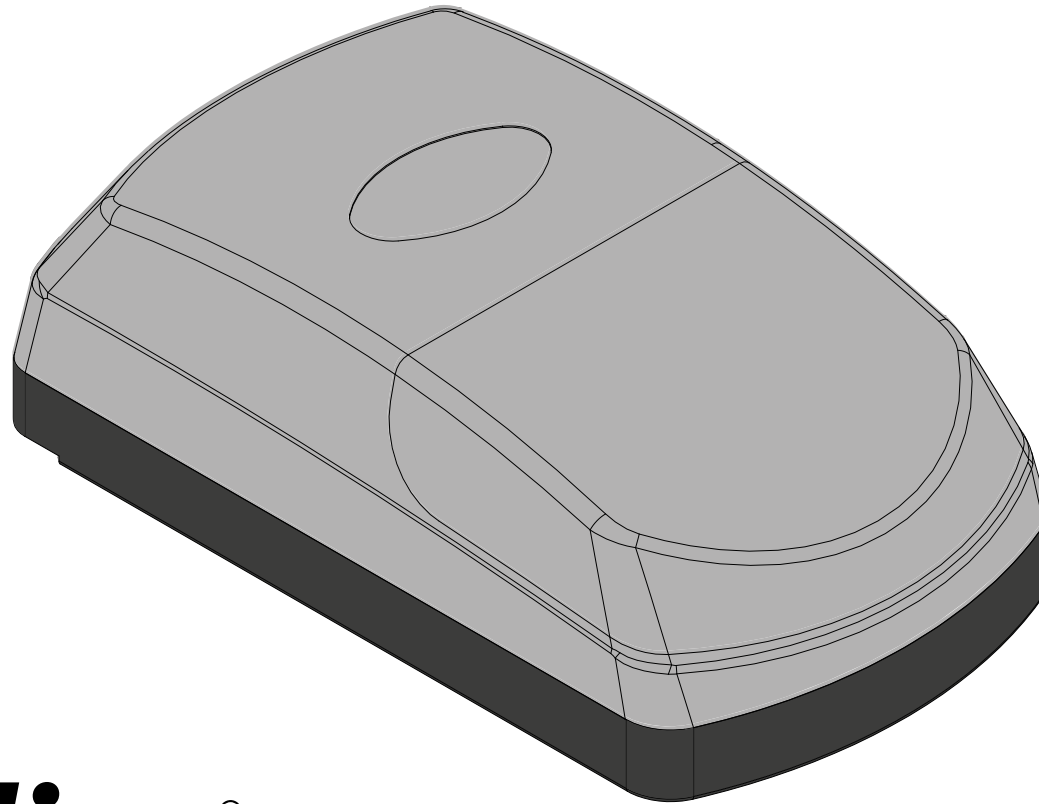




KVM25

USER'S AND INSTALLER'S MANUAL



00. CONTENTS




INDEX

| | |
|--------------------------------|----|
| 01. SAFETY INSTRUCTIONS | |
| STANDARDS TO FOLLOW | 1B |
| 02. THE PACKAGE | |
| INSIDE THE PACKAGE | 2A |
| 03. THE AUTOMATISM | |
| LOCK/UNLOCK | 2B |
| TECHNICAL SPECIFICATIONS | 3A |
| 04. INSTALLATION | |
| PRE-INSTALLATION INFO | 3B |
| AUTOMATISM INSTALLATION | 4A |
| INSTALLATION MAP | 5B |
| 05. PROGRAMMING | |
| PROGRAMMING THE LIMIT SWITCHES | 6A |

01. SAFETY INSTRUCTIONS

STANDARDS TO FOLLOW

ATTENTION:

| | |
|---|--|
|  | 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. |
|  | (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 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. |

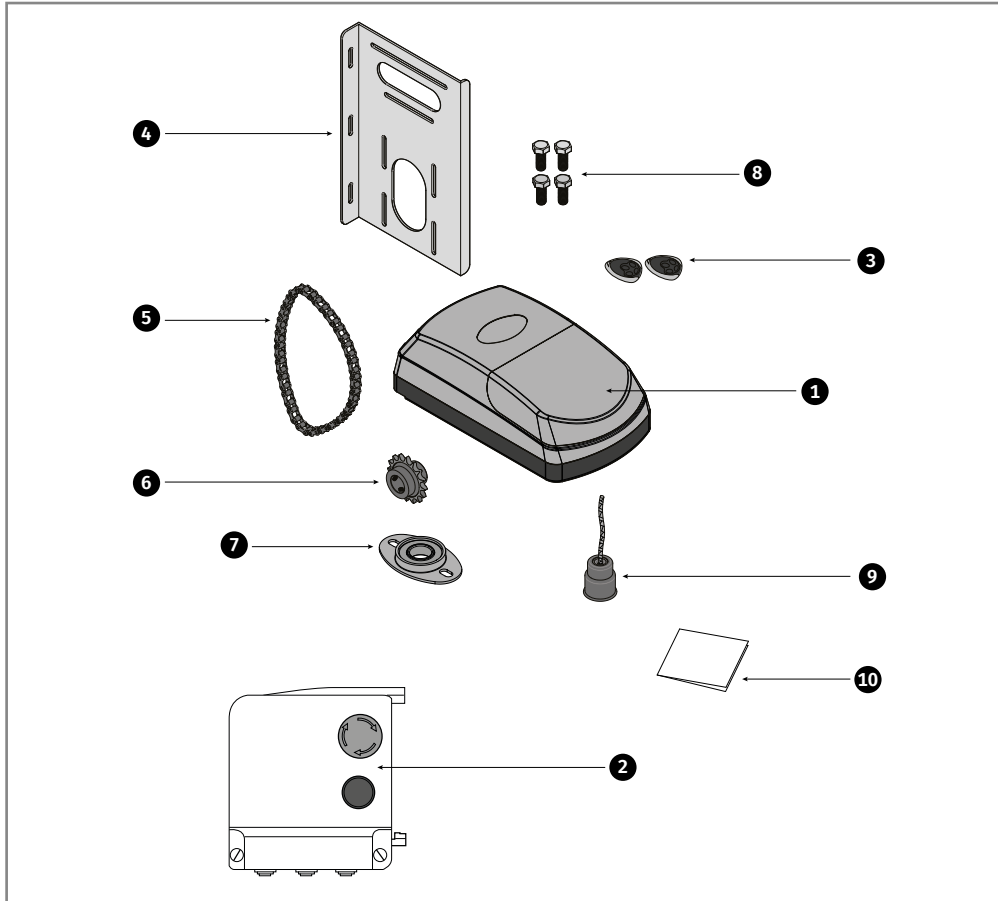
- It is important for your safety that these instructions are followed.
- Keep these instructions in a safe place for future reference.
- The **ELECTROCELOS S.A.** is not responsible for the improper use of the product, or other use than that for which it was designed.
- The **ELECTROCELOS S.A.** is not responsible if safety standards were not taken into account when installing the equipment, or for any deformation that may occur.
- The **ELECTROCELOS S.A.** is not responsible for insecurity and malfunction of the product when used with components that were not sold by the them.
- This product was designed and manufactured strictly for the use indicated in this manual.
- Any other use not expressly indicated may damage the product and/or can cause physical and property damages, and will void the warranty.
- Do not make any changes to the automation components and/or their accessories.
- Keep remote controls away from children, to prevent the automated system from being activated involuntarily.
- The customer shall not, under any circumstances, attempt to repair or tune the automatism. Must call qualified technician only.
- The installer must have certified professional knowledge at the level of mechanical assemblies in doors and gates and control board programming. He should also be able to perform electrical connections in compliance with all applicable regulations.
- The installer should inform the customer how to handle the product in an emergency and provide him the manual.

02. THE PACKAGE

INSIDE THE PACKAGE

Inside the package you will find the following components:

- 1 • 01 automatism KVM25
- 2 • 01 maneuver board
- 3 • 02 four channel transmitters MX4SP
- 4 • 01 mounting plate
- 5 • 01 chain
- 6 • 01 pinion for Ø25mm shaft
- 7 • 01 bearing bracket
- 8 • 04 fixing screws
- 9 • 01 unlocking cord
- 10 • 01 user manual

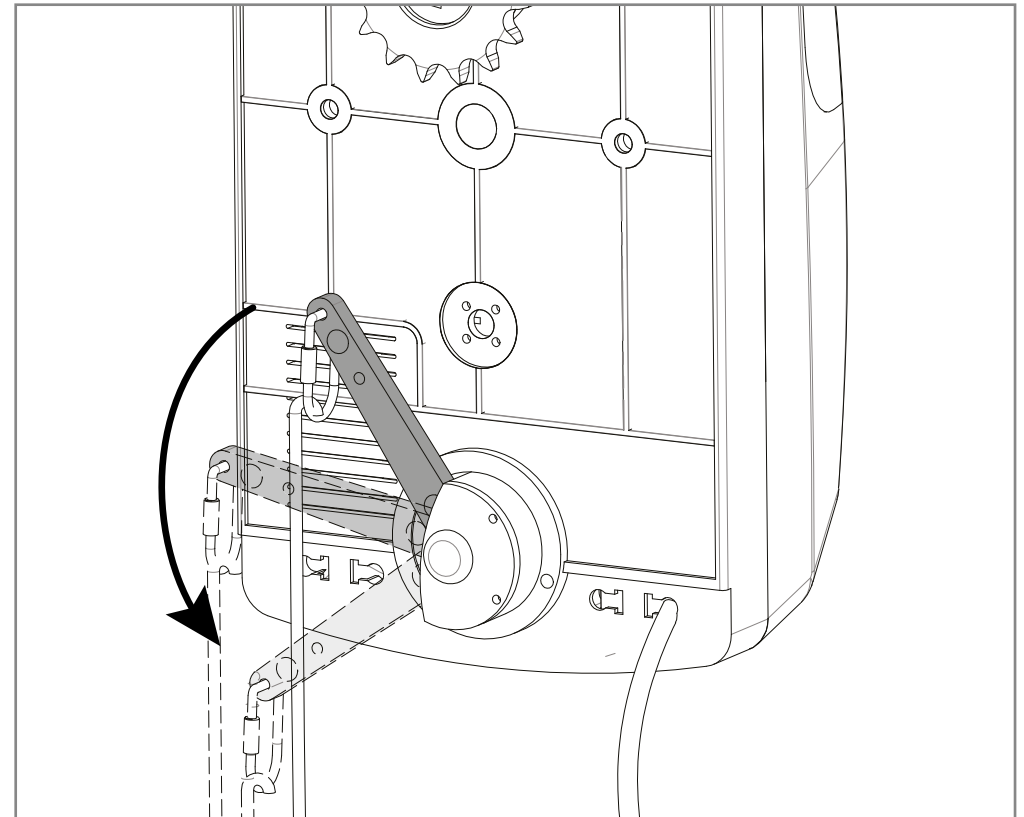


03. THE AUTOMATISM

LOCK/UNLOCK

The automatism unlock function allows the user to open and close the gate manually, without having to remove the motor from the installation site. This functionality is specially important in emergency cases and/or power cuts.

To lock or unlock the automatism just pull down the lever as shown in the following image. The lever has a spring that will bring it up to the starting point. Each time you pull the lever down and rise completely, you will unlock or lock the automatism. When pulling down, a small sound of gears engaging means that the lock/unlock was successfully performed.



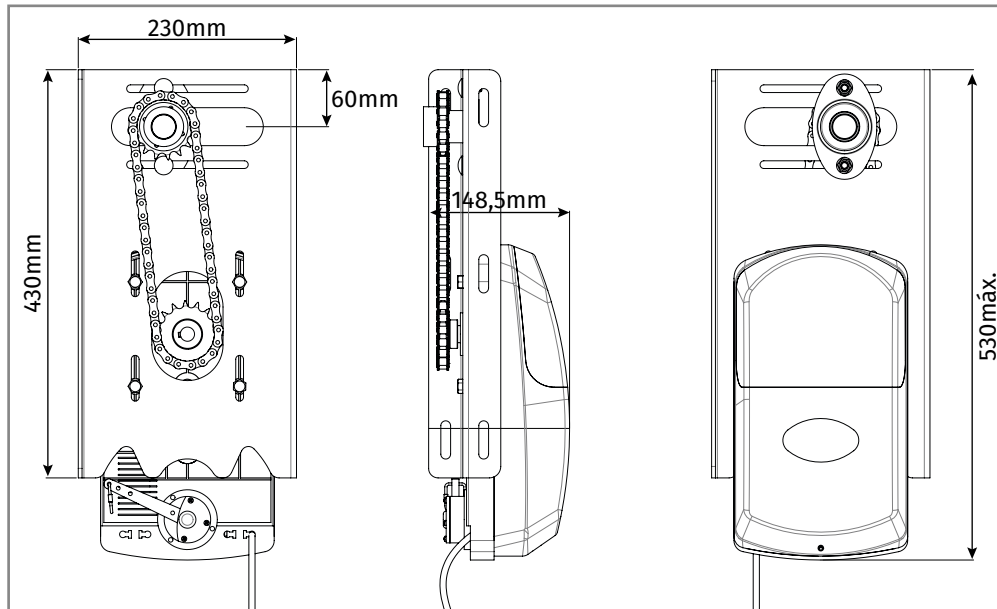
03. THE AUTOMATISM

TECHNICAL SPECIFICATIONS

KVM25 specifications are as follow:

| | |
|--------------------------|-------------------|
| • Power Supply | AC 230V 50/60Hz |
| • Power | 80W |
| • Current | 8A |
| • RPM | 20 RPM |
| • Noise level | <65dB |
| • Force | 30N |
| • Operating temperatures | -25°C a 65°C |
| • Transformer | 100W |
| • Protection class | IP20 |
| • Work Rate | 30ciclos / h |
| • Fuses | 220V 1A - 24V 10A |

KVM25 dimensions are the following:



04. INSTALLATION

PRE-INSTALLATION INFO

For a proper installation and a durable performance of KVM25, be aware of the following parameters:

- Please read all steps of this manual at least once, so that you know the full process before starting the real assembling.
- This equipment can only be installed on sectional doors with a maximum area of 18m².
- Please make sure that the door's structure is solid and in good conditions to be automated.
- Make sure that the sectional door has no mechanical anomalies, they may affect the automatism's durability .
- To check if the door is in good condition for the motor to be installed, manually raise it to 800mm, 1600mm and 2000mm from the floor and drop it. The door must remain suspended in that position or going down very slightly. If this does not happen, check the springs condition.
- Check the surrounding space. Carefully evaluate potential dangers that can cause physical damage and possible contact with bugs, infiltrations or others.
- Please make sure that the automatism will be connected to a 230V power supply, protected with earth wire.
- Please check if there is appropriate electronic protection against short-circuits/current peaks, and earth wire on the main electric board.
- Be careful in case of manually operating the control board. The incorrect usage can damage some sensible electronic components.
- Check if you have all the necessary material ready for the installation.
- Check all safety devices to install. This will ensure that unexpected accidents won't happen.

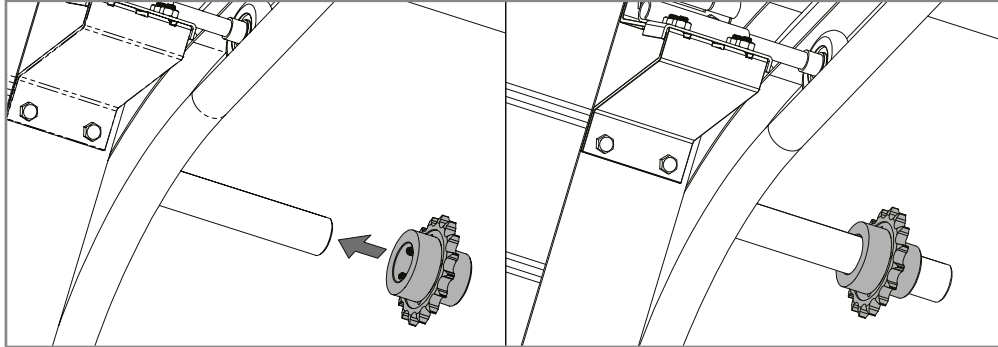


It is very important that before installation, make sure the springs are adjusted according to the door's weight!

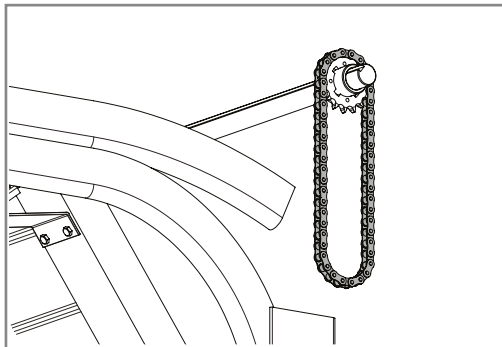
04. INSTALLATION

AUTOMATISM INSTALLATION

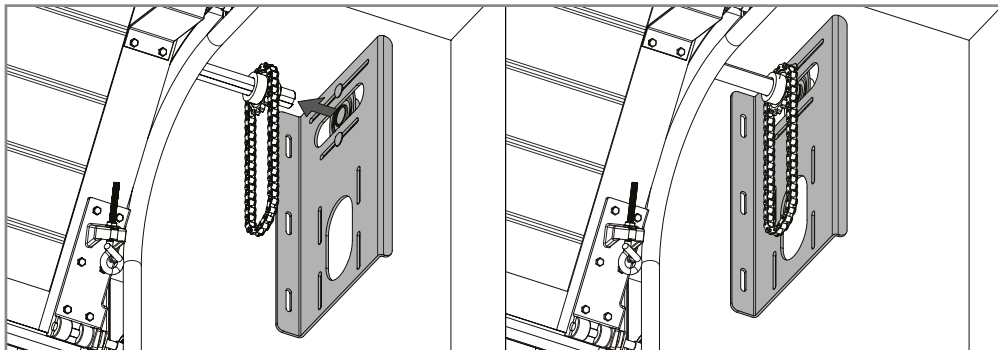
In the illustrated diagrams below and on the following page, are represented the procedures for proper installation of the motor KVM25.



01 - Place the pinion on the Ø25mm spring's shaft of the sectional door.



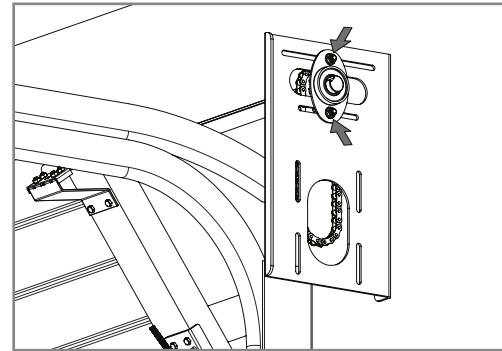
02 - Place the chain over the pinion leaving it hanged.



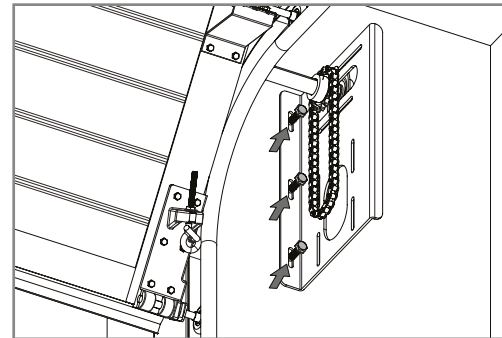
03 - Pass the Ø25mm shaft through the bearing on the support plate.

04. INSTALLATION

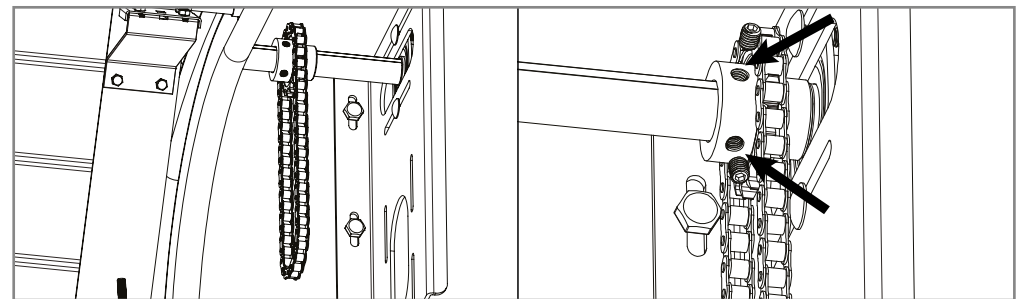
AUTOMATISM INSTALLATION



04 - Slightly loosen the bearing bracket's screws (left), to be able to move it sideways.



05 - Pull the metal plate to the wall and secure with the screws.
After fixing the plate, tighten the bearing bracket's screws back to fix it too.



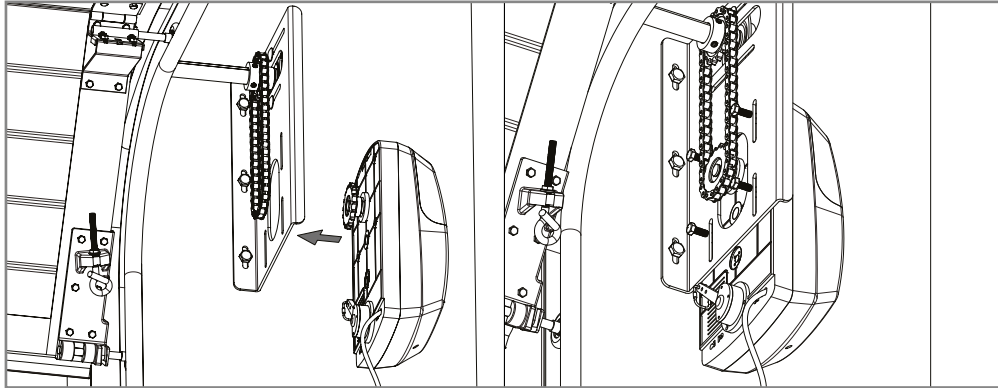
06 - Pull the pinion to the bearing and tighten the two bolts to secure the pinion to the shaft.



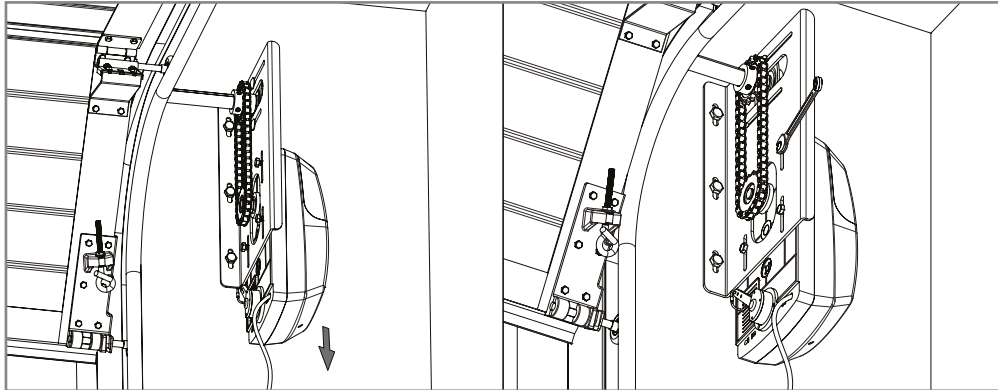
It is very important that these quotas are respected! Only in this way the correct functioning and durability of automatism can be assured!

04. INSTALLATION

AUTOMATISM INSTALLATION



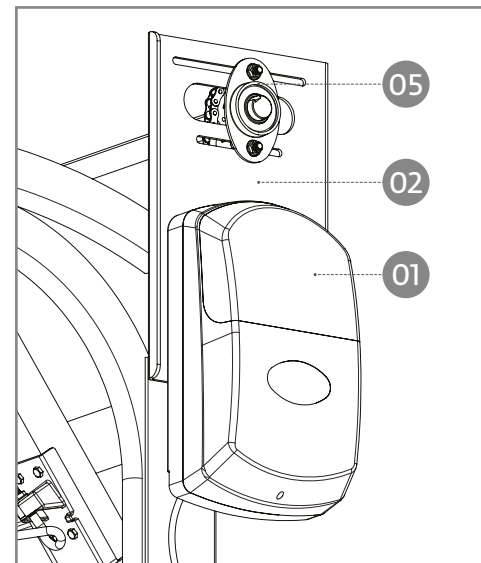
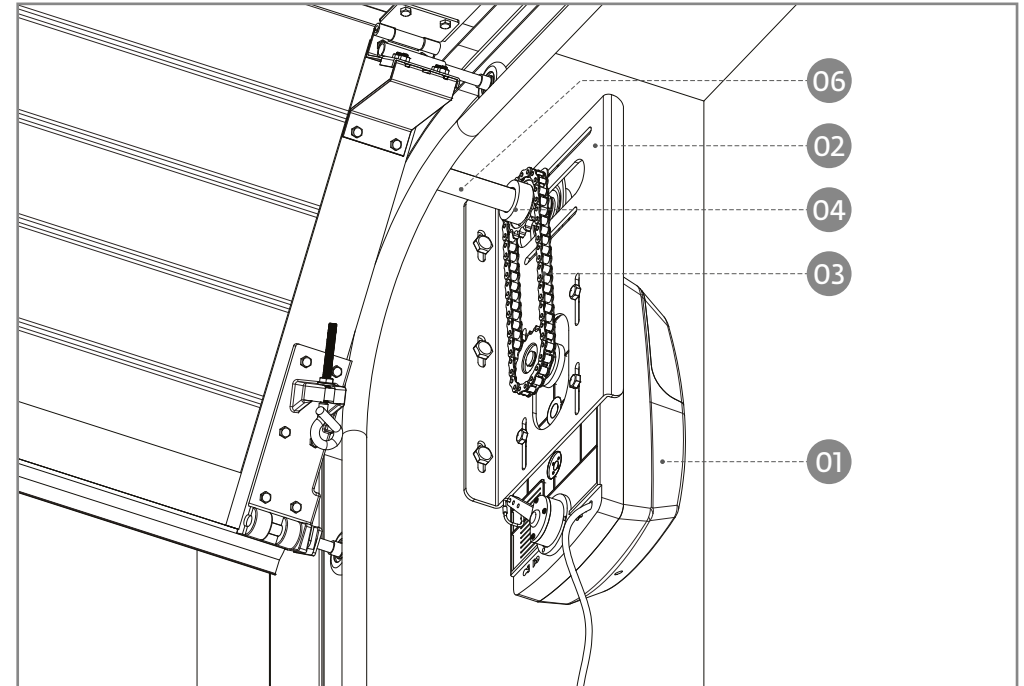
07 - Place the automatism on the support plate (left), and assemble the chain on the motor's pinion as you can see on the right image. Place the screws on the motor in order to support it on the metal plate, without tightening them completely, so that you are able to adjust the automatism.



08 - With the bolts still loose, pull the engine down in order to tighten the chain. While pulling down, fasten the 4 motor bolts to secure it on the support plate. The automatism is now installed.

04. INSTALLATION

INSTALLATION MAP



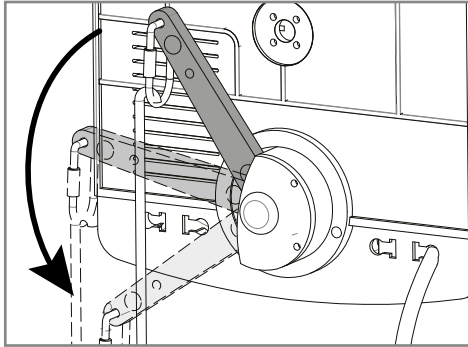
LEGEND:

- 01** • motor KVM25
- 02** • support plate
- 03** • chain
- 04** • pinion for Ø25mm shaft
- 05** • bearing bracket
- 06** • Ø25mm sectional door's shaft

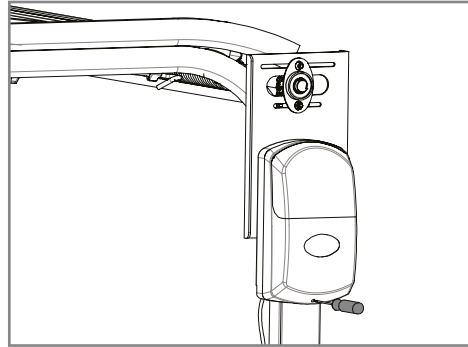
05. PROGRAMMING

PROGRAMMING LIMIT SWITCHES

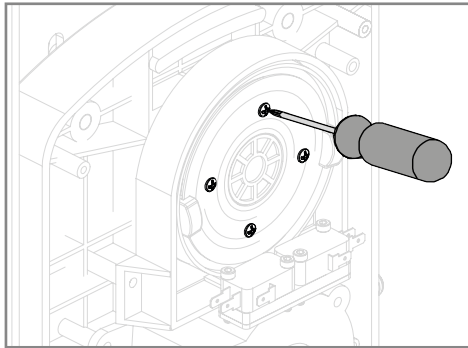
In the illustrated diagrams below and on the following page are represented the procedures for proper programming of the motor KVM25 limit switches, once installed on the gate.



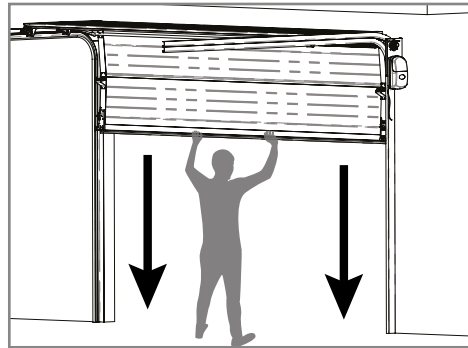
01 - Unlock the motor, pulling the lever down. You will hear a little click when pulling down, and then you must let the lever go up.



02 - Open the automatism cover with a screwdriver and connect the motor to a power source at 230V.



03 - Slightly loosen the 4 screws of the magnetic actuator.



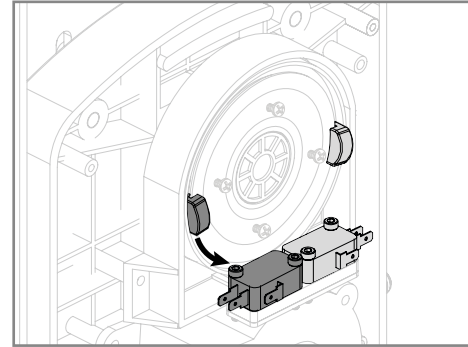
04 - Manually pull the door into the closed position.



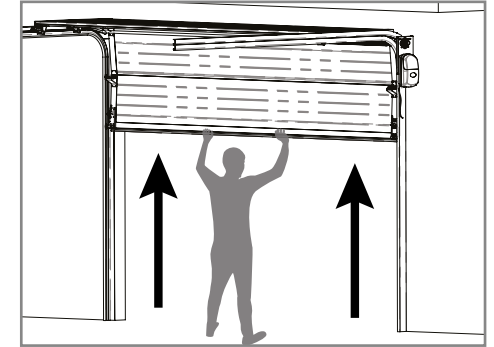
It is very important that these quotas are respected! Only in this way the correct functioning and durability of automatism can be assured!

05. PROGRAMMING

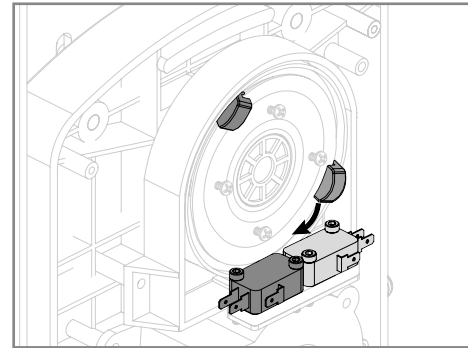
PROGRAMMING LIMIT SWITCHES



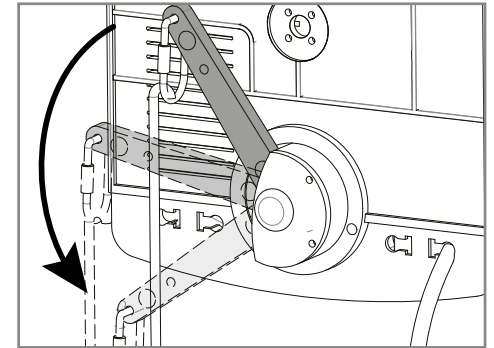
05 - Move the plastic piece until hear a click from the micro.



06 - Manually move the door to the open position.



07 - Move the plastic piece until hear a click from the micro. Now tighten the 4 screws of the magnetic actuator.



08 - Lock the motor and test the door opening and closing using either the "PUSH" button on the control board or the transmitter. If necessary, repeat the previous steps, from the image 03, to better tune the limit switches.