

# *Couper*

KINGGATES

Motori gear for swing gates



## 1 - GENERAL DESCRIPTION

### 1A - WARNINGS

Unfulfilment of the below listed direction will release the KING gates srl, from any responsibility for damage caused to people or things.

-Do not modify the product in any part.

-To optimize the functioning of the automation, King gates accessories only

.-Installing, testing and first functioning have to observe the laws in force.

-The gear-motor doesn't require any maintenance because provided with a permanent lubrication system.

-Disposal of waste material has to observe local regulations.

### 1B - AVAILABLE VERSION

#### AVAILABLE VERSION

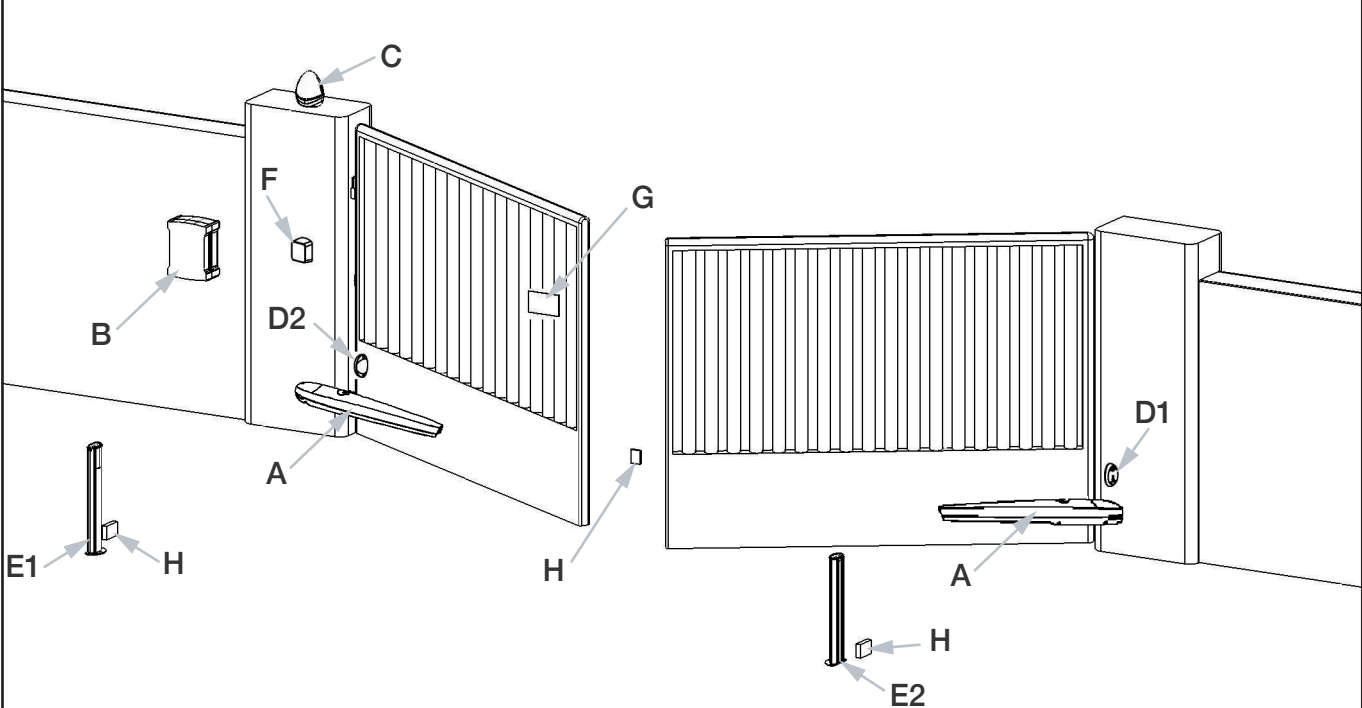
| Code      | Motor  | Mechanical stop | Fixing kit | Wing max dimensions |
|-----------|--------|-----------------|------------|---------------------|
| Couper 24 | 24 Vdc | ● (1)           | ●          | 2m - 250 kg         |

#### COUPER 24 – TECHNICAL DATA

|                        |           |               |
|------------------------|-----------|---------------|
| Power supply           | (Vac)     | 230           |
| Gear motor             | (Vac/Vdc) | 24            |
| Power                  | (W)       | 80            |
| Speed                  | (m/sec)   | 0,013 ÷ 0,016 |
| Travel                 | (mm)      | 360           |
| Work cycle             | (IP)      | 44            |
| Working temperature    | (kg)      | 6             |
| Max length of the gate | (m)       | 2             |
| Max weight of the gate | (kg)      | 250           |
| Protection level       | (%)       | 50            |
| Weight                 | (mm)      | 100x104x780   |
| Dimensions             | (°C)      | -20 ÷ +50     |

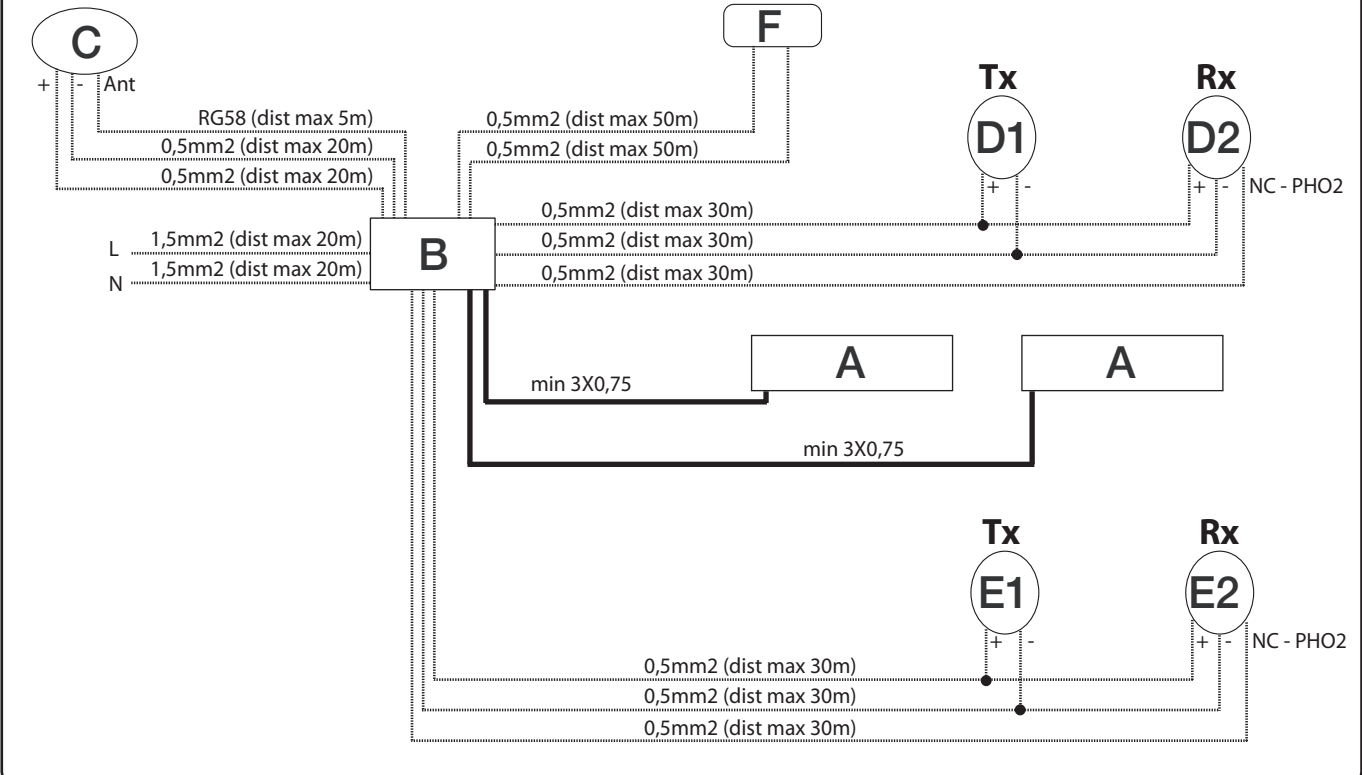
## 2 - TYPICAL SYSTEM

### 2A - TYPICAL SYSTEM

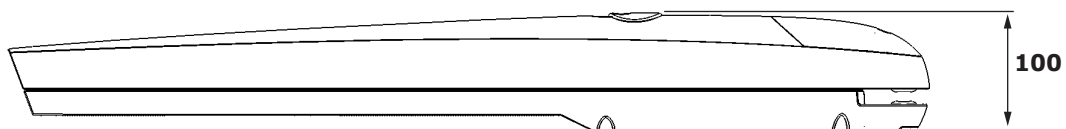
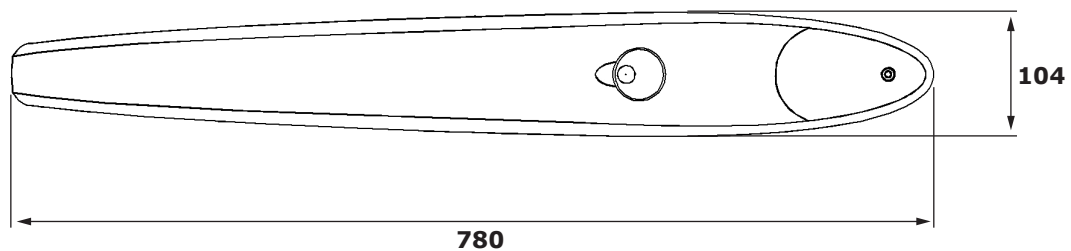


- A - Gear-motor
- B - Control unit
- C - Flash-light with antenna
- D - Photocell in closing
- E - Photocell in opening
- F - Key selector
- G - Warning sign
- H - Stop locks

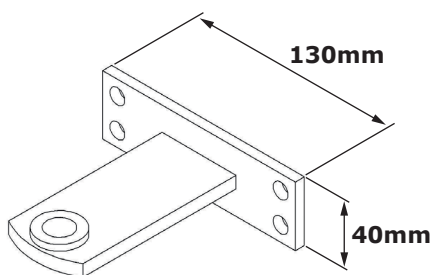
### 2B - TYPICAL CONNECTION AND CABLE SECTION



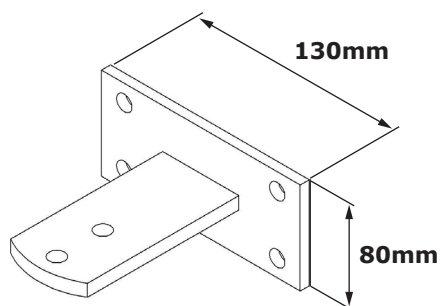
2C - DIMENSIONS



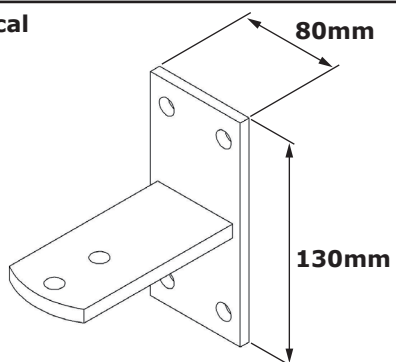
Front  
braket



Rear  
braket



Rear vertical  
braket



### 3 - BRACKETS INSTALLATION SCHEME

#### 3A - HOW TO USE A GRAPH

Measure "E", and draw a horizontal line in graph at the read measure.

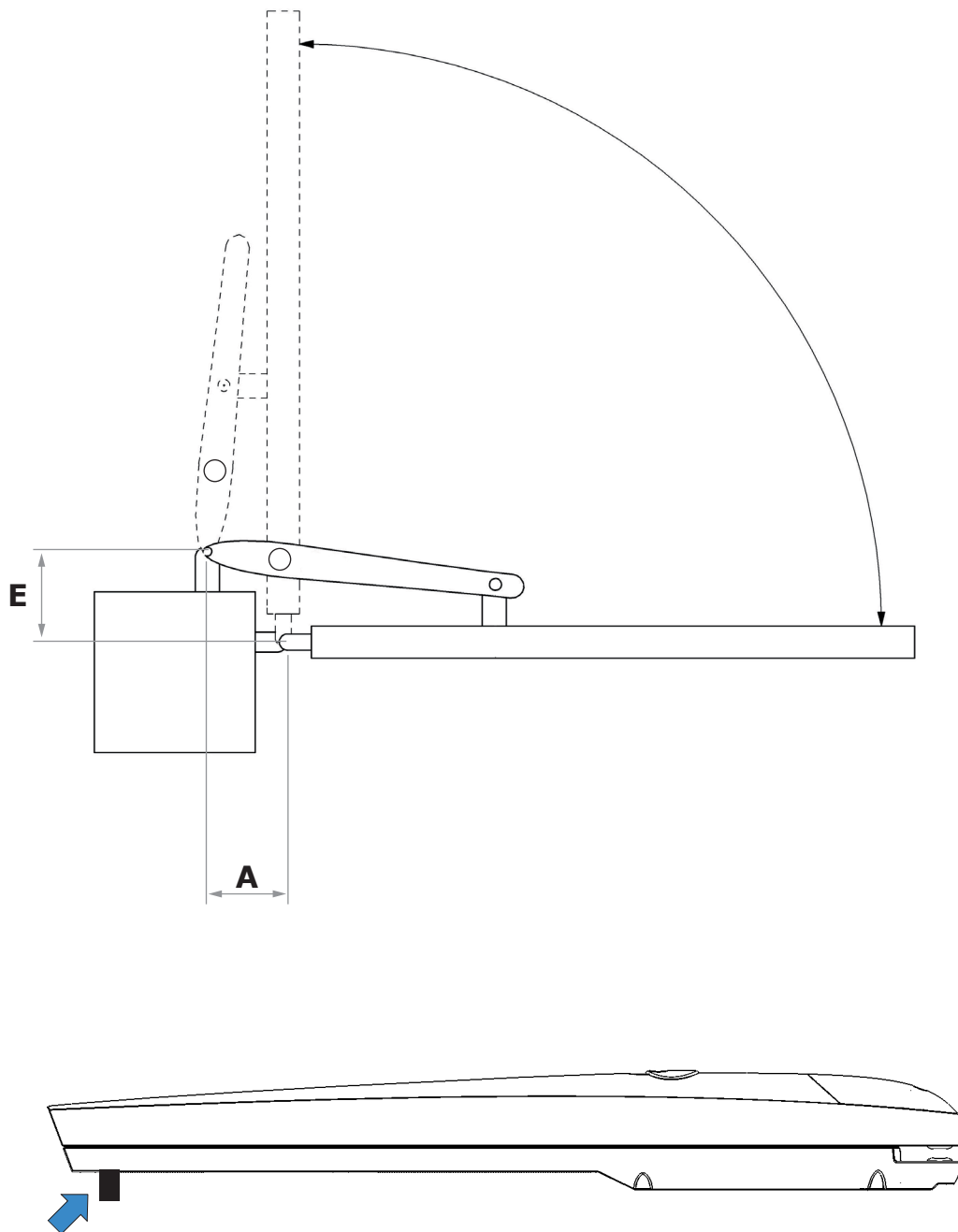
Choose a point on the drawn line, considering the desired opening angle, suitable to the column.

Draw a vertical line from that point and determinate the A value.

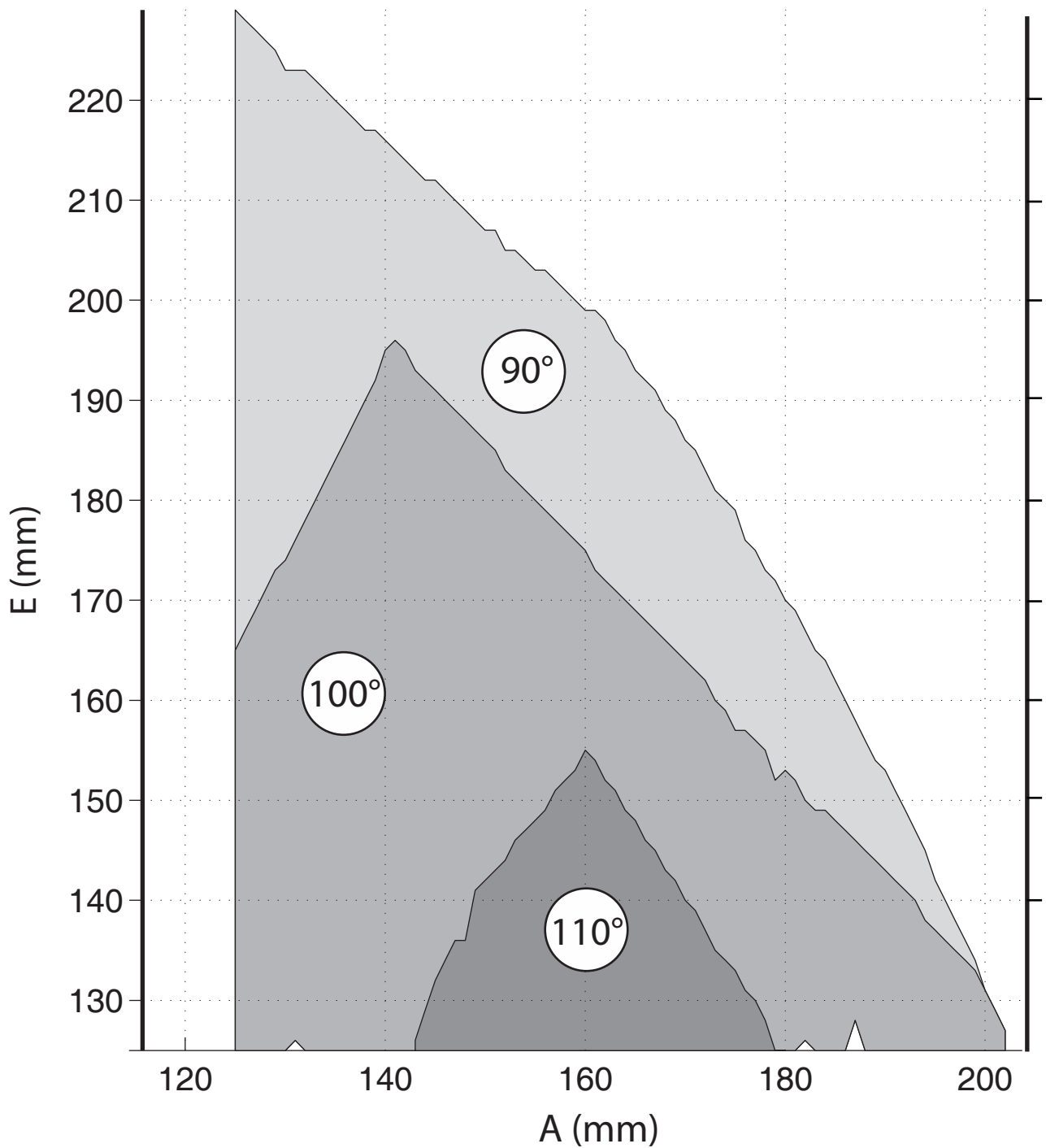
Verify that the A value allows the fixing of the rear bracket to continue the installation, otherwise choose another point on the scheme.

Finally, bring the piston to the limit of the travel to fix the bracket on the rear door (see the following picture).

This, however, by avoiding that the sliding pivot touches the aluminium body.



### 3C - GRAPH



If the installation measures are not properly followed, the automation could not work correctly. For example:

- Cyclical trends, and sudden accelerations
- Noise of the motor
- Limited opening degree or absent opening (in case of motor counter-lever fixed)

## 4 - INSTALLATION

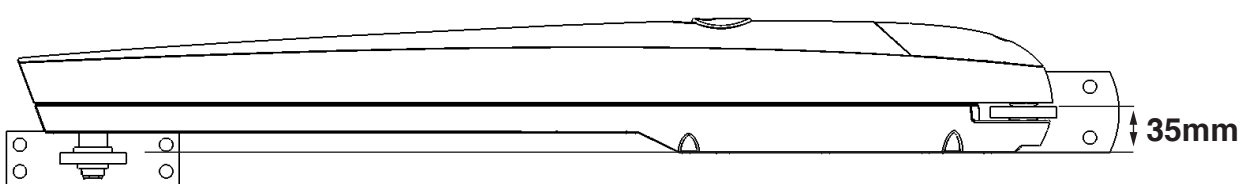
### 4A - INTRODUCTION

Read the instructions with care before installing the product. The producer disclaims all responsibility for any damage or bad functioning caused by non-observance of the instructions or bad connection that may result in poor safety and functioning of the gear-motor.

### 4B - STIRRUPS HEIGHT

Fix the stirrups allowing 35 mm between the faces in order to fix the gear-motor horizontally. (see pic.1).

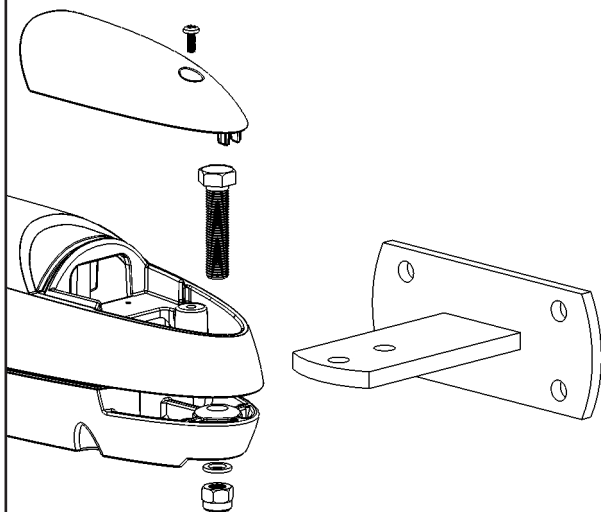
1



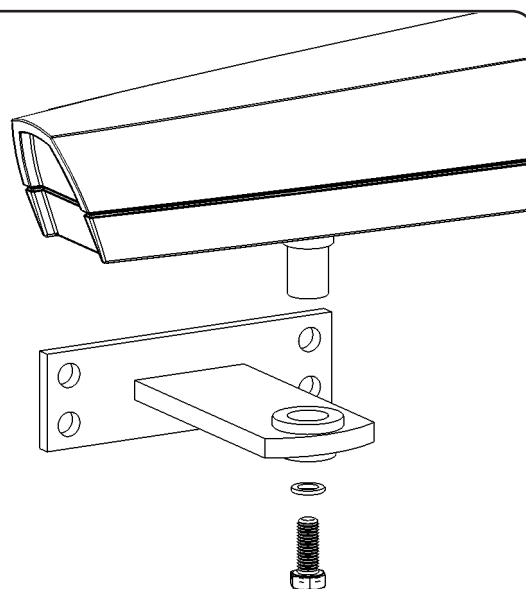
### 4C - FIXING THE GEAR-MOTOR TO THE STIRRUPS

Fixing the gear-motor to the back stirrup. (see pic.2).  
Fixing the gear-motor to the front stirrup. (see pic.3).

2



3



## 5 - MANUAL CONTROL

### 5A - INTRODUCTION

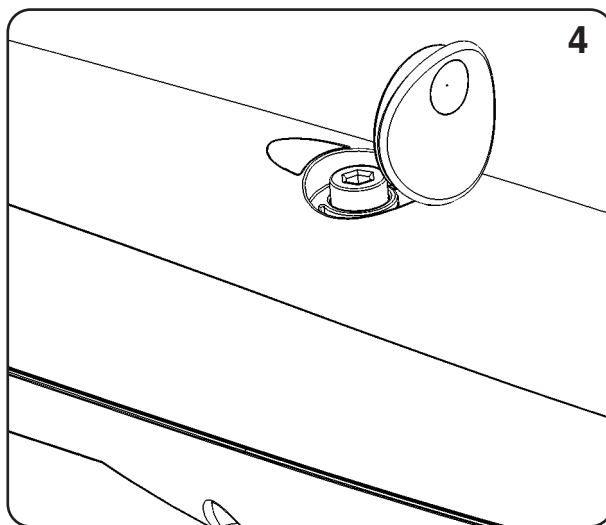
⚠ Before operating the manual release disconnect the power

Manual control has been thought for manual opening of the gate in case of power-cut or motor breakdown.

### 5B - RELEASE

INSTRUCTION (see pic.4).

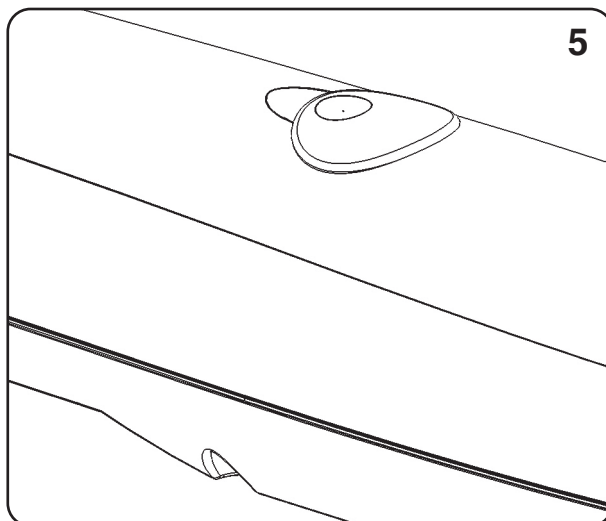
- Open the manual release cover
- Insert the key in the cylinder and turn it of 90° anticlockwise direction.



### 5C - RESTORATION

INSTRUCTION (see pic.5)

- Insert the key in the cylinder and turn it of 90° anticlockwise direction.
- Close the manual release cover





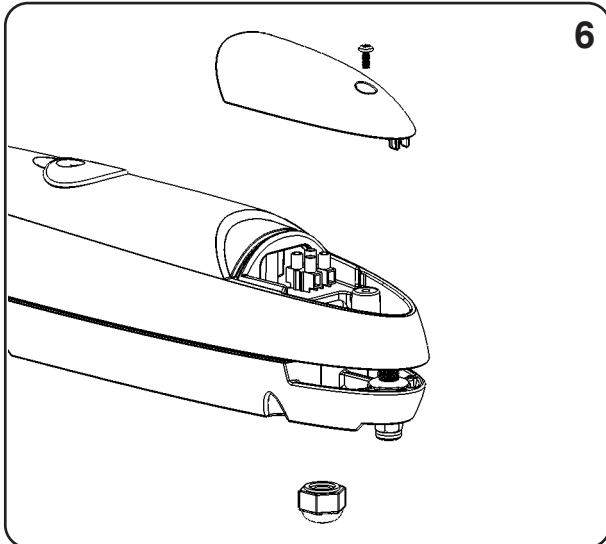
## 6 - ELECTRICAL CONNECTION

### 6A - CONNECTION TO THE POWER STATION

To connect the gear motor to the control unit, proceed as follows:

01. Remove the lid of the gear motor as shown in fig. 12;
02. Slacken the gearmotor cable clamp, thread the connecting cable through the hole and connect the three electric wires
03. Replace lid on gear motor.

To check the connections, direction of rotation of the motor, phase shift in the movement of the leaves and setting the limit switch, refer to the instructions manual of the control unit.



## 7 - STOP ADJUSTMENT

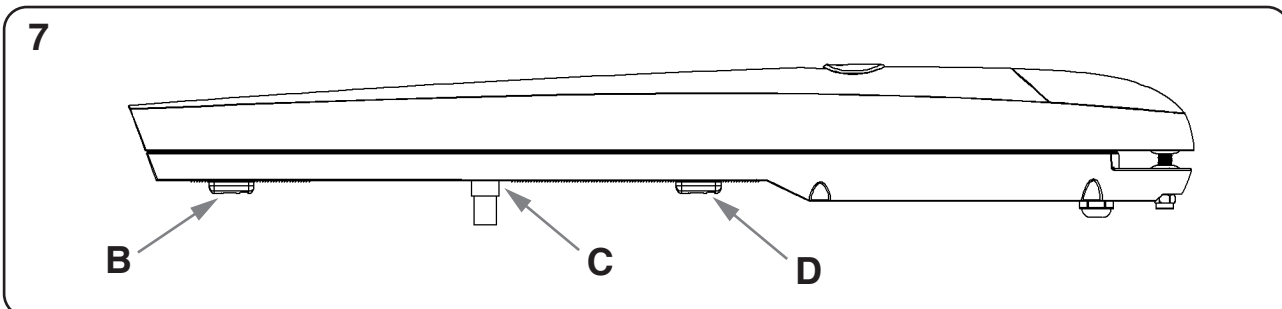
### 7A - INTRODUCTION

The mechanical-stop enables to stop the gate at a required position, avoiding the door hitting the stopping devices.

### 7B - INSTRUCTION FOR THE REGULATION

INSTRUCTION (vedi fig.7):

- Set the gear-motor on manual functioning (pic.4).
- Unscrew the screw on the mechanical-stop (B).
- Move the door to its wide open desired position.
- Place the mechanical-stop next to the sliding pin (C), as a block.
- Screw in the screw tightly.
- Set the gear-motor on automatic functioning (pic.5).



⚠ The gear-motor are manually provided with mechanical stops in open position. In case of lack of external mechanical stops in closing position, it is possible to buy the optional mechanical limit switch.