

**MANUAL DE INSTRUCCIONES
NOTICE D'INSTALLATION
INSTRUCTION MANUAL
MANUAL DE INSTRUÇÕES
BEDIENUNGSANLEITUNG**

KM 600 - KM 600S - KM 1000S

**ACCIONADORES PARA PUERTAS CORREDERAS
ACTIONNEURS POUR PORTES COULISSANTES
ACTUATORS FOR SLIDING DOORS
ACCIONADORES PARA PORTAS DE CORRER
ANTRIEBE FÜR SCHIEBETÖRE MIT SOFT-STOPP**

INTRODUCTION

These products have been designed for the automation of sliding garage doors.

The instructions have been validated in order to facilitate the installation of the models indicated in the table below.

TECHNICAL CHARACTERISTICS

- **Single-phase motor with permanent capacitor**
- **Power supply: 230 V-50Hz**
- **Output speed: 57 r.p.m.**
- **Protection factor: IP45**
- **Slow down at the end of its run.**

Operator	Security	Self locking	Maximum weight (kg)	Power (W)	Intensity (A)	Control board
KM 600	Pushing force adjustment	Yes	600	160	1.2	Built-in
KM 600S	Encoder + Pushing force adjustment	Yes	600	160	1.2	Built-in
KM 1000S	Encoder + Pushing force adjustment	Yes	1000	368	1.67	Built-in

RECOMENDATIONS TO THE FITTER

It is important as far as safety as concerned to follow all the instructions. An incorrect instruction may cause damage to people and/or property. Read the recommendations in this leaflet carefully; they give important information on the security of the installation and its use and maintenance.

Once the product has been unpacked, check that it is undamaged. If you are in any doubt do not use the appliance and contact the nearest technical service.

The elements of the packaging must be kept out of the reach of children, as these items are potentially dangerous.

It should also be checked that the door is in good mechanical condition.

Check that the mechanical operation of the door to be automated is correct.

If friction is excessive, this should be corrected before proceeding to automation.

Under no circumstances should an automation mechanism be installed in a door that is not operating correctly, as both the door and the components installed may be damaged and this may even be dangerous.

This mechanism must only be put to the use for which it has been designed. Any other type of use must be considered unsuitable and therefore dangerous.

The installation must be carried out by qualified personnel, respecting the manufacturer's instructions, and in accordance with current regulations.

Pay particular attention to the instructions of all the elements that make up the installation.

Check that the normal voltage of the elements to be installed corresponds to that of the mains and that the power of the latter is appropriate for the maximum power of the equipment.

Check that the section of the wires is suitable regarding the power absorbed by the elements. If in any doubt, consult a professional.

Never install any appliance without its corresponding earth connection.

The power cable must be appropriately secured.

Suitable cable housing must be used as a protection element.

For the installation it is necessary to provide a switch to insure the omnipolar cut-off of the power supply according to current security regulations.

The use of any electrical appliance implies the observation of fundamental rules such as:

- Do not touch the appliance with wet hands or feet
- Do not handle the appliance with no shoes on.
- Do not leave the appliance exposed to the elements unless this is expressly anticipated

- Do not allow the appliance to be used by children

Inform all users of the installation of these warnings.

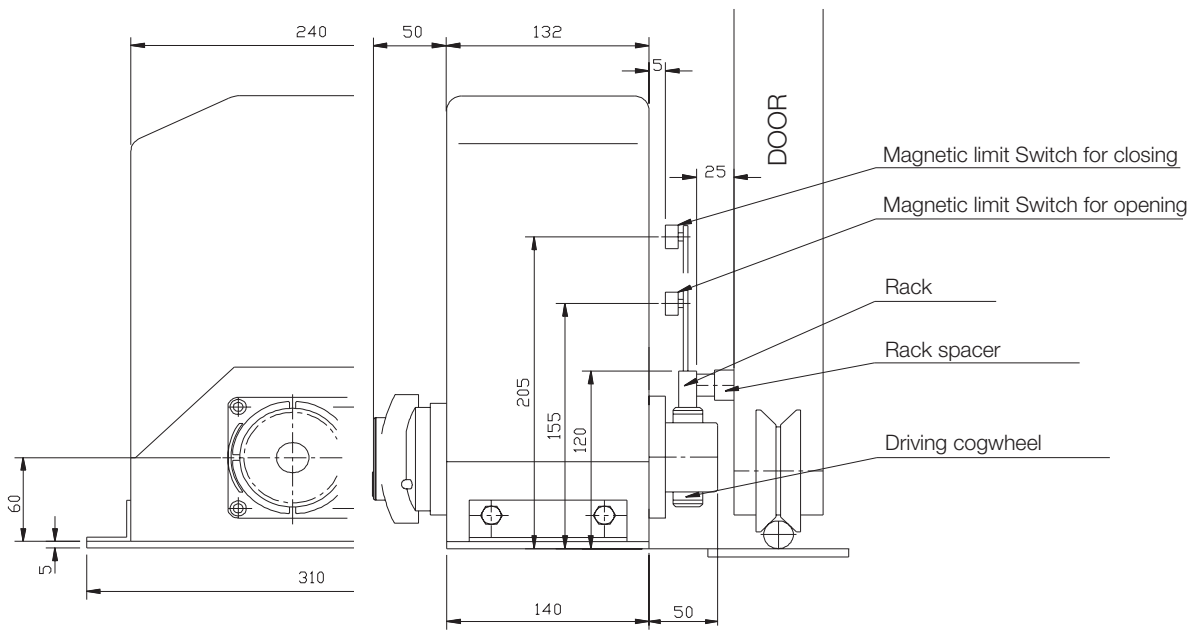
In the case of damage to or incorrect operation of the appliance, disconnect it and refrain from using it.

The possible repair of the appliances must be carried out only by the manufacturer or by an authorised technical assistance centre, using exclusively original spare parts.

It should be clearly indicated on the door that it is automatic and controlled from a distance, if this is appropriate.

The manufacturer cannot be considered responsible for any possible damage caused by failure to follow these recommendations.

INSTALLATION DIMENSIONS



INSTALLATION OF THE OPERATOR

1.- Secure the motor:

1.1. Fit the base plate of the motor. (Fig. 1)

1.2. Secure the motor to the base plate.

2.- Weld the rack, or its spacers, to the door. It is advisable to fit supports if the door does not have them

3.- Screw the rack to the spacers.

4.- Unlock the engine and check that:

4.1. The door moves by hand without difficulty throughout its run.

4.2. The rack is always in contact with the output cogwheel, but without exerting any force on it.

5.- Secure the motor and the rack definitively.

6.- Position the plates housing the magnets and the magnetic limit switches as appropriate for stopping the door (small plate for magnetic limit switch in opening and large plate for magnetic limit switch in closing).

7.- It is advisable to fit stoppers to the door in the opening and closing position, to prevent the door from leaving the field of action of the ends of run.

8.- Lock the motor.

9.- Adjust the pushing force.

IMPORTANT NOTE: THE CONTACTS FOR THE PHOTOCELLS OF THE CONTROL PANEL ARE NORMALLY CLOSED.

MANUAL OPERATION

The appliance has a motor unblocking system that allows the door to be moved manually. The unblocking procedure is as follows:

- 1.- Turn the upper lid of the unblocking mechanism half a turn, leaving the lock visible.
- 2.- Open the trap lock.
- 3.- Turn the handle 270° clockwise as far as the stopper.

To lock the door again carry out the reverse procedure:

- 1.- Turn the unblocking handle 270 ° anti-clockwise as far as the stopper.
- 2.- Press the trap of the lock as far as the closing position.
- 3.- Give the upper lid of the unblocking mechanism half a turn to cover the lock.
- 4.- Move the door manually until it blocks.

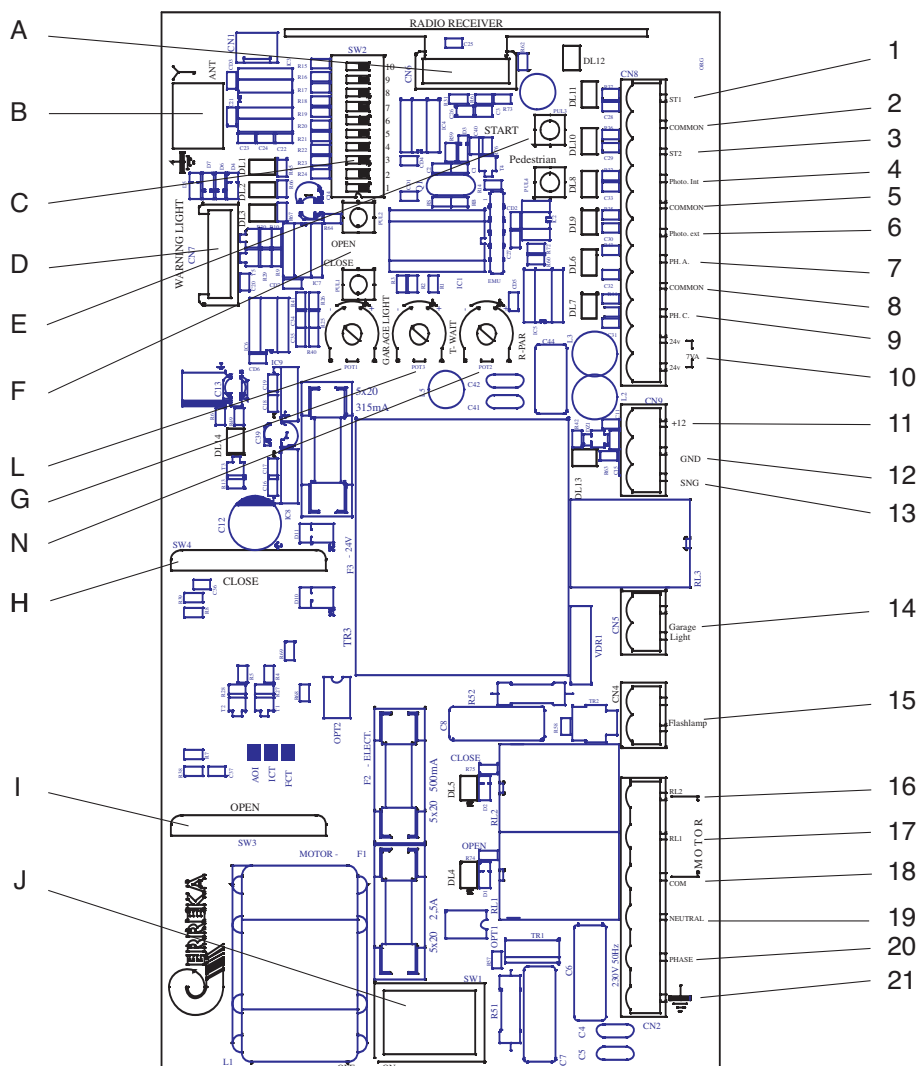
Under normal operation the motor becomes unlocked by exerting moderate force on the lever; under no circumstance must it be forced.

SAFETY ELEMENTS

Automatismos Erreka recommends the installation of additional safety elements (photocells, safety bands, etc.) so as to guarantee the safety of persons or objects that may interfere with the movement of the door.

In its turn it is necessary to incorporate to the installation omnipolar electrical disconnection elements to insulate the equipment from the mains if this is necessary, in order to comply with current legislation. Under no circumstance should the motor be unblocked without having previously turned off the current.

DESCRIPTION OF THE PANEL



5.- Programming of the automatic mechanism:

5.1.- Recording the door run.

- Place the door in the closed position, either manually or using the push-buttons on the panel.
- Turn DIP 7 and DIP 8 to ON (Slow down options and encoder activated).
- Turn DIP 1 to ON (Check the light of the DL3 led).
- Turn DIP 2 to ON.
- Push Operation (Push-button E). The gate begins to open.
- When the the magnetic limit switch is some 50 cm from the end of its run, press again so that the speed begins to slow down.
- Press E for the gate to begin to close.
- When the the magnetic limit switch is some 50 cm from the end of its run, press again so that the speed begins to slow down.
- Turn DIP 1 to OFF.
- Turn DIP 2 to OFF.

5.2.- Recording partial opening (for pedestrians):

- Turn the DIP 1 to ON.
- Turn the DIP 3 to ON.
- Press Peatonal. The door begins to open.
- Press Peatonal in the position in which we want the to start slow down speed.
- Press Peatonal to stop the door in the desired position of opening for pedestrians.
- Press Peatonal. The door begins to close.
- Press Peatonal in the position in which we want the to start slow down speed. The door will stop at the end of the run.
- Turn DIP 1 to OFF.
- Turn DIP 3 to OFF.

Note for all types of operation:

- **If during the opening open/close the door meets an obstacle in its run, it will stop and close for 2 seconds.**
- **If during the opening open/close the door meets an obstacle in its run, it will stop and invert its movement until it stops in the open position.**
- **Whenever the door receives a key impulse or photocell in the opening open/close, it will stop and move to the open door position.**

6.- Selection of operating mode.

6.1.- Automatic/Semi-automatic cycle:

Automatic Cycle (DIP 4 ON).

"Start" (Operation button) – Opening – Waiting with Gate open (time can be regulated with timer G) – Closure.

If "operation" is pressed or any photocell is activated during the waiting time, the period will restart.

Semi-Automatic Cycle (DIP 4 OFF).

"Start" – Opening – "Start" – Closure.

6.2.- Community operation / Step by step:

Community function (DIP 3 OFF).

One "start" opens; other "start" commands are not accepted in opening.

Step by step function (DIP 3 ON).

One "start" opens, another "start" stops the door, a third "start" closes, and if during the closing open/close we activate "start", the door stops and inverts the movement as far as the open door position.

6.3.- Optional Automatic:

In combination with DIP 4 ON.

-Optional automatic (DIP 5 ON)

if "Start" is received during the wait time, the door will close immediately.

-No optional automatic (DIP 5 OFF)

if "Start" is received during the wait time, the wait time is reset.

7.- Radio transmitter programming (Only with plug-in receiver ref. RSD-001)

Radio transmitter programming must be done with the door closed.

The radio recordings for pedestrian and total opening are independent, and they may even correspond to different controls with different codes.

7.1.- Total opening:

-Turn DIP 1 to ON.

-Turn DIP 4 to ON. The memory is now open.

-Select the code on the radio transmitter and press the channel (transmitter button) to be recorded. LED DL2 will begin to flash.

-Turn DIP 4 to OFF.

-Turn DIP 1 to OFF.

7.2.- Pedestrian opening:

-Turn DIP 1 to ON.

-Turn DIP 6 to ON. The memory is now open.

-Select the code on the radio transmitter and press the channel to be recorded. LED DL2 will flash.

-Turn DIP 6 to OFF.

-Turn DIP 1 to OFF.

When the control code has been recorded, you will need to turn the control board off and on again

8.- Select the type of operation of the flashing light.**8.1.- Pre-warning function.**

By turning the DIP 2 to ON, the flashing light comes on 3 seconds before the beginning of the open/close.

8.2.- Flashing lamp output

- DIP 6 to ON. The output to the lamp is flashing, owing to which a normal lamp can be fitted.

- DIP 6 to OFF. The output is fixed, owing to which a flashing lamp is required.

9.- Safety operation

- Opening Safety (connection terminals 4 and 5):

If the accessory (photocell, safety strip,...) is activated on opening, the Gate will stop and reverse 20 cm. On closing the mentioned safety accessory not operate.

- Closing Safety (connection terminals 5 and 6):

If the accessory (photocell, safety strip,...) is activated on closing, the Gate will stop and reverse to fully open. On Opening the mentioned safety accessory not operate.

In both cases, if the Photocell beam is broken during the waiting time, this period restarts.

FAULT FINDING

1.- The motor does not operate:

- 1.1. Check that the installation is correctly connected (Fig. 2)
- 1.2. Check that voltage is reaching the motor. (230 V AC)

2.- The motor operates in a single direction:

- 2.1. Check that the standard motor is correctly connected (Fig. 2)
- 2.2. Check that the condenser is connected.

3.- The motor lacks power:

- 3.1. Unlock the motor and check whether the door shows excessive resistance in its run. If so, disassemble the motor and eliminate the resistance until the door can be easily moved by hand.
- 3.2. Check whether the condenser has been connected and if its capacity is the correct one (see motor label)
- 3.3. Check whether the motor is blocked. If it is not, lock it.

4.- The door does not reach the end of its run:

Check whether the opening and closing times are the correct ones for the size of the door.

If after having made all the checks and adjustments indicated the fault persists, contact your nearest ERREKA dealer or technical service commenting the fault observed in as much detail as possible.

INSTALLATION OF THE AUTOMATIC MECHANISM

The models referred to in this manual comply with the European reference directive:

- Machine directive 89/392/EEC.
- Low voltage regulation 73/233/EEC.
- Electromagnetic compatibility 89/336/EEC

It is recommended that the automatic mechanism should be installed by professionally qualified personnel, respecting the legal regulations corresponding to the place of installation.

WARRANTY CERTIFICATE

Automatismos Erreka guarantees this equipment for a period of 24 months as from the date of supply.

This guarantee is applicable to any manufacturing defect.

It is the responsibility of the fitter to transfer the equipment to the authorised technical services.

This guarantee does not include:

- Damage caused by incorrect installation or use of the equipment.
- Damage caused by handling by unauthorised personnel.
- Damage caused by external or atmospheric agents (lightning, floods, etc)