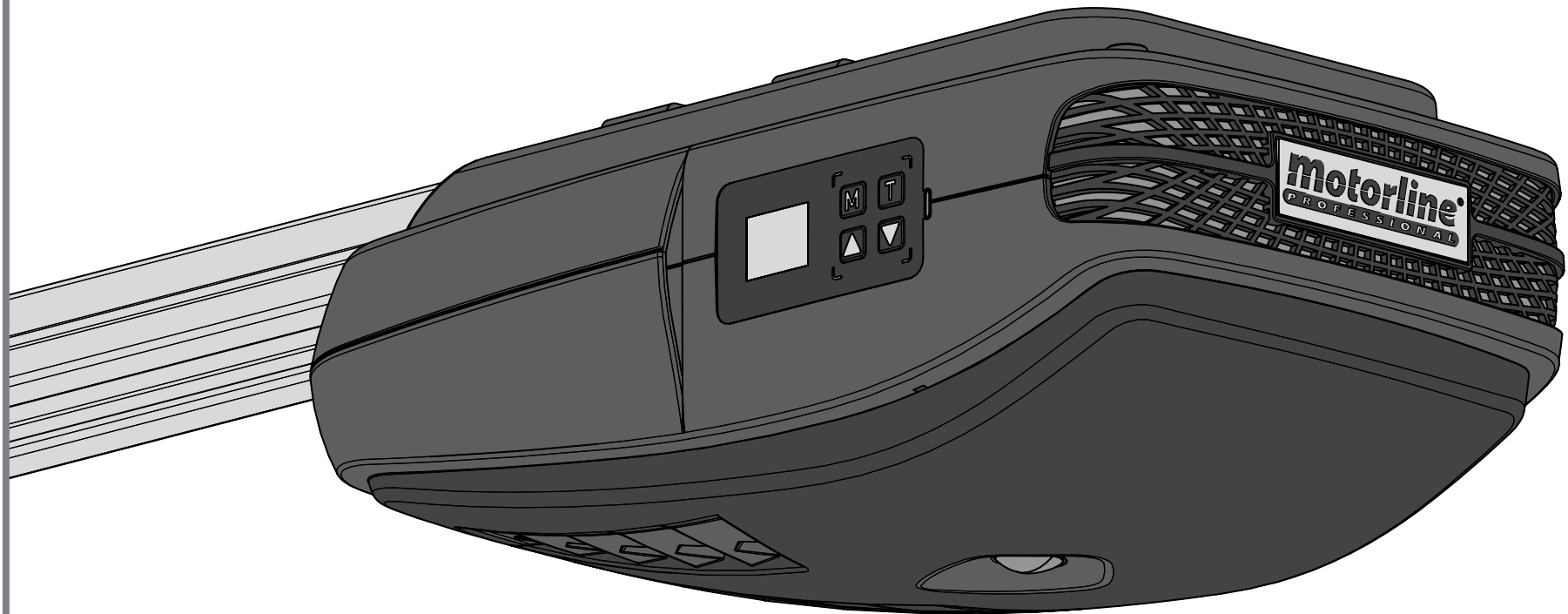




ROSSO PRO

USER'S AND INSTALLER'S MANUAL









motorline[®]
PROFESSIONAL

00. CONTENT

INDEX

| | |
|--|-----|
| 01. SAFETY INSTRUCTIONS | 2B |
| 02. PACKAGE | |
| INSIDE THE PACKAGE | 5A |
| 03. THE AUTOMATISM | |
| TECHNICAL SPECIFICATIONS | 5B |
| MANUAL UNLOCK | 6A |
| INSTALLATION OF MCONNECT LINK (OPTIONAL) | 6A |
| REMOVE UPPER COVER | 6B |
| INSTALL MOTION SENSOR | 6B |
| CHANGING COURTESY LEDES | 7A |
| CHANGING FUSE | 7A |
| PRE-INSTALLATION INFORMATION | 7B |
| 04. INSTALLATION | |
| MOTOR'S FIXATION ON THE RAIL | 8A |
| THE AUTOMATISM INSTALLATION | 8B |
| INSTALLATION MAP | 10 |
| 06. POST-INSTALLATION | |
| STOPPER AT THE OPENING | 11A |
| STRETCH RAIL CHAIN | 11B |
| MAINTENANCE | 11B |
| 06. CONTROL BOARD | |
| LEGEND | 12A |
| 07. PROGRAMMING | |
| TRANSMITTERS | 13B |
| MMR15 MODULE | 14A |
| "P" MENU FUNCTIONS | 15A |
| PROGRAM "P" | 15B |
| "E" MENU FUNCTIONS | 20B |
| PROGRAM "E" | 21A |
| 08. DISPLAY | |
| DISPLAY INDICATIONS | 24 |
| 09. CONNECTIONS TO THE CONTROL BOARD | |
| ROSSO PRO CONTROL BOARD | 25 |
| PHOTOCELLS WITH TEST CONNECTION | 26A |
| MMR15 RECEIVER MODULE (OPTIONAL) | 26B |
| 08. TROUBLESHOOTING | |
| CONTROL BOARD ERROR MAP | 26 |
| INSTRUCTIONS FOR CONSUMERS SPECIALIZED TECHNICIANS | 28 |

01. SAFETY INSTRUCTIONS

| | |
|---|---|
|  | This product is certified in accordance with European Community (EC) safety standards. |
|  | This product complies with Directive 2011/65/EU of the European Parliament and of the Council, of 8 June 2011, on the restriction of the use of certain hazardous substances in electrical and electronic equipment and with Delegated Directive (EU) 2015/863 from Commission. |
|  | (Applicable in countries with recycling systems). This marking on the product or literature indicates that the product and electronic accessories (eg. Charger, USB cable, electronic material, controls, etc.) should not be disposed of as other household waste at the end of its useful life. To avoid possible harm to the environment or human health resulting from the uncontrolled disposal of waste, separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources. Home users should contact the dealer where they purchased this product or the National Environment Agency for details on where and how they can take these items for environmentally safe recycling. Business users should contact their vendor and check the terms and conditions of the purchase agreement. This product and its electronic accessories should not be mixed with other commercial waste. |
|  | This marking indicates that batteries should not be discarded like other household waste at the end of their useful life. Batteries must be delivered to selective collection points for recycling. |
|  | The different types of packaging (cardboard, plastic, etc.) must be subject to selective collection for recycling. Separate packaging and recycle it responsibly. |
|  | This marking indicates that the product and electronic accessories (eg. charger, USB cable, electronic material, controls, etc.) are susceptible to electric shock by direct or indirect contact with electricity. Be cautious when handling the product and observe all safety procedures in this manual. |

01. SAFETY INSTRUCTIONS

GENERAL WARNINGS

- This manual contains very important safety and usage information. Read all instructions carefully before beginning the installation/usage procedures and keep this manual in a safe place that it can be consulted whenever necessary.
- This product is intended for use only as described in this manual. Any other enforcement or operation that is not mentioned is expressly prohibited, as it may damage the product and put people at risk causing serious injuries.
- This manual is intended firstly for specialized technicians, and does not invalidate the user's responsibility to read the "User Norms" section in order to ensure the correct functioning of the product.
- The installation and repair of this product may be done by qualified and specialized technicians, to assure every procedure are carried out in accordance with applicable rules and norms. Nonprofessional and inexperienced users are expressly prohibited of taking any action, unless explicitly requested by specialized technicians to do so.
- Installations must be frequently inspected for unbalance and the wear signals of the cables, springs, hinges, wheels, supports and other mechanical assembly parts.
- Do not use the product if it is necessary repair or adjustment is required.
- When performing maintenance, cleaning and replacement of parts, the product must be disconnected from power supply. Also including any operation that requires opening the product cover.
- The use, cleaning and maintenance of this product may be carried out by any persons aged eight years old and over and persons whose physical, sensorial or mental capacities are lower, or by persons without any knowledge of the product, provided that these are supervision and instructions given by persons with experienced in terms of usage of the product in a safe manner and who understands the risks and dangers involved.

- Children shouldn't play with the product or opening devices to avoid the motorized door or gate from being triggered involuntarily.
- If the power cable is damaged, it must be replaced by the manufacturer, after-sales service or similarly qualified personnel to avoid danger.
- The device must be disconnected from the electrical network when removing the battery.
- Ensure that blocking is avoided between the actuated part and its fixed parts due to the opening movement of the actuated part.

WARNINGS FOR TECHNICIANS

- Before beginning the installation procedures, make sure that you have all the devices and materials necessary to complete the installation of the product.
- You should note your Protection Index (IP) and operating temperature to ensure that is suitable for the installation site.
- Provide the manual of the product to the user and let them know how to handle it in an emergency.
- If the automatism is installed on a gate with a pedestrian door, a door locking mechanism must be installed while the gate is in motion.
- Do not install the product "upside down" or supported by elements do not support its weight. If necessary, add brackets at strategic points to ensure the safety of the automatism.
- Do not install the product in explosive site.
- Safety devices must protect the possible crushing, cutting, transport and danger areas of the motorized door or gate.
- Verify that the elements to be automated (gates, door, windows, blinds, etc.) are in perfect function, aligned and level. Also verify if the necessary mechanical stops are in the appropriate places.
- The control board must be installed on a safe place of any fluid (rain, moisture, etc.), dust and pests.
- You must route the various electrical cables through protective tubes, to protect them against mechanical exertions, essentially on

01. SAFETY INSTRUCTIONS

the power supply cable. Please note that all the cables must enter the control board from the bottom.

- If the automatism is to be installed at a height of more than 2,5m from the ground or other level of access, the minimum safety and health requirements for the use of work equipment workers at the work of Directive 2009/104/CE of European Parliament and of the Council of 16 September 2009.
- Attach the permanent label for the manual release as close as possible to the release mechanism.
- Disconnect means, such as a switch or circuit breaker on the electrical panel, must be provided on the product's fixed power supply leads in accordance with the installation rules.
- If the product to be installed requires power supply of 230Vac or 110Vac, ensure that connection is to an electrical panel with ground connection.
- The product is only powered by low voltage safety with control board (only at 24V motors).
- Parts/products weighing more than 20 kg must be handled with special care due to the risk of injury. It is recommended to use suitable auxiliary systems for moving or lifting heavy objects.
- Pay special attention to the danger of falling objects or uncontrolled movement of doors/gates during the installation or operation of this product.

WARNINGS FOR USERS

- Keep this manual in a safe place to be consulted whenever necessary.
- If the product has contact with fluids without being prepared, it must immediately disconnect from the power supply to avoid short circuits, and consult a specialized technician.
- Ensure that technician has provided you the product manual and informed you how to handle the product in an emergency.
- If the system requires any repair or modification, unlock the automatism, turn off the power and do not use it until all safety

conditions have been met.

- In the event of tripping of circuits breakers or fuse failure, locate the malfunction and solve it before resetting the circuit breaker or replacing the fuse. If the malfunction is not repairable by consult this manual, contact a technician.
- Keep the operation area of the motorized gate free while the gate in in motion, and do not create strength to the gate movement.
- Do not perform any operation on mechanical elements or hinges if the product is in motion.

RESPONSABILITY

- Supplier disclaims any liability if:
 - Product failure or deformation result from improper installation use or maintenance!
 - Safety norms are not followed in the installation, use and maintenance of the product.
 - Instructions in this manual are not followed.
 - Damaged is caused by unauthorized modifications
 - In these cases, the warranty is voided.

MOTORLINE ELECTROCELOS SA.

Travessa do Sobreiro, nº29
4755-474 Rio Côvo (Santa Eugénia)
Barcelos, Portugal

SYMBOLS LEGEND:



• Important safety notices



• Useful information



• Programming information



• Potentiometer information



• Connectors information



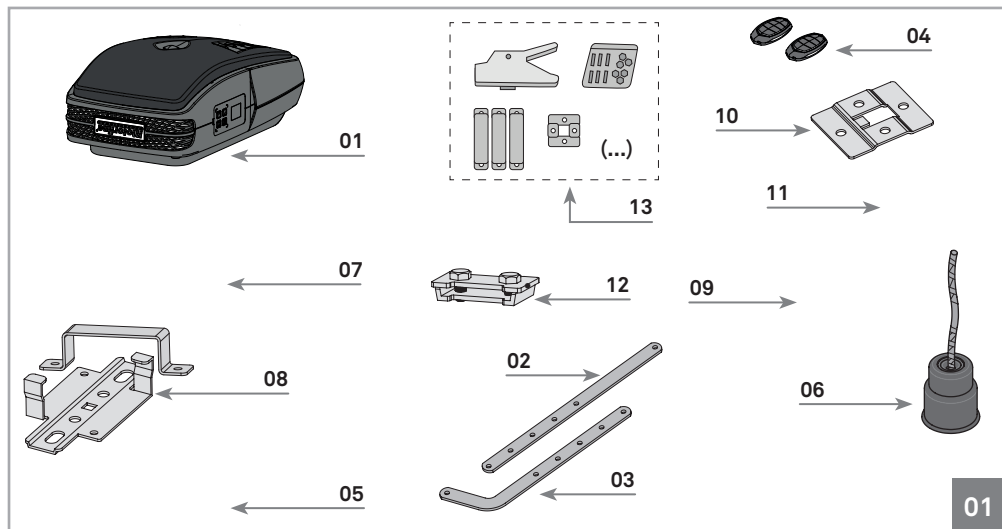
• Buttons information

02. PACKAGE

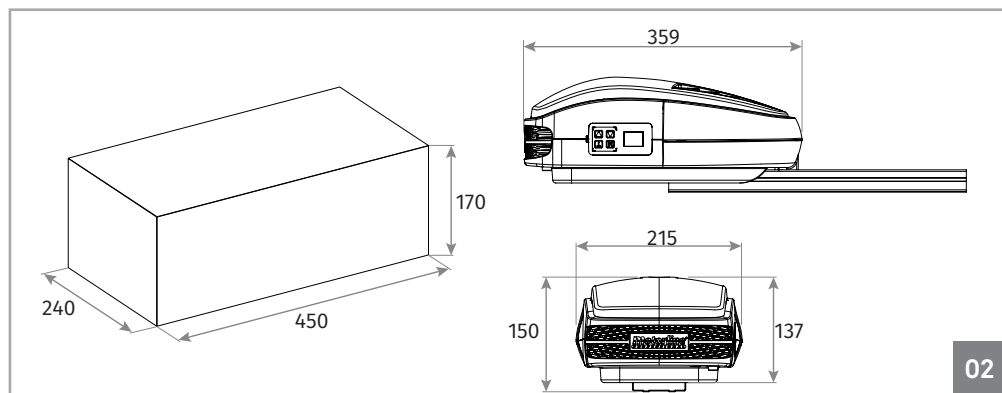
INSIDE THE PACKAGE

Inside the package you will find the following components:

- 01 • 01 motor
- 02 • 01 linear straight arm
- 03 • 01 linear curved arm
- 04 • 02 Transmitters
- 05 • 01 Fixing angle
- 06 • 01 Rope
- 07 • 03 motor's fixing plate to the rail
- 08 • 01 rail's fixing plate to the ceiling
- 09 • 01 rail's fixing plate to the lintel
- 10 • 01 door's fixing plate
- 11 • 01 reinforcement plate to door's fixing plate
- 12 • 01 stopper
- 13 • 01 set of fixing accessories
- 14 • 01 Transmitter support



DIMENSIONS



03. THE AUTOMATISM

TECHNICAL SPECIFICATIONS

ROSSO PRO is an automation system with the possibility of installing a Wi-Fi module for remote management and control. The control board that equips this motor allows motor management with a quadrature encoder, ensuring movement precision and optimizing its control, making it more efficient and powerful.

The motor was designed using brushless technology for super intensive use of over 150 cycles per day. This motor has an increase in inputs and outputs which allows us to know the status of the door, as well as give separate opening and closing orders.

| Control Board Characteristics | |
|--------------------------------------|--------------------------------|
| | ROSSO PRO 120 |
| • Power supply | 24Vac |
| • Output for flashing lamp | 24Vdc 5W Max. |
| • Output for motor | 24Vdc 130W Max. |
| • Output for auxiliary accessories | 24Vdc 5W Max. |
| • Working temperature | -25°C to +55°C |
| • Built-in Radio Receiver | 433.92MHz or 868MHz * |
| • Maximum Transmitter capacity | 200 |
| • Control board Dimensions | 170x86mm |
| • Fuse | 8A |
| • Battery Charging | 29Vdc 200mA max |
| • Battery type | lithium battery MBAT26V2000 |
| • Dry contact relay capacity | 230Vac 8A (resistive load) |
| • Door status output | Open collector 24Vdc 100mA max |
| * Depends on the chosen radio module | |

| Motor characteristics | |
|--------------------------------|---------------------------|
| | ROSSO PRO 120 |
| • Power supply | 110/230Vac (±10%) 50/60Hz |
| • Voltage | 24Vdc |
| • Maximum Force | 1200N |
| • Nominal Force | 600N |
| • Maximum Speed | 170mm/s |
| • Cycles per day | > 150 |
| • Power consumption in standby | < 1W |
| • Nominal power | 150W |
| • Maximum consumed power | 260W |
| • Protection class | IP20 |
| • Working frequency | 55% |
| • Maximum door area | 18m ² |
| • Noise | ≤ 50dB |
| • Motor size | 359x215x137mm |
| • Working temperature | -25°C to +55°C |

| Radio Module | |
|-----------------------------------|-----------------|
| • Decoding | Rolling Code |
| • Input impedance | 50Ω |
| • Transmitter reception frequency | 432MHz / 868MHz |
| • Sensitivity | -108dBm |
| • Memory for Transmitters | 200 |

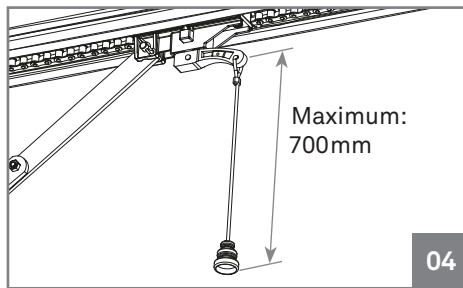
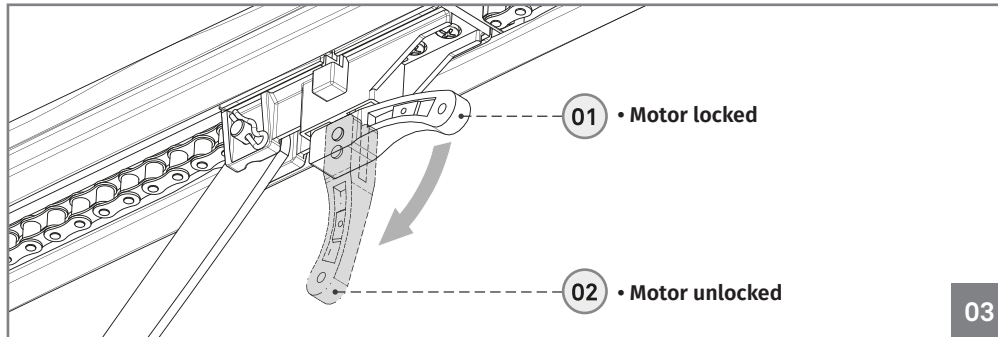
| MMR15 Module | |
|--------------------------|----------------------|
| • Working frequency | 868,00MHz / 869,8MHz |
| • Protection class | IP70 |
| • Audible signal | 70dB |
| • RF channels | 4 |
| • Maximum number of MX14 | 4 |
| • Transmitter power | +14dBm |
| • RF sensitivity | -110dBm |

03. THE AUTOMATISM

MANUAL UNLOCK

The **ROSSO PRO** unlocking system is very simple and practical to use. To do so just pull the lever down (figure 03).

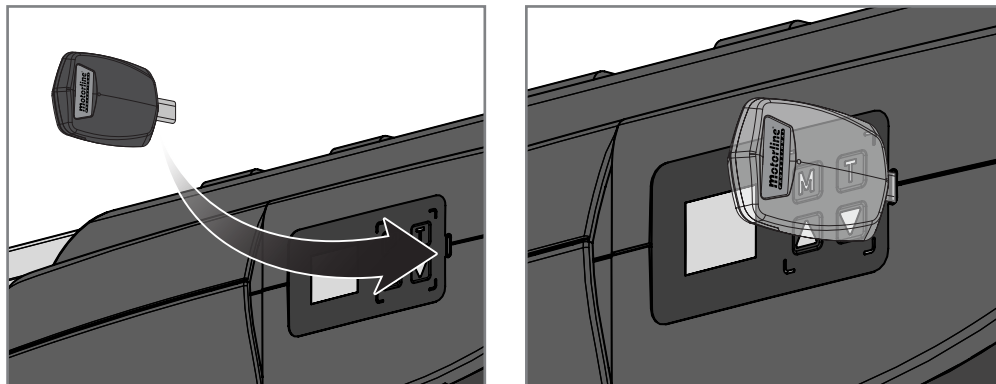
To block simply pull the lever to the original position.



← Together with the automatism it is also provided a rope to apply on the unlock lever, which makes it even a more practical and comfortable process.

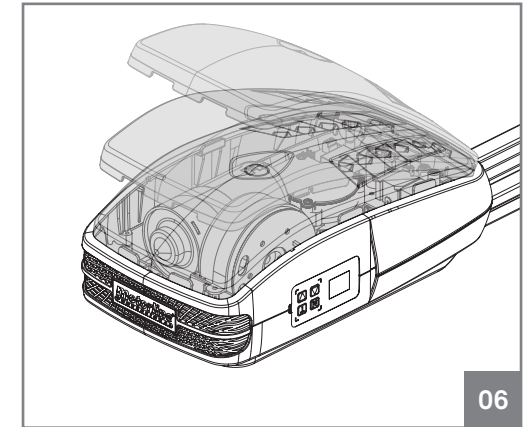
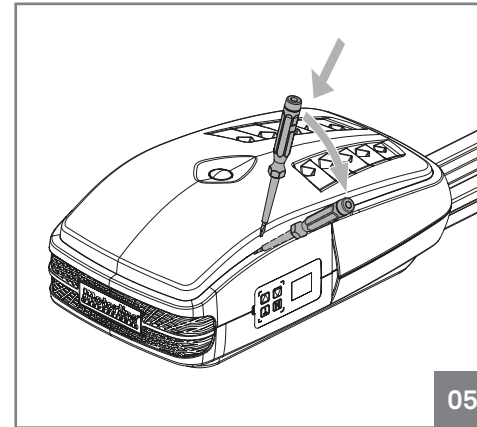
INSTALLION OF MCONNECT LINK (OPTIONAL)

Place the Mconnect Link into the USB-C port next to the display.



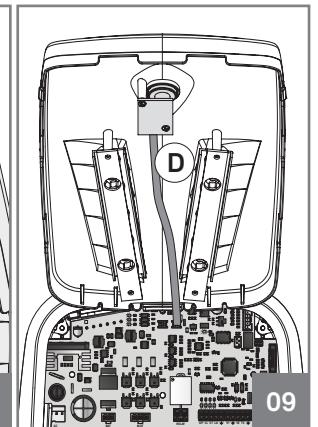
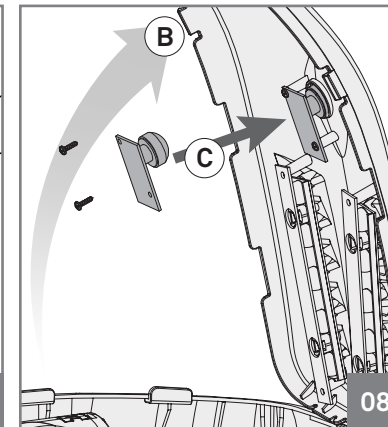
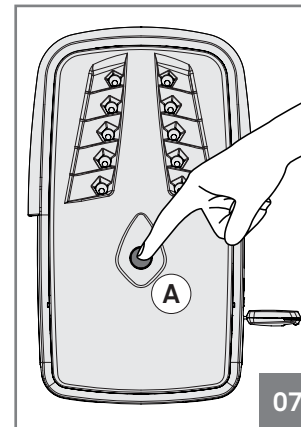
03. THE AUTOMATISM

REMOVING TOP COVER



To remove the cover simply insert a small screwdriver into the side holes, and create a lever effect to release the fittings between the top cover and the body. Then just remove the cover by lifting it.

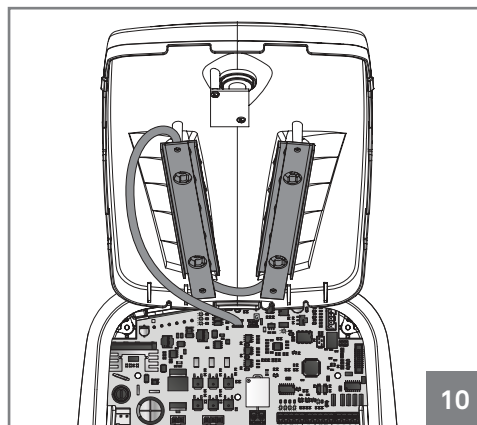
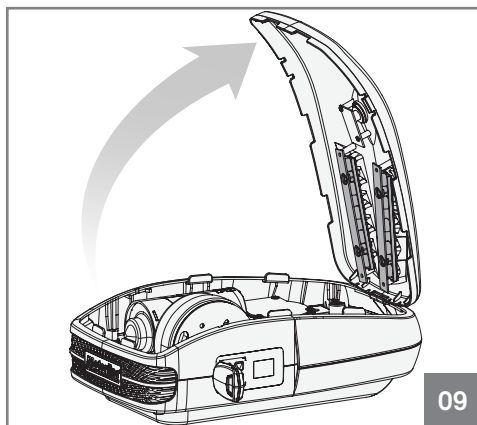
INSTALL MOTION SENSOR



Press the wheel in the centre of the cover (A) until it is loose. Then lift the cover (B), and screw the sensor into the cover (C). Connect the wire to connector G on the motor centre (D).

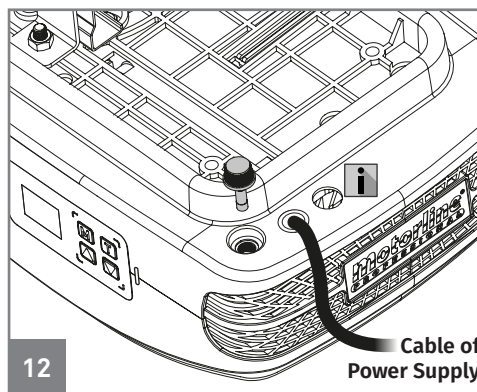
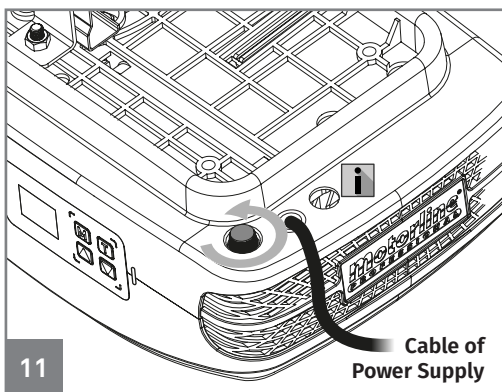
03. THE AUTOMATISM

CHANGING COURTESY LEDS



- To replace the LED board you must open the top cover and detach the wire of the LED from the control board. Loosen the screw which secures the LED board to the top cover and remove it. Now just put the new LED board, screw it, fit the wire in the control board and close back the cover on the motor.

CHANGING FUSE



- To replace the fuse, first loosen it as visible in the image 11. Then just pull to remove it (image 12). Repeat the same steps in reverse order to put a new fuse. The operator uses a 250V 3,15A.



This hole has a diameter of 12.5mm and is reserved for the passage of supplementary cables and accessories.

04. INSTALLATION

INFORMATION PRE-INSTALLATION

For a correct operation of **ROSSO PRO**, you must take into account the following parameters before the installation:

- Read all steps on this manual at least once in order to get acquainted with the installation and configuration process.
- Make sure the door's structure is solid and appropriate to be automated.
- Verify that the sectional door has no technical defects, such as friction points/ prison, that may jeopardize the automatism durability.
- Make sure the door is in good condition to install the motor. To do so, raise it manually to 800mm, 1600mm and 2000mm from the ground. *Check if the door remains suspended in these positions or drops minimally. If the door starts to go up or down, it means that the springs are not well calibrated.*
- Check the surroundings. Carefully evaluate any hazards that may cause material damage, possible insects contact, infiltration, among others.
- Make sure that the automatism will be connected to a 230V, properly protected with Ground Wire.
- Make sure there is adequate protection against short-circuits / current spikes and earthed in the Electrical Box.
- Be careful when handling directly the control board. Improper handling can damage some electrical components.
- Make sure you have all the necessary material prepared for installation.
- Evaluate the safety devices to be installed. This will ensure that unexpected accidents do not happen.



It is very important that these precautions are respected!

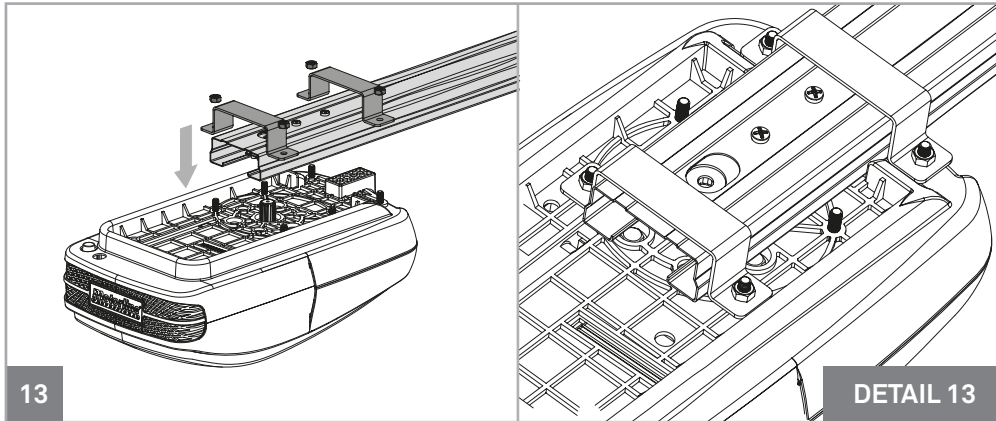
Only in this way the correct functioning and automatism durability can be achieved!

04. INSTALLATION

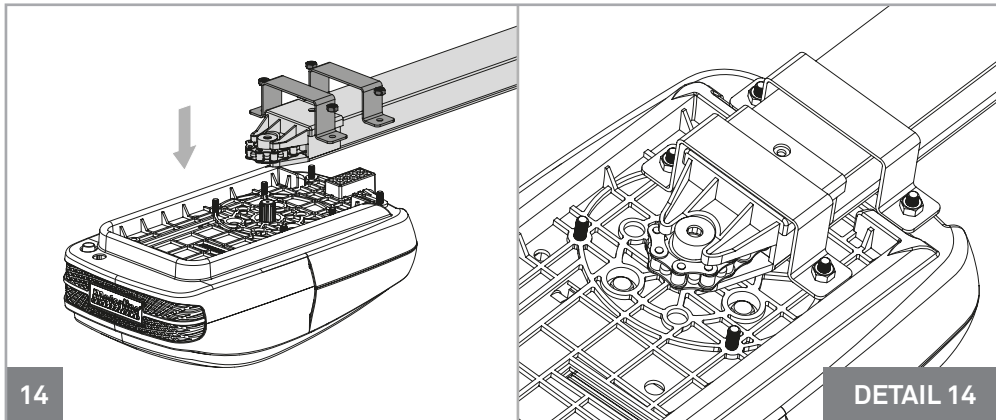
FIXING THE MOTOR IN RAILS



With standard rails, you can only automate doors with maximum height of 2500mm.



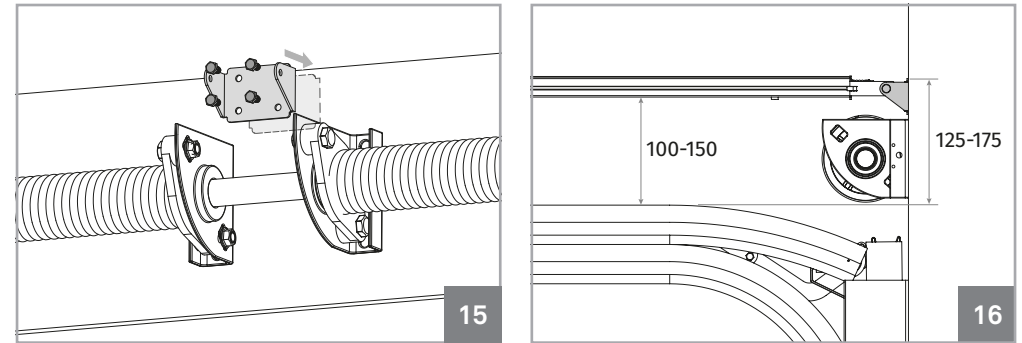
01 • The steel rail and automatism attachment must be made using the plates and M6 nuts as shown above. Fasten 4 screws, leaving the two in the middle free.



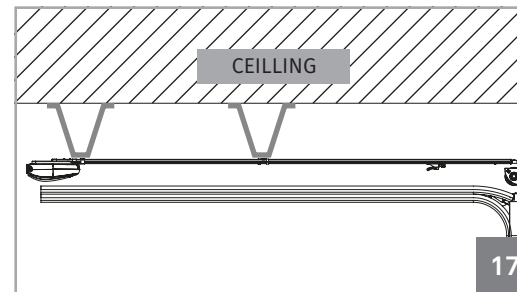
02 • The aluminum rail and automatism attachment must be made using the plates and M6 nuts and as shown above. Tighten 4 screws, leaving the two in the front free.

04. INSTALLATION

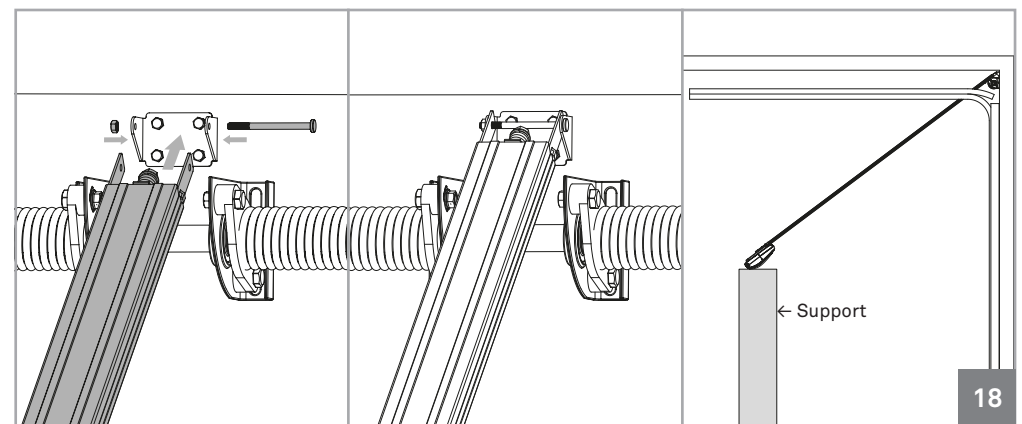
AUTOMATISM INSTALLATION



01 • Attach the rail's support plate to the lintel, as visible in the image 15. In the image 16 if can be seen the distance to keep between the door rail and support plate's upper part (125-175mm).



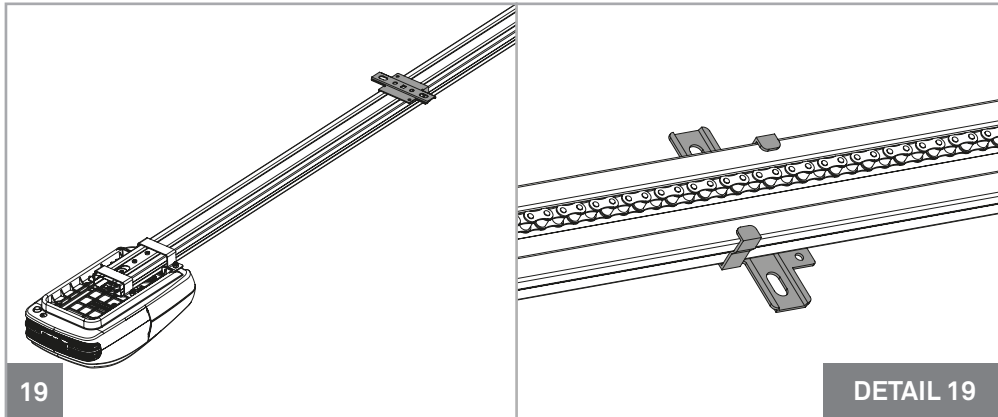
← Note • If you are unable to fix the rail to the ceiling for not respecting the measures above, there should be created a solid structure to be able to fix the motor in correct measurements. This structure may be fixed to the ceiling as a visible on the image 17.



02 • Fasten the rail in the fixation plate already attached. To facilitate the task, you can do it with the rail inclined (motor on the floor / support) which facilitates the installation since you only have to handle the area of rail to be fixed.

04. INSTALLATION

AUTOMATISM INSTALLATION

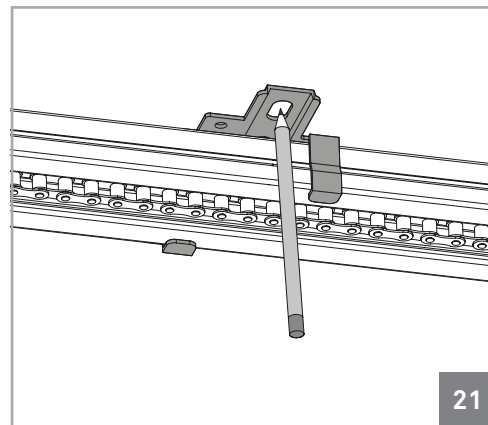


03 • Place the rails fixing plate on the ceiling approximately in the middle of the steel rail as visible in the pictures above.



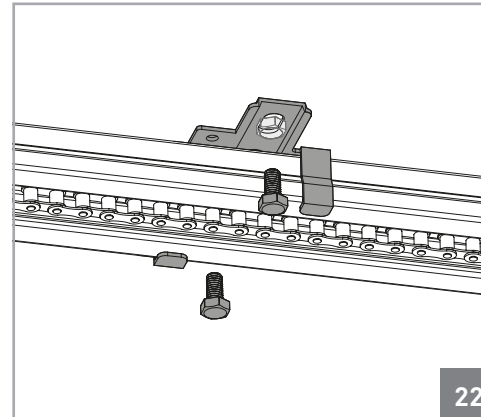
04 • Raise up the motor until the rail is levelled horizontally. If necessary, you should create a support structure to a solid surface as shown on the previous page, so that the rail stays horizontally aligned (picture 17).

Mark the holes in the ceiling plate and/or structure and make the necessary holes to fix it.

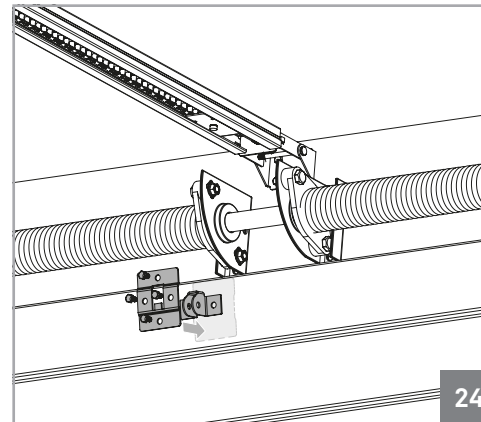


04. INSTALLATION

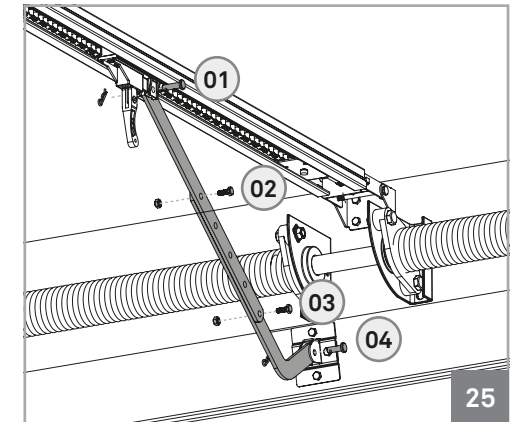
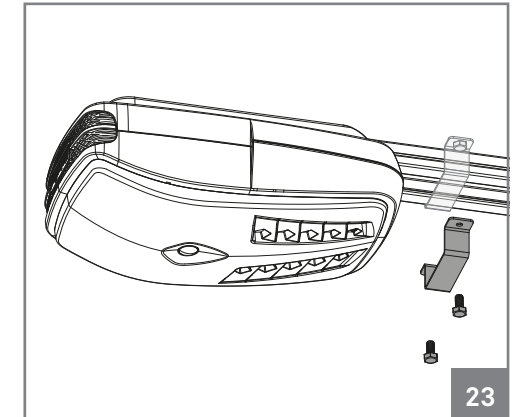
AUTOMATISM INSTALLATION



05 • After rising the rail and mark the holes, you should fix the plate with screws. After that, you should use bracket to reinforce the attachment, this time near the motor (image 23).



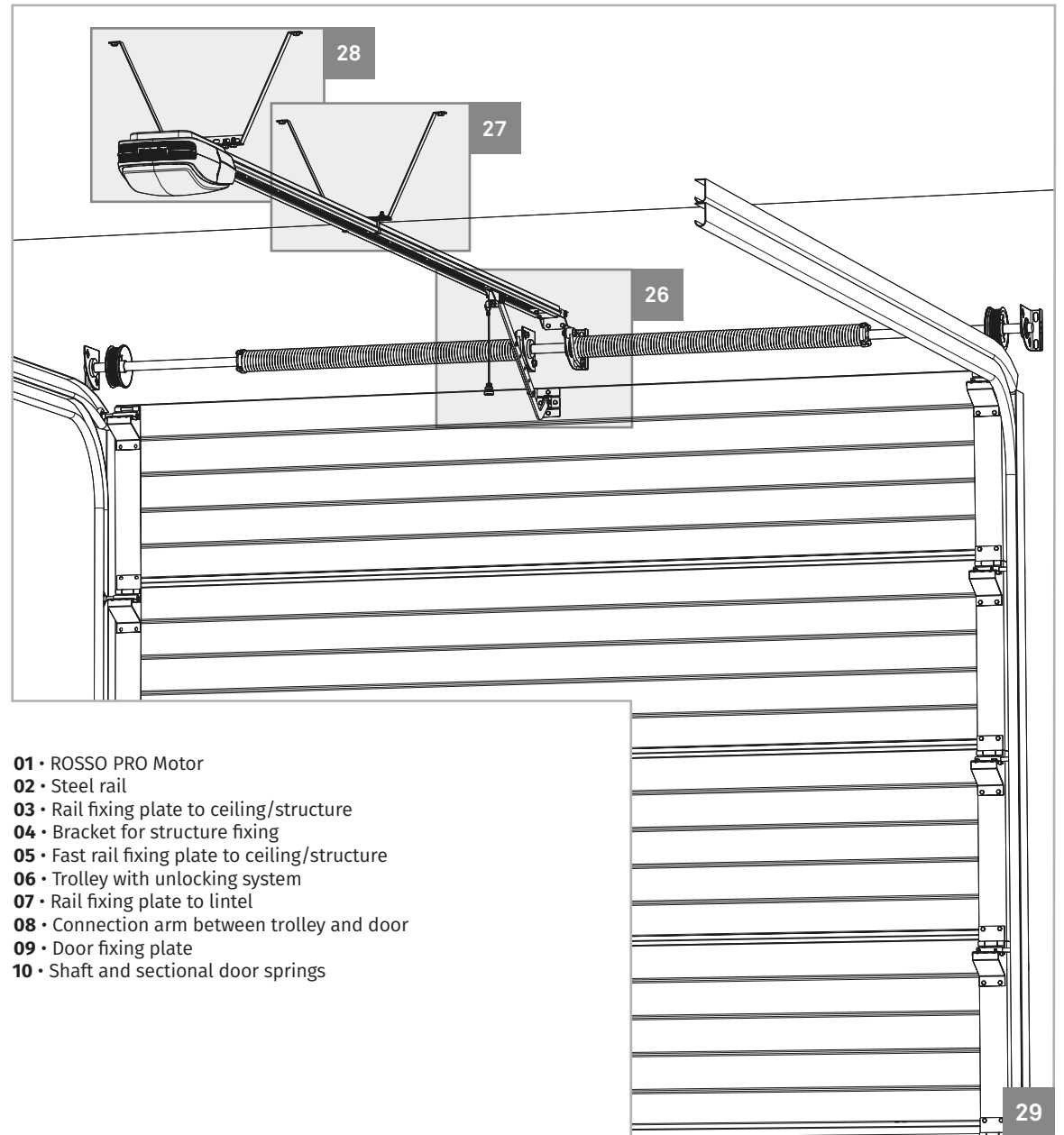
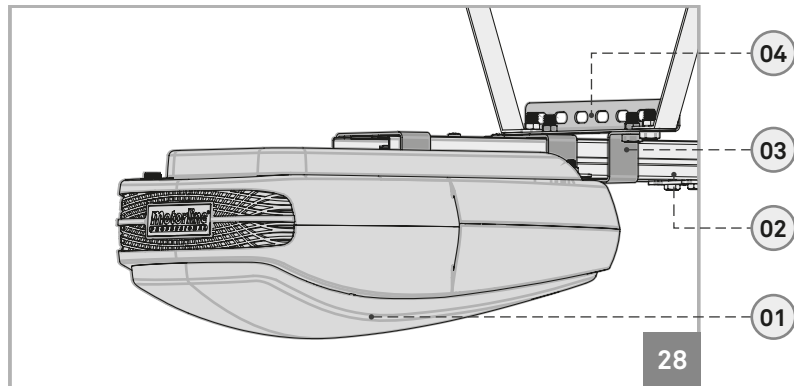
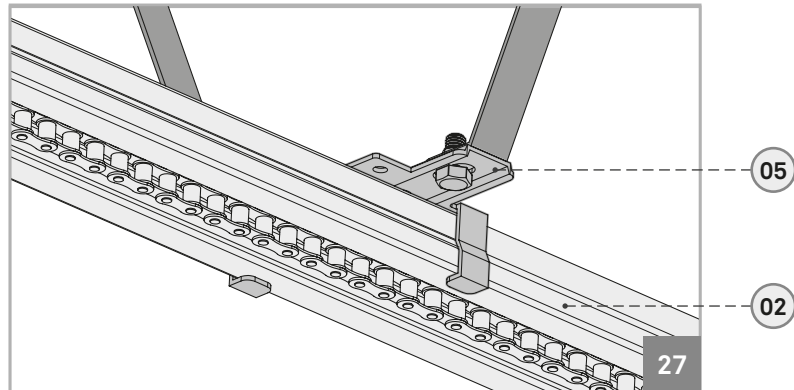
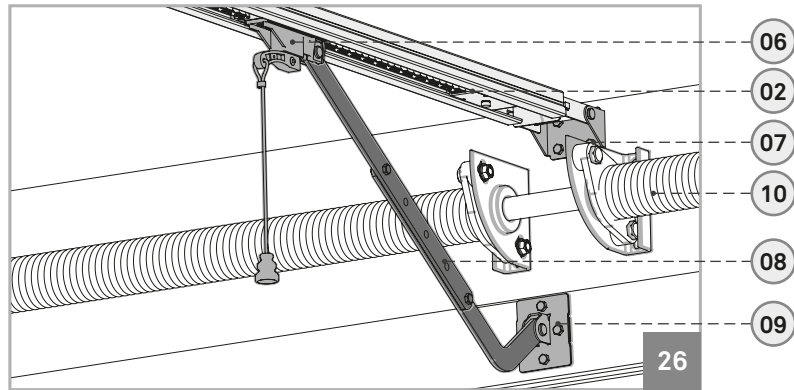
06 • Attach the plates to the top of the door. The plate must be centered horizontally with the panel so that it stays aligned with the rail. It should also be fixed as high as possible (picture 24).



07 • Now attach the two connecting arms between the trolley and the top panel plate. Use the screws and M8 nuts to tighten 2 arms together (02 and 03), and 2 pins with dowels to fix them on the trolley and the door (01 and 04).

04. INSTALLATION

INSTALLATION MAP

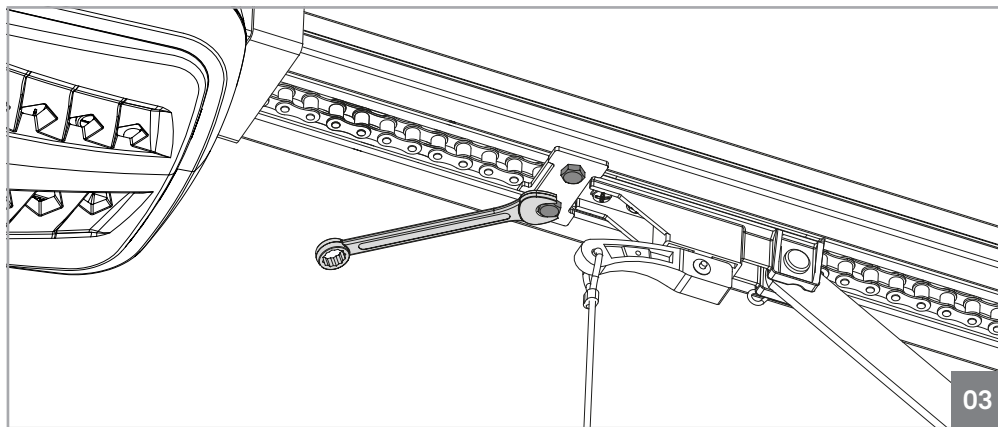
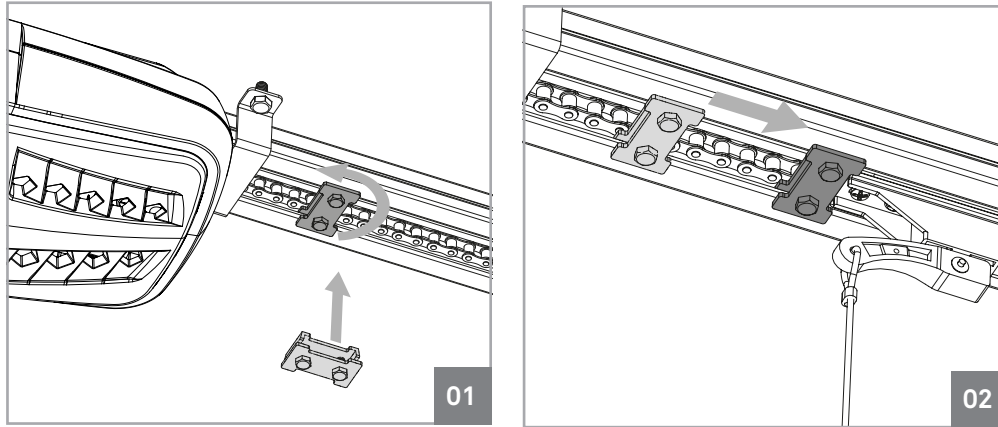


- 01 • ROSSO PRO Motor
- 02 • Steel rail
- 03 • Rail fixing plate to ceiling/structure
- 04 • Bracket for structure fixing
- 05 • Fast rail fixing plate to ceiling/structure
- 06 • Trolley with unlocking system
- 07 • Rail fixing plate to lintel
- 08 • Connection arm between trolley and door
- 09 • Door fixing plate
- 10 • Shaft and sectional door springs

06. POST-INSTALLATION

STOPPER AT THE OPENING

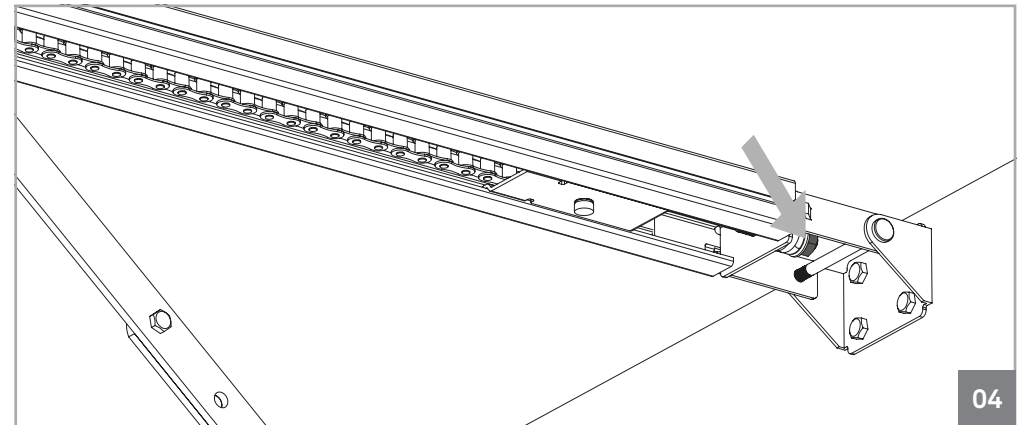
The automatism needs a stopper in the opening and closing to always control the courses. In closing maneuvers, the ground will be the stopper, but in the opening maneuvers it is necessary to create a stopper on the steel rail, to ensure that the trolley always stop in the correct place.



- To install the opening stopper just apply it on the rail, as seen in Figure 01. The stopper must have a metal plate out of the rail and other on the inside, so when you fasten it, this is secure in the rail.
- **With the door completely open**, push the stopper until it touches the trolley (02).
- Fasten the two screws to hold the stopper in that exact position (03).

06. POST-INSTALLATION

STRETCH RAIL'S CHAIN

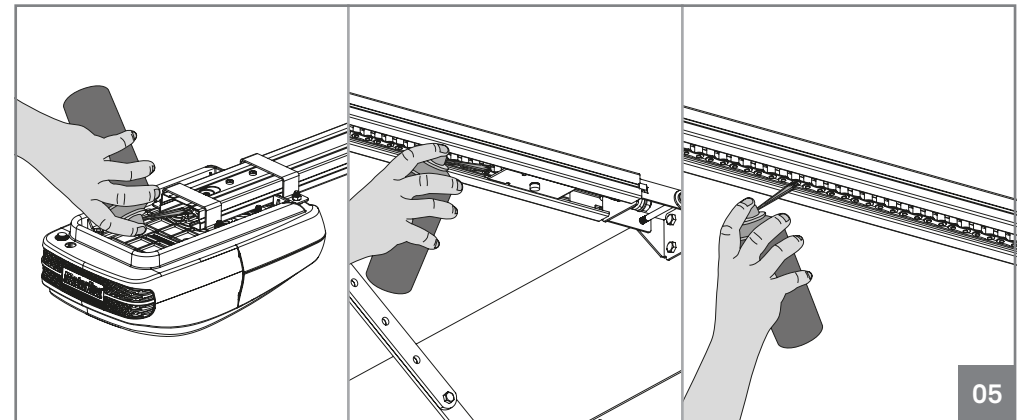


For a correct automatism function, the chain has to be very well adjusted. For that, you just need to tighten or loosen the shadowed nut in the above picture with a wrench key, which will stretch or relieve the chain.

The chain can't be too much stretched, or it will get too stuck and damage the motoreducer, nor too loose to the point of creating a sag in the middle and come out of the rail.

Note • The spring tensioner should never get fully compressed, because it means that it is on its maximum tension!

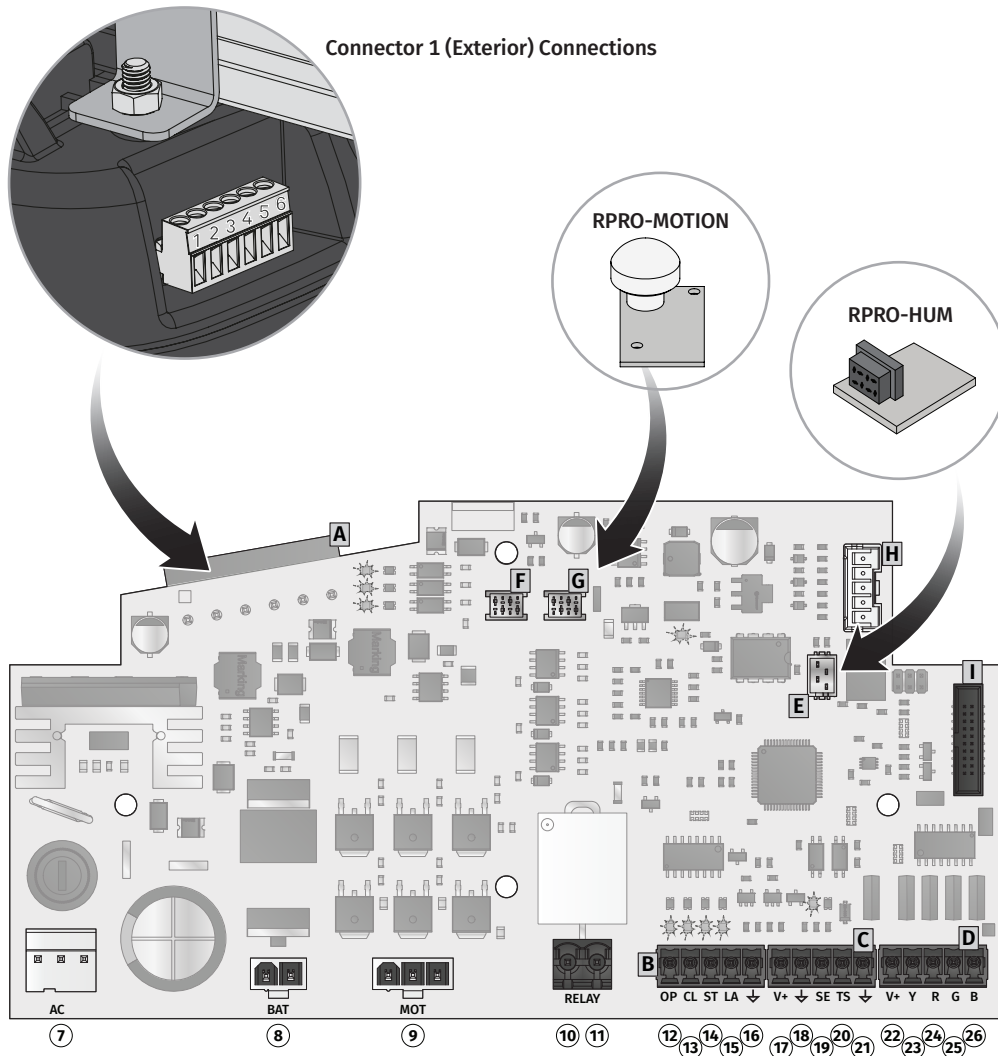
MAINTENANCE



The only maintenance required is lubricating the automatism and rail motion axes. The pinions at both ends of the rails as well as their supporting bearings and chain should be lubricated at least once every year.

06. CONTROL BOARD

LEGEND



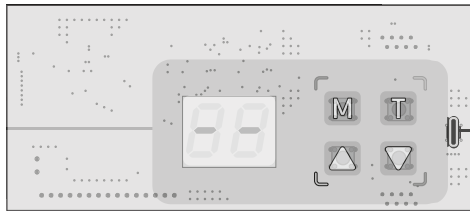
06. CONTROL BOARD

LEGEND

| | | | |
|----|---|--|--|
| A | LB | 1 | NC input for pedestrian door |
| | PU | 2 | NO input for opening pulse |
| | LE | 3 | NC input for photocells |
| | GND | 4 | Common |
| | | 5 | +24V (max 5W) |
| | | 6 | External flashing lamp (max 24V 5W) |
| - | AC | 7 | Power input 24Vac 50/60Hz |
| | BAT | 8 | MBAT26V2000 Lithium Battery Input |
| | MOT | 9 | Motor output (24Vdc 130W) |
| | RELAY (RLY) | 10 | NO output for dry contact power relay (230Vac 8A) |
| | 11 | COM output for dry contact power relay (230Vac 8A) | |
| B | OP | 12 | NO input for opening button |
| | CL | 13 | NO input for close button |
| | ST | 14 | NO input for stop button |
| | LA | 15 | 8K2 safety edge input |
| | ↓ | 16 | GND (Common) |
| | C | V+ | 17 |
| ↓ | | 18 | GND (Common) |
| SE | | 19 | Optical safety edge (OSE) input |
| TS | | 20 | Output for testing photocells 24Vdc 50mA |
| ↓ | | 21 | GND (Common) |
| D | V+ | 22 | 24Vdc output for accessories (max. 5W) |
| | Y | 23 | Multifunctional open collector output (24Vdc max 1W) - Y |
| | R | 24 | Multifunctional open collector output (24Vdc max 1W) - R |
| | G | 25 | Multifunctional open collector output (24Vdc max 1W) - G |
| | B | 26 | Multifunctional open collector output (24Vdc max 1W) - B |
| | E | Humidity Sensor Connector • RPRO-HUM | |
| F | LED Plug Connector | | |
| G | Motion Sensor Connector • RPRO-MOTION | | |
| H | Encoder Plug Connector | | |
| I | Digital control board connection plug connector | | |

06. CONTROL BOARD

LEGEND



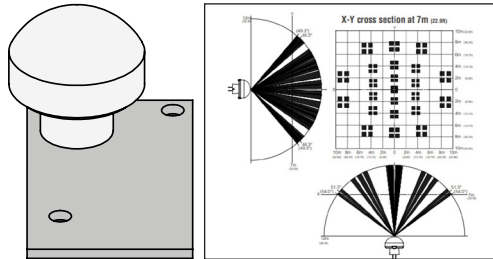
- Display
- M** • Main Menu
- T** • Programming Transmitters
- Up
- Down
- USB Type-C connector for MCONNECT LINK

Whenever the motor is powered, the Control board firmware version is displayed. At the end the display shows **88** the position that represents the door status (see "DISPLAY INDICATIONS" on page 24).

When the motor is opening, the display always shows the message **OP**.
When the motor is closing, the display always shows the message **CL**.

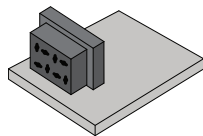
Note: If you connect a flashing lamp for signaling, it will flash (or behave as defined in **P8**) during any door movement cycle.

RPRO-MOTION



This plug and play sensor allows you to detect movements to turn on the garage light or power relay (RLY) to be used in condominium garage lights.

RPRO-HUM



This plug-in sensor is used in places where there is a lot of humidity in the environment. Allows the door to open slightly whenever the humidity exceeds the selected value to allow air circulation. This opening can be regulated as a percentage of the total opening. To configure this sensor, check Menu E1.

07. PROGRAMMING

TRANSMITTERS

| FUNCTION | | FACTORY VALUE |
|--|---|---------------|
| SU | Programming Transmitters for full opening | 88 |
| SP | Programming Transmitters for pedestrian opening | 88 |
| SP | 00 Transmitters for pedestrian opening. Record up to 100 Transmitters for full opening and 100 Transmitters for pedestrian opening, for a total of 200 Transmitters. | 00 |
| | 01 Transmitters for full opening. The 100 pedestrian opening Transmitters are added to the 100 full opening Transmitters, allowing you to record up to 200 full opening Transmitters. | |
| | 02 Transmitters to control RLY output. The 100 Transmitters originally intended for pedestrian opening are reconfigured to control the RLY (relay) output. In this mode, the user can use a button on the Transmitter to, for example, turn on the garage lights. | |
| PROGRAM TransmitterS | | |
| 01 • Press the T button for 1 second. 02 • Select the function where you want to program the Transmitters (SU or SP) using ▼▲ . 03 • Press T once to confirm the function (SU or SP). 04 • The first free position appears. 05 • Press the Transmitter button you want to program. The display will flash and move to the next free location. | | |
| PROGRAM SL FUNCTION | | |
| 01 • Press the T button for 1 second. 02 • Select the function (SU or SP) using ▼▲ . 03 • Press T once to enter the function. 04 • Select the value you want using ▼▲ . 05 • Press the M button to save the new value. | | |
| DELETE TransmitterS | | |
| 01 • Press the T button for 1 second. 02 • Select the function (SU or SP) using ▼▲ . 03 • Press T once to confirm the function (SU or SP). 04 • Use ▼▲ to select the location of the Transmitter you want to delete. 05 • Press T for 3sec. and the position becomes empty. The display will flash and the position will become available. | | |
| DELETE ALL TRANSMITTERS | | |
| 01 • Press the T button for 5 seconds. 02 • The display will show dL , confirming that all Transmitters have been erased. | | |



- Whenever you memorize or erase a Transmitter, the display will flash and show the next position. You can add or delete Transmitter without having to go back to point 01.
- If you do not press any button for 20 sec. the control board will return to standby.

07. PROGRAMMING

MMR15 MODULE

SF

MMR15 MODULE CONFIGURATION

The 868 MHz Plug-and-play receiver module is designed to record up to 2 MX14 per channel. It has two independent channels where Channel 1 (CL) allows the closing direction to be reversed and Channel 2 (St) offers the emergency stop function for pedestrian doors, making it possible to use both channels simultaneously, such as protecting the end of a door with one channel and monitor a pedestrian door with the other.

Select menu SF:

- 01 • Press T for 1 sec. until it appears SU.
- 02 • Use ▲ or ▼ until appears SF.
- 03 • Press T for 1 sec. to confirm.

Programming MX14 emitter:

- 01 • Select the option CH by pressing the M button until appears EE.
- 02 • Use ▲ or ▼ to select the emitter function (EE or SE).
- 03 • Press M for 1 sec. to confirm.
- 04 • Use ▲ or ▼ to select an empty channel to program.
- 05 • Press M to open the receiver's memory.
- 06 • Press JOIN on the MX14 emitter you want to program.

Delete MX14 emitter:

- 01 • Select the option CH by pressing the M button until appears EE.
- 02 • Use ▲ or ▼ to select the emitter function (EE or SE).
- 03 • Press M for 1 sec. to confirm.
- 04 • Use ▲ or ▼ to select the channel you want to delete.
- 05 • Press T for 2 sec. to erase the MX14 emitter.

Configuring MMR15 module parameters:

- 01 • Select the option EE using the ▲ and ▼ buttons.
- 02 • Press M for 1 sec. to confirm, until it appears EE.
- 03 • Use the ▲ and ▼ buttons to select the parameter you want to change.
- 04 • Press M for 1 sec. to confirm.
- 05 • Use the ▲ and ▼ buttons to select the value you want to program.
- 06 • Press M for 1 sec. to save the value.

CH

ALLOWS YOU TO PROGRAM/REMOVE MX14 EMITTERS

Whenever the MMR15 module is used, we can add emitters used to connect safety edges and wireless pedestrian door sensors, allowing a faster and more efficient installation without the need for cables between the detector and the motor control board.

EE

Channels for safety when closing the door.

(All MX14 recorded on this channel will inhibit the door from closing. Up to 2 MX14 can be recorded on this channel)
*For it to work, the parameter SF→C0→LC→01 must be present.

SE

Channels to inhibit door movement

(All MX14s recorded on this channel will inhibit door movement. Up to 2 MX14 are allowed to be recorded on this channel)
*For it to work, the parameter SF→C0→St→01 must be present.

CF

CHANGE FREQUENCY OF MMR15 MODULE

Change the frequency whenever we have several MMR15 units in the same location, allowing them not to interfere with each other.

Attention: The MX14 emitter must be on the same frequency selected on the MMR15.

00 - 868,0MHz • 01 - 868,6MHz • 02 - 869,2MHz • 03 - 869,8MHz

07. PROGRAMMING

MMR15 MODULE

SF

CS

CHECK SIGNAL STRENGTH

This parameter allows you to select the channels you want to monitor in terms of the received signal strength. It is used to evaluate the signal strength of programmed MX14 emitters, helping to verify whether signal reception on the MMR15 is stable and reliable.

| | | | |
|----|--|--------------------------------------|----------|
| EE | Channels for security when closing the door | | 00 01 |
| | 00 Not detected 01 Very weak 02 Weak | 03 Normal 04 Good 05 Very good | |
| SE | Channels to inhibit door movement | | 02 03 |
| | 00 Not detected 01 Very weak 02 Weak | 03 Normal 04 Good 05 Very good | |

EE

CONFIGURE MODULE PARAMETERS

| | | | |
|----|---|--|--|
| EE | Activate/deactivate signal on closing | | |
| | Allows you to activate or deactivate the MX14 recorded in the SF→CH→CL parameter 00 Deactivate signal on closing 01 Activate signal on closing | | |
| ES | Activate/deactivate stop signal | | |
| | Allows you to activate or deactivate the MX14s recorded in the SF→CH→ST parameter 00 Deactivate door movement inhibition signal 01 Activate door movement inhibition signal | | |
| EB | OSE operating mode | | |
| | When the MX14 emitter operates in "OSE LOW POWER" mode, the sensors remain off to save power while the door is in standby. Whenever an opening order is given, the MMR15 sends a signal to the MX14 to check if the emitter is operational (state of life) and turns on the OSE output and checks its operation (circuit self-test). 00 Low power mode: The OSE power is turned off in standby to save energy. 01 Normal mode: The OSE power remains continuously active. | | |
| EB | Self-check interval | | |
| | This parameter determines the time interval in which the MMR15 checks the status of communication with the sensors, ensuring that the emitter (MX14) is operational and without faults that could compromise its operation. To do this, the emitter periodically sends a state of life signal to the receiver. 00 30-second interval: Less impact on MX14 battery consumption. 01 7-second interval: More frequent checks, but with increased battery consumption. | | |
| EB | Activate/deactivate buzzer | | |
| | (The MMR15 module has an integrated buzzer that starts to sound whenever any of the channels are active) 00 Deactivate buzzer 01 Activate buzzer | | |

07. PROGRAMMING

MENU FUNCTIONS "P"

| MENU | FUNCTION | MIN. | MAX. | STATE | FACTORY VALUE | PAGE |
|------|--|--|------|--|---------------|------|
| P0 | Course programming | - | - | NR Manual programming | - | 15A |
| | | 0 | 1 | DI Motor direction | 00 | |
| P1 | Slowdown adjustment | 0% | 99% | DR Opening slowdown | 15 | 15A |
| | | | | DF Closing slowdown | | |
| | | 0 | 9 | FO Ramp time at start | 05 | |
| | | | | FC Ramp time in deceleration | | |
| P2 | Speed and sensitivity adjustment | 1 | 9 | SO Speed adjustment at opening | 08 | 15B |
| | | | | SC Speed adjustment at closing | 04 | |
| | | 0 | 9 | FS Sensitivity | 05 | |
| | | 0 | 1 | ER Encoder fault detection | 01 | |
| P3 | Pedestrian course adjustment | 0% | 99% | Adjusting the opening in pedestrian mode | 50 | 16A |
| P4 | Pause time | 0s | 99s | RF Adjusting the total pause time | 00 | 16A |
| | | | | RP Adjusting the pedestrian pause time | | |
| P5 | Photocell programming | 0 | 1 | LE DD Deactivates photocells | 00 | 16B |
| | | | | DI Activates photocells | | |
| | | 0 | 1 | HE DD Photocells in opening | 01 | |
| | | | | DI Photocells in closing | | |
| | | 0 | 2 | HE DD Reverse | 00 | |
| | | | | DI Stops | | |
| | | | | DD Reverse 2 seconds and stop | | |
| | | 0 | 1 | SE DD Disables photocell test | 00 | |
| | | DI Activates photocell test | | | | |
| P6 | Programming of LA and SE security inputs | 0 | 1 | LR DD Disables 8K2 safety edge | 00 | 17A |
| | | | | DI Enables 8K2 safety edge | | |
| | | 0 | 1 | HE DD Acts in opening | 01 | |
| | | | | DI Acts in closing | | |
| | | 0 | 2 | HE DD Invert | 00 | |
| | | | | DI Stop | | |
| | | | | DD Invert 2sec. and stop | | |
| | | 0 | 1 | SE DD Deactivates OSE safety | 00 | |
| | | | | DI Activates OSE safety | | |
| | | 0 | 1 | SE DD Activates in opening | 01 | |
| | | | | DI Activates in closing | | |
| | | | | DD Reverses | | |
| 0 | 2 | SE DD Stops | 00 | | | |
| | | DI Invert 2sec. and stop | | | | |
| 0 | 99 | SP Course percentage for LA and SE input inhibition. | 02 | | | |
| P7 | Operating logic | | | DD Automatic mode operation | | 17B |
| | | 0 | 3 | DI Step by step mode operation | 01 | |
| | | | | DD Condominium mode function | | |
| | | | | DD Condominium mode 2 function | | |
| P8 | Operating logic Flashing lamp/LED/RLY | 0 | 3 | LS Cover LEDs | 01 | 18A |
| | | 0 | 6 | FE RLY output mode | 02 | |
| | | 0 | 4 | FE LAMP output mode | 00 | |
| P9 | Distance Programming | 0 | 1 | DD Distance PGM OFF | 00 | 18B |
| | | | | DI Distance PGM ON | | |



- To access the **P** menu, press the **M** button for 2 seconds.
- Use **▼▲** to navigate through the menus.
- Press **M** each time you want to confirm access to a menu.
- Press **▼▲** at the same time to cancel programming.

07. PROGRAMMING

PROGRAM "P"

P0 COURSE PROGRAMMING

Manual programming

This menu allows you to manually program the motor.

Before you begin, make sure that all pre-installation requirements (p. 7B) have been met.

NR Manual programming allows you to quickly set the door opening and closing positions. During this process, the control board:

- Automatically calculates intermediate positions;
- Measures current absorption to facilitate obstacle detection during movement;
- Recognizes the downshift point, ensuring smooth and safe movement.

The positions can be adjusted later via the Mconnect app or via the motor interface display.

Manual programming:

01 • Press **M** for 2 sec. until it appears **P0**.

02 • Press **M** until appears **NR**.

03 • Press **M** until appears **OP**.

04 • Using the **▼▲** (UP and **▼**) buttons, position the door in the open position.

05 • Press **M** to save the opening position.

06 • Appears on the display **CL**.

07 • Using the **▼▲** (UP and **▼**) buttons, position the door in the closed position.

08 • Press **M** to save the closing position.

09 • The door will perform an opening maneuver, followed by a closing maneuver.

10 • Programming completed.





To cancel programming, press the **▲** and **▼** buttons simultaneously.

At the time of programming, the Human presence function deactivates the safety inputs and no interruption will be detected.


07. PROGRAMMING

PROGRAM "P"

| P1 ADJUSTING THE SLOWDOWN POSITION AND RAMPS Allows you to adjust the slowdown course when opening and closing. | | FACTORY VALUE |
|--|--|---|
| dB | Position of the beginning of slowdown at Opening <i>As well as the acceleration and deceleration ramp</i> This parameter allows you to program the position where the door slowdown begins during opening or closing. When the controller reaches the percentage set in this parameter (with 100% corresponding to the full width of the door), the door will begin to slowdown until it reaches the speed set in the parameter EB . In other words, when the automation reaches this value, it begins to slow down before reaching the maximum opening or closing position, ensuring a smoother and more controlled movement, avoiding impacts and protecting the system from excessive wear. | 85%  0=OFF 99 |
| dB | Position of the beginning of slowdown at closing Allows you to define the percentage of the course in which the door will act slowly when closing (100% corresponds to total closing). | |
| The parameters FB and FC allow you to adjust the acceleration and deceleration times of the motor, ensuring a smoother and more controlled movement of the door. | | |
| FB | Acceleration Ramp Time <i>As well as the acceleration and deceleration ramp</i> Defines the time it takes for the motor to go from the stopped position until reaching the maximum opening speed. This adjustment helps to initiate movement smoothly, reducing mechanical pressure on the gearbox and avoiding sudden impacts. | 05  0=OFF 9 |
| FC | Deceleration Ramp Time Adjusts the time the door slows down from maximum speed to final deceleration speed. This makes the movement more fluid, eliminating jerks and ensuring a controlled closing. | 0=OFF 5=1,1s 9=2s |
| 01 • Press M for 2 sec. until it appears P0 . 02 • Use ▲ to change to P1 . 03 • Press M until appears dB . Use ▲ or ▼ to navigate through the parameters. 04 • Press M to edit the value of the chosen parameter. 05 • The factory-set time appears. Use ▲ and ▼ to change the value. 06 • Press M to save the new value. | | |

07. PROGRAMMING

PROGRAM "P"

| P2 SPEED AND SENSITIVITY ADJUSTMENT | | FACTORY VALUE |
|--|--|--|
| SB | Speed adjustment at opening This function is used to select the desired speed during the opening maneuver. | 08 |
| SE | Speed adjustment at closing This function is used to select the desired speed during the closing maneuver. | 04 |
| ES | Sensitivity adjustment This function is used to select the desired speed during the closing maneuver. <i>Please note that if a speed above 04 is selected, the motor may not comply with EN12453. We recommend the selected speed is <=04.</i> | 05  0 9 |
| EA | Encoder fault detection Allows you to enable or disable encoder fault detection. If a fault is detected, error E5 will be shown on the display, indicating that it is loose or disconnected (for example). | 00 Activate encoder fault detection 01 Deactivate encoder fault detection 01 |
| 01 • Press M for 2 sec. until it appears P0 . 02 • Use ▲ until appears P2 . 03 • Press M until appears SB . Use ▲ or ▼ to navigate through the parameters. 04 • Press M to edit the value. 05 • The factory-set value appears. Use ▲ and ▼ to change the value. 06 • Press M to save the new value. | | |



A value that is too low in the **SB** or **SE**, or too high in the parameter **ES**, may cause the motor to not have enough torque to move the door.

PEDESTRIAN COURSE ADJUSTMENT

P3

Pedestrian mode allows the door to open only to a set percentage, rather than opening completely. This function is useful on very high doors, where in certain situations it is not necessary to open the door fully, which helps to save energy, reduce cycle time and optimize the use of space. In this parameter, you can define the percentage of the total course (100%) that the door must open when in pedestrian mode.

50%



- 01 • Press **M** for 2 sec. until it appears **P0**.
- 02 • Use **▲** until appears **P3**.
- 03 • Press **M**. The factory-set value appears.
- 04 • Use **▲** and **▼** to change the value.
- 05 • Press **M** to save the new value.

07. PROGRAMMING

PROGRAM "P"

| P4 PAUSE TIME Automatic closing begins after the programmed pause time, counted from the end of the opening maneuver or from the moment the door is stopped during opening. | FACTORY VALUE |
|--|---------------|
| RE Adjusting the pause time in Total opening | 00s |
| RE Adjusting the of pause time in Pedestrian opening This parameter only works when the door is opened in pedestrian mode. | 00s |
| <p>01 • Press M for 2 sec. until it appears P0. 02 • Use ▲ to change to P4. 03 • Press M until appears RE. Use ▲ or ▼ to navigate through the parameters. 04 • Press M to edit the value of the chosen parameter. 05 • The factory-set time appears. Use ▲ and ▼ to change the value. 06 • Press M to save the new value.</p> | |
| <p>i Each value (1s) selected above 90s is equivalent to 20 seconds. Example: Selecting the value 92s equals 130 seconds (90 + (2 x 20) seconds)</p> | |

07. PROGRAMMING

PROGRAM "P"

| PS PHOTOCELL 1 PROGRAMMING Allows you to program the behavior of the LE Security Input <i>Attention: The HC HL Sc to have effect if this parameter is active</i> | FACTORY VALUE | |
|---|---|----|
| EE Allows you to enable or disable the security input. | 00 Deactivate photocells | 00 |
| | 01 Activate photocells | |
| HE Allows you to define whether this security will act when opening or closing the door. | 00 Photocells in opening | 01 |
| | 01 Photocells in closing | |
| HE Allows you to define the behavior that the door will have when this security is activated. | 00 The door movement is reversed | 00 |
| | The door stops and its movement resumes after 5 sec. after security is disabled | |
| | 02 Door movement reverses for 2 sec. and stop | |
| SE Photocell Testing Before each movement of the door, the control board performs a test to check that the photocells are working correctly, thus reducing the risk of accidents in the event of a system failure. The power supply for the transmitting photocell must be connected to the TS output, so that whenever a maneuver is initiated by the automation, the control board turns off the power supply for the transmitting photocell. This allows you to check whether the status of the receiving photocell relay changes, confirming the integrity of the contact and the correct operation of the safety system. | 00 Disable the photocell test | 00 |
| | 01 Activate the photocell test | |
| <p>01 • Press M for 2 sec. until it appears P0. 02 • Use ▲ to change to PS. 03 • Press M until appears LE. Use ▲ or ▼ to navigate through the parameters. 04 • Press M to edit the value of the chosen parameter. 05 • The factory-set time appears. Use ▲ and ▼ to change the value. 06 • Press M to save the new value.</p> | | |

07. PROGRAMMING

PROGRAM "P"

| P6 PROGRAMMING FOR LA AND SE SECURITY INPUT | | FACTORY VALUE | |
|---|----|--|----|
| Allows you to program the behavior of the LA (8K2) and SE(OSE) safety inputs. | | | |
| LA Safety Input (8K2) | 00 | 00 Disables 8K2 safety edges | 00 |
| | | 01 Enables 8K2 safety edges | |
| | HC | 00 Security in opening | 01 |
| | | 01 Security in closing | |
| 00 | 00 | 00 The door movement is reversed | 00 |
| | | 01 The door stops and its movement resumes after 5 sec. after security is disabled | |
| | | 02 Door movement reverses for 2 sec. and stop | |

07. PROGRAMMING

PROGRAM "P"

| P6 PROGRAMMING FOR LA AND SE SECURITY INPUT | | FACTORY VALUE | |
|--|--|--|----|
| Allows you to program the behavior of the LA (8K2) and SE(OSE) safety inputs. | | | |
| SE | 00 | 00 Deactivate OSE Security | 00 |
| | | 01 Activate OSE security | |
| | SC | 00 Safety at opening | 01 |
| | | 01 Safety at closing | |
| SE | 00 | 00 The door movement is reversed | 00 |
| | | 01 The door stops and its movement resumes 5 sec after the safety is deactivated | |
| | | 02 Door movement reverses for 2 sec. and stop | |
| SE | Definition of the percentage for inhibiting safety inputs (LA, SE and MMR15 module) when closing. This parameter allows you to define a percentage of the total door course to inhibit the safety inputs (LA, SE and MMR15 module) during closing. | | 02 |
| | For example, by setting the parameter to 02, the door will no longer detect safety inputs when it reaches the last 2% of closing course. This prevents the pressure of the safety edge against the floor from being interpreted as an obstacle, preventing the movement from being reversed. | | |
| This feature is useful to ensure correct door closing in situations where detection of the safety edges at the end of the course is not necessary. | | | |
| 01 • Press M for 2 sec. until it appears P0 . 02 • Use ▲ to change to P6 . 03 • Press M until appears L0 . Use ▲ or ▼ to navigate through the parameters. 04 • Press M to edit the value of the chosen parameter. 05 • The factory-set time appears. Use ▲ and ▼ to change the value. 06 • Press M to save the new value. | | | |

07. PROGRAMMING

PROGRAM "P"

| P7 OPERATING LOGIC | FACTORY VALUE |
|--|---------------|
| Allows you to define the operating logic of the automation. | |
| 00 Operation in automatic mode OPEN - CLOSE - OPEN - CLOSE Whenever there is an order the movement is reversed. | 00 |
| 01 Operation in step by step mode OPEN - STOP - CLOSE - STOP The "close - stop - open - open" sequence is executed until the door reaches the maximum opening position. If another order is sent during the pause time, the pause time will be reset. The door will close automatically if auto close is active. If automatic closing is disabled, closing will only be performed upon an order from the Transmitter button, step-by-step button or down button. | |
| 02 Operation in condominium mode The "close - stop - open - open" sequence is executed until the door reaches the maximum opening position. If another order is sent during the pause time, the pause time will be reset. The door will close automatically if auto close is active. If automatic closing is disabled, closing will only be performed upon an order from the Transmitter button, step-by-step button or down button. | |
| 03 Condominium mode with automatic closing anticipation The "close - stop - open - open" sequence is executed until the door reaches the maximum opening position. If another order is sent, regardless of whether auto-close is active or not, the door will start the closing cycle. | |
| 01 • Press M for 2 sec. until it appears P0 . 02 • Use ▲ until appears P7 . 03 • Press M and 00 will appear. 04 • Press M to edit the value. 05 • Use ▲ and ▼ to change the value. 06 • Press M to save the new value. | |

07. PROGRAMMING


PROGRAM "P"

| P8 OPERATING LOGIC FLASHING LAMP/LED/RLY | FACTORY VALUE | |
|---|--|-----------|
| Allows you to set the flashing light (LAMP)/LED/RLY operating mode. | | |
| L5 Sets the operating mode of the LED light on the cover | 00 The light turns on during all door movements, whenever the door is stopped the light will turn off. | 00 |
| | 01 The light turns on during all door movements, and during the automatic closing time countdown. | |
| | 02 The light turns on during all door movements, including pause times. When the door reaches the closed position, the light remains on for the time programmed in menu E2 --> Lt. | |
| 03 The light will remain on whenever the door is not in the completely closed position. | | |
| P8 Sets the operating mode of the RLY connector | 00 Intermittent (opening and closing) The light will continue flashing during the opening and closing movement, with a frequency of 1Hz | 00 |
| | 01 During the movement The light turns on during all door movements, whenever the door is stopped the light will turn off. | |
| | 02 During movement and pause time The light turns on during all door movements, and during the automatic closing time countdown. | |
| | 03 Courtesy flashing light The light turns on during all door movements, including pause times. When the door reaches the closed position, the light remains on for the time programmed in menu E2 --> Lt. | |
| | 04 Out of closing position The light will remain on whenever the door is not in the completely closed position. | |
| | 05 Control via RF Transmitter (bistable output) In this configuration, the relay activation is done by the Transmitter, in a bistable manner. Transmitters need to be saved to the SP parameter, and the SL parameter must be set to 02. | |
| 06 Control via RF Transmitter In this configuration, the relay activation is controlled by the Transmitter and will remain active for the time defined in parameter E3 --> rt. Transmitters need to be saved to the SP parameter, and the SL parameter must be set to 02. | | |

07. PROGRAMMING


PROGRAM "P"

| P8 FLASHING LAMP Allows you to set the flashing light (LAMP)/LED/RLY operating mode. | | FACTORY VALUE |
|--|--|---------------|
| E8 Sets the operating mode of the external flashing lamp (LAMP) - Connector I | 00 Intermittent (opening and closing) The output will remain flashing during the opening and closing movement, with a frequency of 1 Hz | 00 |
| | 01 During the movement The light turns on during all door movements, whenever the door is stopped the light will turn off. | |
| | 02 During movement and pause time The light turns on during all door movements, and during the automatic closing time countdown. | |
| | 03 Courtesy flashing light The light turns on during all door movements, including pause times. When the door reaches the closed position, the light remains on for the time programmed in menu E2 --> Lt. | |
| | 04 Out of closing position The light will remain on whenever the door is not in the completely closed position. | |
| <p>01 • Press M for 2 sec. until it appears P0. 02 • Use ▲ until appears P8. 03 • Press M and 00 will appear. 04 • Press M to edit the value. 05 • Use ▲ and ▼ to change the value. 06 • Press M to save the new value.</p> | | |

| P9 DISTANCE PROGRAMMING This menu allows you to activate or deactivate the programming of new Transmitters without directly accessing the control board, using a previously memorized Transmitter (memorize Transmitters page 13B). | | FACTORY VALUE |
|---|--|---------------|
| 00 Distance PGM OFF |  | 00 |
| 01 Distance PGM ON | | |
| <p>01 • Press M for 2 sec. until it appears P0. 02 • Use ▲ until appears P9. 03 • Press M and 00 will appear. 04 • Press M to edit the value. 05 • Use ▲ and ▼ to change the value. 06 • Press M to save the new value.</p> | | |
| <p>DISTANCE PROGRAMMING OPERATION (PGM ON): Press the buttons indicated in the image simultaneously for 10 seconds and the flashing lamp will flash (the 1st free position will appear on the display). Whenever you memorize 1 Transmitter, the control board will exit distance programming. If you want to memorize more Transmitters, you will always have to repeat the process of pressing the Transmitter buttons simultaneously, for 10 seconds for each new Transmitter.</p> | | |


07. PROGRAMMING

"E" MENU FUNCTIONS

| MENU | FUNCTION | MIN. | MAX. | STATE | FACTORY VALUE | PAGE |
|---|--------------------------------------|---|-----------|--|----------------------|------|
| E0 | HUMAN PRESENCE - STOP INPUT | 0 | 2 | HP 00 Disable Human presence 01 Active on closing 02 Active on opening and closing | 00 | 19B |
| | | 0 | 1 | EB 00 Disable LB input (STOP) 01 Activate LB input (STOP) | 00 | |
| E8 | HUMIDITY SENSOR | 0 | 1 | HE 00 Disable sensor 01 Activate sensor | 00 | 20A |
| | | 1% | 99% | HP Opening percentage | 02 | |
| | | 1% | 99% | HR Humidity level to open the door | 70 | |
| | | 0 | 1 | HR Door action after a maneuver | 00 | |
| | | 1 (x10m) | 99 (x10m) | HD Delay time for opening order (value higher than HH) | 01 | |
| | | 1 (x10m) | 99 (x10m) | HE Delay time for closing order (value lower than HH) | 01 | |
| E2 | COURTESY LIGHT TIME | | | EE Courtesy light time adjustment PP Pre-flashing light time adjustment | 00 | 20B |
| E3 | FOLLOW ME | 0 | 2 | FE 00 Disable follow me 01 Detection with door fully open 02 Door opening and fully open detection | 00 | 20B |
| | | 1s | 9s | EN Defines delay time for closing | 03 | |
| E4 | SET RLY/LAMP ACTIVATION TIME | 1 (x10s) | 99 (x10s) | LE RLY/LAMP output timing with RPRO-MOTION sensor | 03 | 21A |
| | | 1 (x10s) | 99 (x10s) | PE Sets RLY output time | 03 | |
| E5 | DOOR MAINTENANCE | 0 | 1 | NR Defines the number of maneuvers RS Reset maneuver counter | 00 | 21A |
| E6 | SLOWDOWN SPEED | 1 | 9 | SD Adjusting the slowdown speed during opening | 3 | 21B |
| | | | | SC Adjusting the slowdown speed during closing | | |
| E7 | MANEUVER COUNTER | - | - | Shows the number of maneuvers performed | - | 21B |
| E8 | RESET - RESTORE FACTORY VALUES | 0 | 1 | 00 Disabled 01 Reset triggered | 00 | 22A |
| E9 | OUTPUT FOR DOOR STATUS (CONNECTOR C) | 0 | 9 | YE Defines the function of the Y output RE Defines the function of the R output GE Defines the function of the G output BE Defines the function of the B output | 01 03 02 00 | 22A |
| | | 0 | 4 (500ms) | YE Set flashing interval - Y RE Set flashing interval - R GE Set flashing interval - G BE Set flashing interval - B | 00 | |
|  | | <ul style="list-style-type: none"> To access the E menu, press the M button for 8 seconds. Use ▼▲ to navigate through the menus. Press M whenever you want to confirm access to a menu. Press ▼▲ simultaneously to exit programming. | | | | |













07. PROGRAMMING

PROGRAM "E"

| E0 HUMAN PRESENCE /STOP INPUT | | FACTORY VALUE |
|--|--|---|
| HP  Human presence With the active Human presence the RF Transmitters do not work. | Disable Human presence The "Human presence" function ensures that the door only moves while the opening button remains pressed, allowing the door to move. This function can be used to operate the automation even when one or more safety devices are not working properly or are out of service. | 00 |
| | Active at closing With this parameter active, the PU and OP inputs will operate in 'Open - Stop - Open' mode until the door reaches the fully open position. To close, it will be necessary to operate in 'Hold-to-Close' mode, in which the button connected to the CL inputs must remain pressed for the door to close. If the button is no longer pressed, the door will stop. | 01 |
| | Active at opening and closing With this parameter active, only the OP and CL inputs operate in 'Hold-to-Run' mode. In this mode, the button connected to these inputs must remain pressed until the door reaches the desired position or the end of the course corresponding to the movement. | 02 |
| | Allows you to enable or disable the LB input - Connector I. The LB input is of the NC type and is used specifically to immediately interrupt the maneuver whenever it is activated. It is intended for emergency stop circuits. | 00 Disable LB (Stop) input 01 Activate LB (Stop) input |
| 01 • Press M for 8 sec. until it appears E0. 02 • Press M until appears HP. Use ▲ or ▼ to navigate through the parameters. 03 • Press M to edit the value of the chosen parameter. 04 • The factory-set time appears. Use ▲ and ▼ to change the value. 05 • Press M to save the new value. | | |


07. PROGRAMMING

PROGRAM "E"

| E1 HUMIDITY SENSOR | | FACTORY VALUE |
|---|---|--|
| HE | Allows you to enable/disable the sensor | 00 |
| HP | Sets the percentage of the total course, which the door will open when the humidity value is greater than the value set in HH | 02   99 |
| HA | Sets the humidity level at which the control board will execute the order to open the door | 88   99 |
| HR | Allows you to define the behavior of the door when closing after a maneuver with a humidity level higher than that defined in HH | 00 The door closes 01 The door will stop at the value set in HP |
| | | 00 |
| HO | Sets the delay time, in 10-minute intervals, from when the humidity level exceeds the defined value in HA until the control board gives the order to open the door. | 03m   99 |
| HC | Sets the delay time, in 10-minute intervals, from when the humidity level drops below the defined value HA until the control board gives the order to close the door. | 01m   99 |
| 01 • Press M for 8 sec. until it appears E0. 02 • Use ▲ until appears E1. 03 • Press M and HE. Use ▲ or ▼ to navigate through the parameters. 04 • Press M to edit the value. 05 • Use ▲ and ▼ to change the value. 06 • Press M to save the new value. | | |
| E2 COURTESY LIGHT TIME | | FACTORY VALUE |
| EE | Courtesy light time Allows you to adjust the courtesy light time. The courtesy light is activated for the set time when the door is in the closed, open and stopped position. | 00m   99 |
| PE | Pre-flashing light time Allows you to adjust the pre-flashing light time. If the value is 00 this function it is disabled. The pre-flashing light is activated before an opening and closing maneuver. This function is used to signal door movement in advance. This function only affects the LAMP output of connector I. | 00s   99 |
| 01 • Press M for 8 sec. until it appears E0. 02 • Use ▲ to change to E2. 03 • Press M until appears EE. Use ▲ or ▼ to navigate through the parameters. 04 • Press M to edit the value of the chosen parameter. 05 • The factory-set time appears. Use ▲ and ▼ to change the value. 06 • Press M to save the new value. | | |

07. PROGRAMMING

PROGRAM "E"

| E3 FOLLOW ME | | FACTORY VALUE |
|--|---|------------------|
| <p>E8 This function allows the door to be kept in the open position only for the time necessary for a vehicle or person to pass. After this interval, the closing maneuver is activated automatically, starting after the time set in the "closing waiting time" function. (The function uses photocells to identify the movement of people/vehicles and activate closing maneuvers).</p> | <p>00 Function disabled</p> | <p>00</p> |
| | <p>01 Detection with door fully open If the safety photocells are interrupted with the door fully open, the automation will initiate a closing maneuver after the 'waiting time' E3 --> tn. If automatic closing (P3 --> AF) is activated, it will be brought forward to the waiting time set in the E3 --> tn menu.</p> | |
| | <p>02 Detection of door opening and fully open If the photocells are interrupted and then restored during the opening or closing maneuver, the automation will start to decrease the waiting time (E3 --> tn). When the timer reaches 0 and the door is fully open, closing will begin. If the automatic closing (P3 --> AF) is activated, the waiting time will be anticipated.</p> | |
| <p>E7 Delay time for closing Allows you to define the waiting time between detection and the start of the closing maneuver after the safety device detects the passage of a user/object.</p> | <p>03s</p>  | <p>03</p> |
| <p>01 • Press M for 8 sec. until it appears E0. 02 • Use ▲ until appears E3. 03 • Press M and E7 will appear. 04 • Press M to edit the value. 05 • Use ▲ and ▼ to change the value. 06 • Press M to save the new value.</p> | | |

07. PROGRAMMING

PROGRAM "E"

| E4 SET RLY/LAMP ACTIVATION TIME | | FACTORY VALUE |
|---|------------------|---------------|
| <p>E8 RLY/LAMP output time with RPRO-MOTION sensor Allows you to define the time that the LED/RLY output remains activated after motion is detected. Each value is equivalent to 10 seconds <i>If the value is 00 the motion sensor is disabled.</i> <i>If the sensor is used, both LED/RLY outputs will continue to operate as programmed in P8. Additionally, whenever the sensor detects movement, the outputs will be activated for the time defined in this parameter. If the parameter is set to 00, the sensor will be disabled.</i></p> | <p>03</p> | |
| <p>E8 RLY Output time When Operated by Transmitter Allows you to define the time that the RLY output remains activated, <i>if the operating mode selected in the P8→rL menu is 06-control via RF Transmitter.</i></p> | <p>03</p> | |
| <p>01 • Press M for 8 sec. until it appears E0. 02 • Use ▲ to change to E4. 03 • Press M until appears E4. Use ▲ or ▼ to navigate through the parameters. 04 • Press M to edit the value of the chosen parameter. 05 • The factory-set time appears. Use ▲ and ▼ to change the value. 06 • Press M to save the new value.</p> | | |

| E5 DOOR MAINTENANCE | | FACTORY VALUE |
|---|------------------|---------------|
| <p>E8 Allows you to define the number of maneuvers for maintenance indication. If the value is 00 this function it is disabled. Number of maneuvers = Selected value x 5000 maneuvers</p> | <p>00</p> | |
| <p>E8 Resets maneuver counter.</p> | <p>00</p> | |
| <p>01 • Press M for 8 sec. until it appears E0. 02 • Use ▲ to change to E5. 03 • Press M until appears E5. Use ▲ or ▼ to navigate through the parameters. 04 • Press M to edit the value of the chosen parameter. 05 • The factory-set time appears. Use ▲ and ▼ to change the value. 06 • Press M to save the new value.</p> | | |

07. PROGRAMMING

PROGRAM "E"

| E6 | SLOWDOWN SPEED This function allows you to program the motor speed during the slowdown phase of an opening maneuver. The higher the level, the faster the slowdown. | FACTORY VALUE |
|--|--|---------------|
| S6 | Adjusting the slowdown speed during opening Allows you to adjust the motor speed during the slowdown phase of an opening maneuver. | 03 |
| S6 | Adjusting the slowdown speed during closing Allows you to adjust the motor speed during the slowdown phase of a closing maneuver. | 03 |
| <p>01 • Press M for 8 sec. until it appears E0. 02 • Use ▲ until appears E6. 03 • Press M and S6 will appear. 04 • Press M to edit the value. 05 • Use ▲ and ▼ to change the value. 06 • Press M to save the new value.</p> | | |

| E7 | MANEUVER COUNTER This menu allows you to check how many complete maneuvers were performed by the control board (complete maneuver is understood as opening and closing). |
|--|--|
| | |
| <p>Example: 130 371 maneuvers 1st Hundreds of thousands: 13 2nd Thousands: 03 3rd Tens: 71</p> | |
| <p>01 • Press M for 8 seconds. 02 • Appears E0. Press ▲ until appears E7. 03 • Press M. 04 • The maneuver count appears in the order shown above (example 130 371). 05 • Appears E8.</p> | |

07. PROGRAMMING

PROGRAM "E"

| E8 | RESET - RESET FACTORY VALUES | FACTORY VALUE |
|---|-------------------------------------|---------------|
| 00 | Disabled | 00 |
| 01 | Reset triggered | |
| <p>01 • Press M for 8 sec. until it appears E0. 02 • Use ▲ until appears E8. 03 • Press M and 00 will appear. 04 • Press M to edit the value 05 • Use ▲ and ▼ to change the value. 06 • Press M to save the new value.</p> | | |

Resetting the control board does not erase the maneuver count.

| E9 | OUTPUT FOR DOOR STATUS (CONNECTOR C) | FACTORY VALUE |
|--|--|----------------------------|
| <p>Allows you to define the function of each output. Connector C</p> | Y8 Defines the function of the Y output | 00 01 02 03 04 |
| | R8 Defines the function of the R output | 03 |
| | G8 Defines the function of the G output | 02 |
| | B8 Defines the function of the B output | 00 |
| <p>Allows you to define the flashing interval for each output. To set continuous output select the value 00.</p> | Y8 Set flashing interval - Y | (x500ms) |
| | R8 Set flashing interval - R | |
| | G8 Set flashing interval - G | |
| | B8 Set flashing interval - B | |
| <p>01 • Press M for 8 sec. until it appears E0. 02 • Use ▲ until appears E9. 03 • Press M to select the parameter. 04 • Use ▲ and ▼ to change the value. 05 • Press M to save the new value.</p> | | |

08. DISPLAY

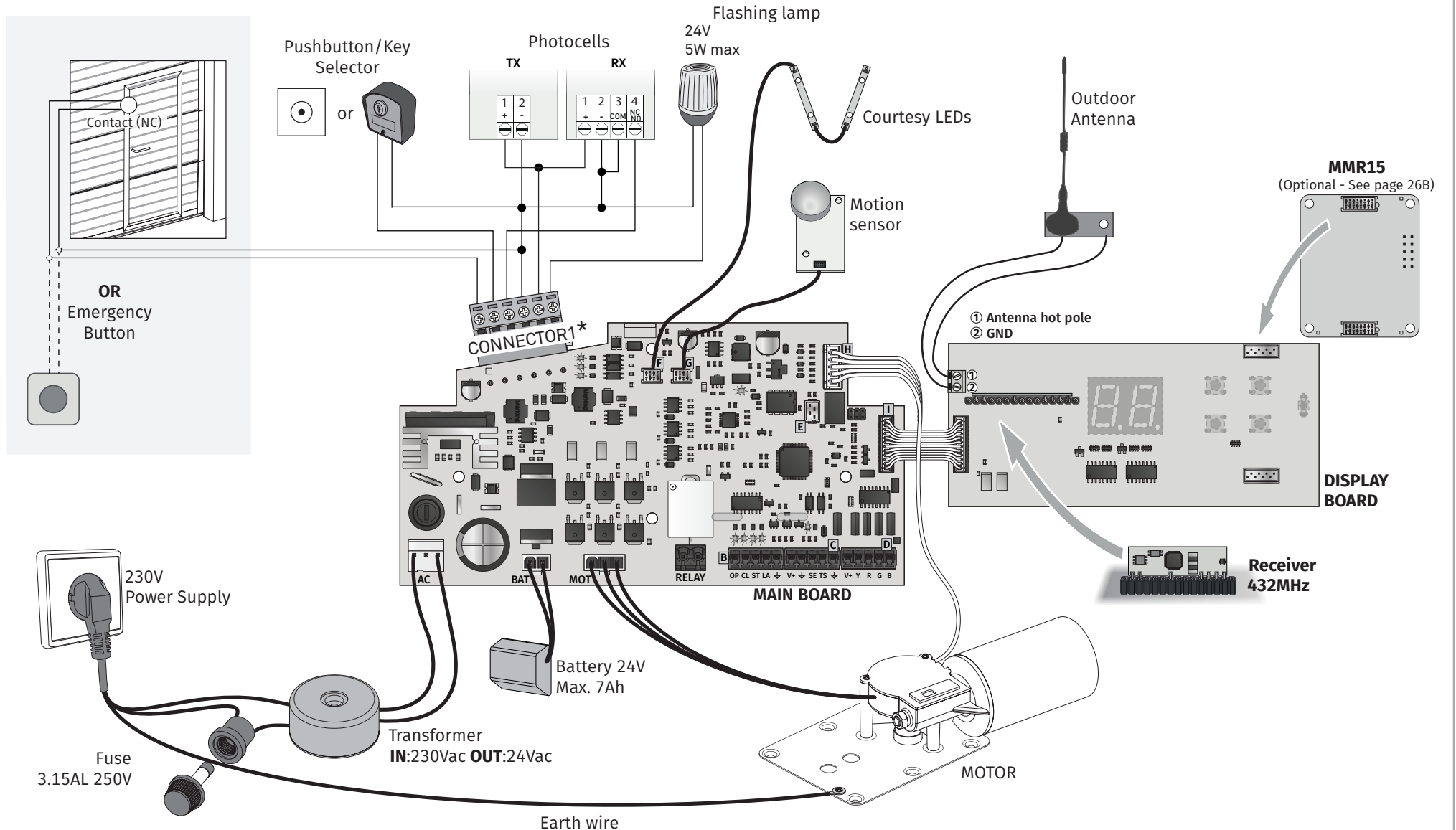
DISPLAY INDICATIONS

| MENU | DESCRIPTION |
|----------|---|
| 88 | In the stopped position, fully open |
| 88 | In the stopped position, intermediate position |
| 88 | In the stopped position, fully closed |
| PO | Opening pulse button pressed |
| 8P | Full opening button pressed |
| 8B | Full close button pressed |
| SE | Stop button pressed |
| OP | Control board executing the opening course |
| CB | Control board executing the closing course |
| EU | Memory full |
| 88 | All Transmitters deleted |
| 00 01 02 | Transmitter triggered from the indicated position |
| LE | Obstructed photocell |
| LA | Safety edge pressed |
| RF | In pause time |
| RP | In pedestrian pause time |
| OB | Obstacle detection |
| OO | Motor overcurrent detection |
| EB | Emergency device activated |
| SE | OSE Security Obstructed |

| MENU | DESCRIPTION |
|------|---|
| E1 | Processing error |
| E2 | Overvoltage error |
| E3 | Under voltage error |
| E4 | Initialization error |
| E5 | Encoder error |
| E6 | EEPROM memory error |
| SE | Photocell test failed |
| PP | Control board in Pre-flashing light |
| EB | MMR15 Module - Closing safety activated |
| ES | MMR15 Module - Stop Signal Activated |

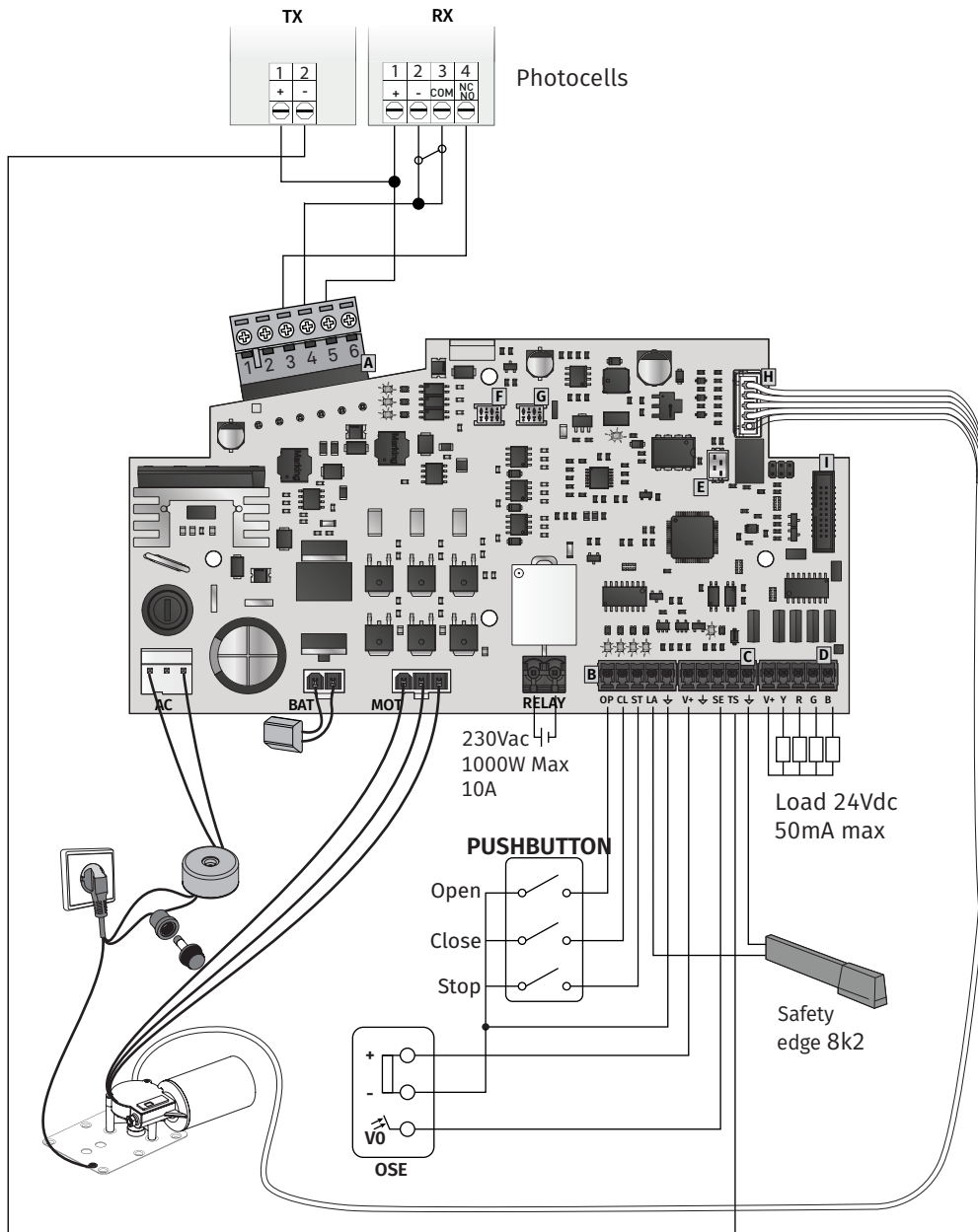
09. CONTROL BOARD CONNECTIONS

ROSSO PRO CONTROL BOARD



09. CONTROL BOARD CONNECTIONS

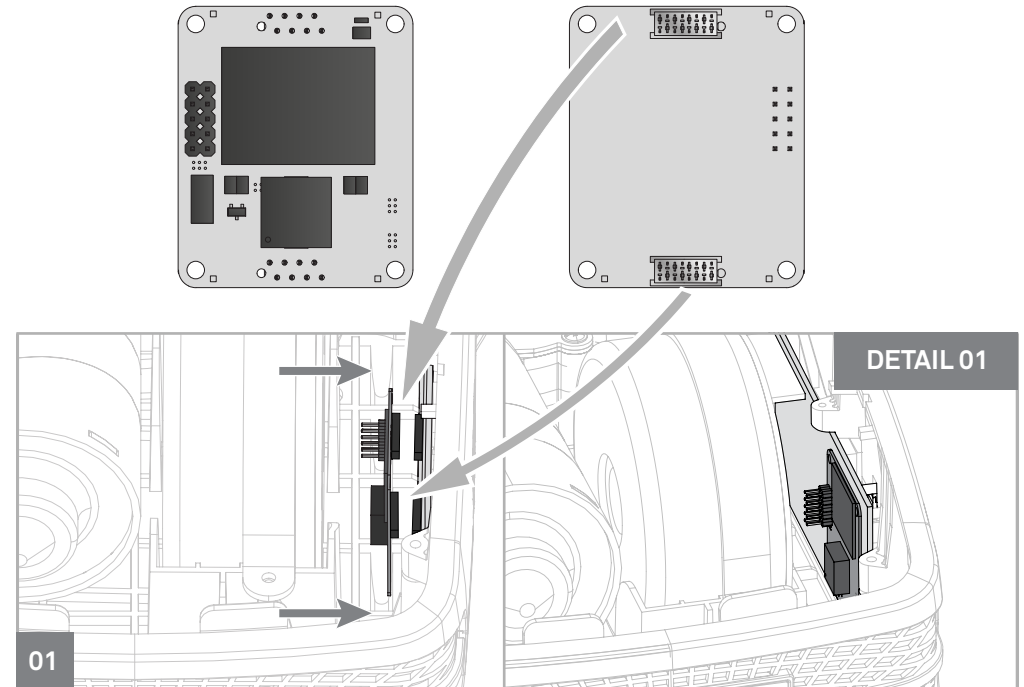
PHOTOCELLS WITH TEST CONNECTION



09. CONTROL BOARD CONNECTIONS











MMR15 RECEIVER MODULE (OPTIONAL)

This control board allows the installation of a receiver for the MX14 radio safety edge device, simplifying the entire installation without the need for external accessories or additional wiring to the control board. This way, when you want to add safety edges or magnetic contacts via radio, simply install the MMR15 module and add up to 4 MX14 to the motor.



10. TROUBLESHOOTING

CONTROL BOARD ERROR MAP


| Display | Description | Cause | Solving the problem |
|--|---|--|--|
|  | <ul style="list-style-type: none"> • Motor opening (Motor in opening maneuver) | <ul style="list-style-type: none"> • Opening. | |
|  | <ul style="list-style-type: none"> • Motor closing (Motor in closing maneuver) | <ul style="list-style-type: none"> • Closing. | |
| DELETE Transmitter  | <ul style="list-style-type: none"> • If all remotes controls are deleted. (Total reset) | <ul style="list-style-type: none"> • All remotes controls have been deleted. | <ul style="list-style-type: none"> • You should program new remotes controls. |
| COUNT FOR AUTOMATIC CLOSING  | <ul style="list-style-type: none"> • When the door is waiting for automatic closing. (Pause time counting) | <ul style="list-style-type: none"> • Automatic closing activated and in countdown. | |
| CORRECT OPERATION  | <ul style="list-style-type: none"> • When any value is saved. (Save parameters) | <ul style="list-style-type: none"> • Menu values have been changed and saved. | |
| BUTTON PRESSED  | <ul style="list-style-type: none"> • Whenever a button is pressed. (Order on PU input) | <ul style="list-style-type: none"> • Order given by button, key selector, or external receiver. | <ul style="list-style-type: none"> • Check if PU is continuous or only at the moment. |
| ACTIVE AND OPEN PHOTOCELL  | <ul style="list-style-type: none"> • Whenever a photocell is activated and opened. (Photocell interrupted) | <ul style="list-style-type: none"> • Function active and circuit open. | <ul style="list-style-type: none"> • Check the photocell circuit and its operation (Shunt LE+GND). |
| ACTIVE AND OPEN PEDESTRIAN DOOR  | <ul style="list-style-type: none"> • Whenever the pedestrian door is active and opened. (Pedestrian door input activate) | <ul style="list-style-type: none"> • Function active and circuit open. | <ul style="list-style-type: none"> • Check the pedestrian door/photocell circuit and its operation (Shunt LA+GND) |
| OBSTACLE DETECTION  | <ul style="list-style-type: none"> • When a larger obstacle is detected. (Selected force level is exceeded) | <ul style="list-style-type: none"> • Low force level, increase the value in P2. | <ul style="list-style-type: none"> • Enter Menu P2, adjust the value according to the previously defined point. |
| FULL MEMORY  | <ul style="list-style-type: none"> • When you want to program a Transmitter, but there is no free position. • Memory full | <ul style="list-style-type: none"> • Exceeded the limit of programmed Transmitters. | <ul style="list-style-type: none"> • Option to install an additional receiver. |



Errors appear on the display for 5 seconds!

08. TROUBLESHOOTING

INSTRUCTIONS FOR CONSUMERS | SPECIALIZED TECHNICIANS

| Anomaly | Procedure | Actions | Procedure II | Discovering the origin of the problem | | | |
|---------------------------------------|--|--------------------------------------|--|--|--|--|---|
| • Motor does not work | • Check that the 230V power supply is connected to the automation and that the fuse is working correctly | • Still not working | • Consult a MOTORLINE qualified technician. | 1 • Remove the top cover of the motor; 2 • Measure the 24V transformer's output to detect the location of the malfunction; | A) Has 24V: 1 • Make sure the control board is supplying the motor to detect whether the fault is in the motor or in the control board. Replace the damaged component or | send to Motorline facilities for diagnosis and repair. B) Doesn't have 24V: 1 • Check the 230V transformer input. If you can measure 230V | on the input, the transformer is the problem. If not, the problem is the fuse, electrical cables or electrical current itself. Check all systems. |
| | • Make sure the pedestrian door is securely closed. | • Still not working | • Consult a MOTORLINE qualified technician. | 1 • Give a order on the Transmitter to open and check the LEDs behavior. | 2 • If it blinks twice, then the connection with the photocells is having problems. Check all the | photocells circuit connection. 3 • If it flashes three times, then the pedestrian door connection | is having problems. Check all the door's connection circuit. |
| • Motor does not move but makes noise | • Unlock the motor and move the door manually to check for mechanical problems on the door. | • Encountered any problems? | | 1 • Check all the motion axes and the movement systems associated to the door and the automatism (rails,pulleys, bolts, hinges, etc.) to find out the problem. Also make sure the springs are in good condition and are able to withstand the door. | | | |
| | | • The door moves easily? | | If the motor does not work, remove it and send it to the MOTORLINE technical services for diagnosis. | | | |
| • Motor opens but does not close | 1 • Check if there is any obstacle in front of the photocells; 2 • Check if the photocells are working. Put your hand in front of the photocells, and check if the relay makes noise. 3 • Check if any of the door control devices (key selector, push button, video intercom, etc.) are stuck and sending permanent sign; | • Door has opened but did not close. | • Consult a MOTORLINE qualified technician. | 1 • Make sure the display and the courtesy LEDs are connected and to see if it has power; 2 • Check if the photocells have power supply from the control board. If not, check the fuse n° FUSE FT (see page 7A); 3 • Go to the menu on the display and disable the photocells and the pedestrian door; 4 • Try to close; | A) It closed: 1 • Problem is in one of these two systems. Activate the photocells and make sure the door closes. If it closes, the problem will be on the pedestrian door. Deactivate it from the menu and try to close the door to be sure. | B) Didn't close: 1 • The problem is in the motor or in the control board. Give the order to close the door while measuring the output power from the control board to the motor. If you have 24V, the control board is working and the problem is in the motor. 2 • If it does not have power, the problem remains in the control board. | |
| • Motor does not complete the course | • Unlock motor and move door by hand to check for mechanical problems on the door. | • Encountered any problems? | • Consult an door's technician. | 1 • Check all the motion axes and the movement systems associated to the door and the automatism (rails,pulleys, bolts, hinges, etc.) to find out he problem. Also make sure the springs are in good condition and are able to withstand the door. | | | |
| | | • Is the door moving easily? | • Consult a MOTORLINE qualified technician. | 1 • Verify that the door tests were well done; 2 • Change the force on P2 menu until the motor move the door without changing direction; 3 • This adjustment must be made so that the door when | encountering an obstacle inverts his direction (next illustration);  | 4 • If even at his maximum force (F9) the problem still remains, test the motor directly connected to a 24V battery to see if it has the force to open/close the door completely; 5 • Change the force on P2 menu | until the motor moves the door without changing direction; |