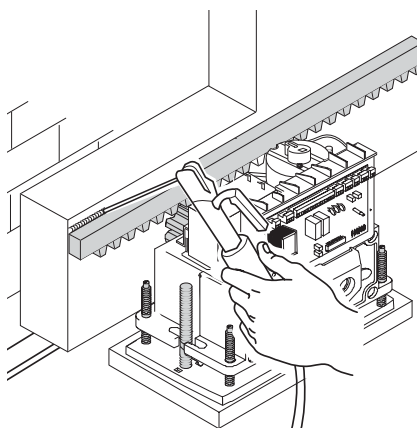
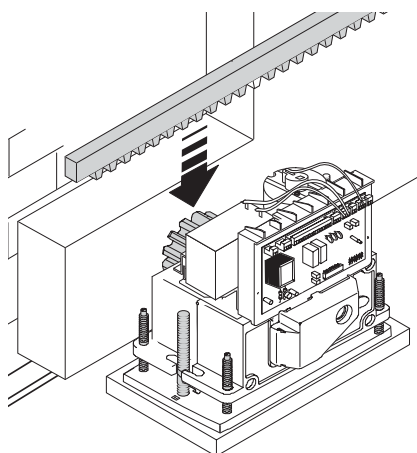
- The following illustrations for the securing the rack, are just examples of applications. It is up to the installer to choose the best solution.

Releasing the gearmotor (see paragraph on manual release). Rest the rack on the gearmotor pinion.

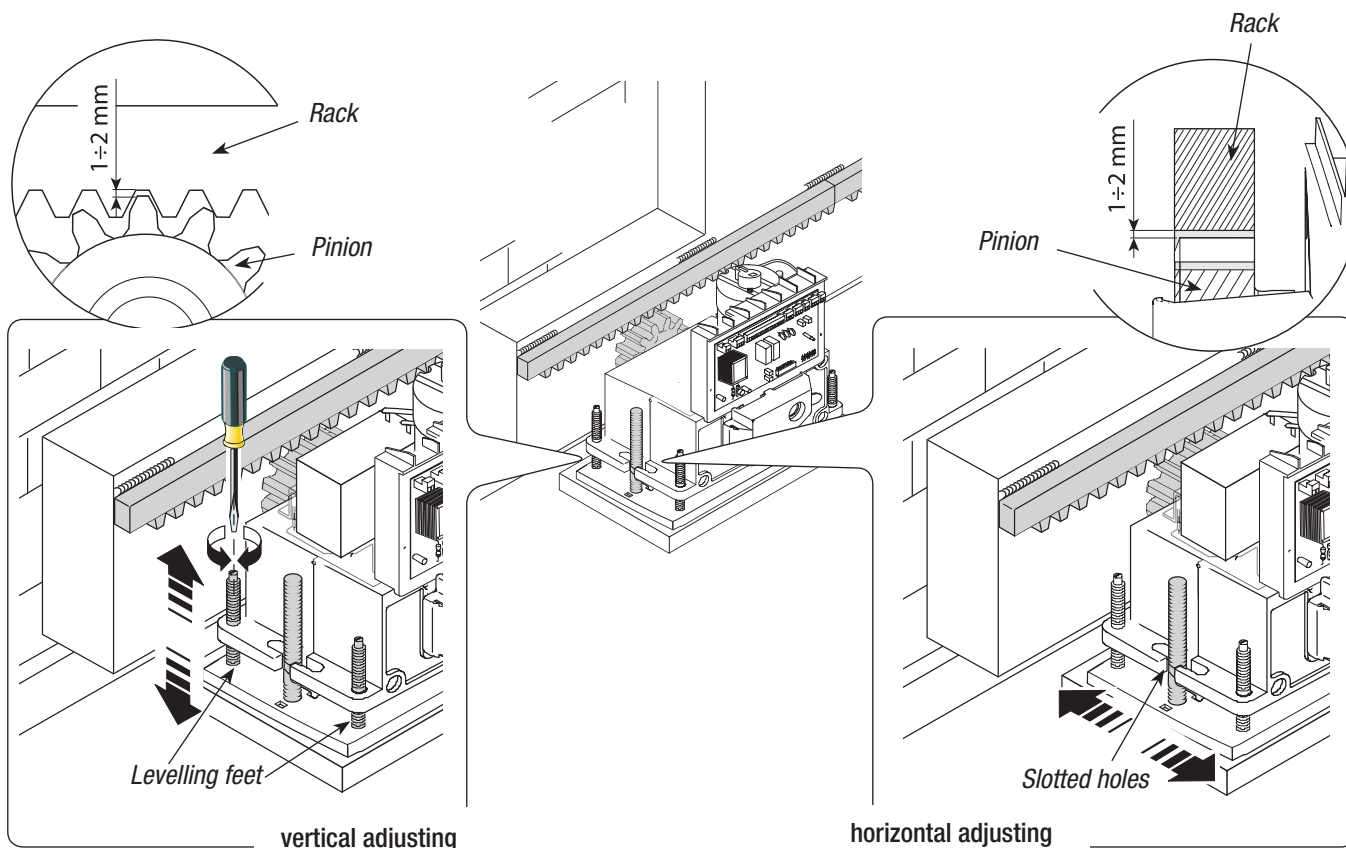
Weld or secure the rack to the gate along its entire length.

To assemble the rack modules, use an excess piece of rack and place it under the joining point, then block it using two C-clamps.

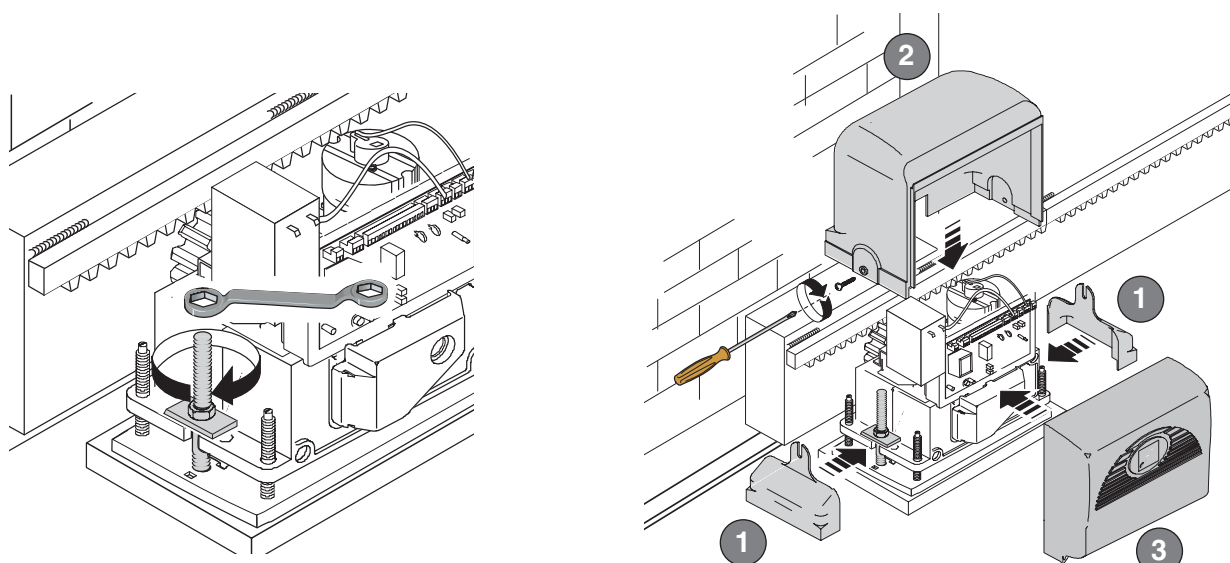
Note: if a rack is already in place, then just adjust the pinion-to-rack distance.



- Open and close the gate manually and register the pinion-to-rack distance using the threaded steel-levelling feet (for vertical adjusting) and the slotted holes (horizontal adjusting). This prevents the weight of the gate from bearing on the operator.



Once adjustments are finished, secure the assembly using the nuts and washers. Insert the cover after performing the adjustments and settings on the electronic card.

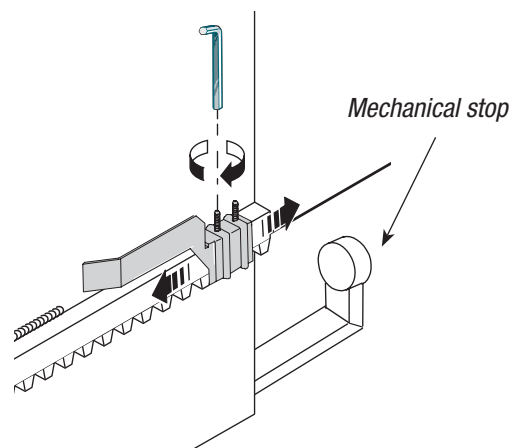
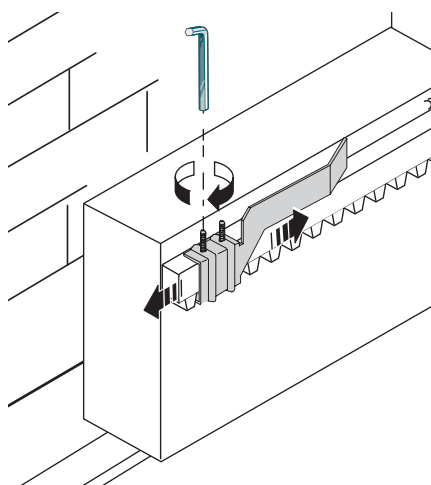




## 5.6 Mounting the endstop fins

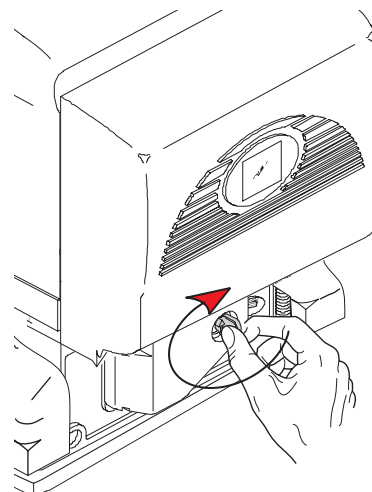
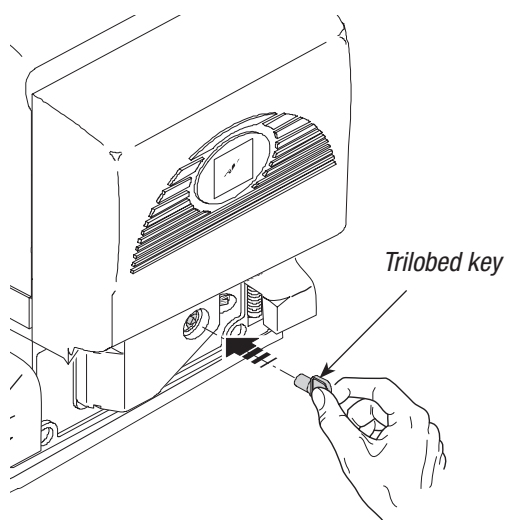
Place the endstop fins onto the rack and secure them using a 3 mm Allen wrench. Their positioning limits the gate run.

**Note:** the gate should not slam against the mechanical stop, when opening or closing.

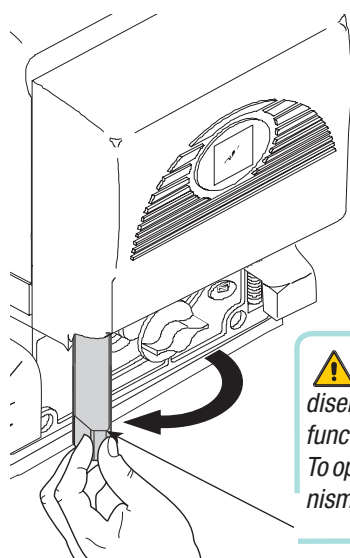


## 5.7 Manually releasing the gearmotor

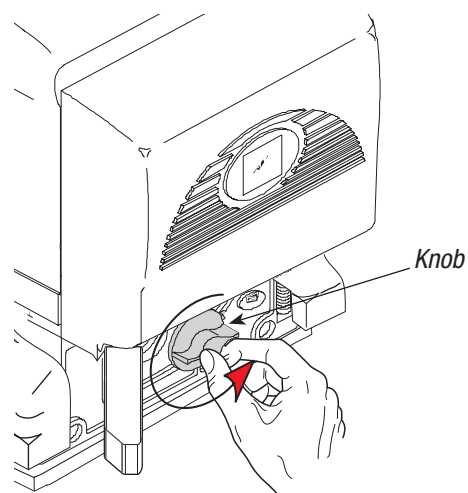
- Insert the trilobed key into the lock, push it in and turn it clockwise ....



..... open the small door and turn the release handle clockwise.



**⚠ WARNING:** opening the door will disengage the motor (i.e. it will not function).  
To operate the motor the release mechanism must be firmly fastened.



## 6 Control board

### 6.1 General description

Use 230V A.C. to power the electronic card using the L-N terminals, at a max 50/60Hz frequency.

Use 24V to power the command devices and accessories. Careful! The accessories cannot exceed 37W of overall power.

The card is fitted with an amperometric device which constantly monitors the motor's drive. When the gate runs into an obstacle, the amperometric sensor immediately detects the overload on the drive and so inverts the gate's movement:

- opens it if it is closing
- closes it if it is opening

Warning: after 3 obstacle detections, the gate stops when in opening-mode and excludes automatic-closing mode; to regain movement press the command button or use the remote control.

All connections are protected by quick-fuses – see table.

The card handles the following functions:

- Automatic closing after an opening command;
- Warning light pre-flashing;
- Obstacle detection when gate is still at any point;
- Constant monitoring of photocell operations.
- Opening/closing;
- Opening/closing in maintained action mode;
- partial opening;
- total stop.

Apposite trimmers regulate:

- The automatic closing's running time;
- The partial opening;
- The amperometric device's detection sensitivity, in both normal and brake modes;
- the speed of both the normal gate run and the brake mode run.

Warning! Before acting on the machinery, cut off the main power supply and disconnect any emergency batteries.

#### TECHNICAL INFORMATION

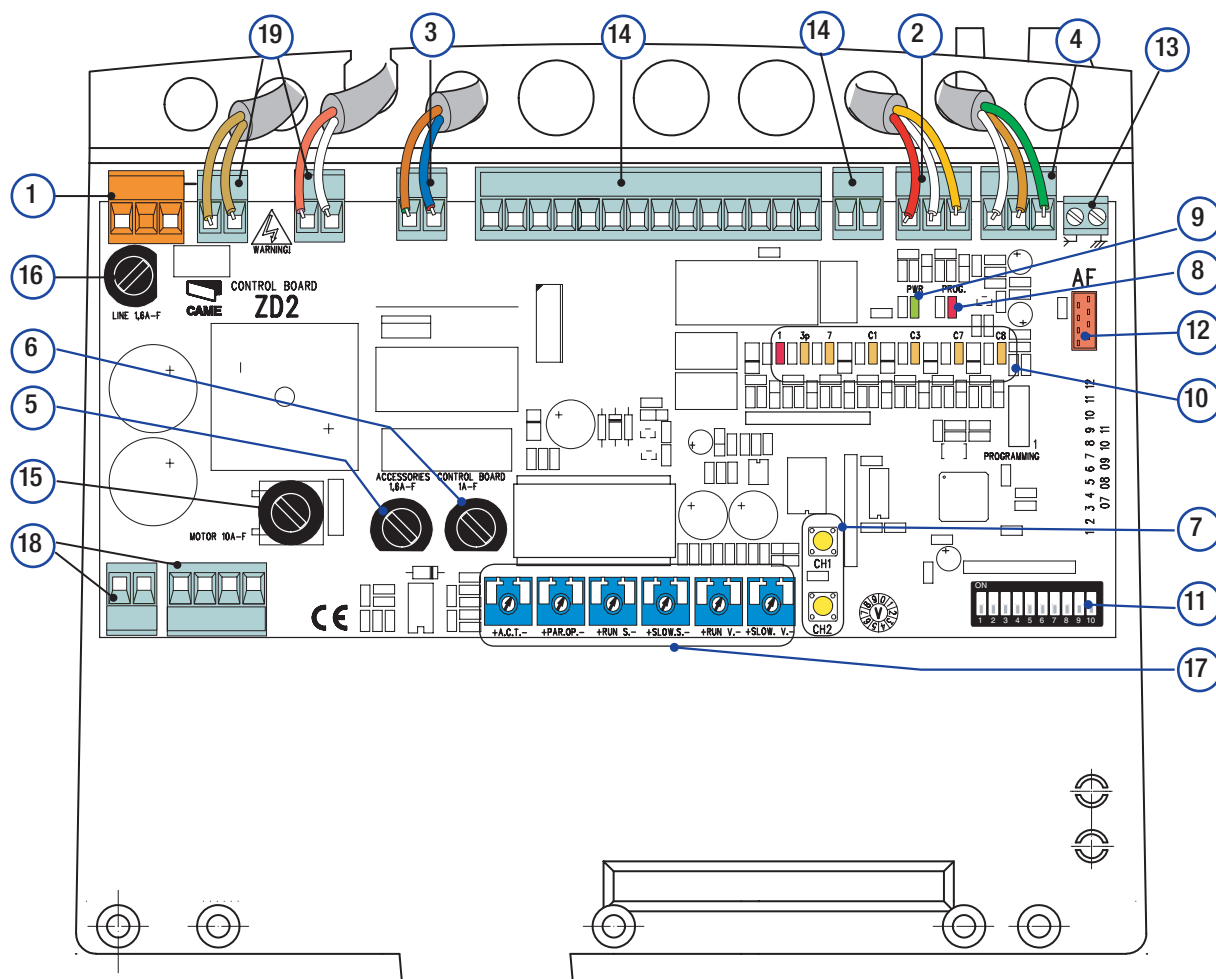
|                                   |                 |
|-----------------------------------|-----------------|
| Power supply                      | 230V - 50/60 Hz |
| Maximum power allowed             | 400 W           |
| Absorption at rest                | 100 mA          |
| Maximum power for 24V accessories | 35 W            |
| Insulation rating                 | II              |

#### FUSE TABLE ZD2

| To protect:          | fuse:  |
|----------------------|--------|
| Motor                | 10A-F  |
| Control board (line) | 1,6A-F |
| Accessories          | 1.6A-F |
| Command devices      | 1A-F   |

### 6.2 Main components

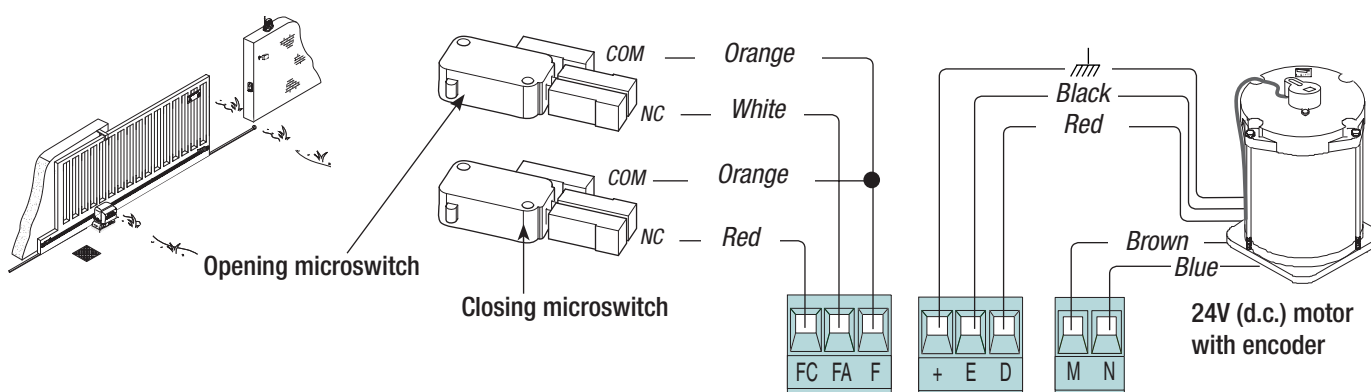
- 1) Power supply terminals
- 2) Endstop terminals
- 3) Motor terminals
- 4) Encoder terminals
- 5) Accessory fuse
- 6) Card fuse
- 7) Button for memorising the radio code
- 8) Radio-code signalling LED indicator
- 9) 230V-power signalling LED
- 10) Control and signalling LED group
- 11) Function selector DIP switch
- 12) Socket for connecting the remote control's radiofrequency card
- 13) Antenna terminal
- 14) Accessories' and command device's terminals
- 15) Motor fuse
- 16) Line fuse
- 17) Setting trimmer
- 18) Battery charger (LBD2) connecting terminal boards
- 19) Transformer-connecting terminal board



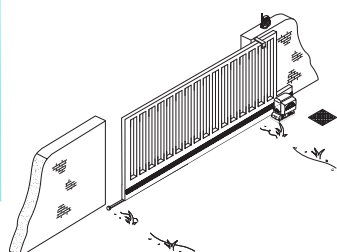
## 6.3 Electrical connections

### Gearmotor, endstop and encoder

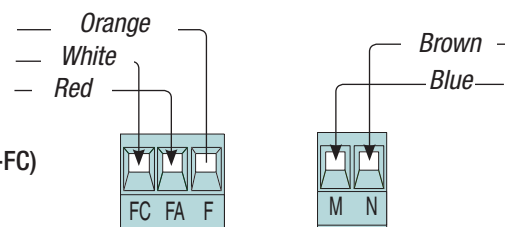
Description of the standard electrical connections for left-hand installations



### Modifications to the electrical connections for right-hand installations



Invert the gearmotor (M-N) and (FA-FC) endstop phases.



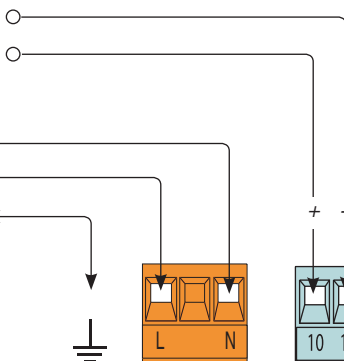
## Power supply for accessories

Terminals for powering the following accessories:

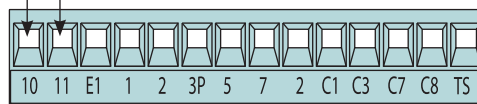
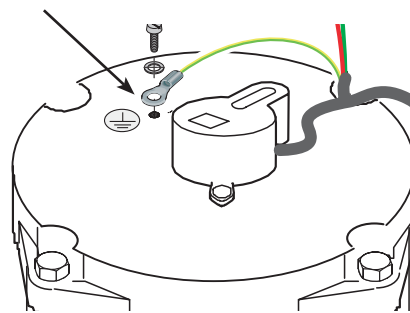
- 24V A.C. normally;
- 24V D.C. when the emergency batteries are working;

Maximum allowed power: 35W

230V (a.c.) Power, 50/60Hz frequency



Cable lug with bolt and washer for connecting to earth.

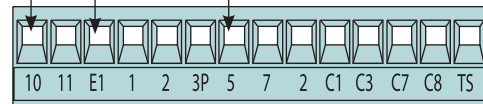


## Warning devices

**Movement flashing light (Contact range: 24V – 25W max) -**  
Flashes during the gate's opening and closing phases.



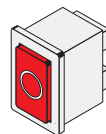
**Open-gate status light (contact range: 24V – 3W max)**  
- Signal that gate is open; turns off when gate is closed.



## Command and control devices

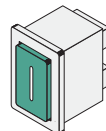
**Stop button (N.C. contact)**

- Gate stop button. Excludes automatic closing. For motion to resume, press the command button or the remote control button.



**Key selector and/or partial opening button (N.O. contact)**

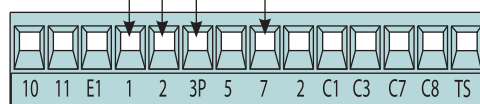
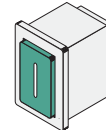
- Partial gate opening for pedestrian access.



**Key selector and/or command button (N.O. contact)**

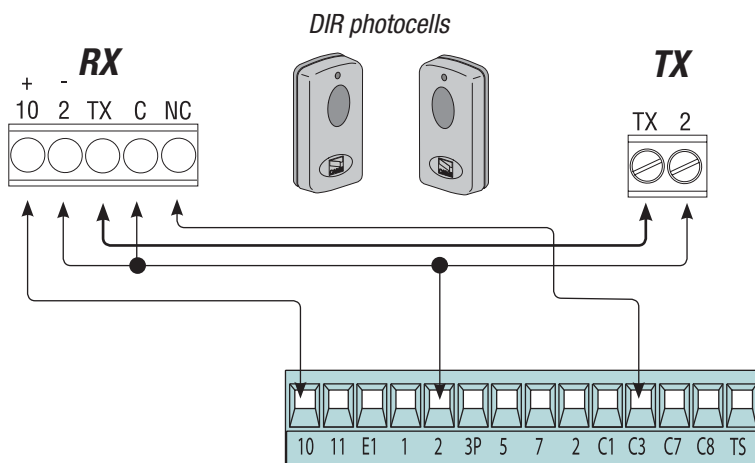
- Gate opening and closing command.

By pressing the button or turning the selector key, the gate inverts its movement or stops depending on which the settings on the DIP switches.



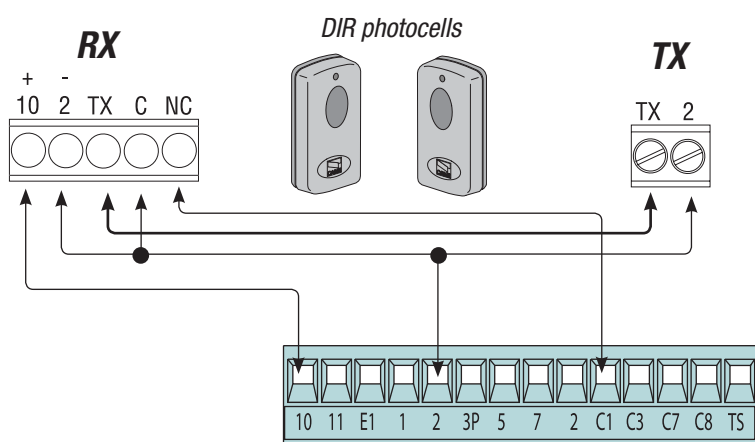
«partial stop» (N.C.) contact

- Input for EN 12978 standard-compliant safety devices such as photocells. Gate stops if moving and automatically shuts (if this functions has been selected).

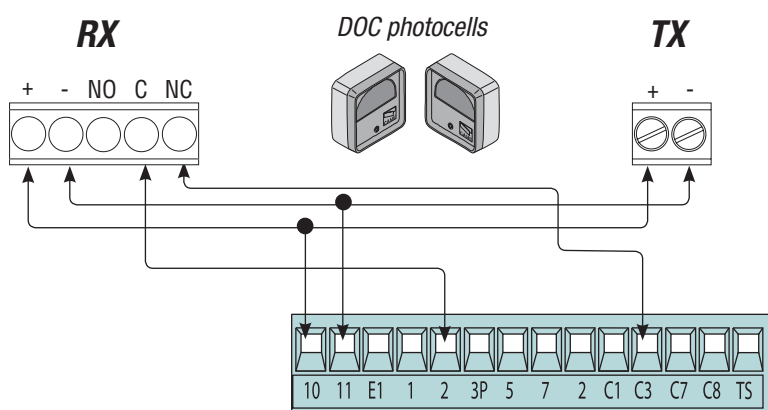


(N.C.) contact for «re-open during closing phase»

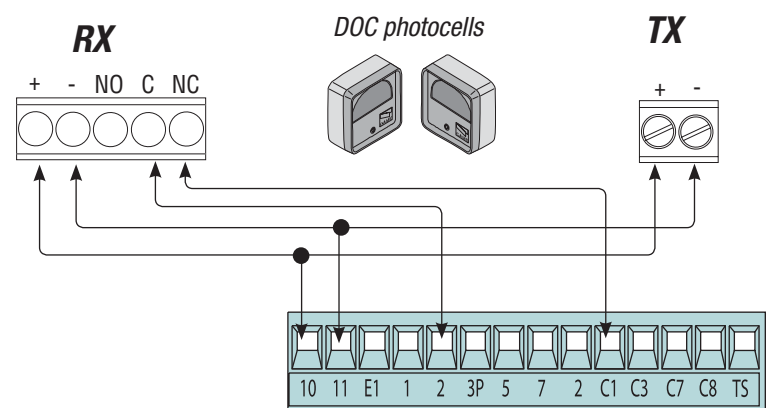
- Input for EN 12978 standard-compliant safety devices such as photocells. If contact is opened, while gate is closing, the gate inverts its direction.



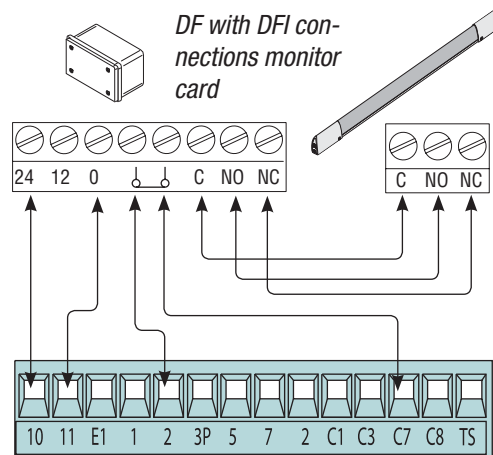
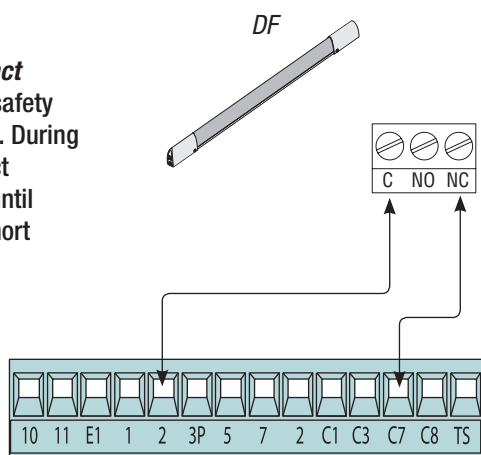
«partial stop» (N.C.) contact



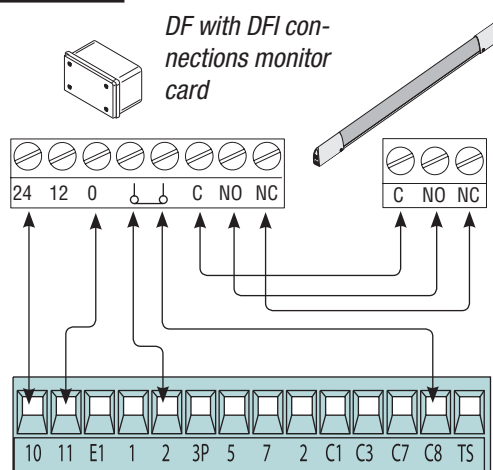
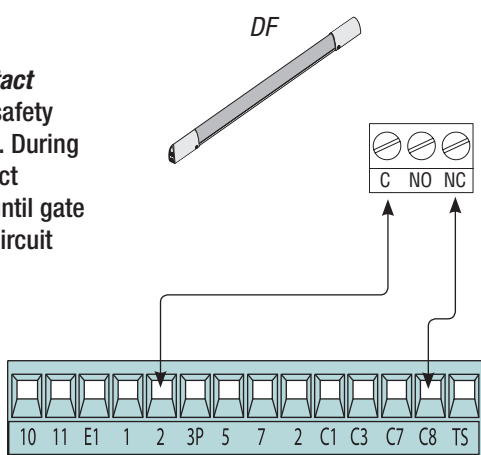
«Open while closing» (N.C.) contact



«Open while closing» **(N.C.) contact**  
- input for EN 12978 compliant safety devices such as sensitive edges. During gate closing, opening the contact causes inversion of movement until gate is fully open; if not used, short circuit contact 2-C7.

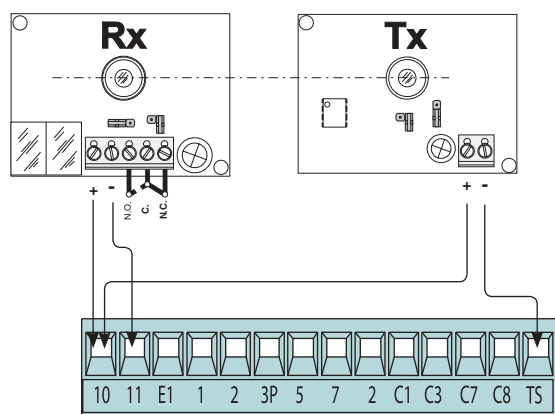


«Close while opening» **(N.C.) contact**  
- input for EN 12978 compliant safety devices such as sensitive edges. During gate opening, opening the contact causes inversion of movement until gate is fully close; if not used, short circuit contact 2-C8.

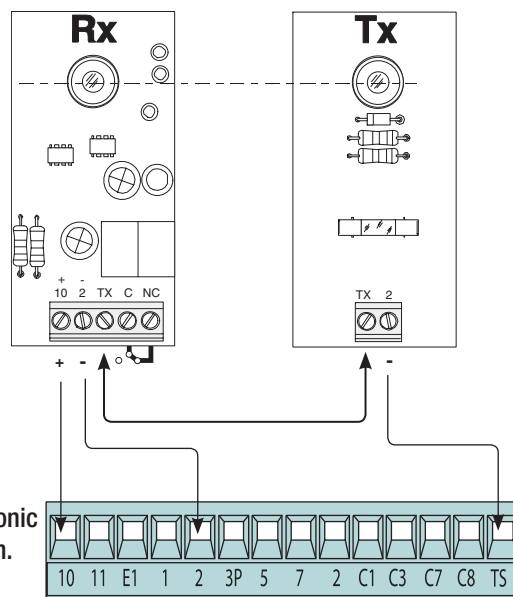


## 6.4 Electrical connection to operate the photocells' safety test

### (DOC)



### (DIR)



At each open/close command, the card check the photocells' efficiency. Any problems with the photocells will cause the (PROG) Led to flash on the electronic card, which cancels any commands from the radio transmitter or push-button.

### Electrical connection to operate the photocells' safety test:

- The transmitter and receiver, must be connected as shown in the diagram;
- Set DIP switch **7** to **ON** to activate the test.

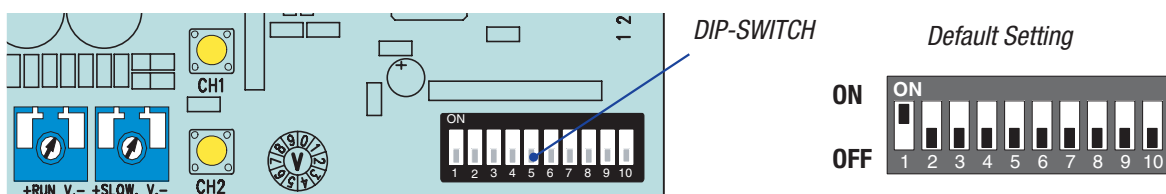
### IMPORTANT:

When the safety test function is activated, the N.C. contacts:

- If unused – are to be excluded on their relative DIP switches (see chapter “selecting functions”).

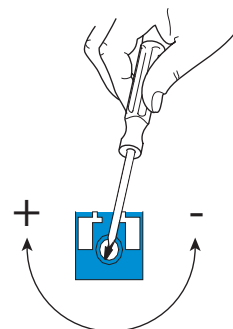
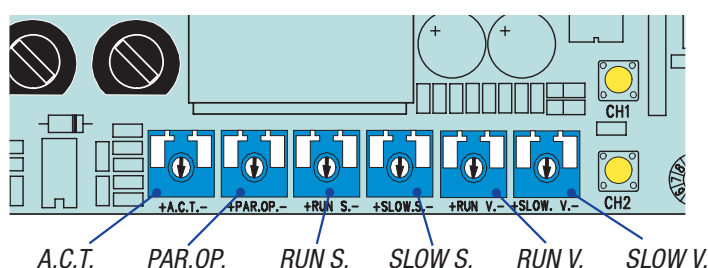


## 7 Function selector



- 1 ON - **Automatic Closing** - The automatic closing timer activates at the end of the opening gate run. The pre-set time is adjustable, and is in any case conditioned by the activation of any safety devices, and does not activate after a total safety "stop" or during a blackout.
- 2 ON - **"Open-stop-close-stop"** function with [2-7] button and radio transmitter (fitted with inserted radiofrequency card).
- 2 OFF - **"Open-close"** function with [2-7] button and radio transmitter ((fitted with inserted radiofrequency card).
- 3 ON - **"Open only"** function with [2-7] button and radio transmitter ((fitted with inserted radiofrequency card).
- 4 ON - **Pre-Opening and closing flasher** - Following an opening and closing command, the flasher connected to [10-E1], flashes for 5 seconds before motion begins.
- 5 ON - **Obstacle detected** - When motor is stopped (gate closed or after a total stop command) it prevents any movement if safety devices, such as photocells, detect any obstacles.
- 6 ON - **Maintained action** - The gate works by keeping button pressed (one 2-3P opening button , and one closing button).
- 7 ON - **Functioning of the photocells' safety test** - Allows the card to check the efficiency of any safety devices (i.e. photocells) after every opening or closing command.
- 8 OFF - **Total stop** - This function stops the gate and then excludes any automatic closing cycle; to set in motion again, use either the keypad or transmitter. Insert the safety device in [1-2]; If unused, set DIP switch to ON.
- 9 OFF - **Opening during closing** - If the photocells detect an obstacle during gate's closing, gate motion is inverted until fully opened; connect the safety device to terminals [2-C1]; if unused, set DIP switch to ON.
- 10 OFF - **Partial stop** - Gate stop when obstacle is detected by the safety device; once obstacle is removed, the gate remains still or closes if automatic closing is activated. Connect the safety device to terminal [2-C3]; if unused, set the DIP switch to ON.

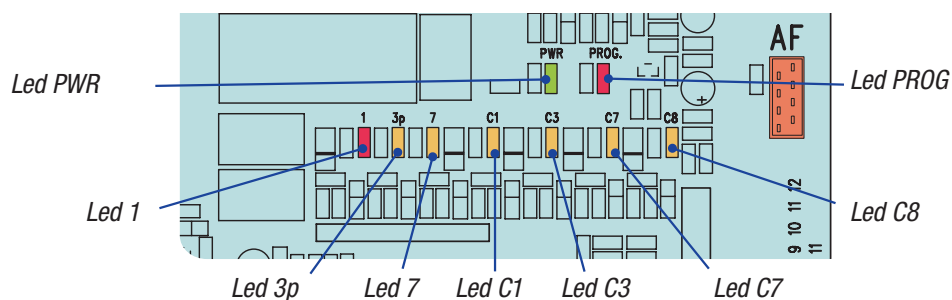
## 8 Settings



### SETTING TRIMMER LIST:

- **«A.C.T.»** Sets the waiting time while open. Once this time has elapsed, closing automatically takes place. The waiting time may be set from 1 to 150 seconds.
- **«PAR.OP.»** Sets the gate's partial opening. By pushing the partial opening button connected at 2-3P, the gate opens depending on the length of the gate.
- **«SLOW S.»** Sets the amperometric sensitivity that controls the force generated by the motor during slow down; if the force exceeds the set level, the system intervenes by inverting the direction of motion.
- **«RUN S.»** Sets the amperometric sensitivity that controls the force generated by the motor during movement; if the force exceeds the set level, the system intervenes by inverting the direction of motion.
- **«SLOW V.»** Sets the gate's final opening/closing phase slow-down speeds.
- **«RUN V.»** Sets the gate's opening/closing motion speed.

## 9 Warning Led



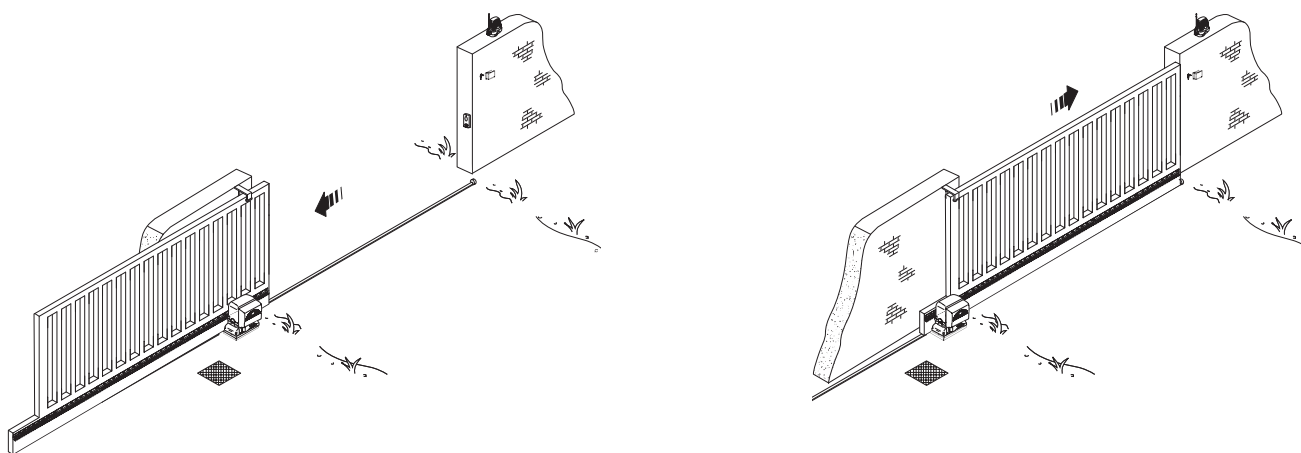
### LIST WARNINGS OF THE COMMAND AND SAFETY DEVICES' CONTROL LEDs:

- «**PROG**» Red Led. Normally off.  
When the transmitter is activating, it turns on or flashes.
- «**PWR**» Green led. Normally on.  
Shows that card is properly powered;
- «**1**» Yellow led. Normally off.  
Shows activation of the PARTIAL STOP button.
- «**3p**» Yellow Led indicator. Normally off.  
Indicates that the PARTIAL OPENING button has been activated.
- «**7**» Yellow Led indicator. Normally off.  
Indicates that the OPENING and CLOSING button has been activated.
- «**C1**» Yellow led. Normally off.  
Shows that there are obstacles between the photocells (which are in OPEN WHILE CLOSING mode).
- «**C3**» Yellow Led. Normally off.  
Shows that there are obstacles between the photocells (which are in PARTIAL STOP mode).
- «**C6**» Yellow Led. Normally off.  
Show obstacles detected by the sensitive edge (which are in OPEN WHILE CLOSING mode).
- «**C7**» Yellow Led. Normally off.  
Shows obstacles detected by sensitive edge (which are in CLOSE WHILE OPENING mode).

## 10 Programming to save gate-run and decelerations adjustments

Do the adjustment by making the operator execute a complete opening/closing manoeuvre

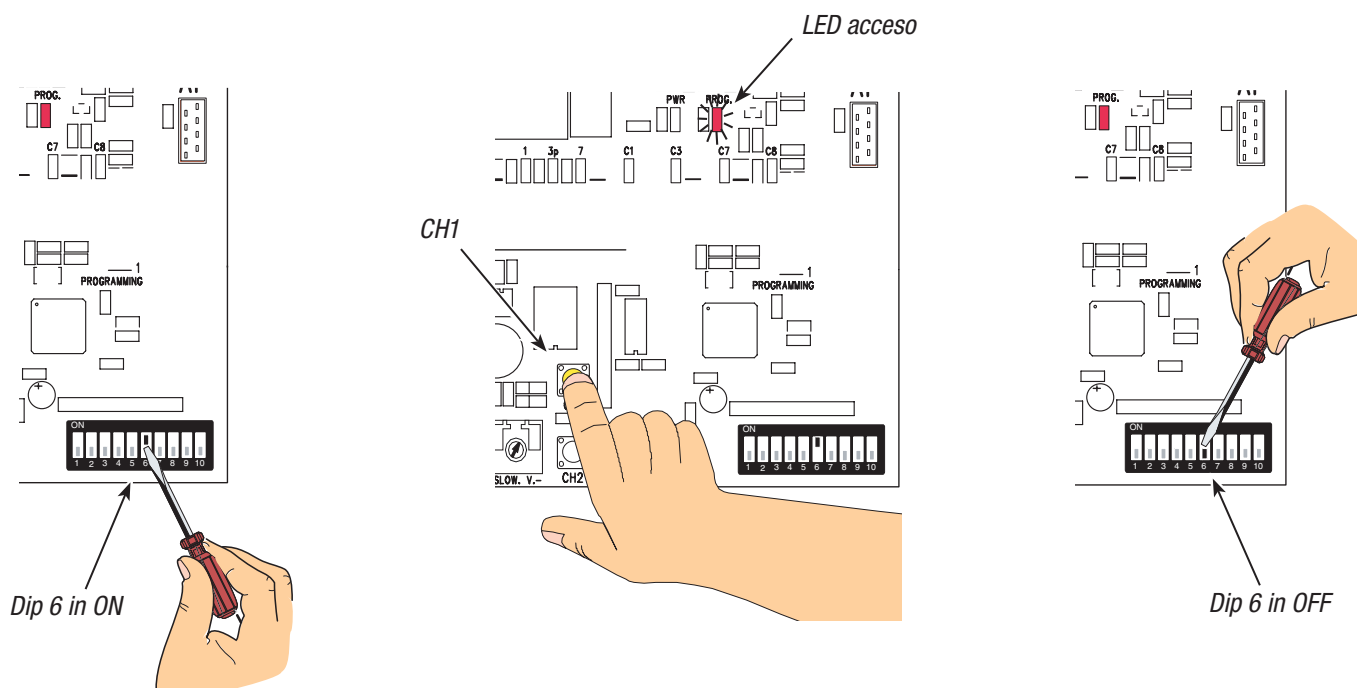
The control board automatically registers the gate-run adjustments with opening and closing decelerations.



To save the adjustment, position dip 6 in ON and press CH1 button until the signalling led stays on.

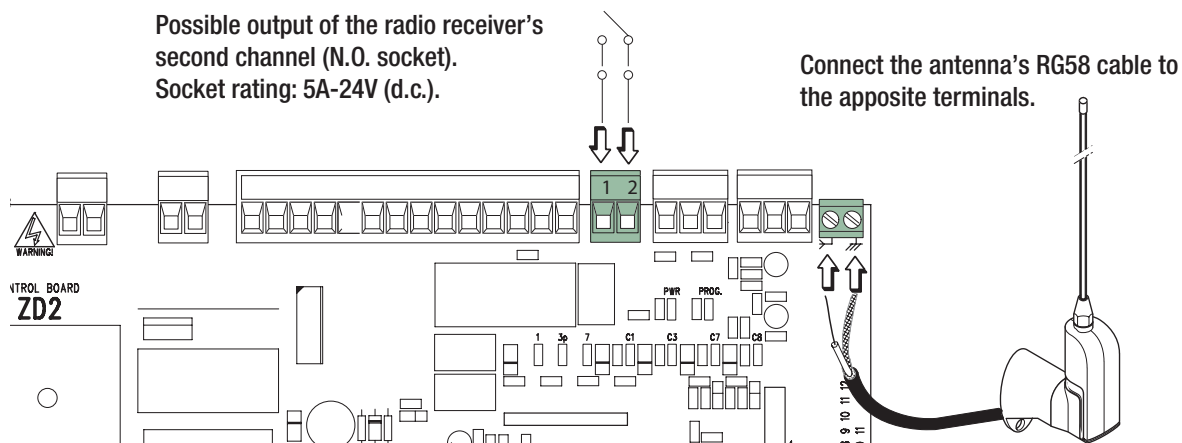
Re-position the dip in OFF

Note: you need to reposition the dip in OFF so to avoid that the reactivation of power supply after a blackout provokes a new adjustment while executing the first manoeuvre.



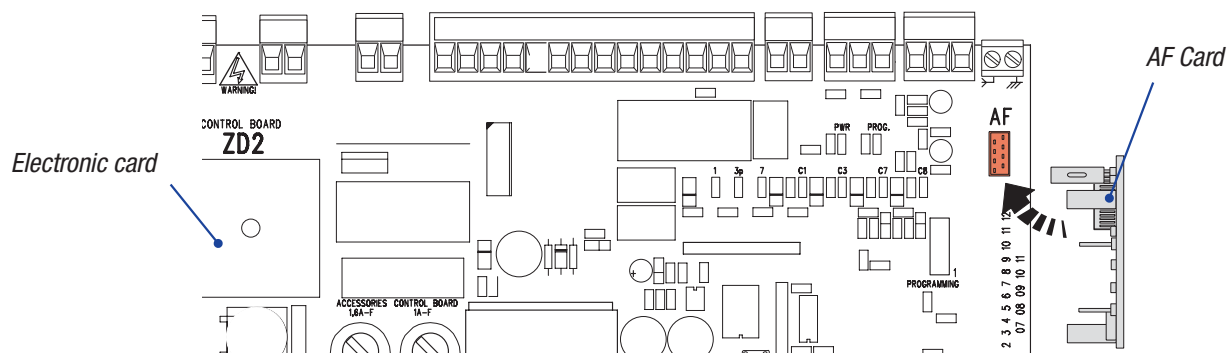
## 11 Activating the radio command

### Antenna

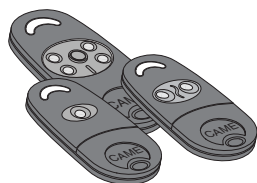


### Radiofrequency card

Insert the radio frequency card into the electronic card **AFTER DISCONNECTING THE POWER** (and disconnecting any batteries).  
N.B.: the electronic card picks up the radiofrequency card on when it is running on power

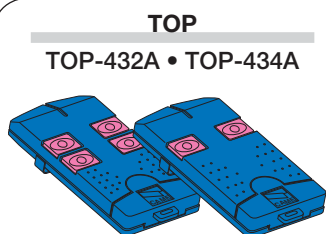


### Transmitters

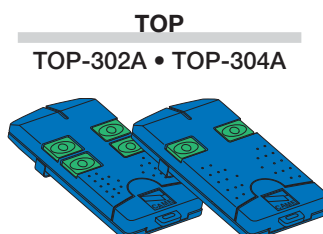


**ATOMO**  
AT01 • AT02  
AT04

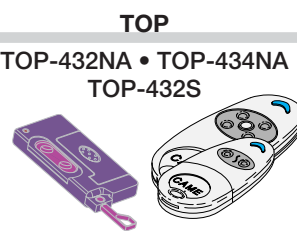
See instruction sheet in AF43SR radiofrequency  
card box



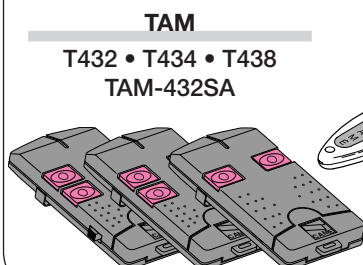
**TOP**  
TOP-432A • TOP-434A



**TOP**  
TOP-302A • TOP-304A

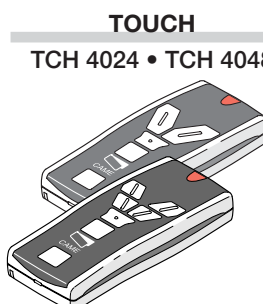


**TOP**  
TOP-432NA • TOP-434NA  
TOP-432S

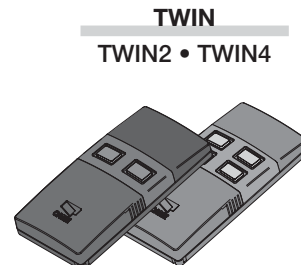


**TAM**  
T432 • T434 • T438  
TAM-432SA

See instructions on packaging



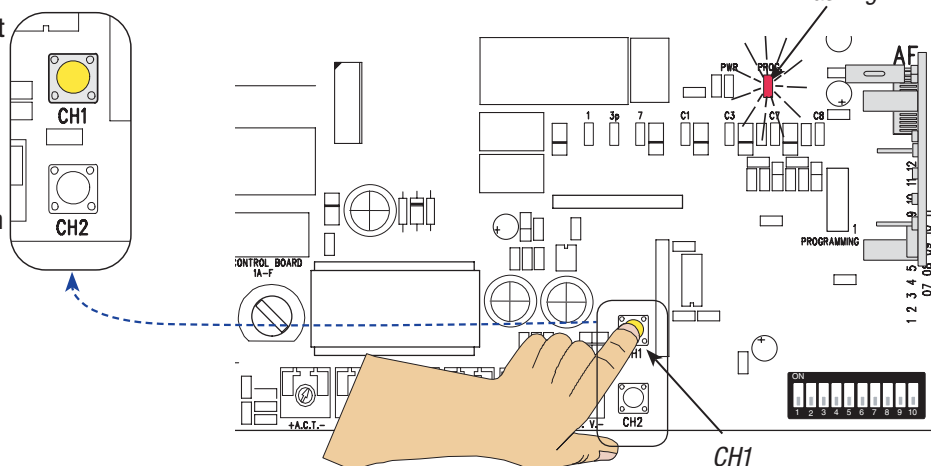
**TOUCH**  
TCH 4024 • TCH 4048



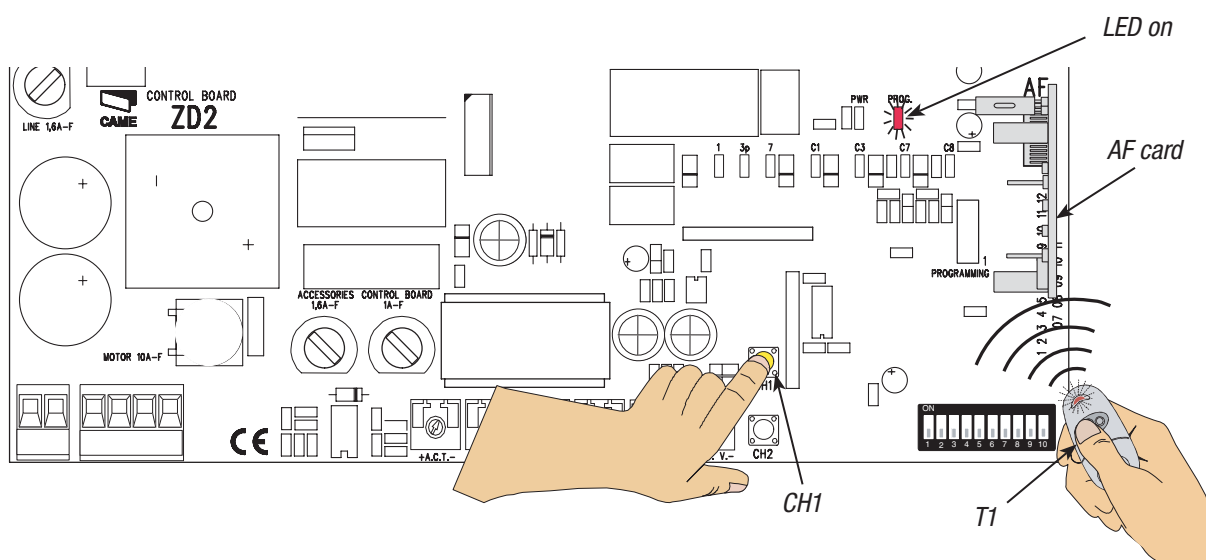
**TWIN**  
TWIN2 • TWIN4

- Keep the **CH1** button on the electronic card pressed. The led flashes.

**CH1** = Channel for direct command to a function of the gearmotor's card, ("open only"/"open-close-invert" or "open-stop-close-stop" command, depending on the choice made on DIP switches 2 and 3).

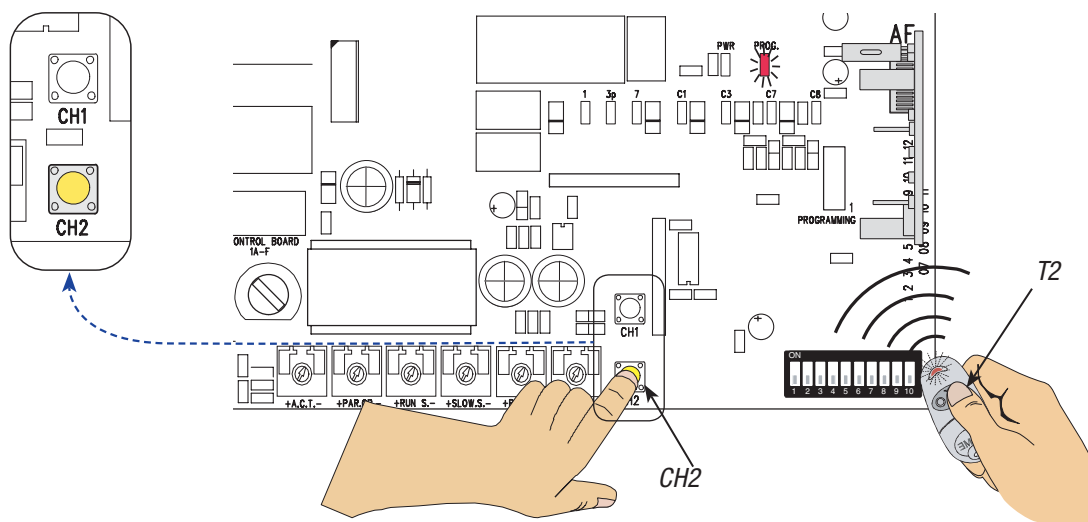


- Press the transmitter button you wish to memorise. The LED will stay on to show memorisation has been successful.



- Repeat the points 1 and 2 procedures "**CH2**" button associating this to another button on the transmitter.

**CH2** = Channel for direct command an accessory device connected to B1-B2.



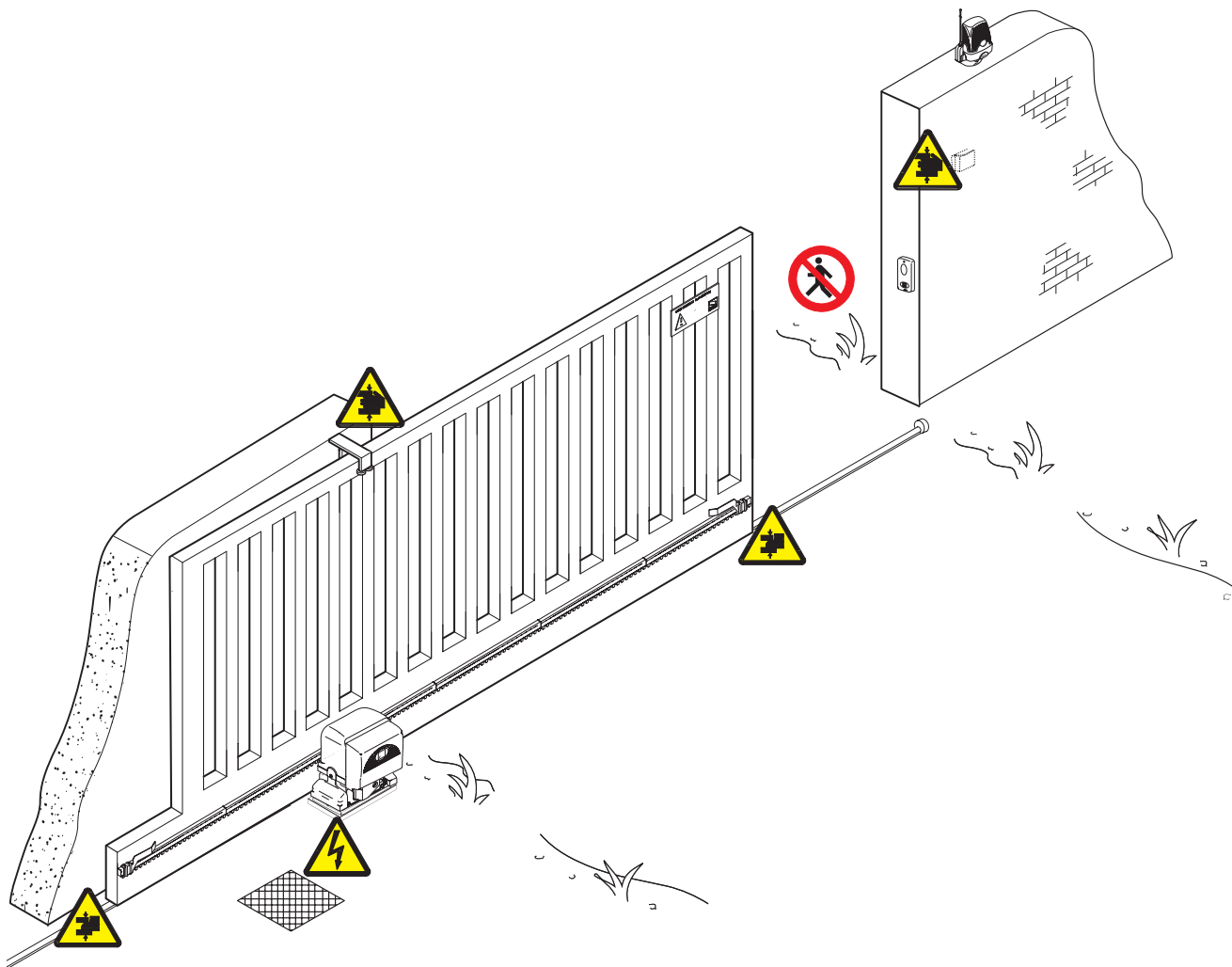
## 12 Safety instructions

### **Important safety instructions**

This product must only be employed for its originally intended use. Any other use is wrong and potentially dangerous. The manufacturer cannot be held liable for any damages resulting from wrongful, erroneous or negligent uses.

Avoid working close to the hinges or other moving mechanical parts. Stay out of the opening/closing arc when operator is in motion.

Do not exercise force against the motion of the operator as this could result in potentially dangerous situations.



Do not allow children to play or loiter within the opening/closing arc of the operator. Keep remote controls and any other command device out the reach of children, to prevent operator from being activated by accident.

In the event of anomalous behaviour, stop using the operator immediately.



Danger of crushing hands



Danger! High voltage



Danger of crushing feet




No transit during operation



## 13 Maintenance

### 13.1 Periodic maintenance

 Periodic maintenance to be carried out by the end-user is as follows: wipe clean the glass surface of the photocells; check that the safety devices work properly; remove any obstructions.

We suggest checking the state of lubrication and tightness of the anchoring screws on the operator.

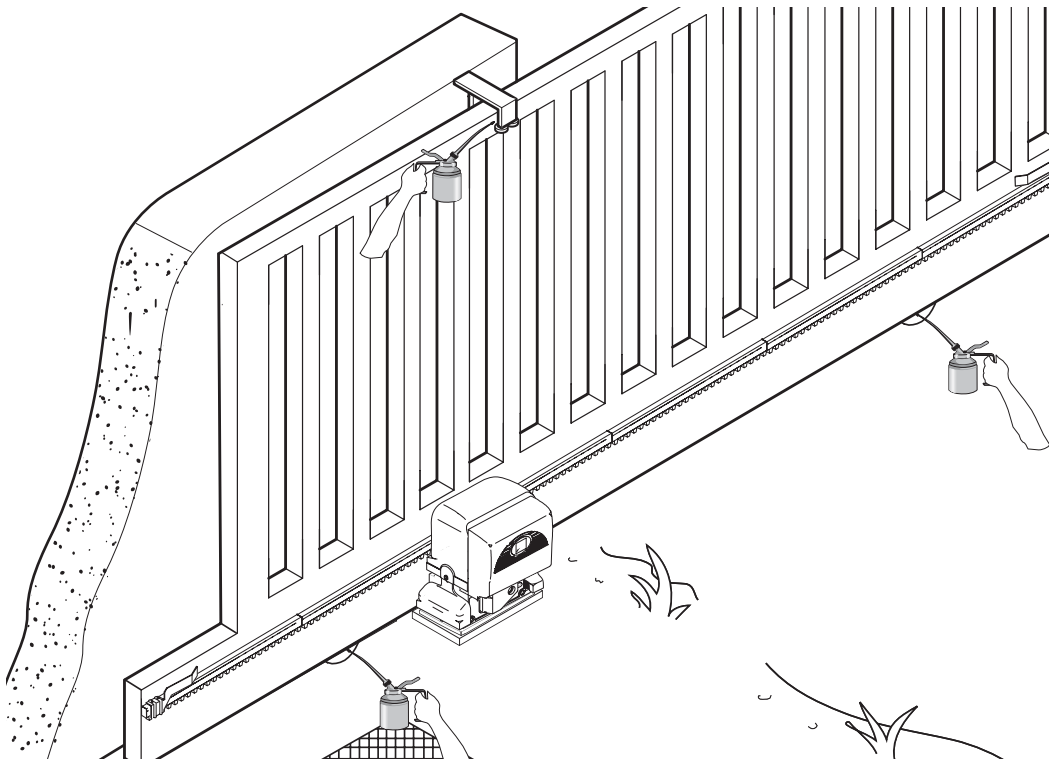
-To check the efficiency of the safety devices, move an object in front of the photocells when gate is closing. If the operator inverts the motion or stops, the photocells are working properly.

This is the only maintenance procedure to be carried out with the power source connected.

-Before performing any maintenance procedures, cut off the main power, to prevent possible accidents due to gate movement.

-To clean the photocells use a water dampened cloth. Do not use solvents or other chemical products which may ruin the devices.

-In the event of any strange vibrations or squeaking, lubricate the joints with grease, as shown in the diagram.



-Make sure there are no plants within the photocell's beam, and that the gate motion is free of any obstacles.

### 13.2 Trouble shooting

| MALFUNCTIONS                      | POSSIBLE CAUSES   | CHECK AND REMEDIES   |
|-----------------------------------|---|--|
| The gate will not open nor close  | <ul style="list-style-type: none"><li>• There is no power</li><li>• The gearmotor is in release mode and the release door is open</li><li>• The transmitter's batteries are run down</li><li>• The transmitter is broken</li><li>• The stop button is either stuck or broken</li><li>• The opening/closing button or the key selector are stuck</li><li>• Photocells in partial stop mode</li></ul> | <ul style="list-style-type: none"><li>• Check that the power is up</li><li>• Call assistance</li><li>• Replace batteries</li><li>• Call assistance</li><li>• Call assistance</li><li>• Call assistance</li><li>• Call assistance</li></ul> |
| The gate opens but will not close | <ul style="list-style-type: none"><li>• The photocells are engaged</li><li>• Sensitive edge triggered</li></ul>   | <ul style="list-style-type: none"><li>• Check that photocells are clean and in good working order</li><li>• Call assistance</li></ul>  |
| The gate closes but will not open | <ul style="list-style-type: none"><li>• Sensitive edge triggered</li></ul>  | <ul style="list-style-type: none"><li>• Call assistance</li></ul>  |
| The flasher does not work         | <ul style="list-style-type: none"><li>• The bulb is burnt</li></ul>   | <ul style="list-style-type: none"><li>• Call assistance</li></ul>  |

**Periodic maintenance log for end-user (every 6 months)**

| Date | Notes | Signature |
|------|-------|-----------|
|      |       |           |
|      |       |           |
|      |       |           |
|      |       |           |
|      |       |           |
|      |       |           |
|      |       |           |
|      |       |           |
|      |       |           |

**13.3 Extra-ordinary maintenance**

 The following table serves to note down any extraordinary maintenance, repairs or improvements performed by specialised firms.

N.B.: Any extraordinary maintenance must be performed by specialised technicians.

**Extra-ordinary maintenance log**

|                              |                        |
|------------------------------|------------------------|
| Installer's stamp            | Operator name          |
|                              | Date of job            |
|                              | Technician's signature |
|                              | Requester's signature  |
| Job performed _____<br>_____ |                        |

|                              |                        |
|------------------------------|------------------------|
| Installer's stamp            | Operator name          |
|                              | Date of job            |
|                              | Technician's signature |
|                              | Requester's signature  |
| Job performed _____<br>_____ |                        |


  

|                              |                        |
|------------------------------|------------------------|
| Installer's stamp            | Operator name          |
|                              | Date of job            |
|                              | Technician's signature |
|                              | Requester's signature  |
| Job performed _____<br>_____ |                        |

|                     |                        |
|---------------------|------------------------|
| Installer's stamp   | Operator name          |
|                     | Date of job            |
|                     | Technician's signature |
|                     | Requester's signature  |
| Job performed _____ |                        |

|                     |                        |
|---------------------|------------------------|
| Installer's stamp   | Operator name          |
|                     | Date of job            |
|                     | Technician's signature |
|                     | Requester's signature  |
| Job performed _____ |                        |

## 14 Phasing out and disposal

 CAME CANCELLI AUTOMATICI S.p.A. employs a UNI EN ISO 14001 certified and compliant environmental protection system at its plants, to ensure that environmental safeguarding. We ask you to keep protecting the environment, as CAME deems it to be one of the fundamental points of its market operations strategies, by simply following these brief guidelines when disposing:

### DISPOSING THE PACKING MATERIALS

The packing components (cardboard, plastic, etc.) are solid urban waste and may be disposed of without any particular difficulty, by simply separating them so that they can be recycled.

Before actions it is always advisable to check the pertinent legislation where installation will take place.

**DO NOT DISPOSE OF IN NATURE!**

### DISPOSING OF THE PRODUCT

Our products are made using different types of materials. The majority of them (aluminium, plastic, iron, electric cables) can be considered to be solid urban waste. They may be recycled at authorised firms.

Other components (electrical circuit board, remote control batteries etc.) may contain hazardous waste.

They must, thus, be removed and turned in to licensed firms for their disposal.

Before acting always check the local laws on the matter.

**DO NOT DISPOSE OF IN NATURE!**

## 15 Conformity declaration



### MANUFACTURER'S DECLARATION OF CONFORMITY

Pursuant annex II B of the Machinery Directive 98/37/EC



CAME Cancelli Automatici S.p.A.  
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internet: www.came.it - e-mail: info@came.it

#### IMPORTANT WARNING!

Do not use the equipment specified here above, before completing the full installation  
In full compliance with the Machinery Directive 98/37/EC

Declares under its own responsibility that the equipments for automatic garage doors and gates listed below:

**BX-246**

... comply with the National Law related to the following European Directives and to the applicable parts of the following Standards.

|                        |   |
|------------------------|---|
| 98/37/CE - 98/79/CE    | MACHINERY DIRECTIVE                     |
| 98/336/CEE - 92/31/CEE | ELECTROMAGNETIC COMPATIBILITY DIRECTIVE |
| 73/23/CEE - 93/68/CE   | LOW VOLTAGE DIRECTIVE                   |
| 89/106/CEE             | CONSTRUCTION PRODUCTS DIRECTIVE         |

|            |            |              |
|------------|------------|--------------|
| EN 13241-1 | EN 12635   | EN 61000-6-2 |
| EN 12453   | EN 12978   | EN 61000-6-3 |
| EN 12445   | EN 60335-1 | EN 60204-1   |

MANAGING DIRECTOR  
Mr. Andrea Menuzzo

Reference code to request a true copy of the original: **DDF B EN B001c**

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English - Manual code: **119BU50** ver. **1.0** 10/2007 © CAME cancelli automatici s.p.a. to notify users.  
The data and information reported in this installation manual are susceptible to change at any time and without obligation on CAME cancelli automatici s.p.a.



## CAME Cancelli Automatici S.p.a.

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