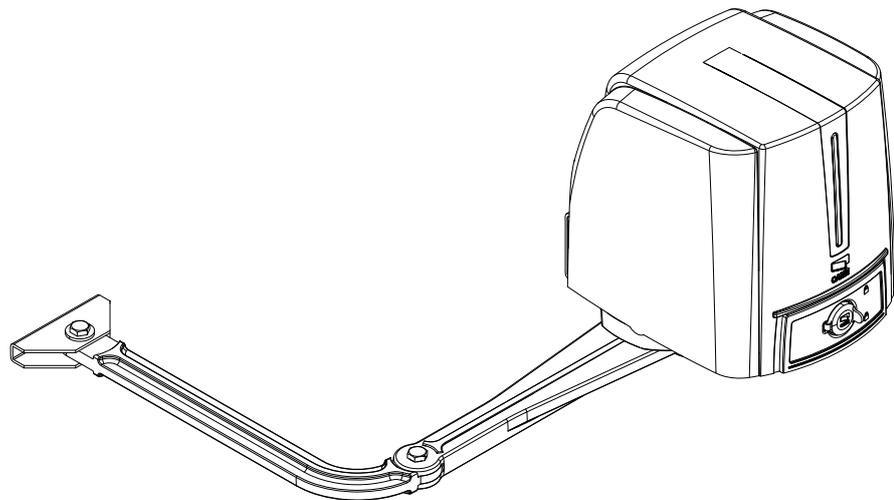




CE

119DW02EN

OPERATOR
FOR SWING GATES



Installation manual

FA40230-FA40230CB



English

EN

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WARNING!
important safety instructions:
READ THIS PART CAREFULLY!



Introduction

- This product is only intended to be used for the purpose it was designed. Any other use is therefore improper and dangerous. La CAME Cancelli Automatici S.p.A. is not liable for any damage due to improper, erroneous and unreasonable use
- Keep these warnings together with the installation and users' manual for the automation system.

Before installing

(check what's there: if the outcome is negative, refrain from continuing until you are compliant with safety standard)

Check that the part being automated is in proper working order, that it is balanced and aligned, and that it opens smoothly. Make sure you have suitable mechanical stops. If the operator will be installed less than 2.5 m from the floor or from any other access level, check whether you need additional protections and/ or warnings. With pedestrian doors framed into the doors that will be automated, a system must be in place to block their opening during movement. Make sure the opening of the automated door leaf does not cause any trapping situations involving any surrounding fixed parts. Do not install the operator upside down or on any elements that may bend. If necessary, add suitable reinforcements at the fastening points. Do not fit onto door leaves that are installed on a slope, only on level ground. Check that any watering devices cannot wet the gearmotor from the bottom upwards.

Installation

Properly demarcate the entire site to prevent any unwanted access by unauthorised personnel to the working area, especially children and minors. Be careful when handling operators that weigh more than 20 kg (see installation manual). If needed, use specific safety moving equipment. All opening commands (buttons, key switches, magnetic card readers, etc.) must be installed at least 1.85 M from the gate's area of movement, or so that they are unreachable from the outside. Also, the direct commands (button or touch) must be installed at least 1.5 m high and not reachable by the public. All "maintained action" commands must be placed where the moving door leaves and transit areas are completely visible. If missing, affix a permanent tag showing the position of the release device. Before delivering to the end user, check that the operator complies with Standard EN 12456 (impact testing), making sure the operator is properly set and adjusted and that all safety and protection devices and manual release work properly. Affix the Warning Signs in places that are clearly visible, where necessary (such as the gate tag).

Instructions and special recommendations for users

Keep gate-operating area free of any obstacles. Keep the photocells' range of operation free of vegetation. Do not allow children to play with the fixed command devices, or in the area of operation of the gate. Keep the remote control devices (transmitters) away from children. Check the system frequently, for any anomalies and signs of wear and tear or damage to the mobile structures, the component parts of the operator, all fastening points and devices, the cable and any accessible connections. Keep any jointed parts like hinges lubricated and clean of debris and the guide-sleds free of any friction. Perform functional checks to the photocells and sensitive edges every six months. Ensure proper cleaning of the glass on the photocells (use a slightly damp cloth); do not use solvents or other chemical products). If repairs or changes to the system settings become necessary, release the operator do not use it until all safety conditions are restored. Cut the main power supply before releasing the operator to perform manual openings. Check the instructions. It is FORBIDDEN for users to perform ANY OPERATIONS THAT ARE NOT EXPRESSLY REQUESTED OF SAID USERS in the manuals. For repairs, changes to the settings and extra-ordinary maintenance, CALL FOR TECHNICAL ASSISTANCE. Enter any interventions in the periodic maintenance log.

Special instructions and recommendations for everyone

Keep away from the hinges and any moving mechanical parts. Stay out of the operating range of the operator while it is moving. Do not oppose the movement of the operator as this may result in danger. Always be careful around the dangerous parts, which must be properly indicated with warning signs and black and yellow stripes. When using a selector switch or a maintained-action

mode command, keep checking that no persons come within the operating range of the moving parts, until the command is released. The gate may move at any moment without warning. Always cut off the main electric power supply before performing any cleaning or maintenance.

Legend

-  This symbol means parts must be read carefully.
-  This symbol means the parts describe safety issues.
-  This symbol tells you what to notify to the user.

Description

The complete range:

001FA40230 - Self-locking gearmotor with articulated transmission arm for leaves up to 2.3 m;

001FA40230CB - Self-locking gate-operator with built-in control panel complete with articulated transmission arm for gate leaves of up to 2.3 m.

Optional accessories:

001FA001 - LED card;

001LOCK81 - Single cylinder release electro-lock;

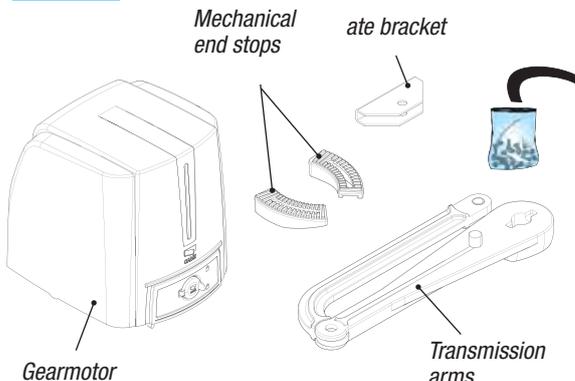
001LOCK82 - Double cylinder release electro-lock;

001STYLO-BD - Straight transmission arm with slide guide;

001H3000 - Safety casing complete with release toggle and command button for the L = 5 m. pull-cord release.

Important! Make sure that the command and safety equipment and accessories are CAME originals; this will ensure easy installation and maintenance of your system.

Packing list



a		x2	UNI 5931 M8x80 bolt	f		x2	Arm pin
b		x2	UNI 7474 M8 nut	g		x2	UNI 6593 Ø6 washer
c		x1	Ø10 plug	h		x2	UNI 5739 M6x10 bolt
d		x1	Slow shaft washer	i		x1	UNI 6592 Ø12 washer
e		x1	UNI 5739 M10x14 bolt	j		x2	UNI 5933 M8x20 bolt

Intended use

This operator is engineered and built by Came Cancelli Automatici S.p.A. in compliance with current safety regulations, to automate residential and apartment building swing-gates.

 Any installation or use other than that indicated in this manual is forbidden.

Operational limits

Model	FA40230 - FA40230CB			
Maximum leaf length	2.3 m	2 m	1.5 m	1 m
Maximum leaf weight	200 kg	215 kg	250 kg	300 kg

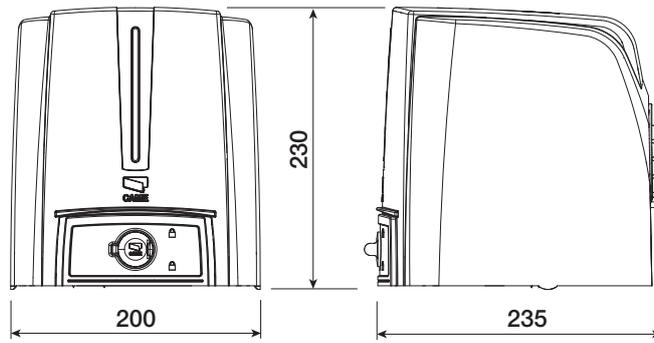
Technical data

	FA40230CB	FA40230
Power supply	230 V AC 50/60 Hz	
Motor power supply	230 V AC 50/60 Hz	230 V AC 50/60 Hz
Maximum draw.	A 1.4	A 1.4
Power rating	160 W	160 W
Maximum Torque.	180 Nm	180 Nm
Opening time at 90°	18 S	18 S
Duty cycle	30%	30%
Protection rating	IP54	IP54
Motor heat protection	150°C	150°C
Weight	12,700 kg	10,860 kg
Insulation class	I	I

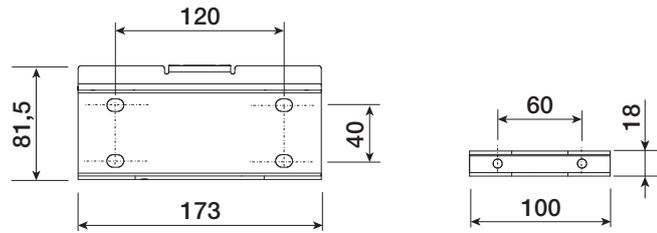


Dimensions

Gearmotor

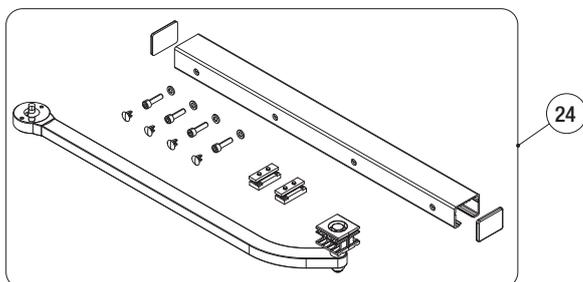
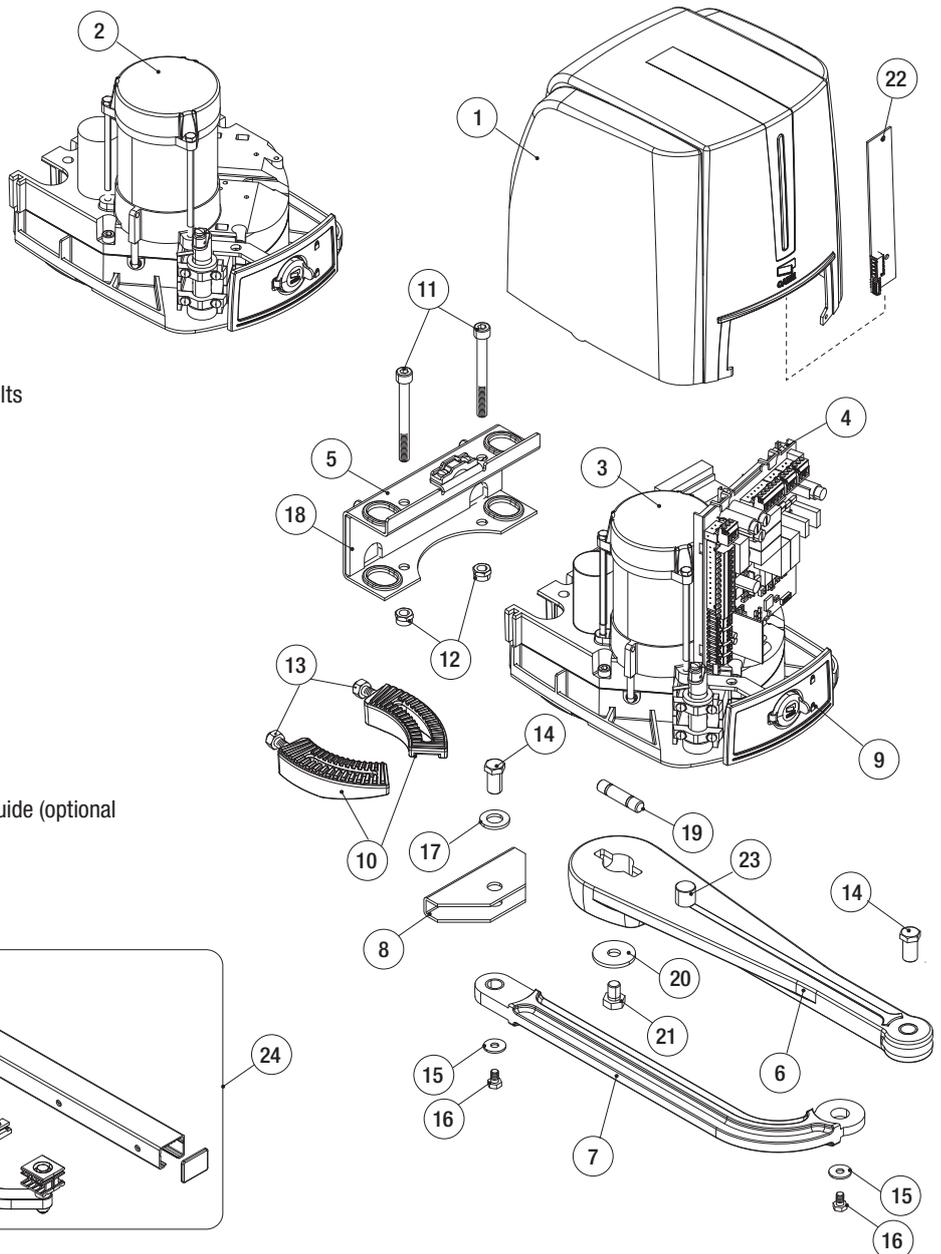


Fastening bracket



Main component parts

1. Cover
2. FA40230 gearmotor
3. FA40230CB gearmotor
4. ZF4 electronic board
5. Post-fastening bracket
6. Transmission arm
7. Drive arm
8. Gate-fastening bracket
9. Release hatch
10. Mechanical endstops.
11. UNI5931 M8x80 gearmotor fastening bolts
12. UNI7474 M8 nuts
13. limit-switch adjusting grub screws
14. Arm pin
15. UNI6593 Ø6 washer
16. UNI5739 M6x10 bolt
17. UNI6592 Ø12 washer
18. Rubber shim
19. Ø10 plug
20. Slow shaft washer
21. UNI5739 M10x14 bolt
22. FA001 LED card
23. Transmission arm pin
24. Straight arm with 001STYLO-BD slide guide (optional accessory)



System feasibility

 Installation must be carried by skilled, qualified technicians in accordance with current regulations.

Preliminary checks

 Before beginning to install, do the following:

- Set up proper omnipolar cut-off device, with more than 3mm of distance between contacts, with sectioned power source;
- Set up proper conduits and electric cable raceways, making sure these are protected from any mechanical damage;
- Set up a drainage tube to prevent stagnation of moisture that can lead to oxydation;
-  Check that any connections inside the container (made for continuity purposes of the protective circuit) be fitted with extra insulation compared to other internal conductive parts;
- Make sure the gate structure is sturdy enough, that the hinges are efficient and that there is no friction among the fixed and moving parts.
Make sure there are mechanical opening and closing strike plates.

Tools and equipment

Make sure you have all the tools and materials needed to carry out the installation in total safety and in accordance with current regulations. The figure shows some examples of the tools needed by installers.



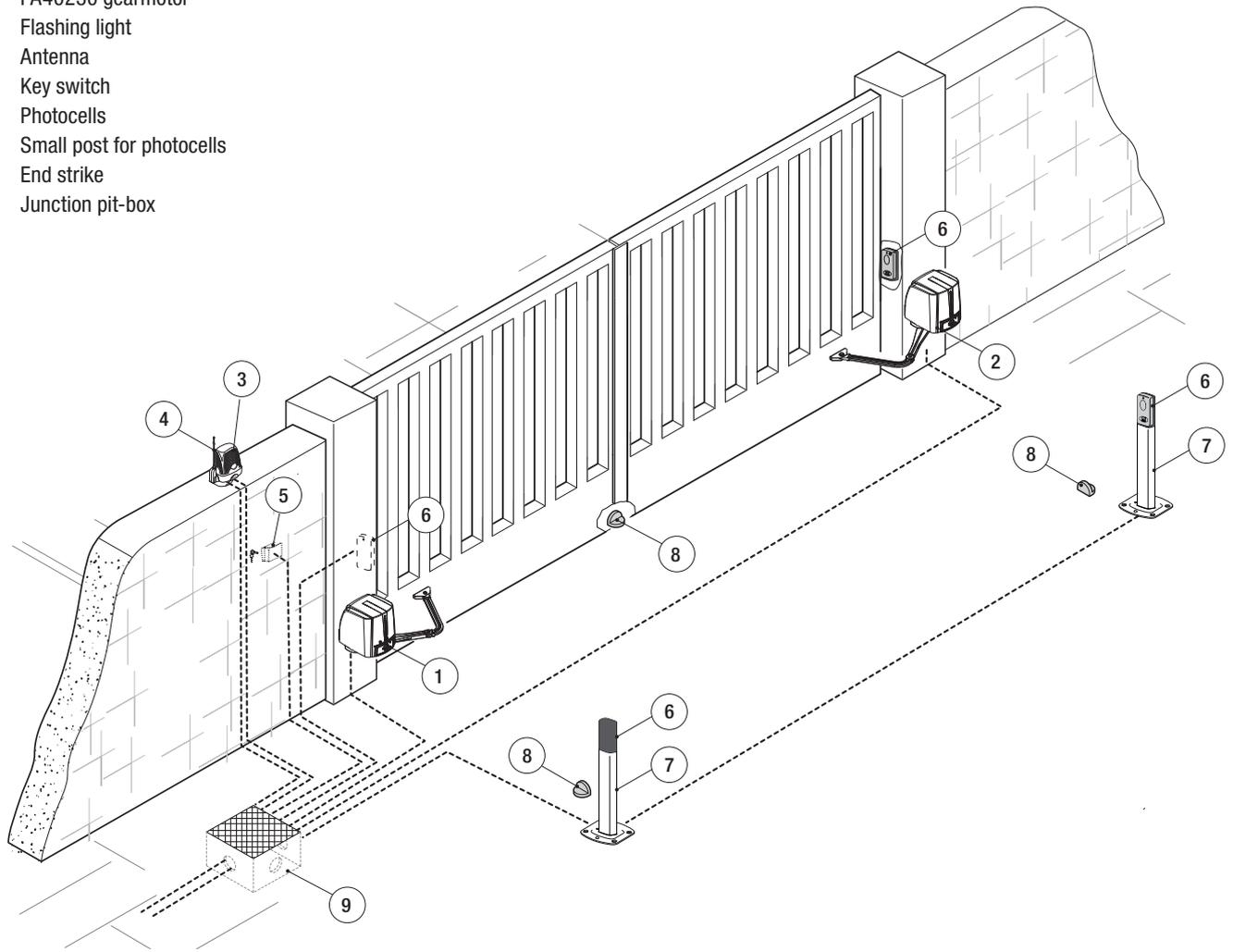
Types and thickness of cables

Connection for	Type of cable	Cable length 1 < 10 m	Cable length 10 < 20 m	Cable length 20 < 30 m
230 V power supply to control panel	FROR CEI 20-22 CEI EN 50267-2-1	3G x 1.5 mm ²	3G x 2.5 mm ²	3G x 4 mm ²
Motor powered by 230 V AC		4G x 1 mm ²	4G x 1.5 mm ²	4G x 2.5 mm ²
Flashing light		2 x 0.5 mm ²	2 x 1 mm ²	2 x 1.5 mm ²
Photocell transmitters		2 x 0.5 mm ²	2 x 0.5 mm ²	2 x 0.5 mm ²
Photocell receivers		4 x 0.5 mm ²	4 x 0.5 mm ²	4 x 0.5 mm ²
Safety and command devices		2 x 0.5 mm ²	2 x 0.5 mm ²	2 x 0.5 mm ²
Antenna	RG58	max. 10 m		
Encoder	TWISTED	max. 30 m		

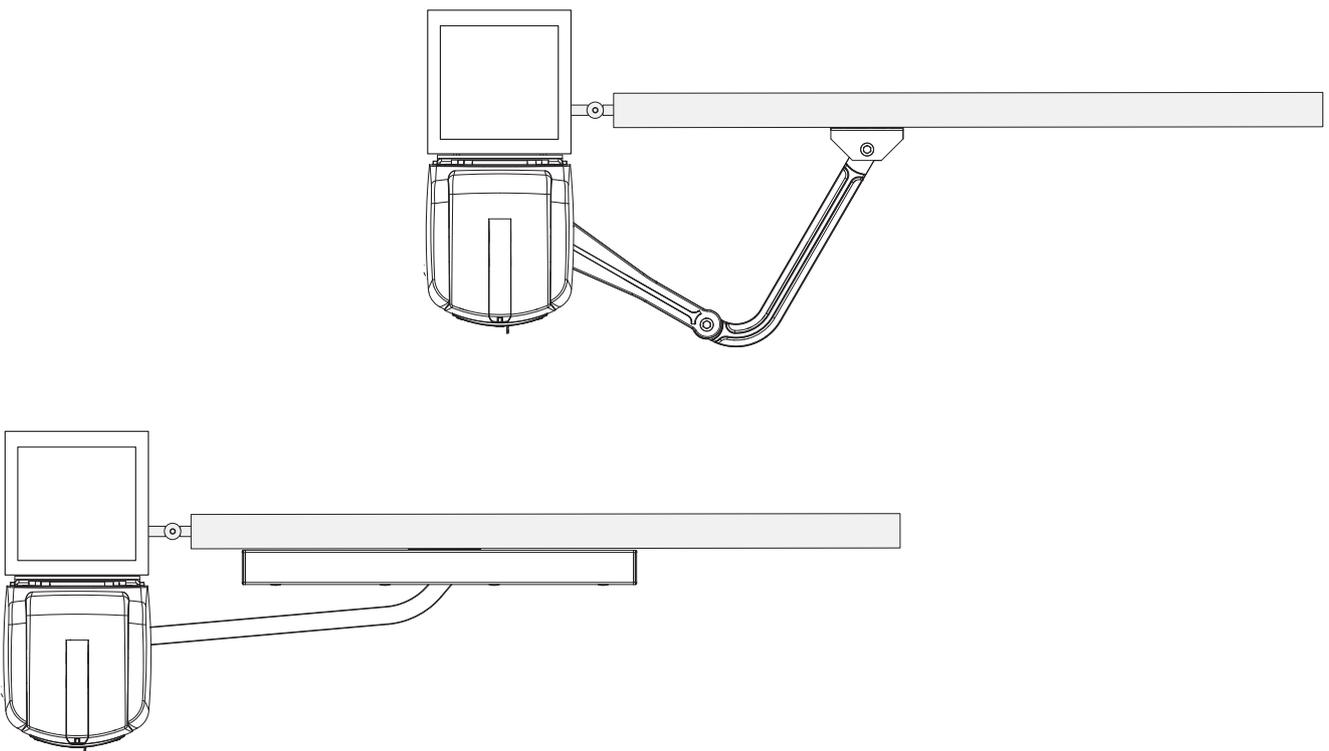
N.B.: If cables are of a different length than that shown in the table, determine the cable section based on the actual draw and the number of connected devices and according to what is set forth in the CEI EN 60204-1 code of regulations.
For connections featuring several loads on the same line (i.e. sequential ones), the dimensions shown on the table must be reconsidered according to the total draw and actual distances. When connecting products not featured in this manual, only refer to the literature accompanying such products.

Standard installation

1. FA40230CB Gate Operator
2. FA40230 gearmotor
3. Flashing light
4. Antenna
5. Key switch
6. Photocells
7. Small post for photocells
8. End strike
9. Junction pit-box



Application examples



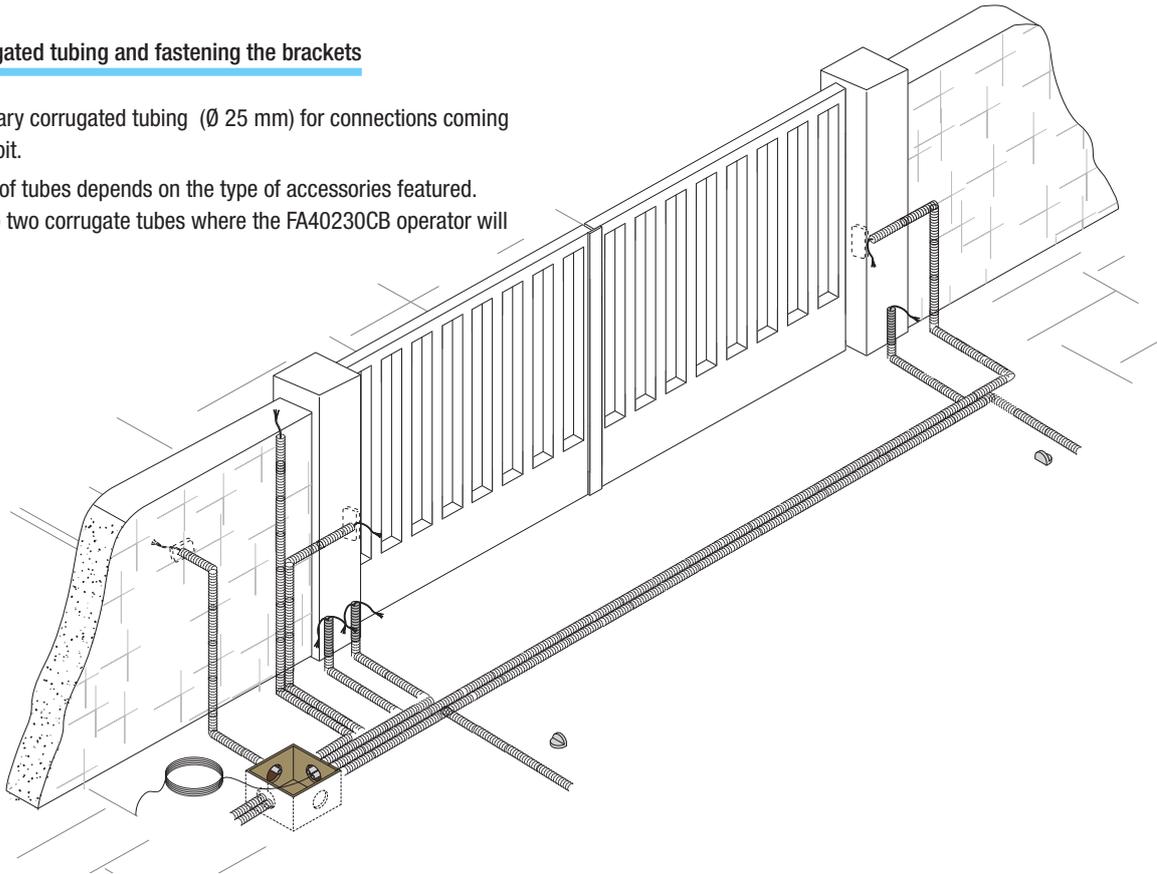
Installation

⚠ The following illustrations are just examples, in that the space for securing the operator and accessories depends on the installation zone. It is up to the installer to choose the most suited solution.

Laying the corrugated tubing and fastening the brackets

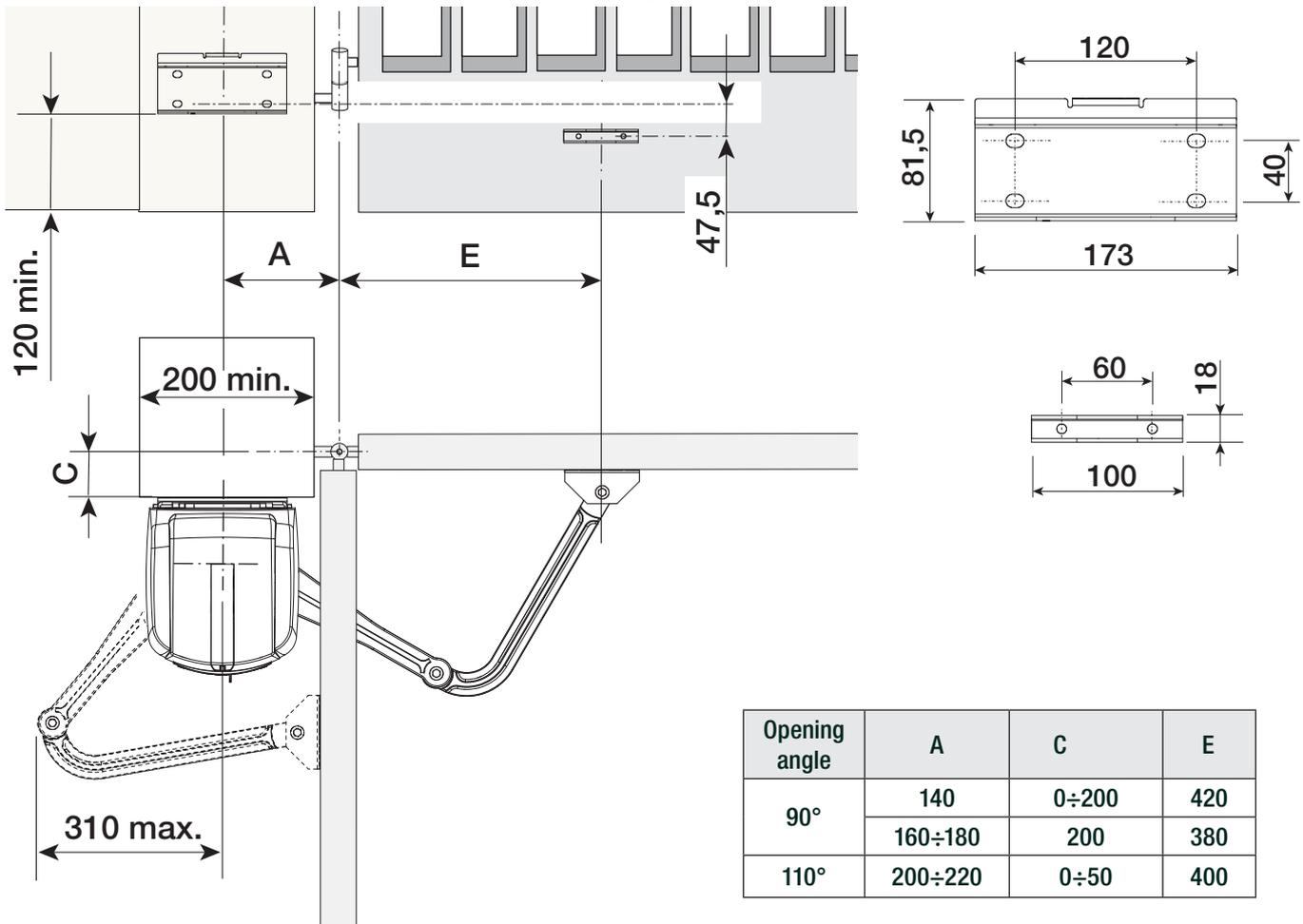
Set up the necessary corrugated tubing (Ø 25 mm) for connections coming from the junction pit.

N.B.: the number of tubes depends on the type of accessories featured.
You need to set up two corrugate tubes where the FA40230CB operator will be installed.



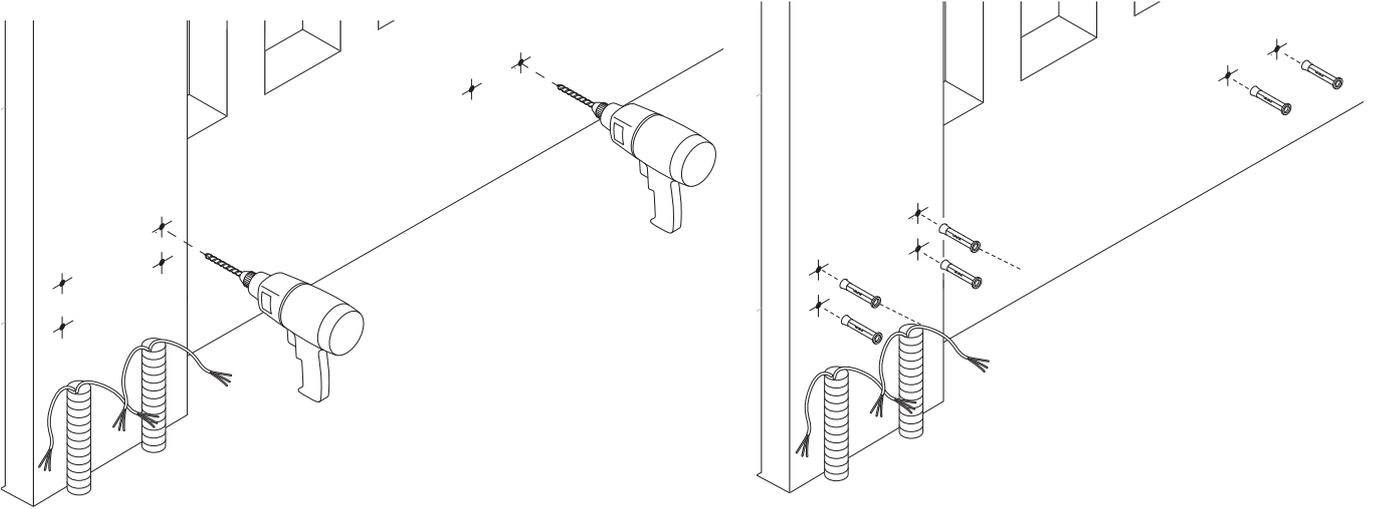
Note: the drawings are for installing the left-side gearmotor. Installing the right-side gearmotor is symmetrical.

Determine the most suitable point to fasten the gate bracket while respecting the distances (mm) shown in the drawing on the table below.



Mark the fastening points for fastening the bracket to the post and for the fastening bracket to the gate. The centre distances of the bracket holes are shown in the paragraph about **dimensions**. Drill the fastening hole points, insert the plugs or use suitable inserts to hold the brackets.

Note: the illustrations are indicative. It is up to the installer to decide on the best solution depending on the thickness of the gate wing.

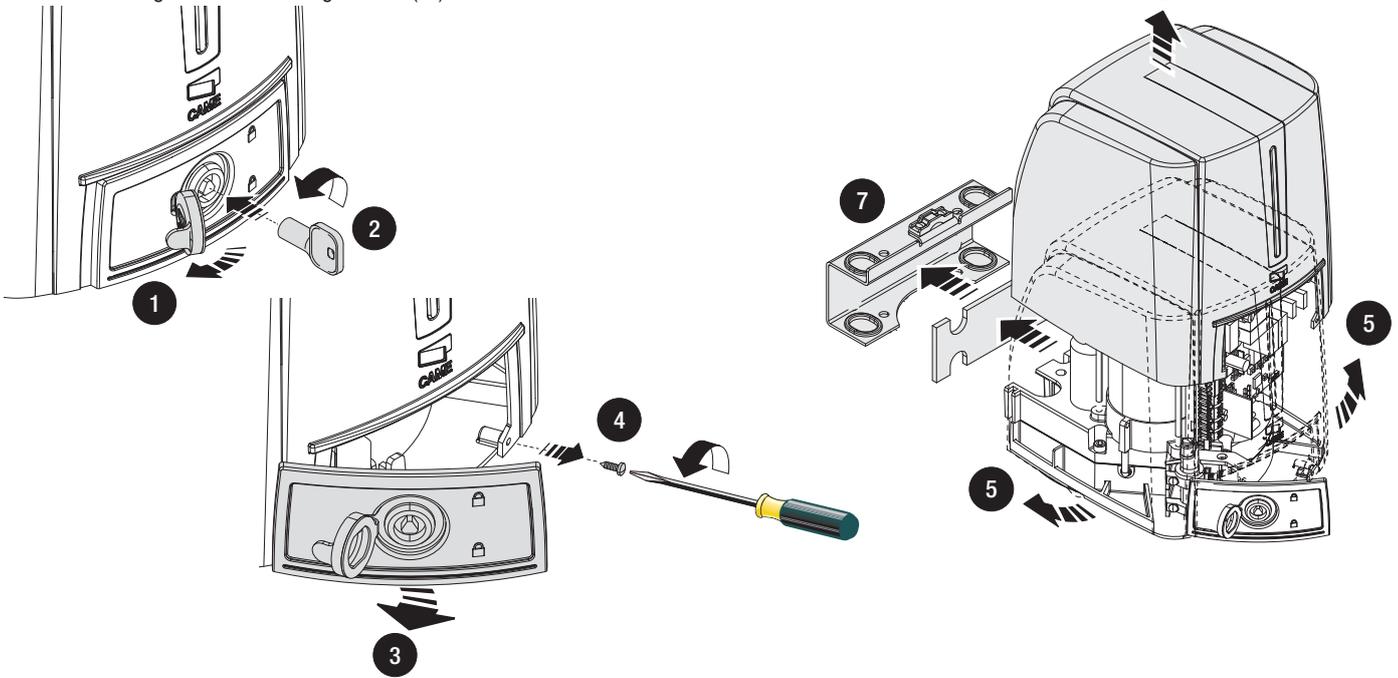


Before installing the operator, remove the gearmotor cover. Remove the cap protecting the release override hatch lock, fit the key into the lock and turn it (Ⓒ (1 2)).

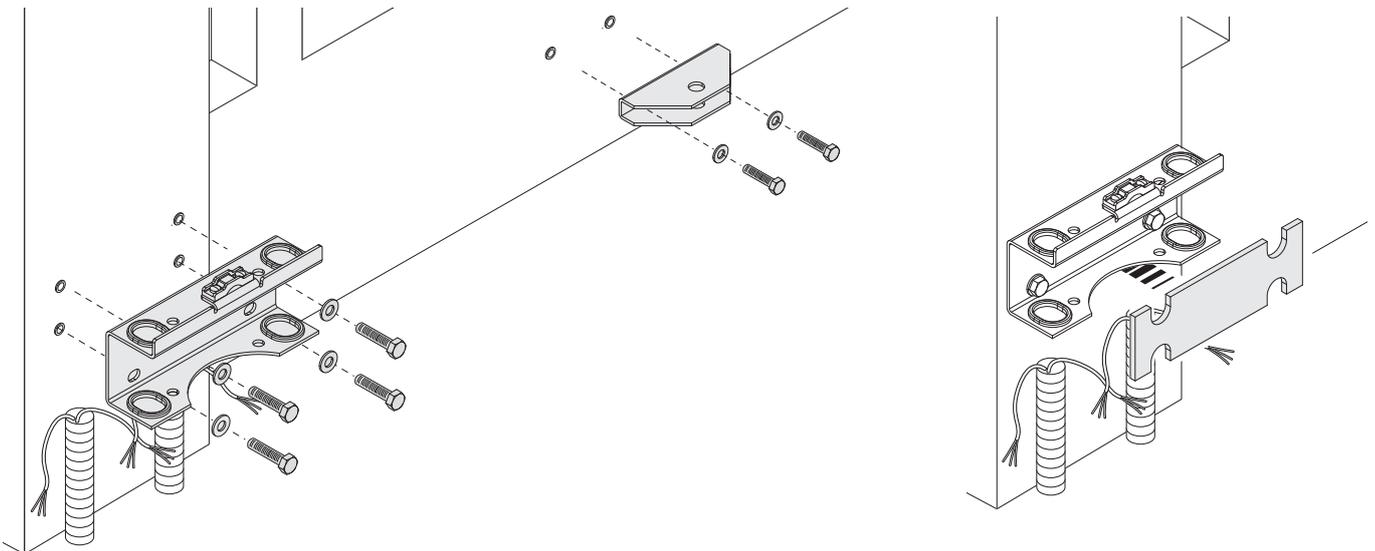
Open the hatch and turn the screw that fastens the cover to the gearmotor (Ž (3 4)).

Lift the cover slightly from the sides (5 6).

Remove the gearmotor fastening bracket (7).

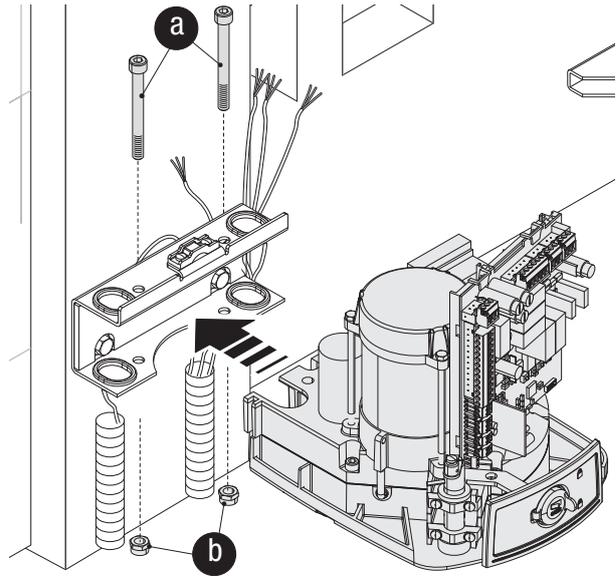
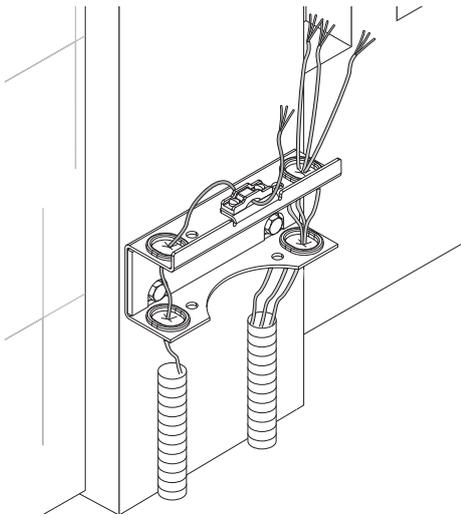


Fasten the brackets with suitable screws. Insert the rubber shim into the post fastening bracket.

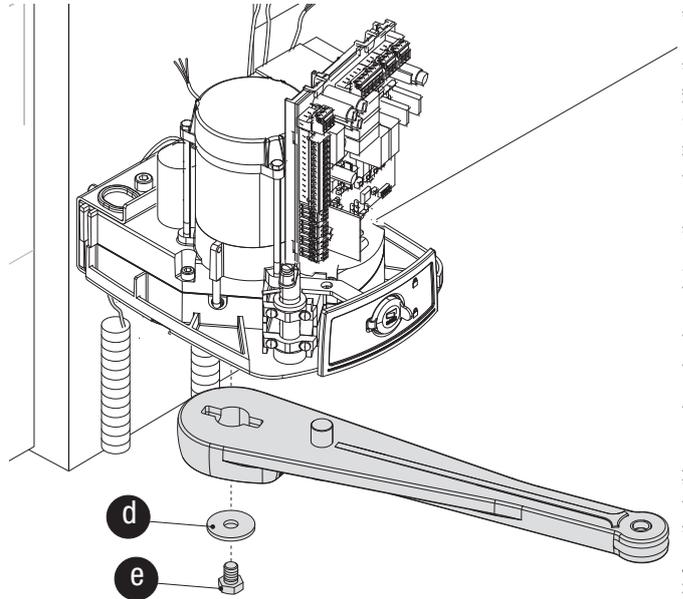
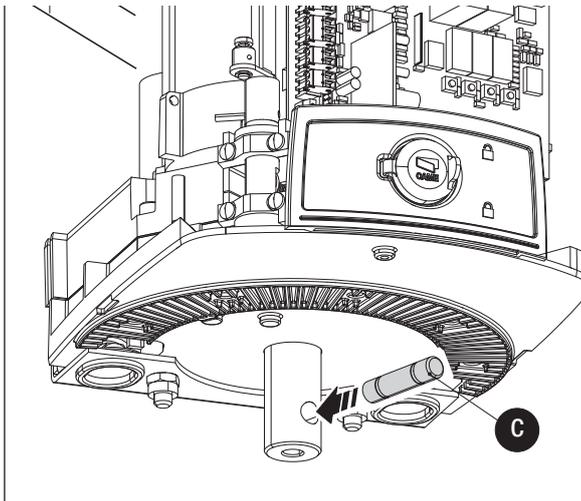


Installing the gearmotor and transmission arms

Set up the required electrical cables threading them through the cable glands and blocking them to the gate post fastening U bracket. Insert the gearmotor into the bracket and fasten it with nuts and bolts (a b).

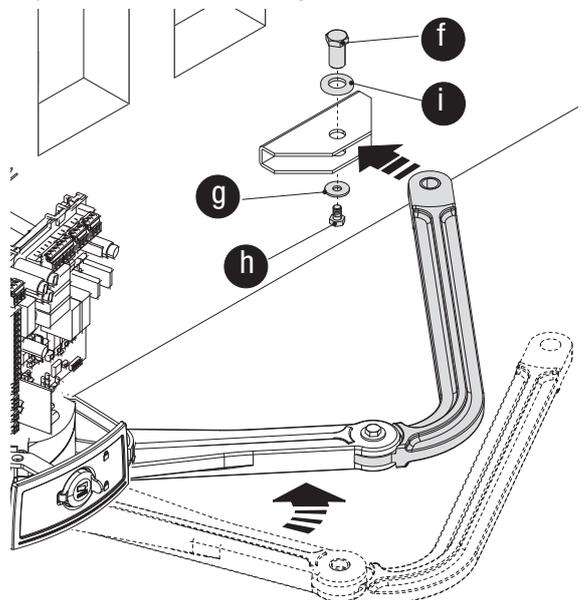
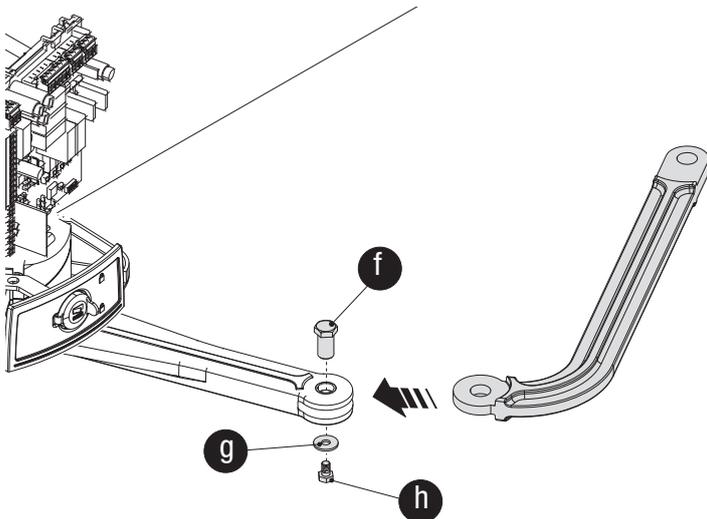


Fit plug c into the gearmotor shaft hole. Fasten the transmission arm to the shaft with slow-shaft washer d and the bolt e.



Fasten the drive arm to the transmission arm with the pin, bolt and washer (f g h).

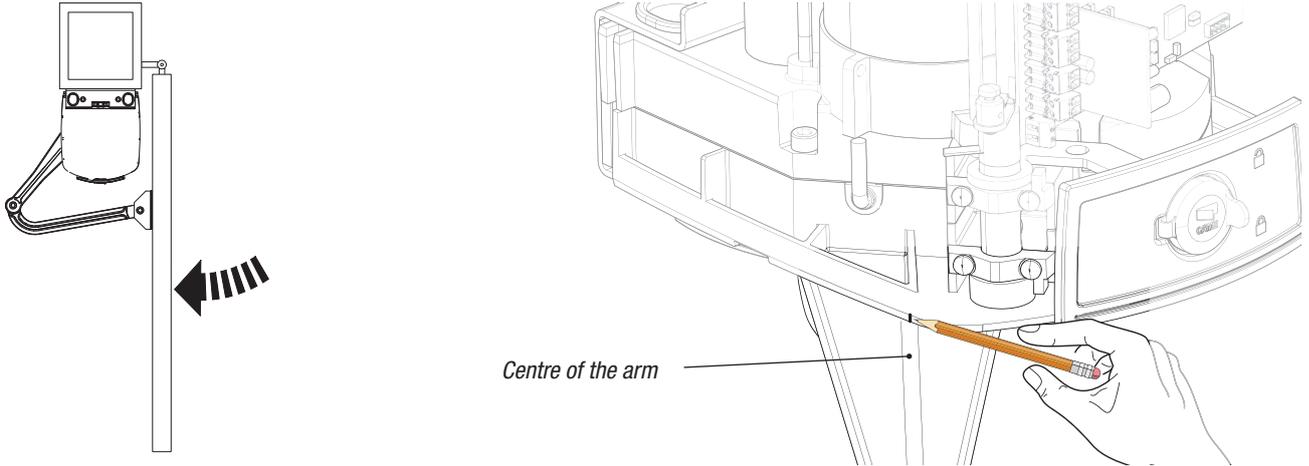
Release the gearmotor (see paragraph **manual release override and block of the gearmotor**), fasten the drive arm to the gate bracket as shown in the drawing (f i g h).



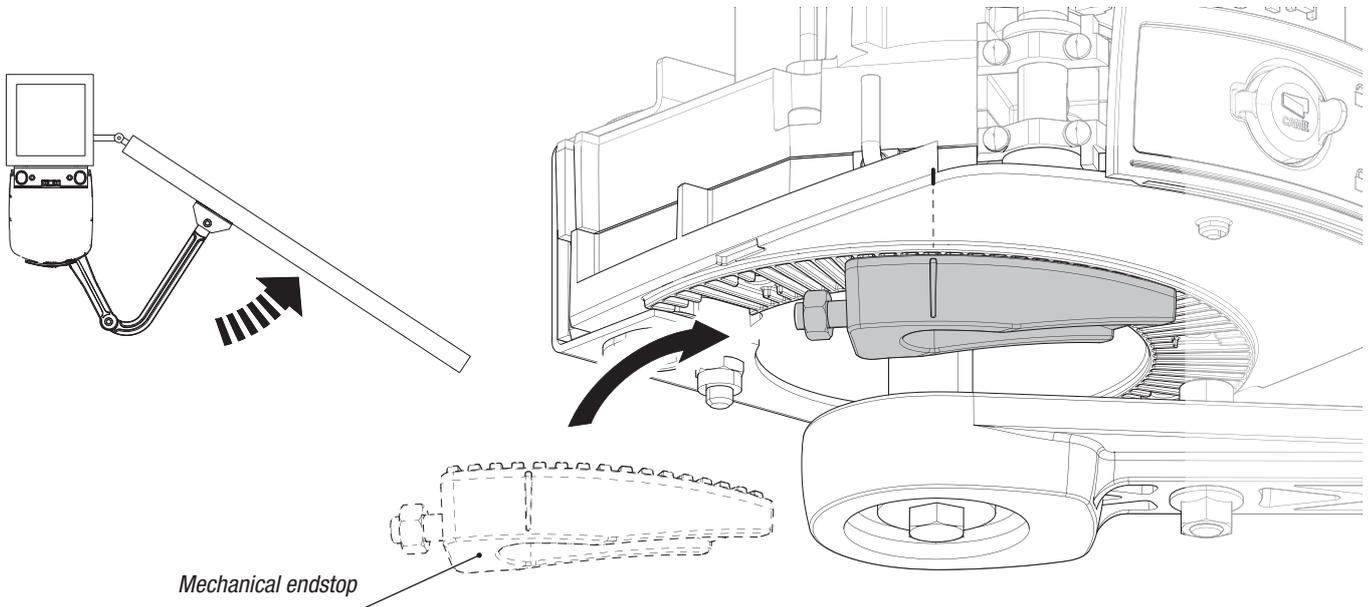
Mounting the mechanical endstops (if no mechanical strike plates are included)

For the opening mechanical endstops .

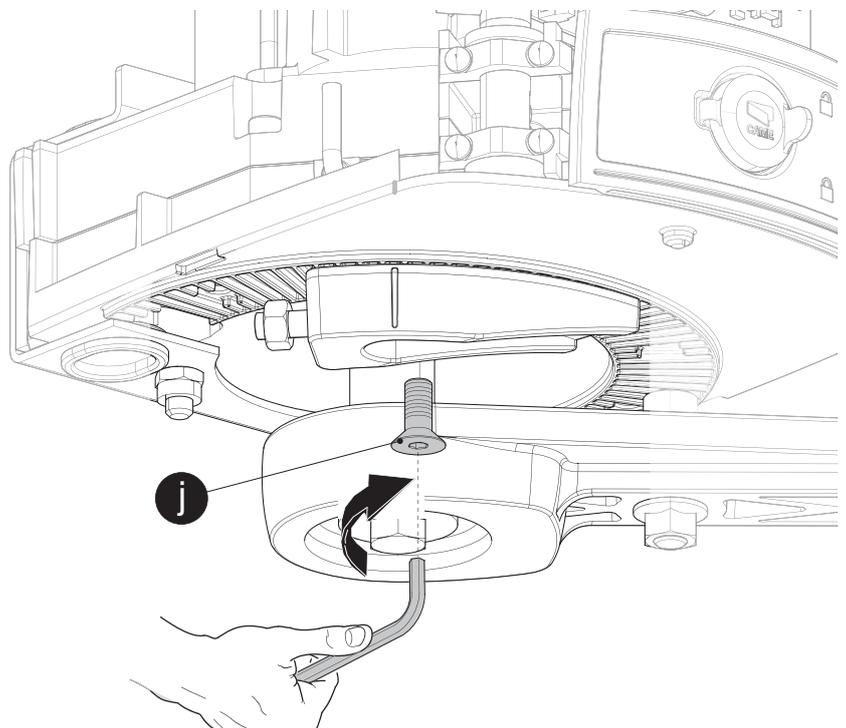
With the gearmotor released, completely open the leaf, manually. Mark the case near the centre of the arm.



Manually close the leaf. Insert the mechanical stop as shown. The mark on the case must match the groove on the stop.

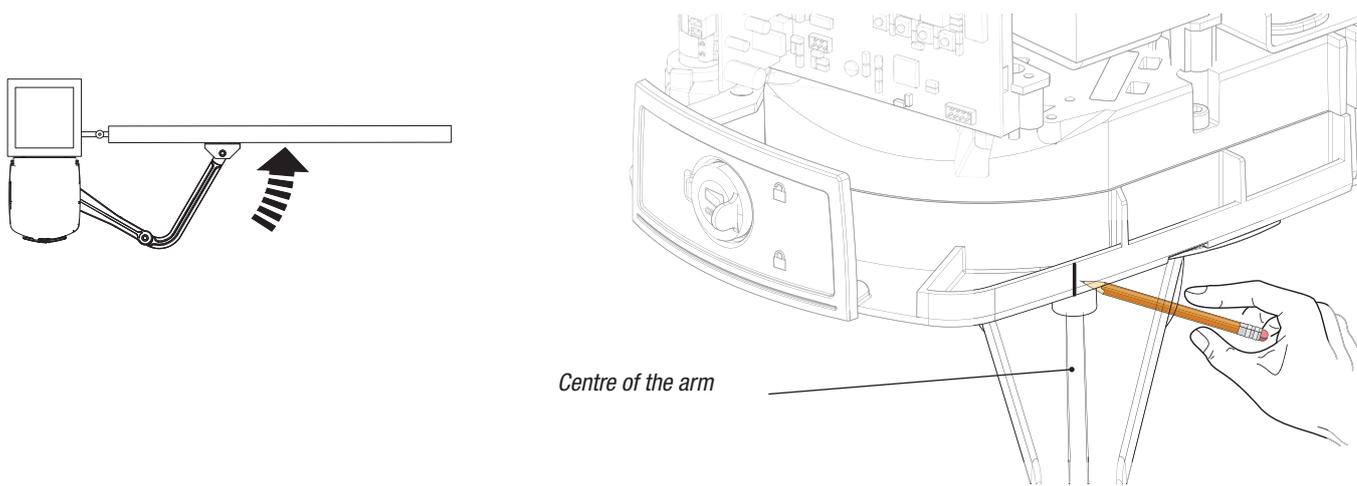


Fasten the stop using the bolt ❶.

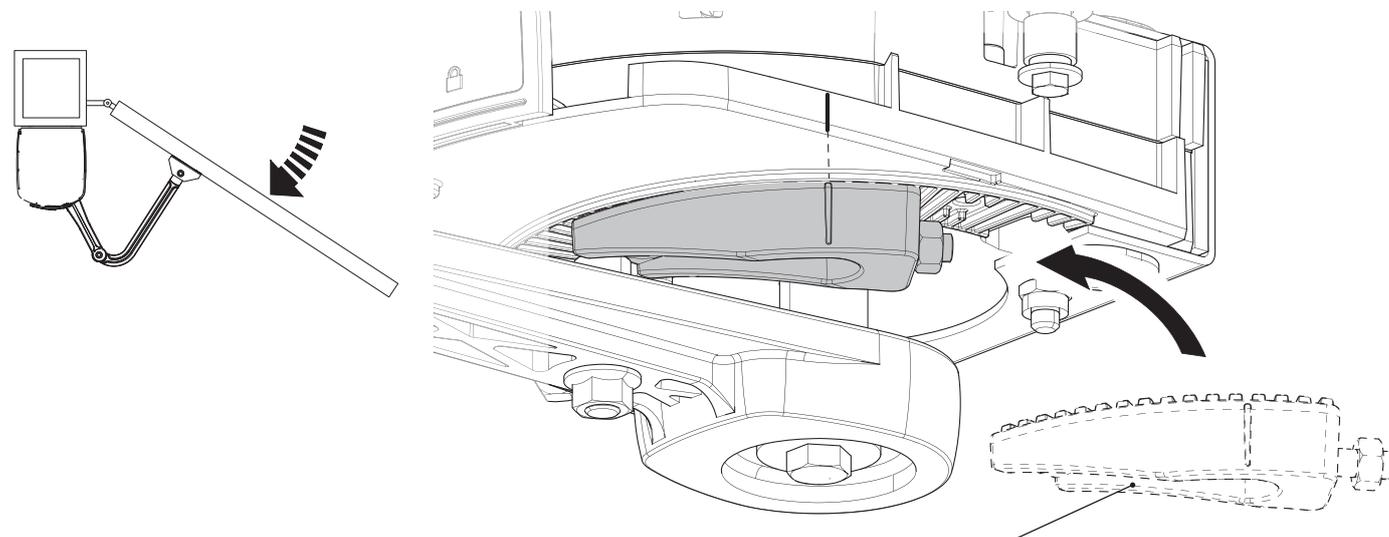


For the closing mechanical endstops .

With the gearmotor released, completely open the leaf, manually. Mark the case near the centre of the arm.

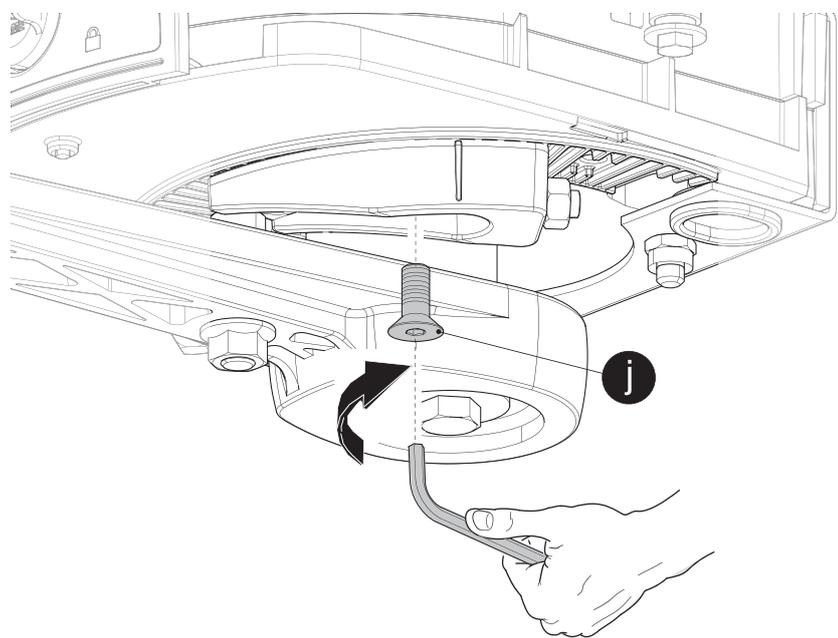


Manually open leaf. Insert the mechanical stop as shown. The mark on the case must match the groove on the stop.



Mechanical endstop

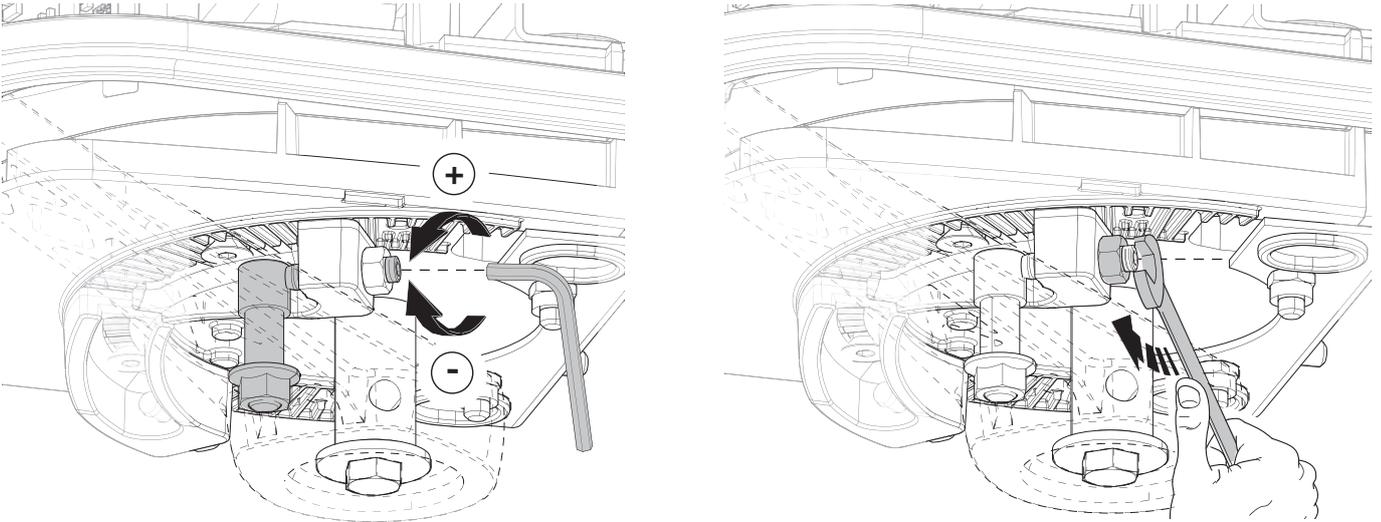
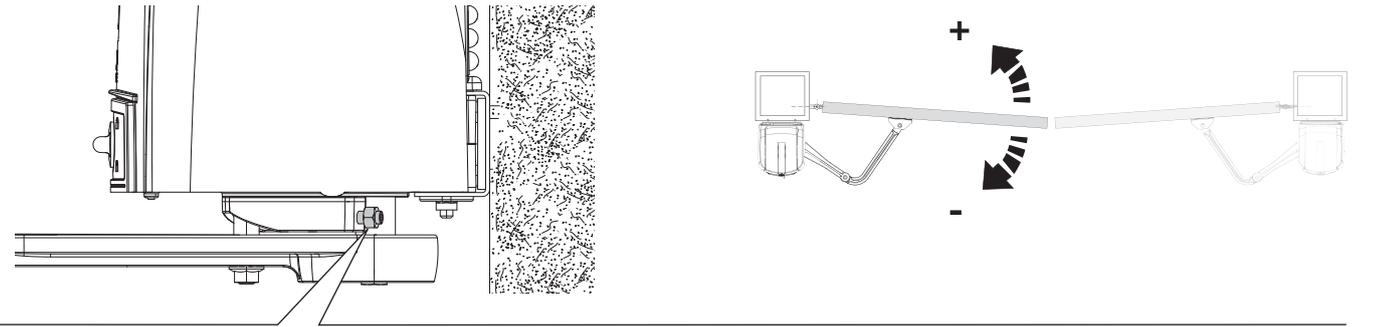
Fasten the stop using the bolt **j**.



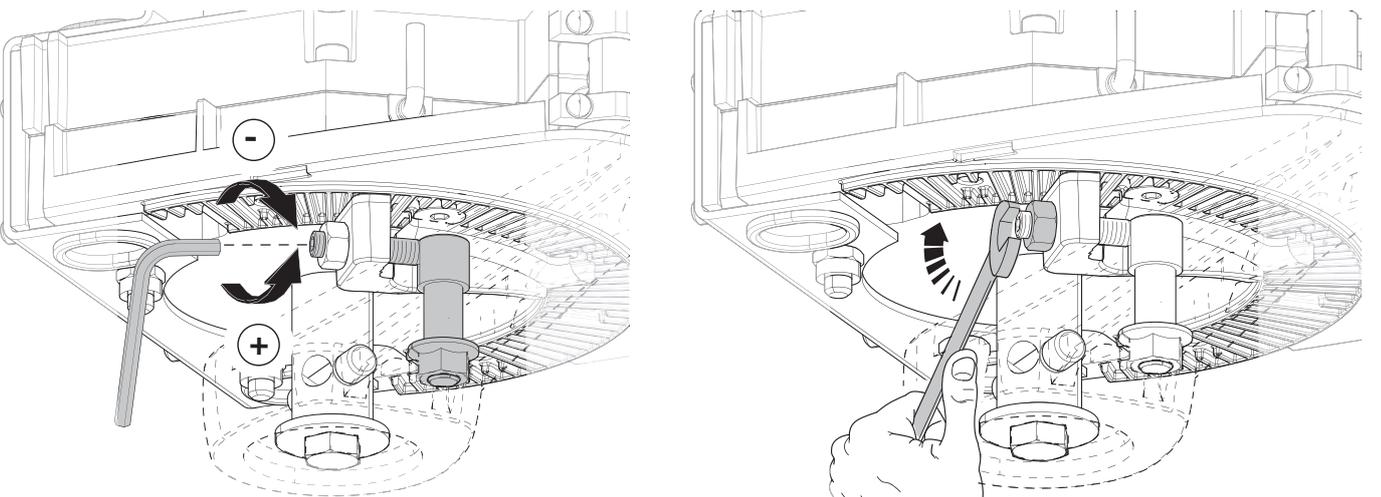
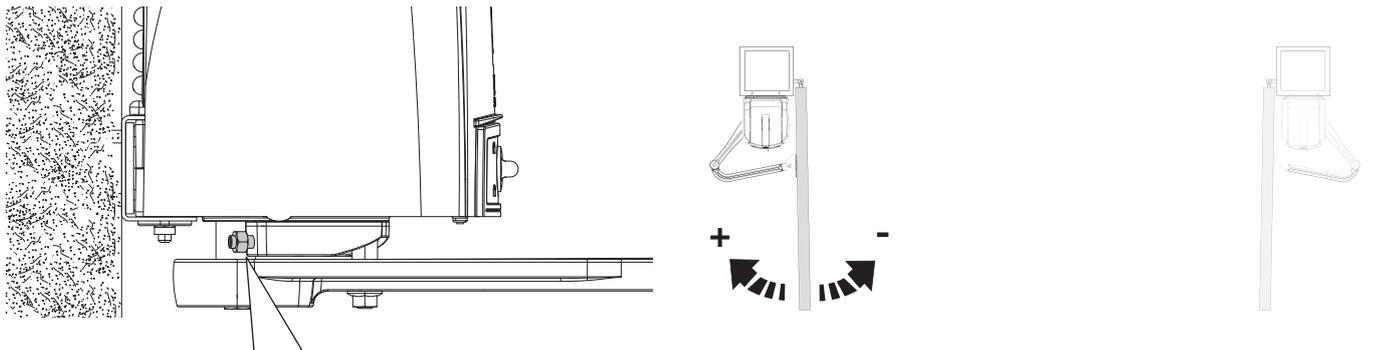
Adjusting the limit switches

Adjusting the closing and opening endstop points of left-side gearmotors (internal view).

With the gearmotor released and the gate leaf closed, adjust the closing limit-switch grub screw by turning it either clockwise or anti clockwise. Fasten the grub screw using the nut (see drawing).

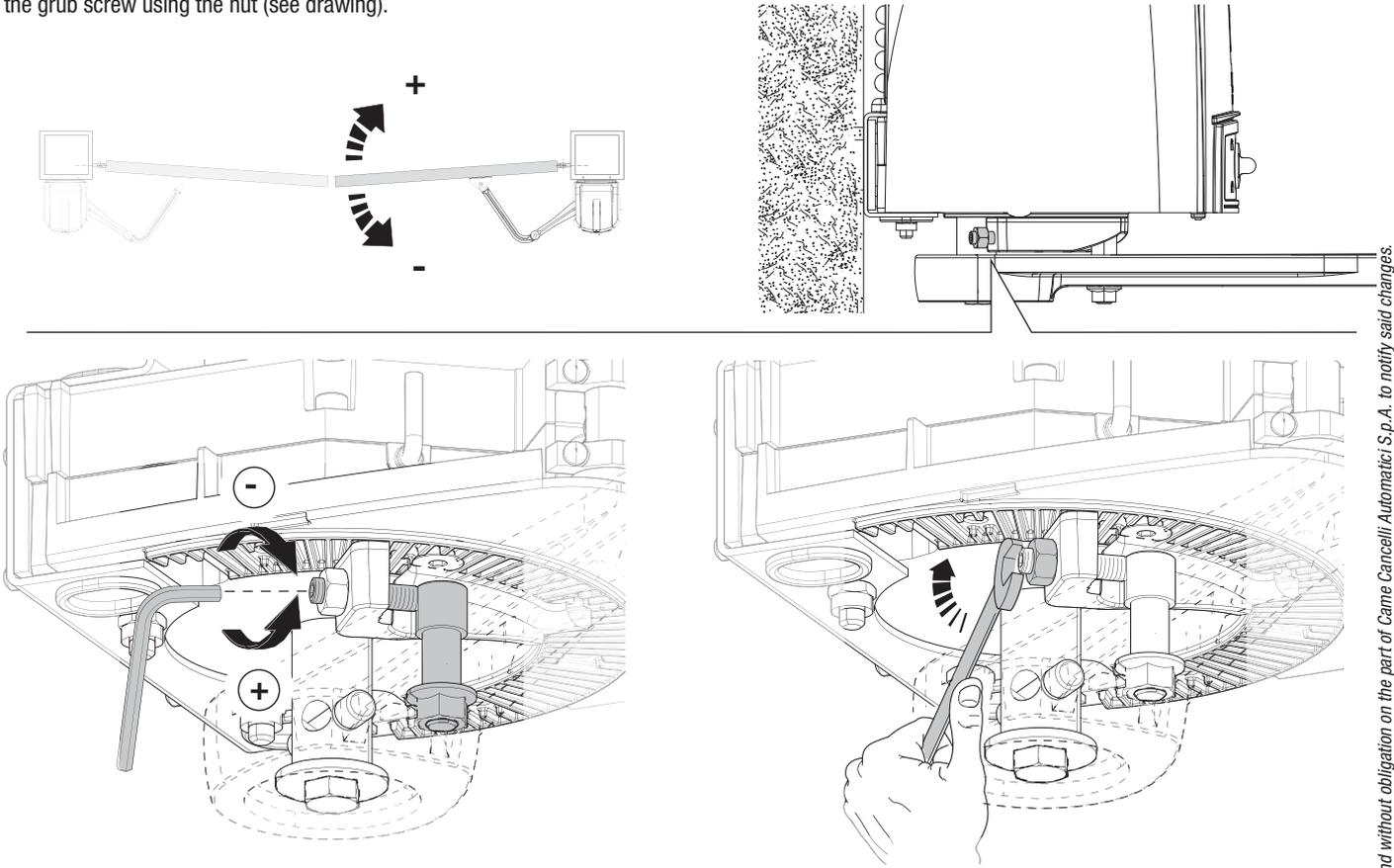


In the same way, adjust the opening limit-switch by turning the grub screw of the other stop (see drawing).

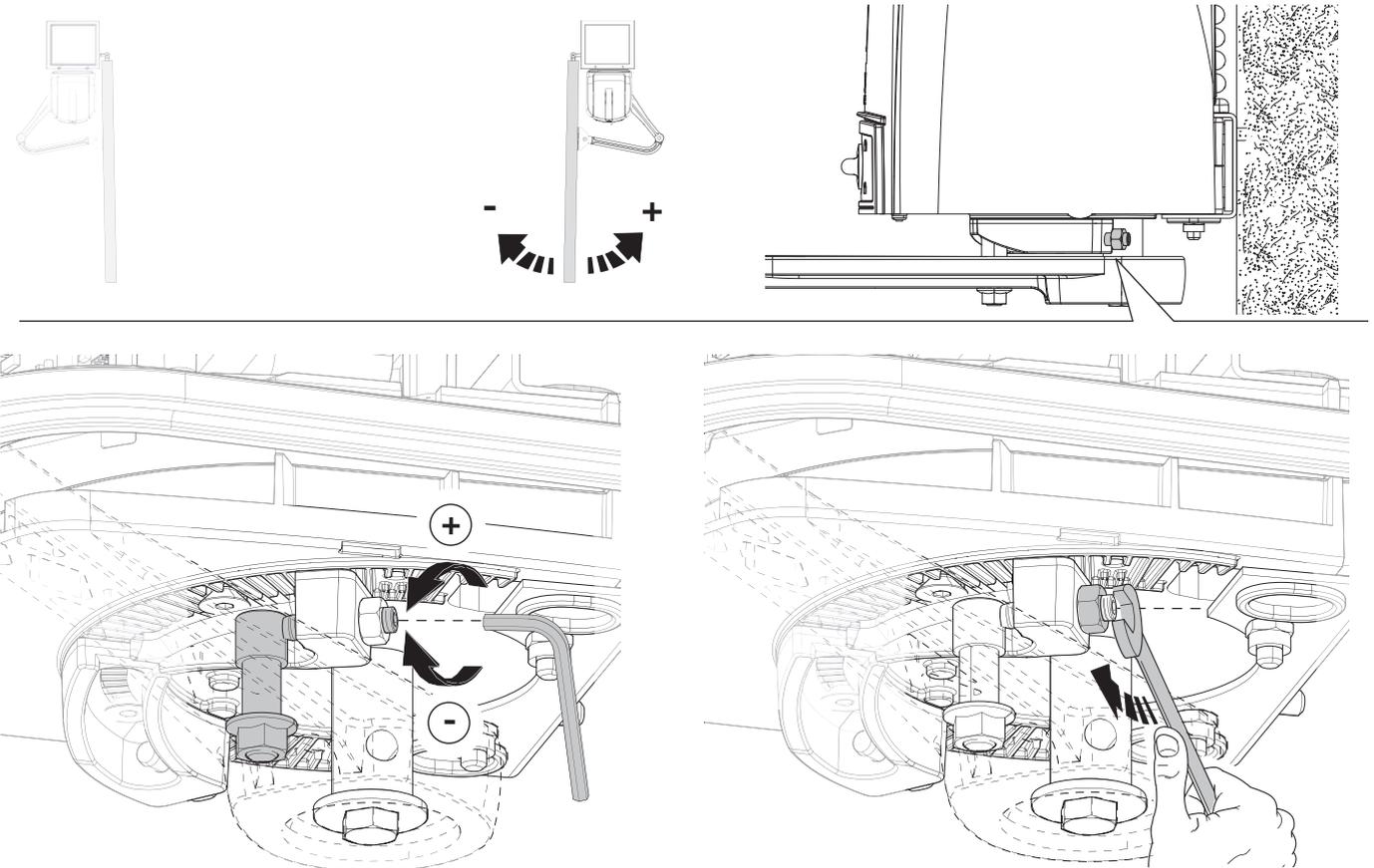


Adjusting the opening and closing endstop points of the **right-side gearmotor** (internal view).

With the gearmotor released and the gate leaf closed, adjust the closing limit-switch grub screw by turning it either clockwise or anti clockwise. Fasten the grub screw using the nut (see drawing).

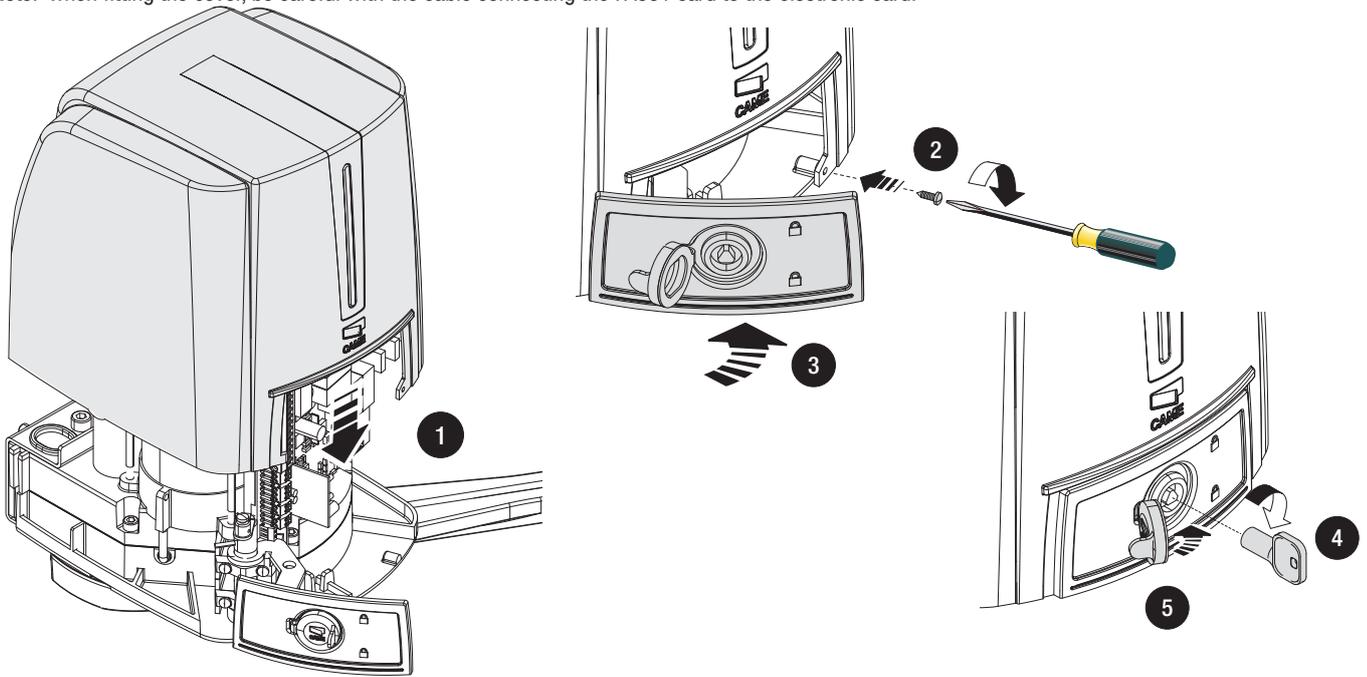


In the same way, adjust the opening limit-switch by turning the grub screw of the other stop (see drawing).



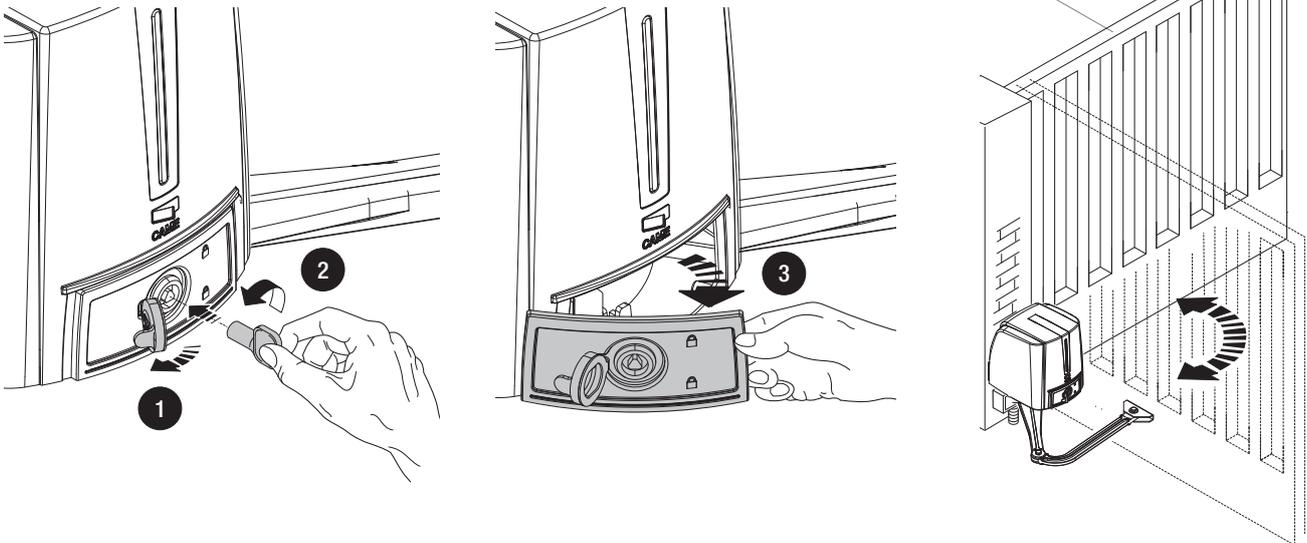
After making the electrical connections and necessary programming, fit the cover onto the gearmotor and fasten it 1 2. Close the hatch 3 Ž, block the gearmotor using the key and fit the protective cap 4 5.

Note: when fitting the cover, be careful with the cable connecting the FA001 card to the electronic card.

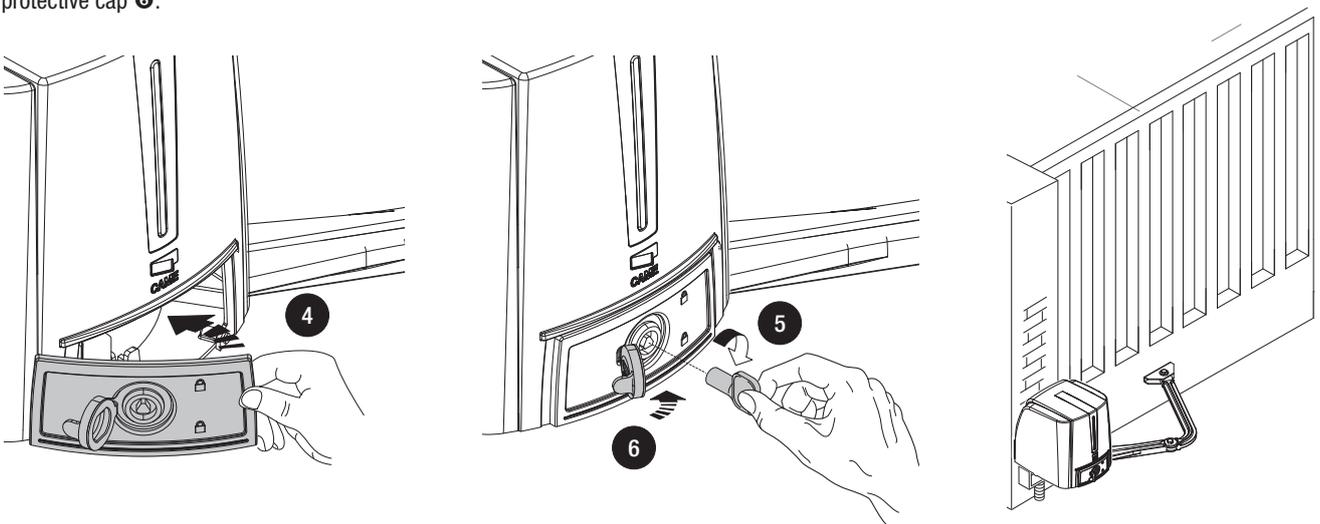


Manual release override and blocking of the gearmotor

RELEASE - Remove the protective cap from the lock CE 1. Insert the trilobe key and turn it anti-clockwise 2. Open the hatch and activate the release override lever Ž 3.



BLOCK - Close the release override hatch 4. Insert the trilobe key and turn it clockwise 5. Insert the protective cap 6.



Command and control electronics

Description

The control panel should be powered by 230 V AC, at 50/60 Hz frequency.

the command devices and accessories are powered by 24 V. The accessories must not exceed 50 W overall.

All connections are protected by quick fuses, see table.

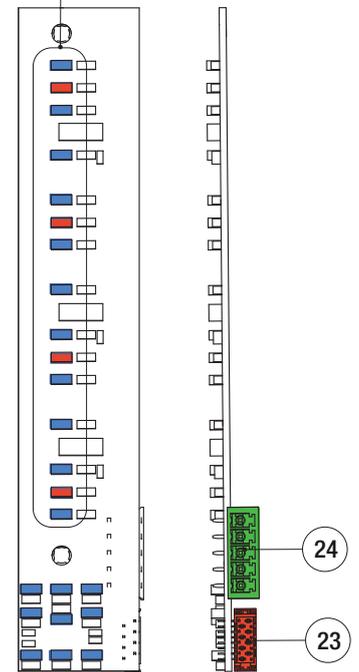
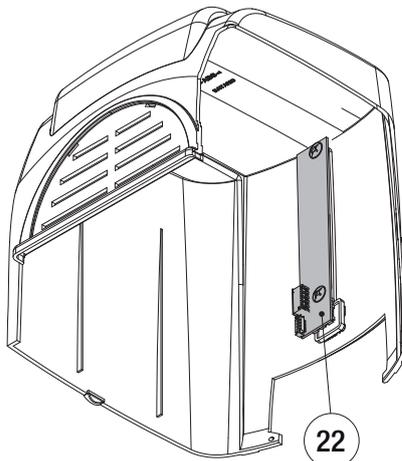
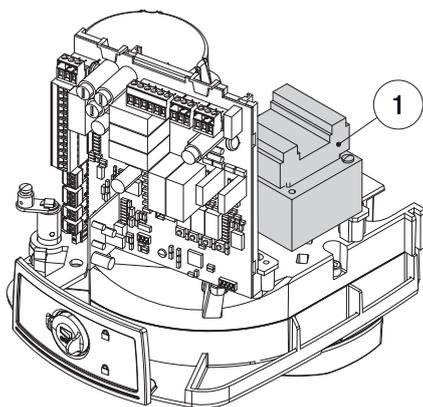
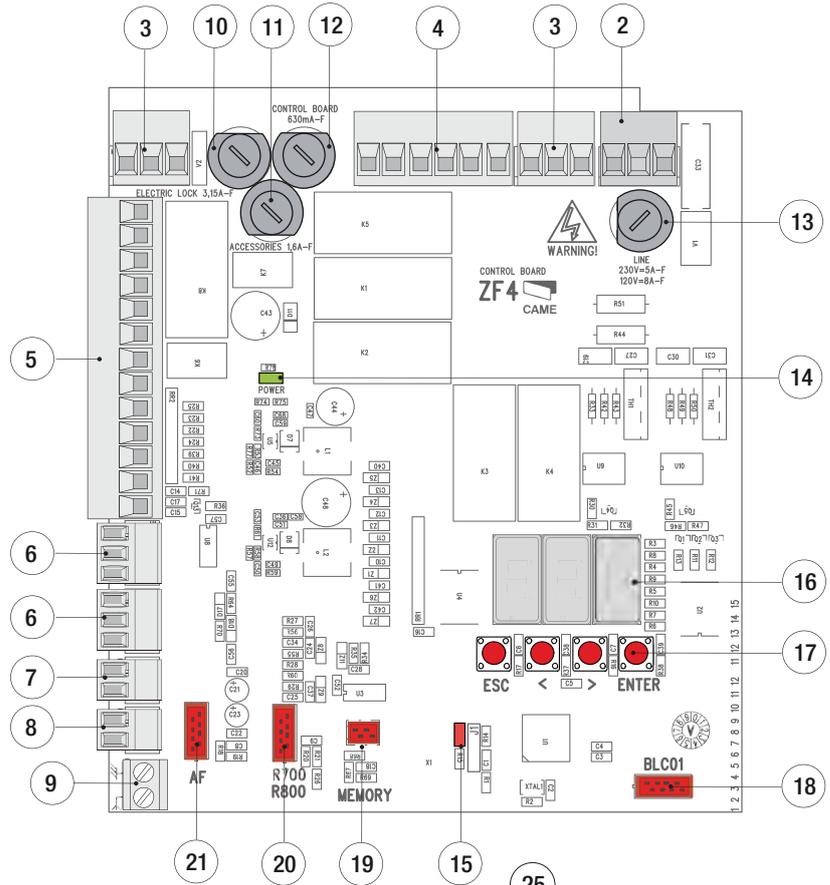
The functions on the entry and exit contacts, the time settings and user management, are all set and viewable on the display which is managed by the software.

FUSE TABLE	
Line fuse	5 A-F
Accessories fuse	1.6 A-F
Control unit fuse	630 mA-F
Electro-lock fuse	3.15 A-F

Main component parts

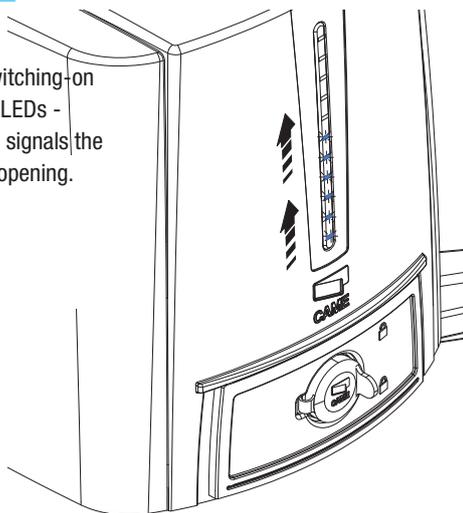
- 1 Transformer
- 2 V power supply terminals
- 3 Transformer terminals
- 4 Gearmotor terminals
- 5 Command and safety device terminals
- 6) Encoder terminals
- 7 Terminals for transponder-based devices
- 8 Keypad selector terminals
- 9 Antenna terminals
- 10 Electro-lock fuse
- 11 -Accessories fuse
- 12 Board fuse
- 13 Line fuse
- 14 power on voltage present LED warning light
- 15 Programming indicator LED
- 16 Display
- 17 Programming buttons
- 18 FA001 board connector
- 19 Memory roll card connector
- 20 700 R800 or R800 card connector
- 21 AF card connector
- 22 FA001 board
- 23 4 Connector for connecting to the ZF4 card
- 24 001 Terminals for connecting the second FA001 card
- 25 25 LED to signal gate status

Warning! Before acting on the control panel, cut off the power supply.

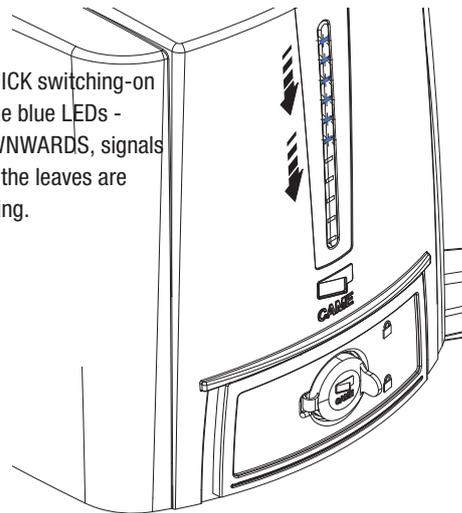


LED signal light

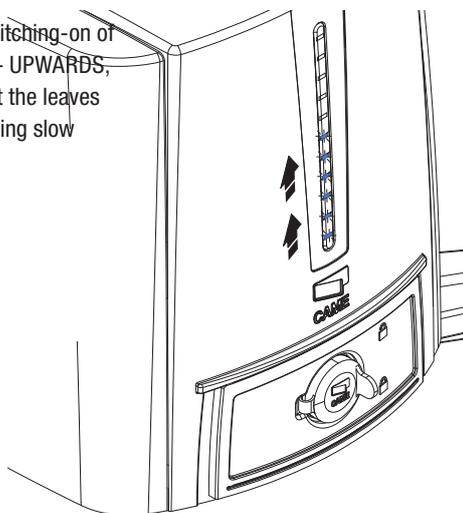
- QUICK switching-on of the blue LEDs - UPWARDS, signals the leaves are opening.



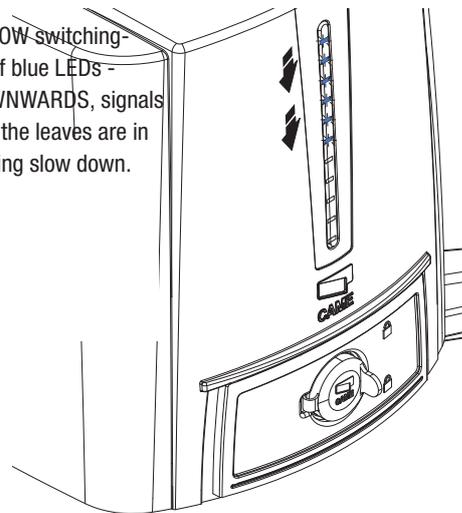
- QUICK switching-on of the blue LEDs - DOWNWARDS, signals that the leaves are closing.



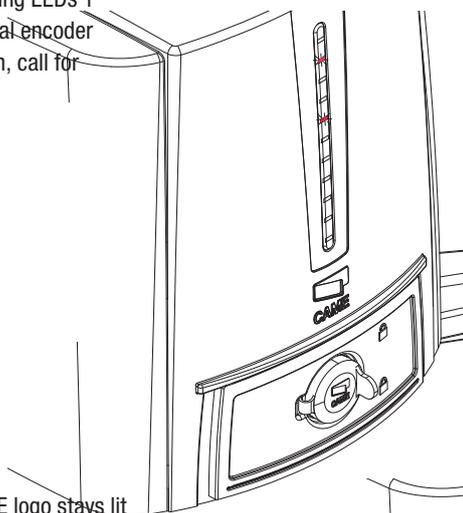
- SLOW switching-on of blue LEDs - UPWARDS, signals that the leaves are in opening slow down.



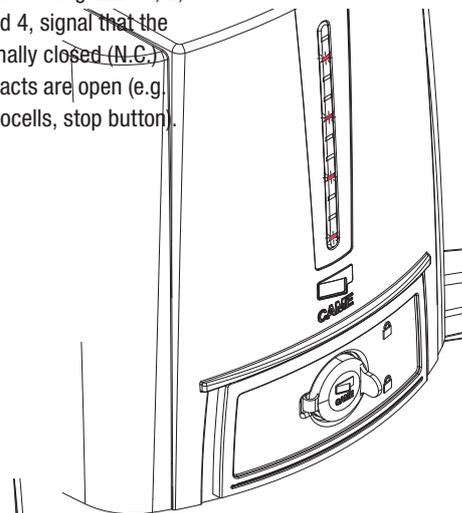
- SLOW switching-on of blue LEDs - DOWNWARDS, signals that the leaves are in closing slow down.



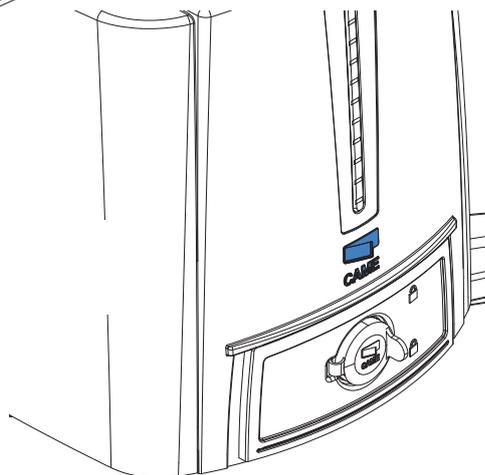
- Red flashing LEDs 1 and 2, signal encoder malfunction, call for assistance.



- Red flashing LEDs 1, 2, 3 and 4, signal that the normally closed (N.C.) contacts are open (e.g. photocells, stop button).

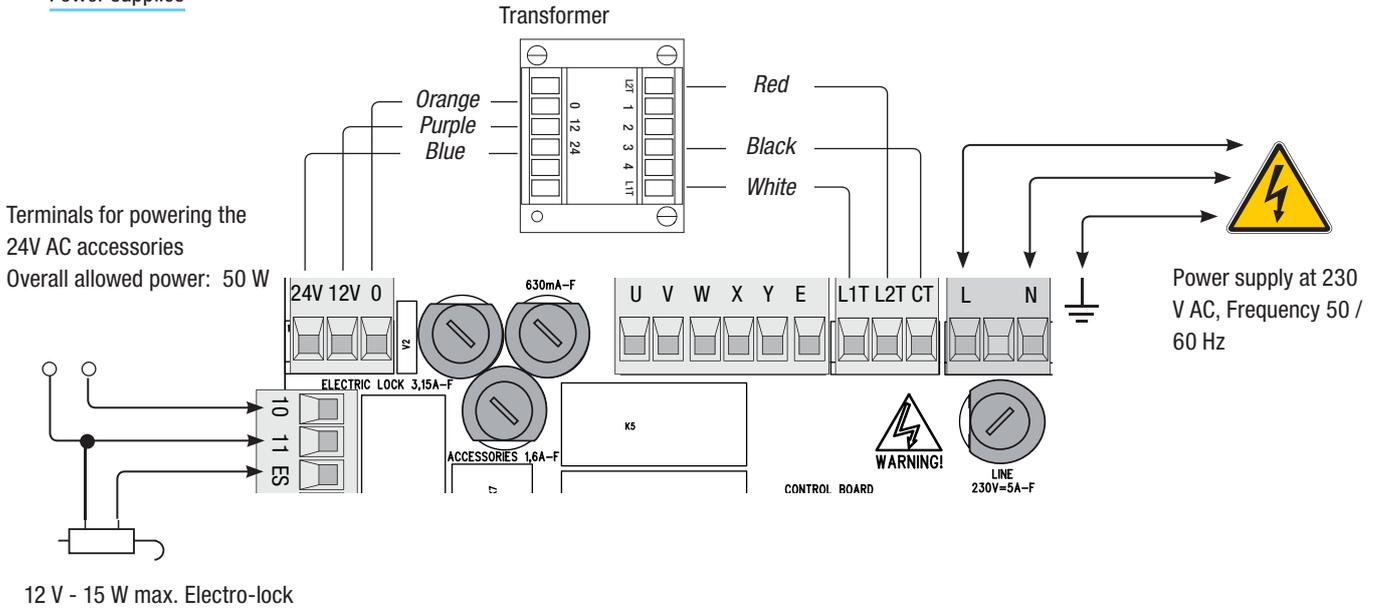


- The CAME logo stays lit always.

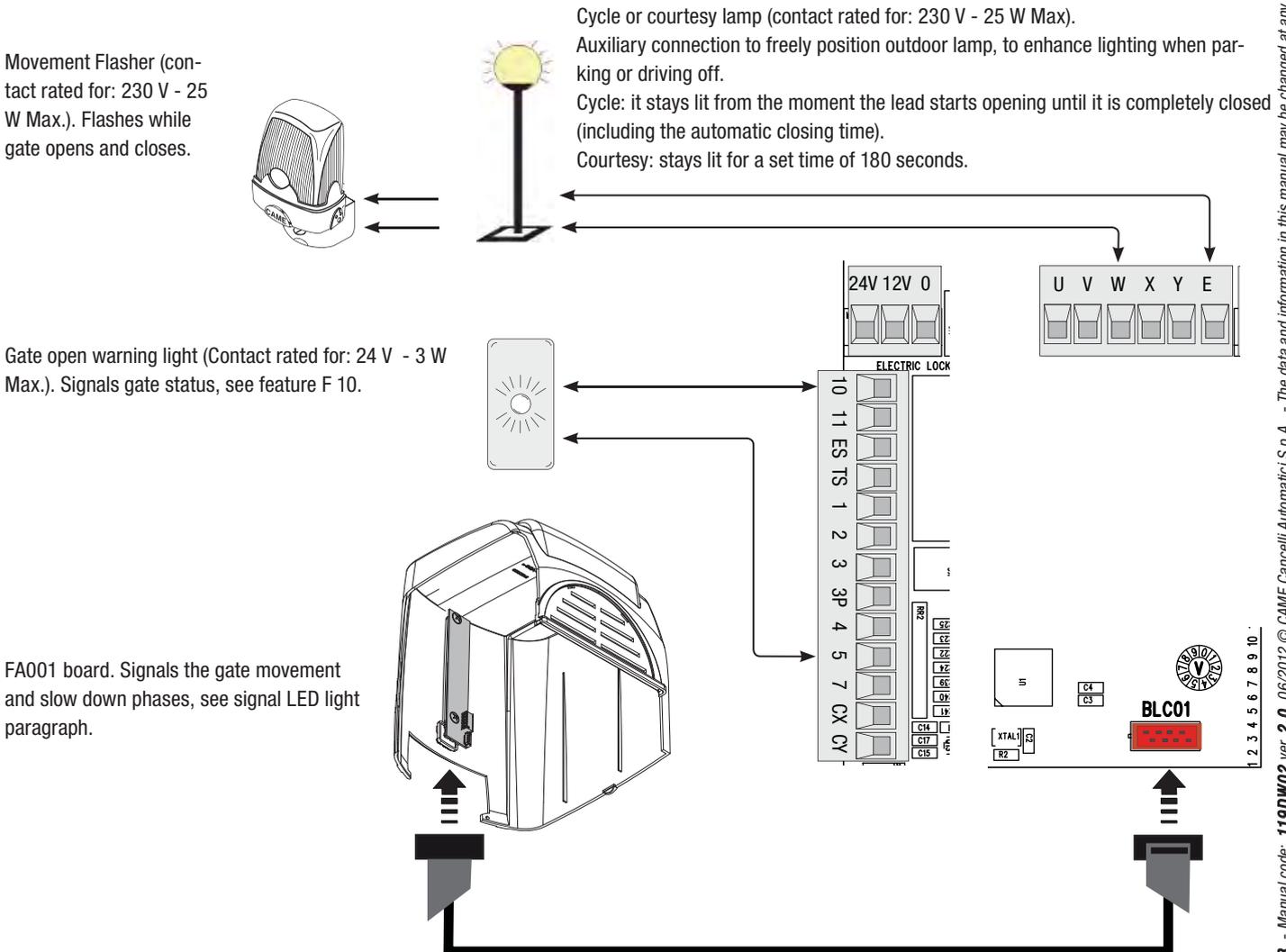


Electrical connections

Power supplies



Warning devices



Command devices

Stop button (N.C. contact.). Gate stop button that excludes the automatic closing cycle, to resume movement press the command button or use another command device.

N.B.: if contact is unused, select 0 (Deactivated) from the F 1 function.

Opening device (N.O. contact)

Device for partial or pedestrian opening (N.O. contact).
Command for opening a leaf for pedestrian passages.

Closing device (N.O. contact)

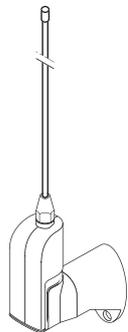
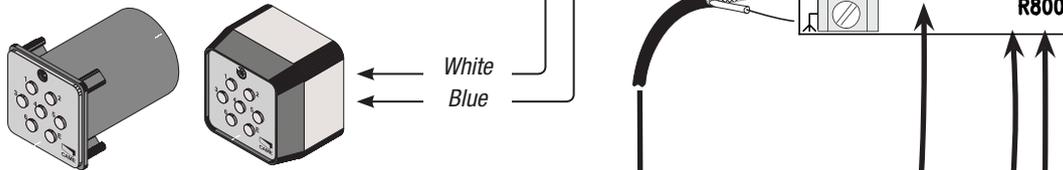
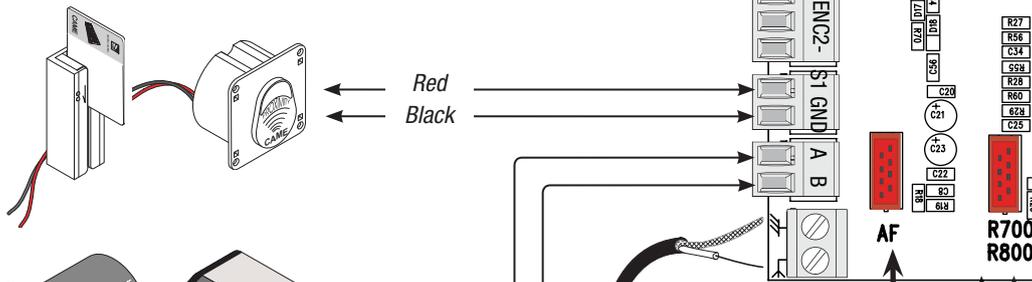
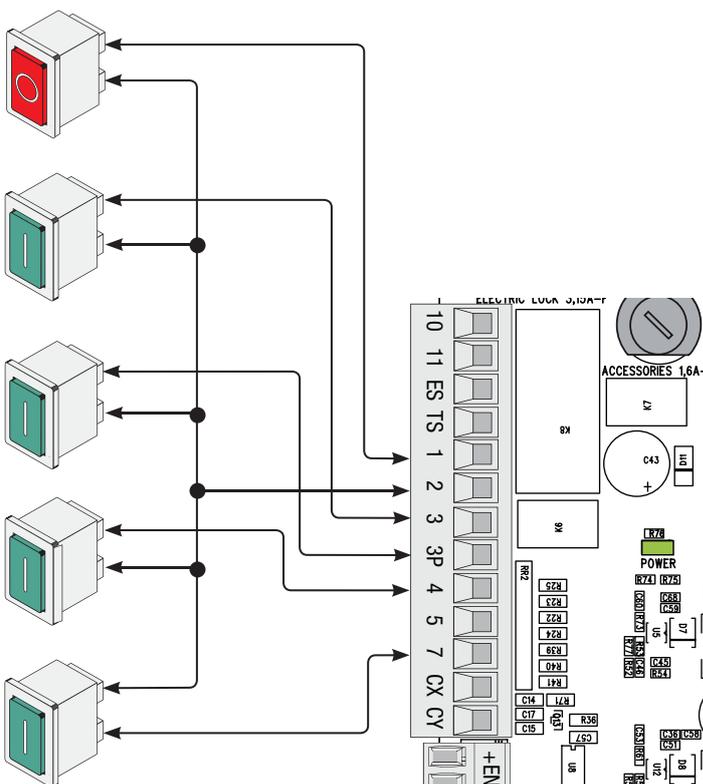
Command device (N.O. contact). Commands for opening and closing the gate, see feature F 7.

(N.O.) contact. for command device (Transponder or card reader with R700 board).

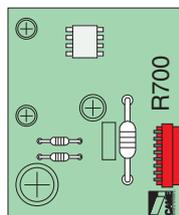
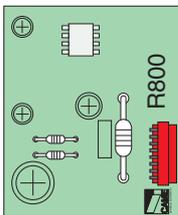
(N.O.) contact. for command device (keypad selector with R800 board).

Antenna with RG58 cable for remote controls.

N.B.: insert the R800 decoding board to have the S6000/S7000 keypad selector recognised.

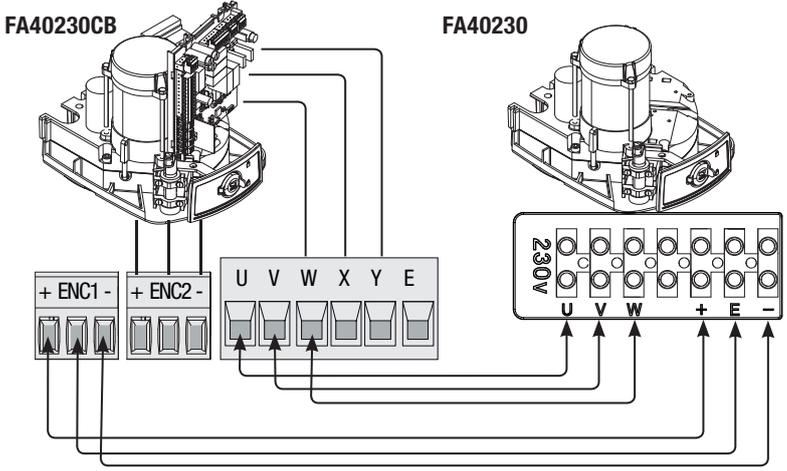


AF remote control card.



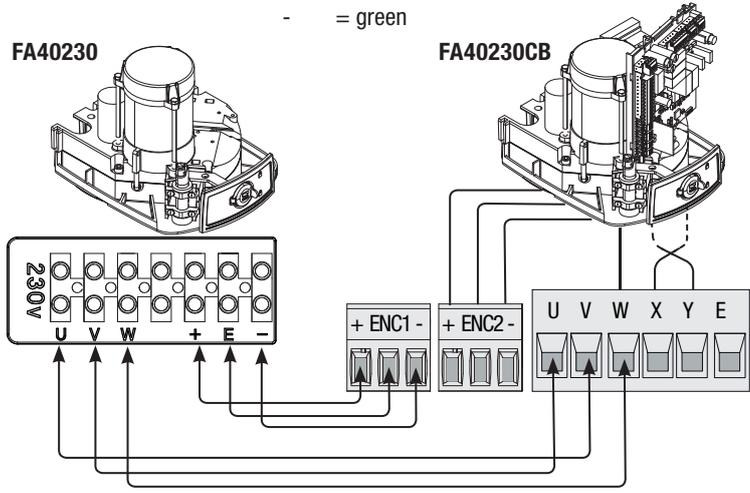
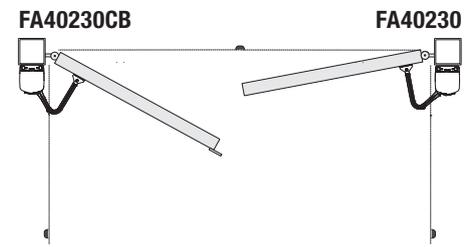
N.B.: plug in the (R700) coding card for the (TSP00) sensor or the (LT001) card reader to be recognised.

Gearmotor with encoder

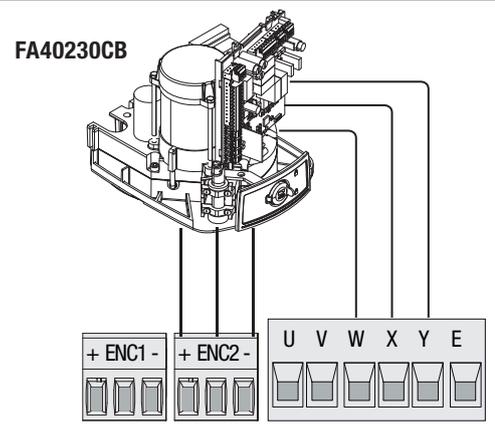
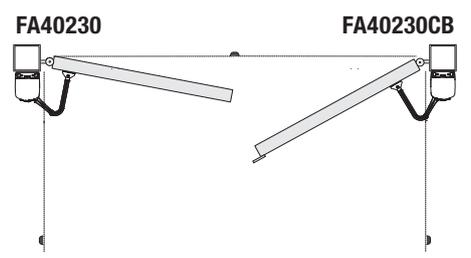


Encoder wire colours:
 + = White
 ENC = Brown
 - = green

Default setting for electrical connections:
 operator installed on the left and gearmotor installed on the right (internal view) with operator closing delay.

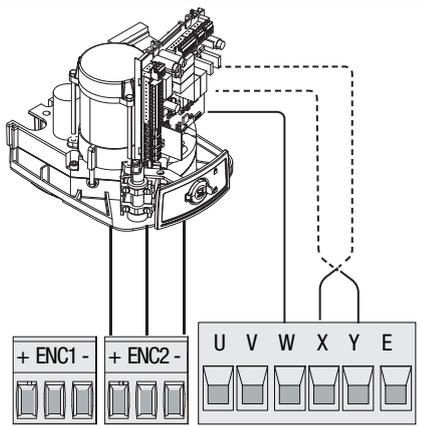
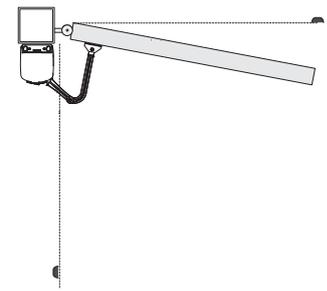


Electrical connections:
 gearmotor installed on the left and operator installed on the right (internal view) with operator closing delay.

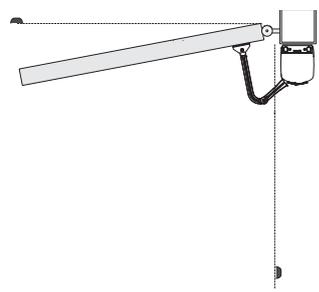


Encoder wire colours:
 + = White
 ENC = Brown
 - = green

Default setting for electrical connections:
 operator installed on left side (internal view)



Electrical connections:
 operator installed on right side (internal view)



Photocells

Configure contact CX or CY (N.C.), input for safety devices such as photocells, compliant with EN 12978 standards.

See CX input functions (Function F2) or CY (Function 3) in:

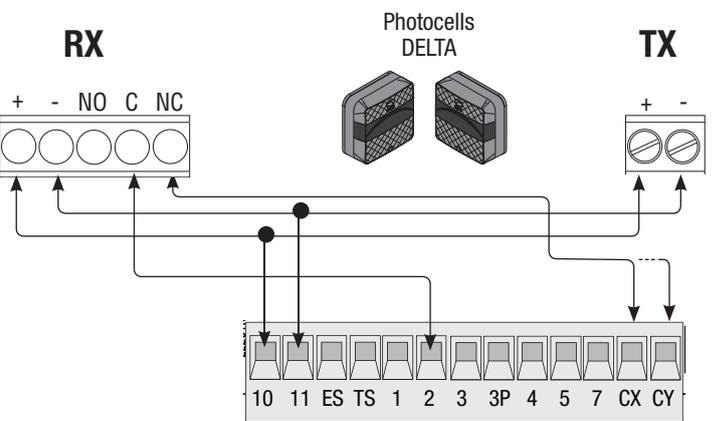
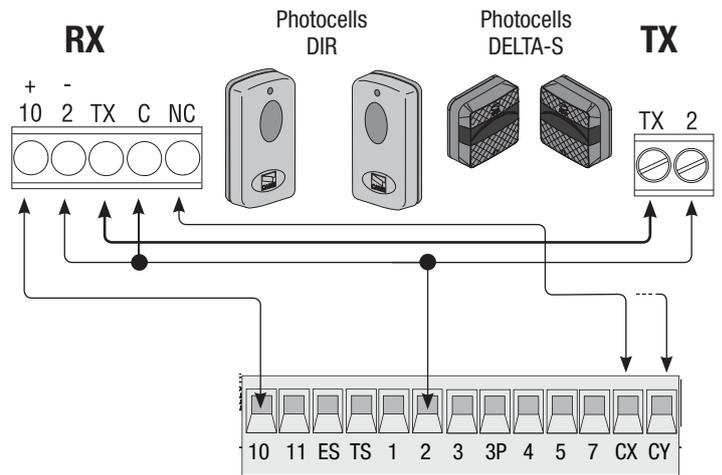
- **C1 reopening when closing**, while the gate is closing, opening the contact will invert movement until it is completely opened;

- **C2 reclosing when opening**, when leaves are opening, opening the contact will trigger inversion of movement until completely closed;

- **C3 partial stop**, leaves stop if moving with consequent triggering of automatic closing (if automatic closing feature is inserted);

- , obstacle stand-by , stops the leaves if they are moving and resumes movement after obstacle is removed.

N.B.: if contacts CX and CY are unused, they should be deactivated when programming.



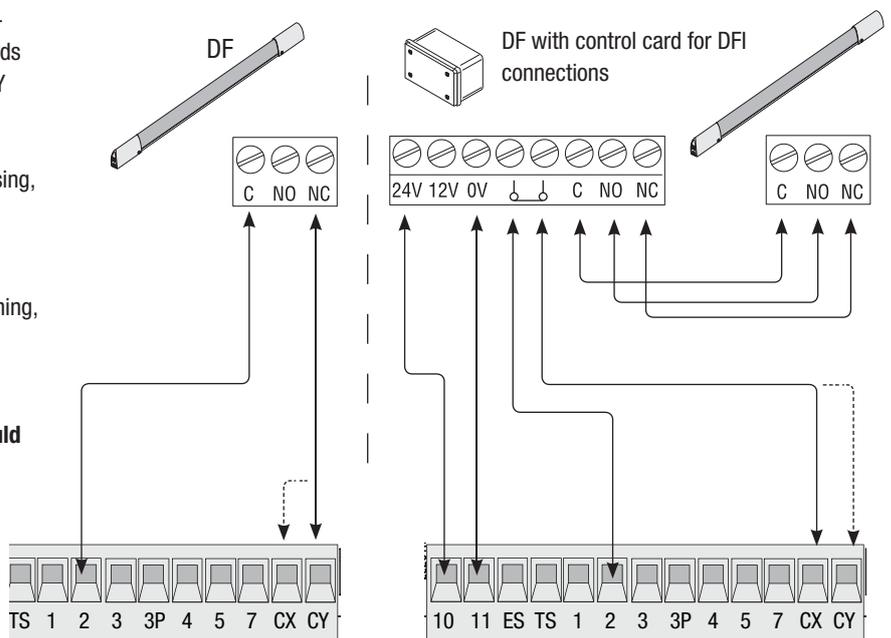
Sensitive safety edges

Configure contact CX or CY (N.C.), input for sensitive-safety-edge type devices, that are EN 12978 standards compliant. See CX input functions (Function F2) or CY (Function 3) in:

- **C7 reopening when closing**, while the gate is closing, opening the contact will invert movement until it is completely opened;

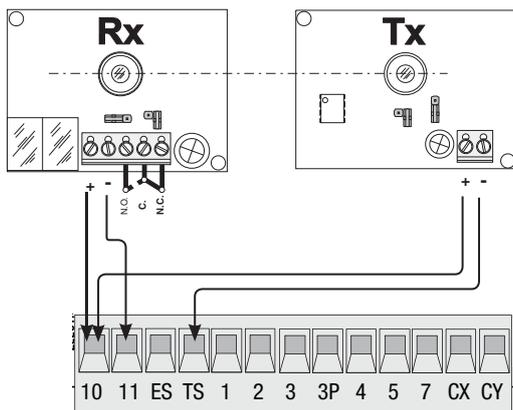
- **C8 reclosing when opening**, while the gate is opening, opening the contact will invert movement until it is completely closed.

N.B.: if contacts CX and CY are unused, they should be deactivated when programming.

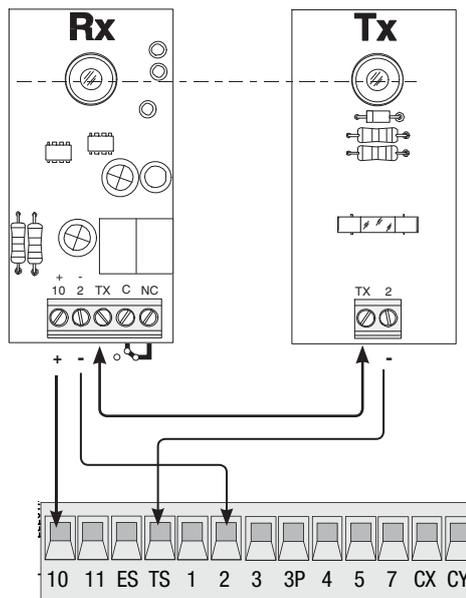


Electrical connection for operating the photocell's safety test

DELTA



DIR / DELTA S

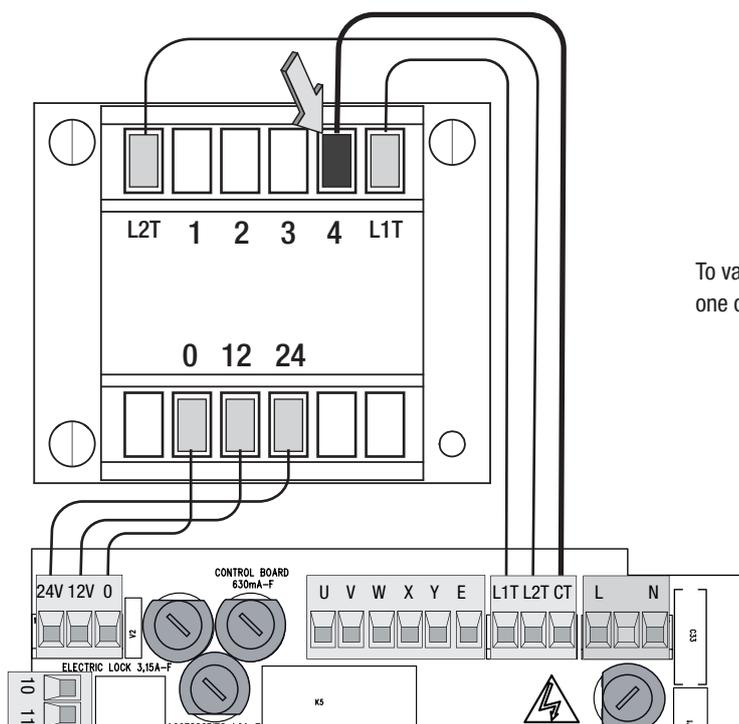


With each opening and closing command, the card checks the efficiency of the safety devices (i.e. photocells). Any anomalies in the working of the photocells is flagged on the electrical card, and this cancels any commands from the radio transmitters or buttons.

Electrical connection to work the photocells safety test:

- the transmitter and receiver, must be connected as shown in the diagram;
- select from the F5 feature which inputs the test should be activated on.

Settings and adjustments

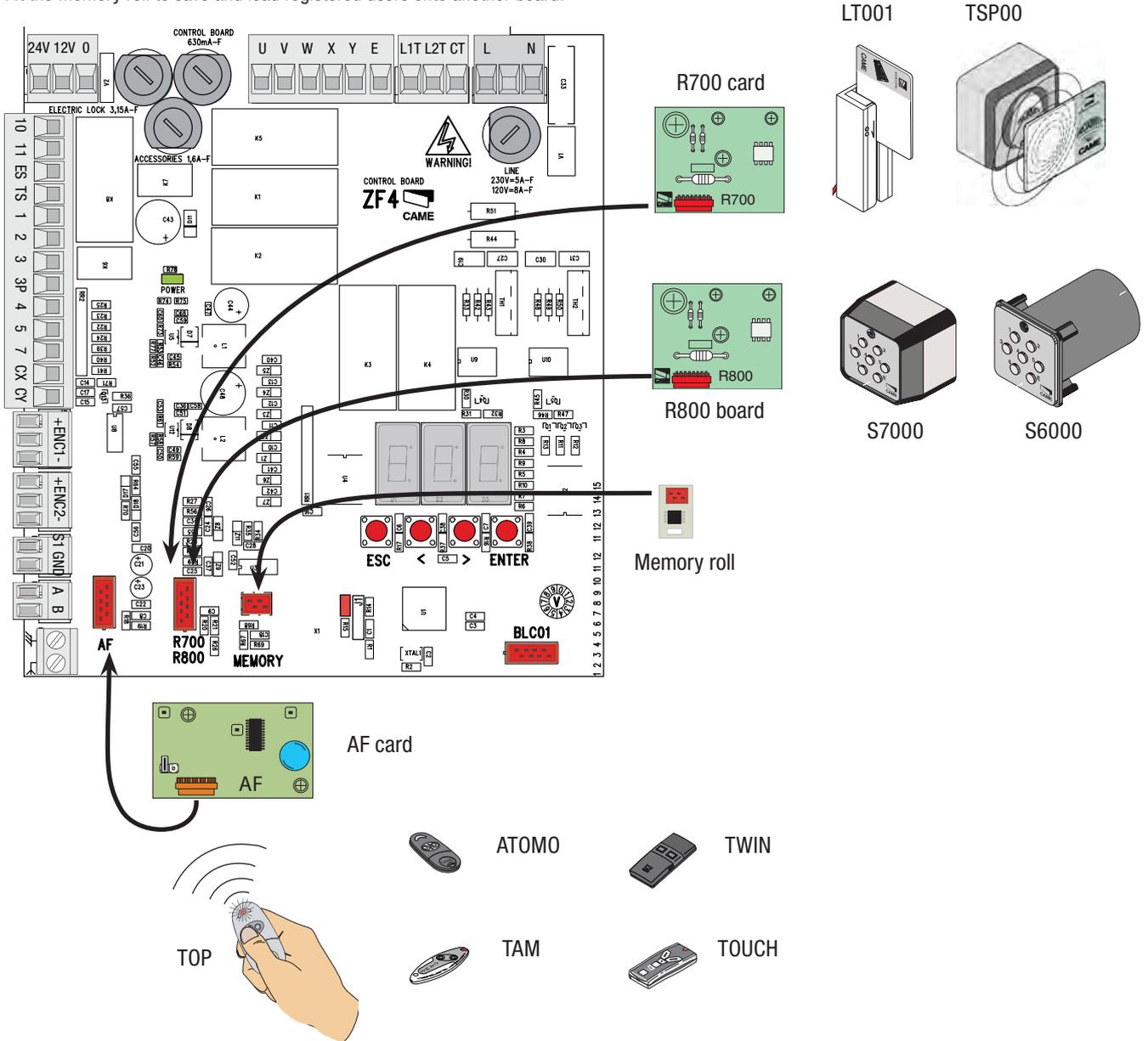


To vary the motor torque, move the faston shown to one of the four positions; 1 min ÷ 4 max.

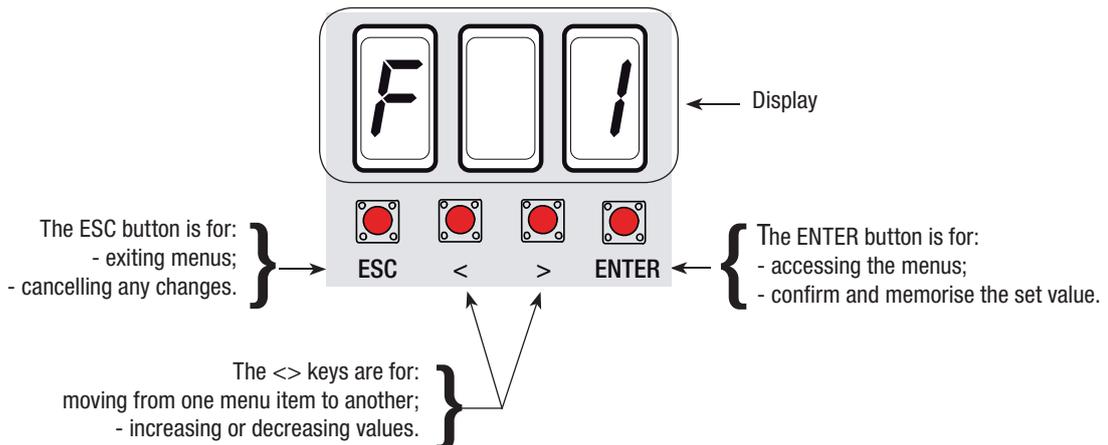
Programming

Memorising data

To register, edit or remove users or command the operator via radio transmitter, plug in the AF43S card.
 If using either the transponder or card reader, fit the R700 board or, alternatively, the R800 keypad selector board.
 Fit the memory roll to save and load registered users onto another board.



Description of programming commands



Menu map

F 1	Total stop feature (1-2)
F 2	Function associated to CX input
F 3	Function associated to CY input
F 5	Safety test function
F 6	Maintained action function
F 7	Command mode on 2-7
F 8	Command mode on 2-3
F 9	Obstacle detection when motor is idle function
F 10	Indicator light function
F - 11	Excluding encoder
F 14	Sensor-type selection feature
F 16	Recoil function
F 18	Supplementary light feature
F 19	Automatic closing time
F 20	Automatic closing time after partial opening;
F 21	Pre-flashing time
F 22	Working time
F 23	Delay time when closing
F 24	Delay time when closing
F 30	Adjusting motor slow down speed
F 34	Sensitivity during movement
F 35	Sensitivity during deceleration
F 36	Adjusting open-partially
F 37	Adjusting the motor's starting point of slow down when opening
F 38	Adjusting the motor's starting point of slow down when closing
F 39	Adjusting the motor's end-strike starting point when opening
F 40	Adjusting the motor's end-strike starting point when closing
F 46	Setting the number of motors
F 50	Saving date in the memory roll
F 51	Reading memory roll data
F 59	Enabling CAME logo feature
U 1	Registering new users with associated command
U 2	Cancelling one user
U 3	Completely cancel users
A 2	Motor test
A 3	Calibrating travel
A 4	Reset parameters
H 1	Software version

Motor test and calibration menu

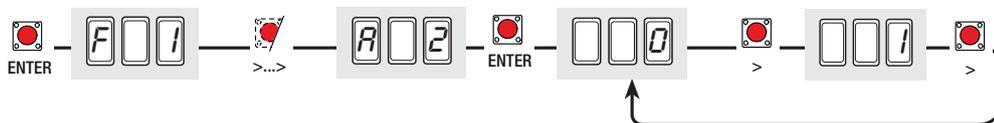
Important! We suggest starting the programming by first doing the following:

- 1 Motor test;
- 2 Calibration of travel.

Confirm with the ENTER button after choosing the value for each feature.

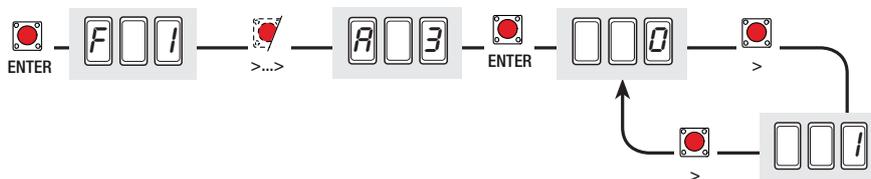
A 2 (Motor test): test activation to check for proper rotation direction of the gearmotor (see the paragraph about **motor test**).

0 = deactivated; 1 = activated.



A 3 (travel calibration): automatic gate-travel calibration operation (see the paragraph about **calibrating travel**).

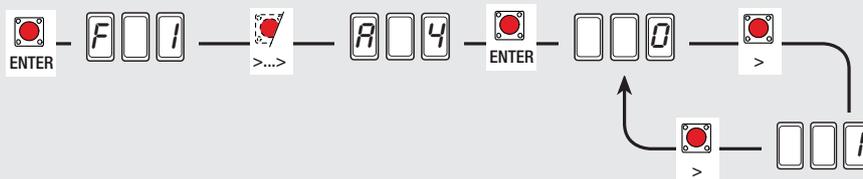
0 = deactivated; 1 = activated.



Warning! If needed, you can restore the factory settings with the following feature:

A 4 (Reset parameters): data restoring procedure (for default settings) and travel calibration cancellation.

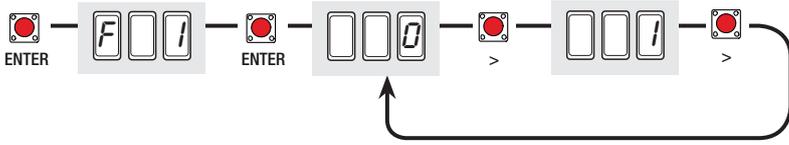
0 = deactivated; 1 = activated.



Features menu

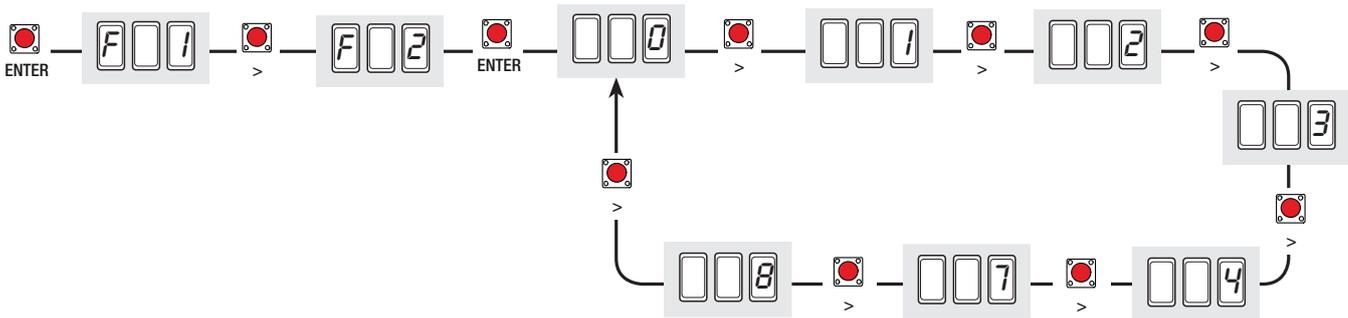
F 1 (Total Stop 1-2) - N.C. input: gate stop with consequent exclusion of possible automatic closing cycle; to restore movement act on the command device. Insert safety device on [1-C2]; if unused, select function "0".

= 0 = Deactivated (default); 1 = activated



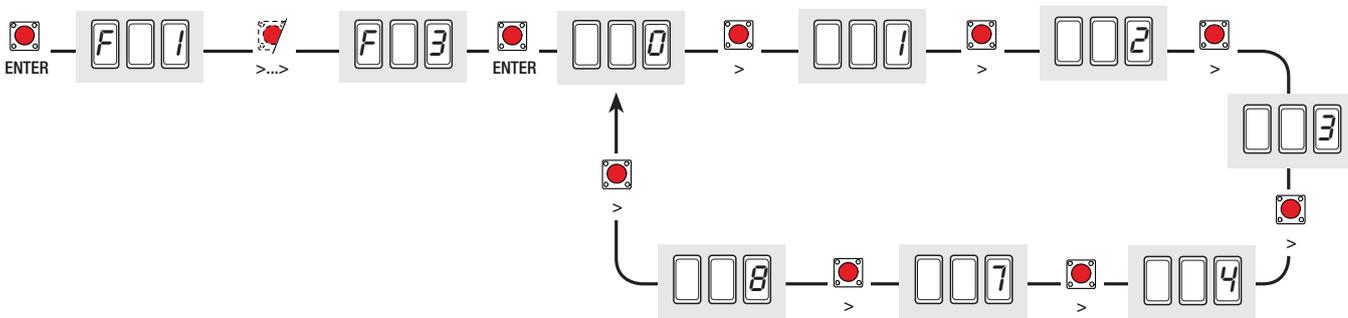
F 2 (2-CX input): NC safety contact with possibility to associate the following functions: C1 (reopen when closing), (reclose when opening), C3 (partial stop;), C4 (obstacle stand-by), C7 (reopen when closing, for sensitive safety edges), (reclose when opening, for sensitive safety edges) or deactivated, see safety devices in electrical connections.

= 0 = Deactivated (default); 1 = C1; 2 = C2; 3 = C3; 4 = C4; 7 = C7; 8 = C8.



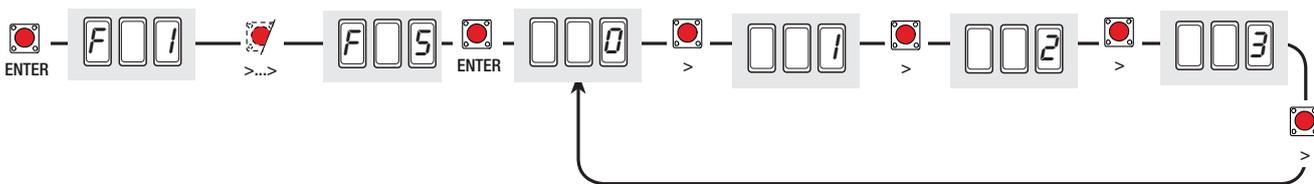
F 3 (2-CY input): NC safety contact with possibility to associate the following functions: C1 (reopen when closing), (reclose when opening), C3 (partial stop;), C4 (obstacle stand-by), C7 (reopen when closing, for sensitive safety edges), (reclose when opening, for sensitive safety edges) or deactivated, see safety devices in electrical connections.

= 0 = Deactivated (default); 1 = C1; 2 = C2; 3 = C3; 4 = C4; 7 = C7; 8 = C8.



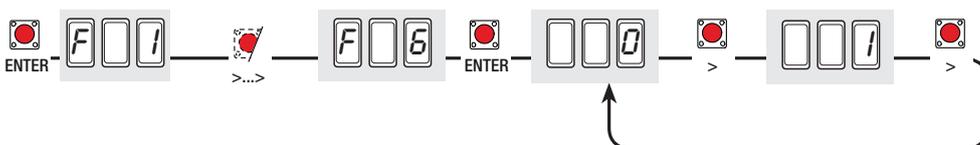
F 5 (Safety test): allows the card to check the efficiency of safety devices (i.e. photocells) after every opening or closing command.

= 0 = Deactivated (default); 1 = CX; 2 = CY; 3 = CX+CY



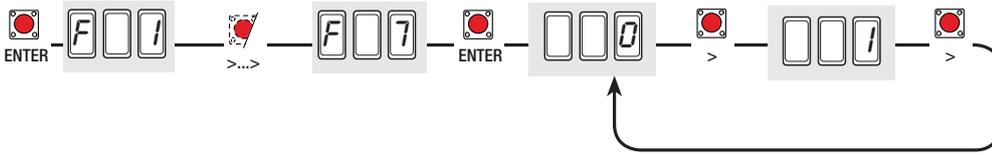
F 6 (Maintained action): the gate works by keeping the button pressed (a 2-3 button for opening, a 2-4 button for closing). This excludes all of the other command devices including the radio command.

0 = Deactivated (default); 1 = activated.



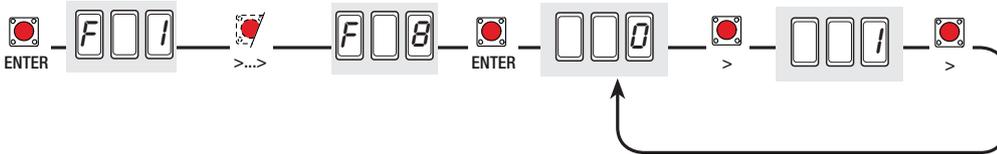
F 7 (Command 2-7): setting the 2-7 contact to either the step (open-close) or sequential (open-stop-close-stop) modes.

0 = step-step (default); 1 = sequential.



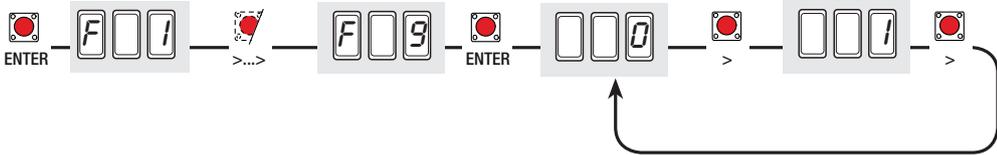
F 8 (Command 2-3P): setting contact on 2-3P to pedestrian opening (total opening of the second leaf) or partial (partial opening of the second leaf depending on percentage setting between 10 and 80 of the travel, feature F 36).

0 = pedestrian opening (default); 1 = Partial opening.



F 9 (Obstacle detection): with motor idle (gate closed, open or after a total stop command), it prevents any movement if the safety devices (e.g. photocells) detect an obstacle.

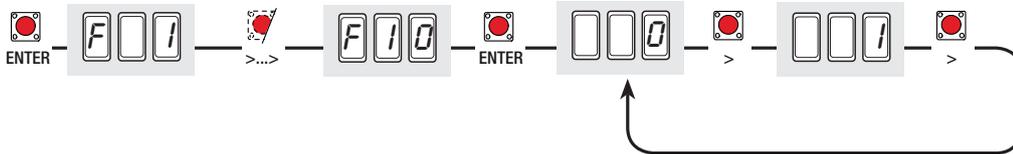
0 = Deactivated (default); 1 = activated.



F 10 (Open signal-light): Light bulb connected to 10-5, signals gate status.

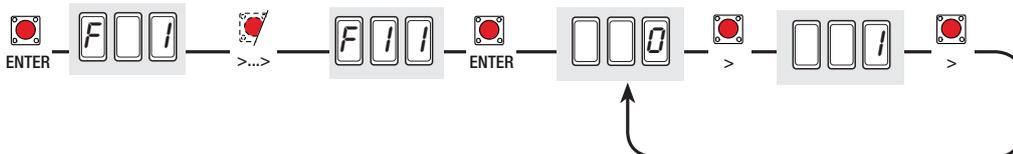
0 = gate open or moving, stays lit (default)

1 = - 1 = - gate is opening, it flashes intermittently each half-second;
 - gate closing, it flashes intermittently each second;
 - gate open, stays lit;
 - gate closed, stays off.



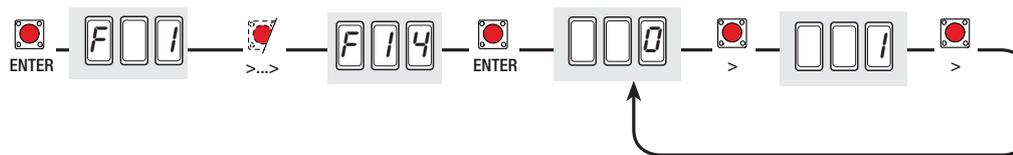
F 11 (Encoder exclusion): excludes management of the slow downs, obstacle detection and sensitivity.

0 = Encoder activated. (default); 1 = Encoder deactivated.



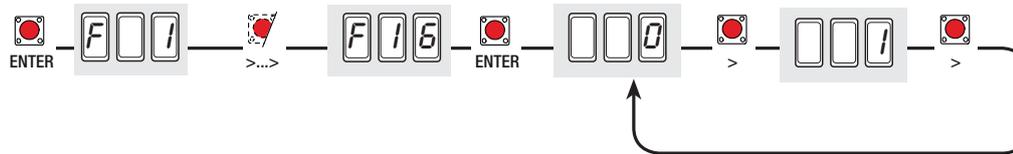
F 14 (Sensor type): setting the sensor-type for the operator command via TSP00 transponder or LT001 magnetic card reader with the R700 coding board or S7000 keypad with R800 coding board.

0TAG; 1 = S7000 (default).



F 16 (Ramming): before each opening and closing manoeuvre, the leaves press against the strike-plate for a few seconds to facilitate the electro-lock release (to adjust the time, see feature F26).

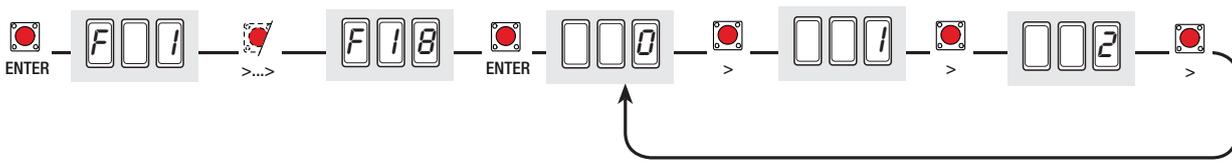
0 = deactivated (default); 1 = activated.



F 18 (Light W-E): output on contact W-E for the light with the following feature:

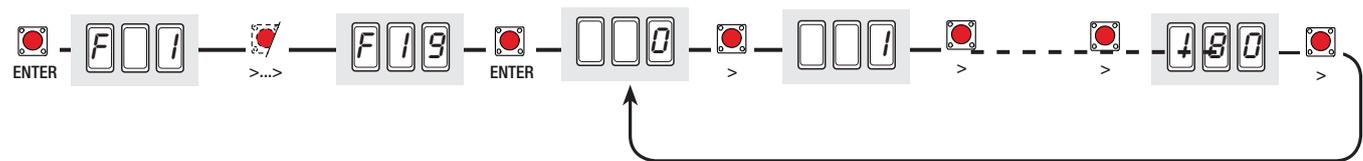
- movement warning flashing light, flashes while gate is opening and closing.
- outdoor freely placeable light, to enhance lighting in the parking area, set as courtesy light which stays lit for a set time of 180 seconds or as a cycle light that stays on from the moment the leaf starts opening until it is completely closed (including automatic closing time) .

0 = Flashing light (by default); 1 = Cycle; 2 = Courtesy.



F 19 (Automatic closing time): The automatic closing timer activates at the closing endpoint. The pre-set time is adjustable, and is anyhow conditioned by a possible intervention by the safety devices and is deactivated after a total emergency stop or when the power is cut. The waiting time can be deactivated or adjusted from 1" to 180".

= 0 = Deactivated (default); 1 = 1 second; 2 = 2=seconds; 180 = 180=seconds.

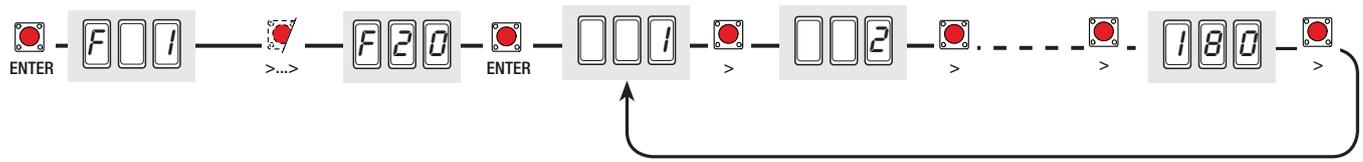


F 20 (Automatic closing time after partial or pedestrian opening): leaf automatic closing time after a partial or pedestrian opening command.

The door closes automatically once this time-frame has elapsed and is anyway subject to the trigger of any safety devices and it deactivates after a «total emergency stop" or due to power outages . The waiting time can be adjusted from 1" to 180"

Note: the automatic closing time (see F 19) should not be deactivated.

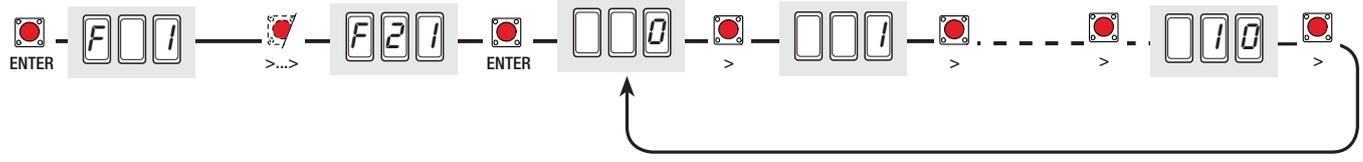
1 = 1 second; 2 = 2=seconds; 5 = 5=seconds (default); 180 = 180=seconds.



F 21 (Pre-flashing time): after an opening or closing command, the flashing light connected on (10-E), flashes for an adjustable time interval before the manoeuvre begins.

the pre-flashing time can be deactivated or adjusted from 1" to 10".

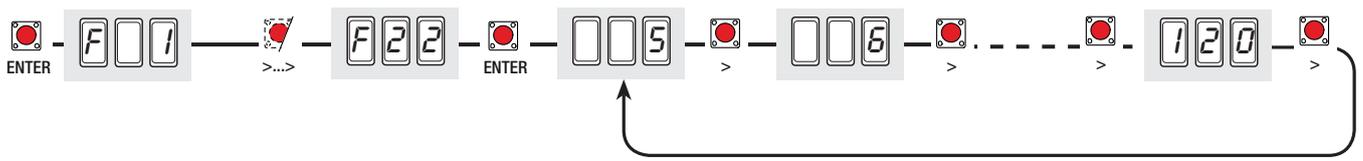
= 0 = Deactivated (default); 1 = 1 second; 2 = 2=seconds; 10 = 10=seconds.



F 22 (Working time): motor operation time in when opening or closing.

the working time can be adjusted to between 5" and 120"

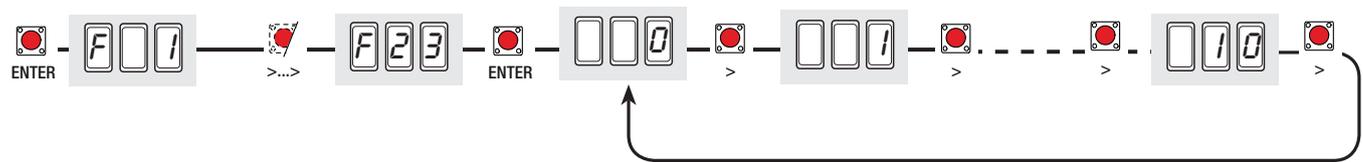
5 = 5=(seconds; 120 = 120=(seconds (default).



F 23- (Opening delay time): after an opening command, the leaf of gearmotor (M1) starts moving after that of gearmotor (M2) and the time is adjustable.

the delay time can be deactivated or adjusted from 1" to 10".

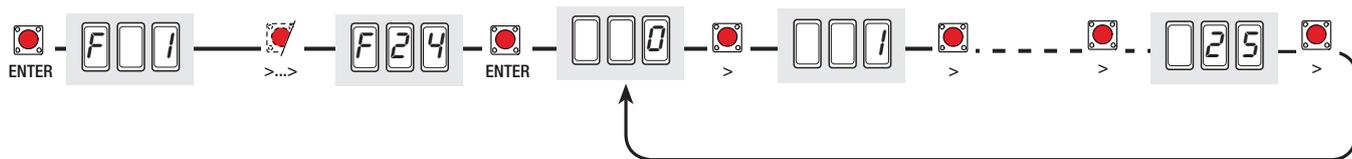
= 0 = Deactivated (default); 1 = 1 second; 2 = 2=(seconds 10 = 10=seconds.



F 24 (Closing delay time): after a closing command or after automatic closing, the M2 gearmotor lead delays its start compared to gearmotor M1; the time is adjustable.

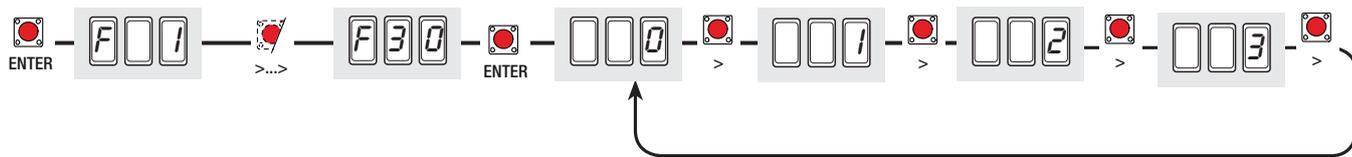
the delay time can be deactivated or adjusted from 1" to 25".

= 0 = Deactivated (default); 1 = 1 second; 2 = 2=(seconds 25 = 25=seconds.



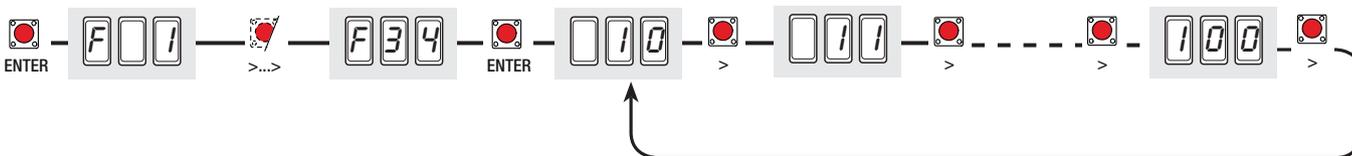
F 30 (Slow down speed): setting the time during motor slow downs.

= 0 = Deactivated; 1 = maximum speed; 2 = intermediate speed 3 = minimum speed.



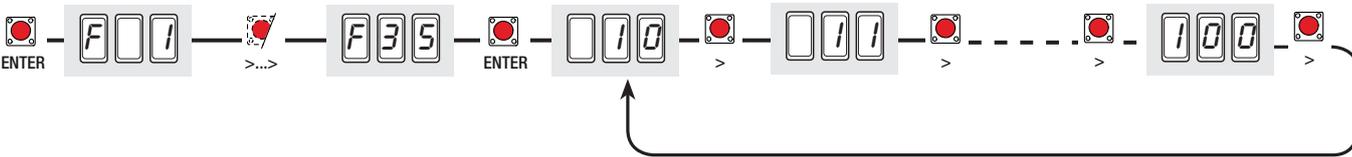
F 34 (travel sensitivity): adjusts the obstacle-detection sensitivity during travel.

10 = maximum sensitivity; 100 = minimum sensitivity (default).



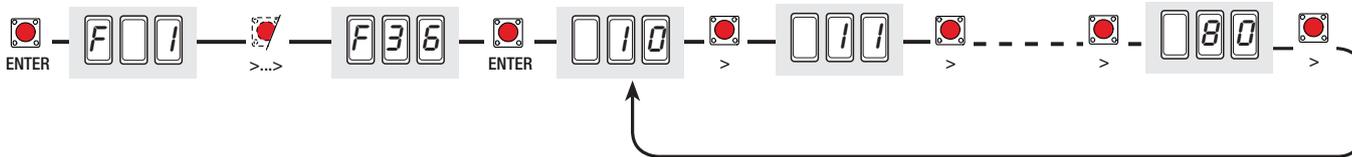
F 35 (Deceleration sensitivity): adjusts the obstacle detection sensitivity when decelerating.

10 = maximum sensitivity; 100 = minimum sensitivity (default).



F 36 (Adjusting partial opening): adjusts the leaf opening of the second motor M2 as a percentage of the total travel

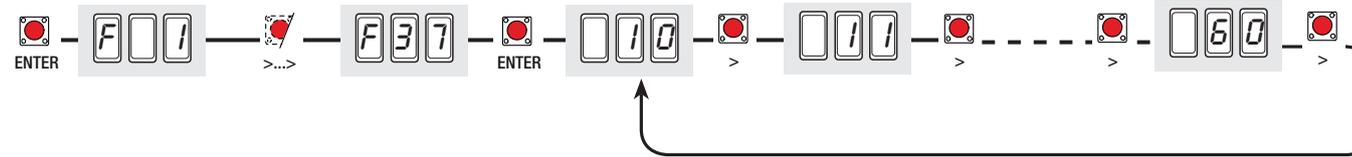
10 = 10% of the travel (default); 80 = 80% of the run-cycle.



F 37 (Opening slow down point): adjusts the motor's beginning slow down point before the opening endstop.

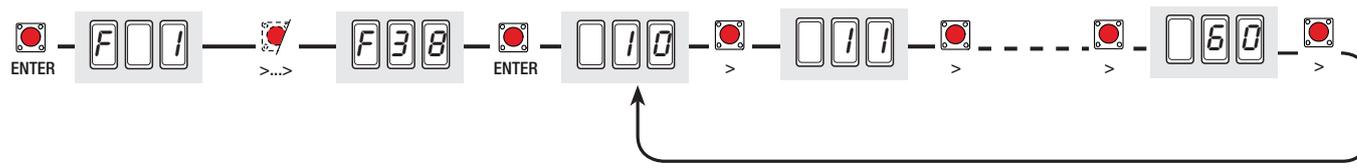
The beginning slow down point is calculated as a percentage of the leaf's complete travel (see par. about illustrating the slow down and end-strike areas and points)

10 = 10% of the travel; 25 = 25% of the run-cycle (default); 60 = 60% of the run-cycle.



F 38 (Closing slow down point): adjusts the motor's beginning slow down point before the closing endstop.
 the beginning deceleration point is calculated as a percentage of the leaf's complete travel (see par. illustration of slow down and end strike areas and points)

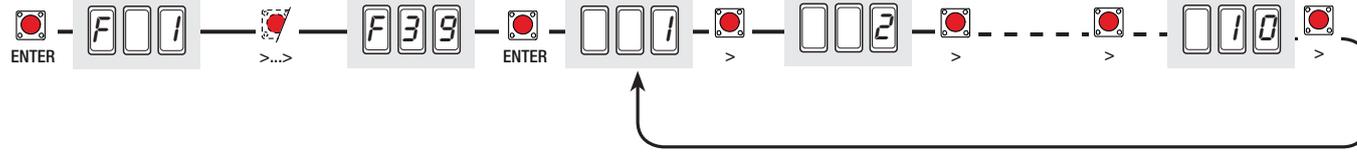
10 = 10% of the travel; 25 = 25% of the run-cycle (default); 60 = 60% of the run-cycle.



F 39 (Opening end-strike point): adjusts the starting point of the motor's end-strike before the opening endstop.

the beginning end-strike point is calculated as a percentage of the leaf's complete travel. (see par. illustration of slow down and end strike areas and points)

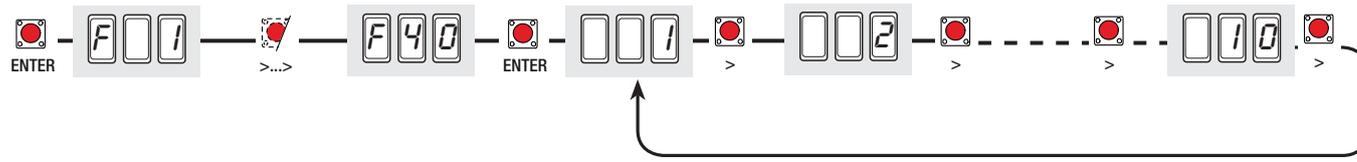
1 = 1% of the travel; 5 = 5% of the run-cycle (default);10 = 10% of the run-cycle.



F 40 (Closing end-strike point): adjusts the starting point of the motor's end-strike before the closing endstop.

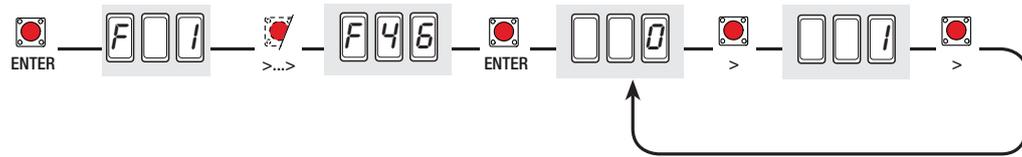
the beginning end-strike point is calculated as a percentage of the leaf's complete travel (see par. illustration of slow down and end strike areas and points)

1 = 1% of the travel; 5 = 5% of the run-cycle (default); 10 = 10% of the run-cycle.



F 46 (Number of motors): setting the number of motors connected to the control panel.

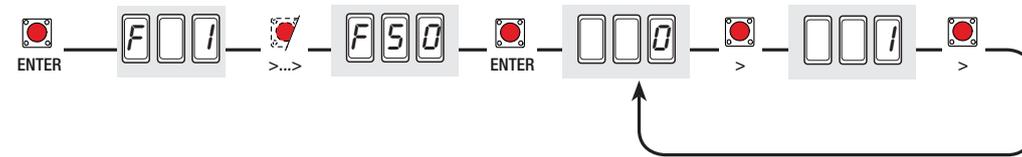
0 = Enabling both motors (M1+M2) (default); 1 = 2 = Enabling just one motor (M2)



F 50 (Save data): saves users and all settings in the memory roll.

Note: this feature appears only if the memory roll is plugged into the mother board.

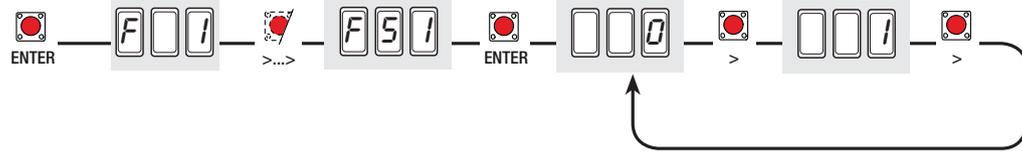
= 0 = Deactivated; 1 = activated



F 51 (Data reading): loads memory roll data onto the mother board.

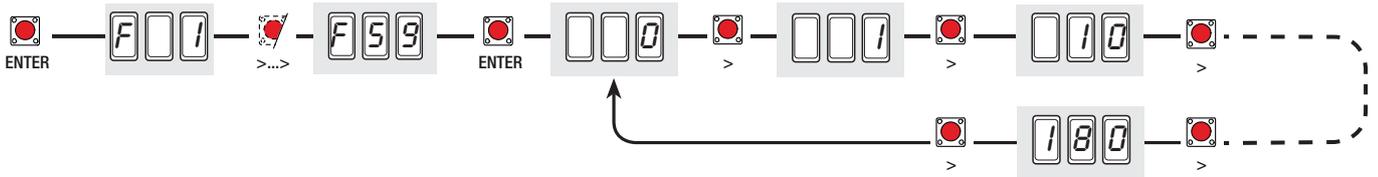
Note: this feature appears only if the memory roll is plugged into the mother board.

= 0 = Deactivated; 1 = activated.



F 59 (Enabling the CAME logo): enables switching on or off of the CAME logo of after the gate is completely closed, it stays on for a time that can be adjusted to between 10" and 180".

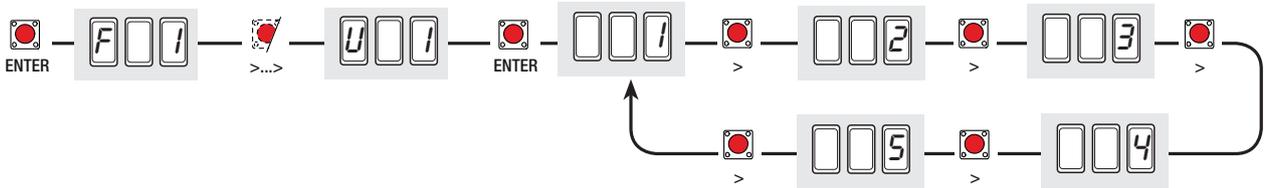
= 0 = Deactivated; 1 = Activated (default); 10 = 10 seconds..... 11 = 11=(seconds 180 = 180=seconds..



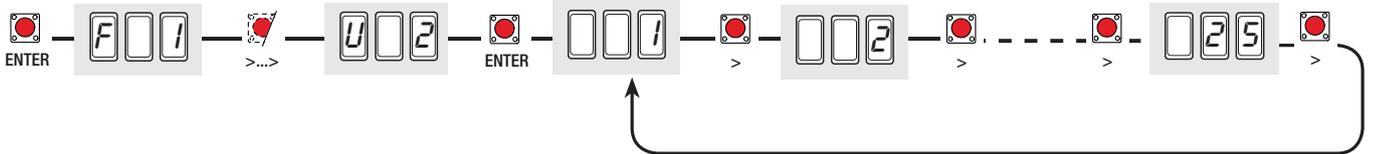
Users menu

U 1 (Adding user with associated command): registering users (max 25 users) associated to a command, via transmitter (see paragraph about registering users with associated command).

1 = 1 = step-step command (open-close); 2 = 2 = 2 = sequential command (open-stop-close-stop); 3 = open only command; 4 = 8 = partial/pedestrian command (see feature F8); 5 = B1-B2 output.

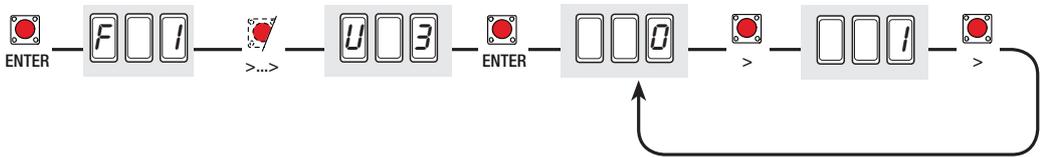


U 2 (Cancelling users): cancelling one user (see paragraph on cancelling one user)



U 3 (Cancelling users): cancelling all users on memory. Press Enter button to confirm cancellation

0 = Deactivated; 1 = 1 = Cancelling all users



Info menu

H 1 (Version): view software version.

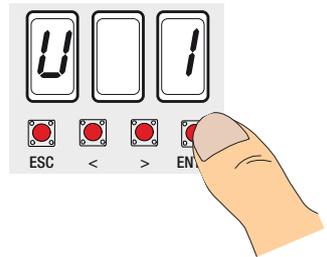


N.B.: during registering / cancelling new users operations, the flashing numbers viewed, are available and usable for any user needing to be registered (maximum 25 users).

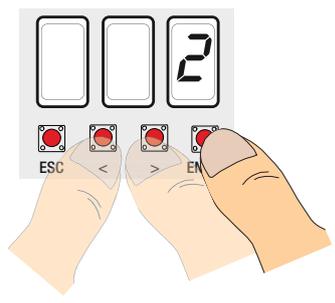
Adding user with associated command

Important! Before entering users, remove the memory roll card if present.

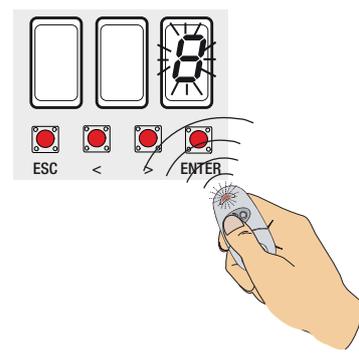
Select U 1.
Press ENTER to confirm.



Select a command to associate to the user.
The commands are:
- step-step (open-close) = 1
- sequential (open-stop-close-stop) = 2;
- open = 3;
- partial opening/pedestrian = 4.
Press ENTER to confirm...



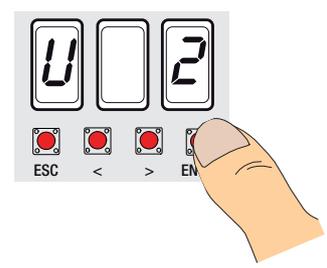
... an available number between 1 and 25 will flash for a few seconds, this number will be assigned to the user after the code is sent via transmitter or other such command device).



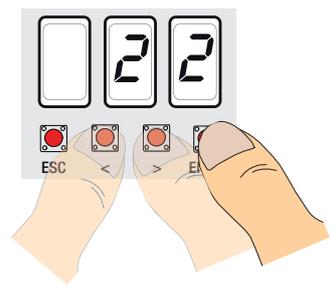
User	Associated command
1 -	
2 -	
3 -	
4 -	
5 -	
6 -	
7 -	
8 -	
9 -	
10 -	
11 -	
12 -	
13 -	
14 -	
15 -	
16 -	
17 -	
18 -	
19 -	
20 -	
21 -	
22 -	
23 -	
24 -	
25 -	

Cancelling one user

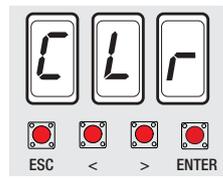
Select U 2.
Press ENTER to confirm.



2) Use the arrow buttons to select the user number you wish to cancel.
Press ENTER to confirm...

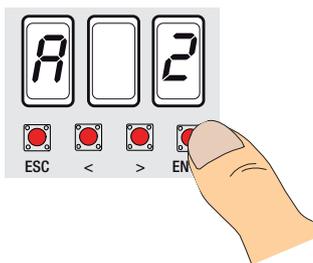


... CLr will be displayed to confirm cancellation.

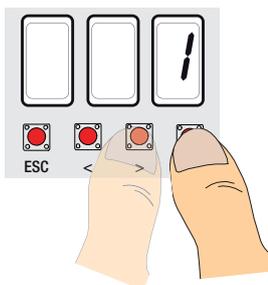


Motor test

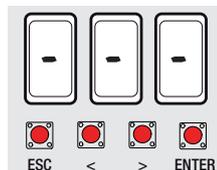
Select A 2.
Press ENTER to confirm.



1) Select 1 to activate the test.
Press ENTER to confirm...

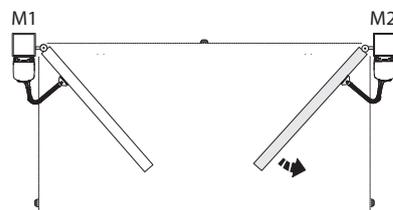
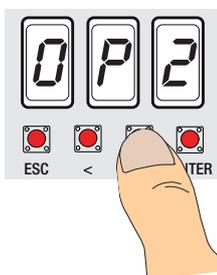


... 3) ... "---" will appear on the screen, waiting for a command...



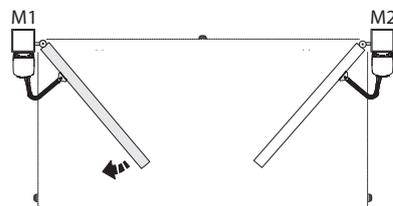
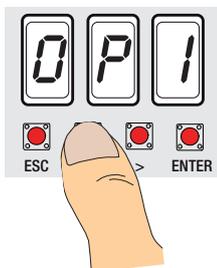
Keep the > button pressed and check that the leaf of the second gearmotor M2 opens completely .

Note: if the leaf closes, invert the motor phases.



Do the same procedure with the < arrow button to check the leaf of the first gearmotor M1.

Note: if the leaf closes, invert the motor phases.



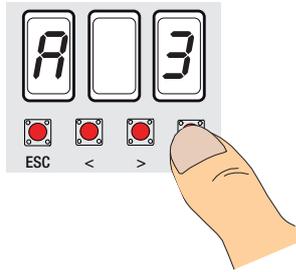
Calibrating travel

N.B.: before calibrating the travel, check that the manoeuvring area is free of any obstacles and check for the presence of any mechanical opening and closing strike-plates.

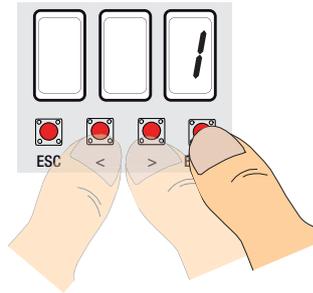
Important! While calibrating, all safety devices will be deactivated until calibration is complete, except for the TOTAL STOP.

Select A 3.

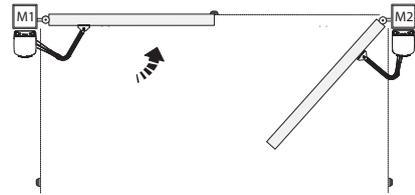
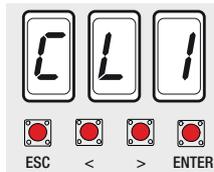
Press ENTER to confirm.



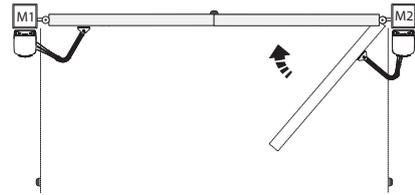
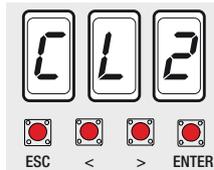
1) Select 1 and press ENTER to confirm the automatic-calibration-of-travel mode...



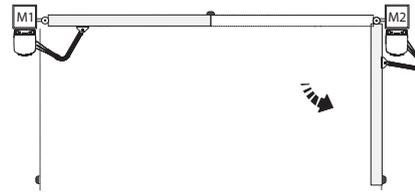
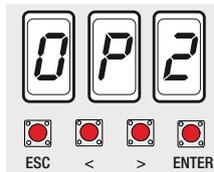
The leaf of the first motor will perform a closing manoeuvre until it reaches the strike plate.



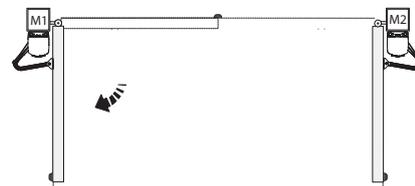
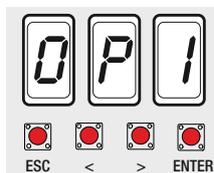
...consequently, the leaf of the second motor will perform the same manoeuvre...



...then the second motor's leaf, will open completely until the end-strike...



... the leaf of the first motor will perform the same manoeuvre.



Error messages

Er1: calibration of motor M1 interrupted; check proper connection and operation of motor M1.

Er2: calibration of motor M2 interrupted; check proper connection and operation of motor M2.

Er3: encoder out-of-order; call for assistance.

Er4: services test error: check proper connections and functioning state of the safety devices.

Er5: insufficient working time; check the set time, it could be insufficient to complete a full cycle.

Er6: maximum number of detected obstacles

C0: contact 1-2 (stop) unused and not deactivated

C1/2/3/4/7/8: unused and not deactivated CX and/or CY contacts

RED flashing LED: command board still not calibrated to the travel.

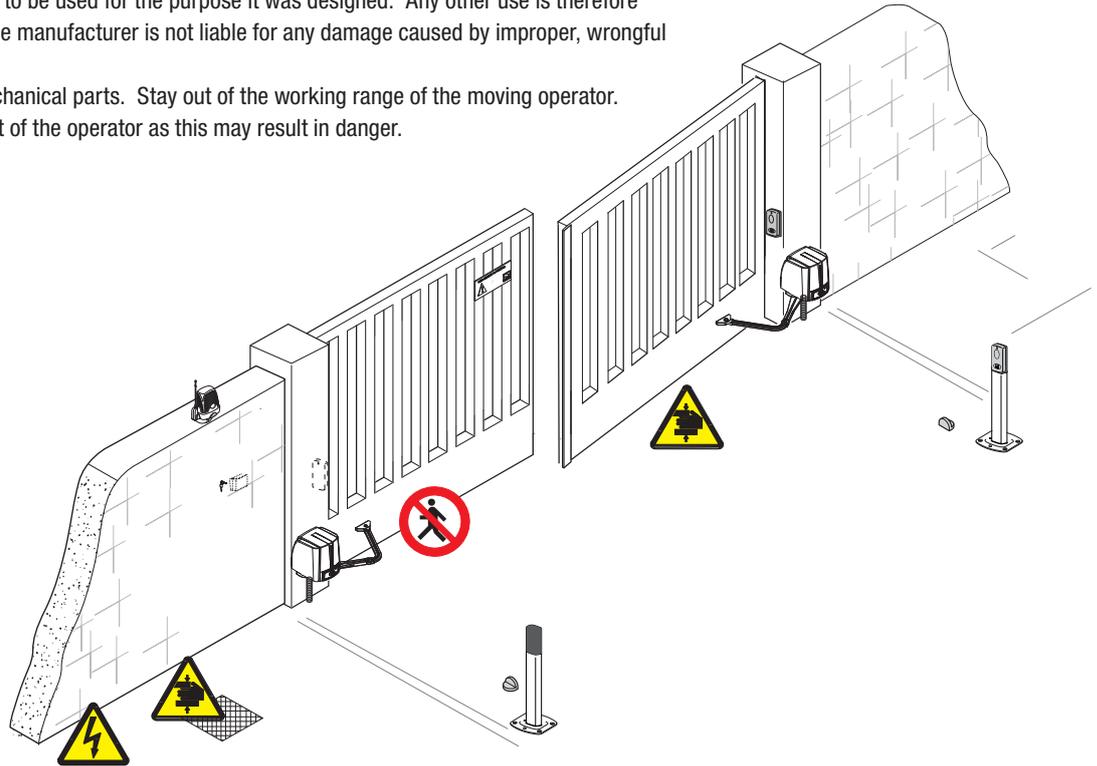
Safety instructions

⚠ Important general safety instructions

This product is only intended to be used for the purpose it was designed. Any other use is therefore improper and dangerous. The manufacturer is not liable for any damage caused by improper, wrongful or unreasonable use.

Stay away from working mechanical parts. Stay out of the working range of the moving operator.

Do not oppose the movement of the operator as this may result in danger.



Do not allow children to play or loiter within the working range of the operator. Keep transmitters and any other command devices away from children, to prevent the operator from being activated by mistake.

Immediately stop using the operator if any anomaly is manifested.



Danger of hand crushing



Danger high voltage



Transit forbidden during operation

Maintenance

Periodic maintenance

⚠ Periodic servicing **performed by end-user** includes: cleaning the photocells' glass, checking the proper working state of the safety devices and making sure the operator is free of any impediments.

We also recommend to periodically check the lubrication the tightness of the bolts and screws on the operator.

To check that the safety devices are working properly, wave an object in front of the photocells during closing; if the operator inverts its direction of travel or blocks movement, then the photocells are working properly. This is the only maintenance job that should be done with the power source on.

Before doing any maintenance or repair job, cut off the main power, to prevent any dangerous situations.

To wipe clean the photocell glass, use a slightly damp cloth, and do not use any solvents or other chemical products that may ruin the device.

Check that there is not vegetation within range of the photocells, and that no objects interfere with the operation of the automated device.

Periodic maintenance log to be done twice yearly by the end-users

Date	Notes	Signature

Extraordinary maintenance

 The following table is used to log extraordinary maintenance, repair and improvement jobs done by the specialised external firms.
N.B.: All extraordinary maintenance jobs must be carried out by skilled technicians.

Extraordinary maintenance log

Installer's stamp	Product name
	Date of job
	Technician's signature
	Customer's signature
Job carried out _____ _____ _____	

Installer's stamp	Product name
	Date of job
	Technician's signature
	Customer's signature
Job carried out _____ _____ _____	

Dismantling and disposal

 On its premises, Cancelli Automatici S.p.A. implements a certified Environmental Management System in compliance with the UNI EN ISO 14001 standard to ensure environmental protection.

Please help us to safeguard the environment. At CAME we believe this to be one of the fundamentals of our market operations and development strategies. Just follow these short disposal instructions:

 DISPOSING OF THE PACKAGING

The components of the packaging (i.e. cardboard, plastic, etc.) are solid urban waste and may be disposed of without much trouble, simply by separating them for recycling.

Before proceeding it is always a good idea to check your local legislation on the matter.

DO NOT DISPOSE OF IN NATURE!

 PRODUCT DISPOSAL

Our products are made up of various materials. The majority of these (aluminium, plastic, iron, electrical wires) is solid urban waste. These can be disposed of at local solid waste management dumps or recycling plants.

Other components (i.e. electronic cards, transmitter batteries, etc.) may contain hazardous substances.

These must therefore be handed over the specially authorised disposal firms.

Before proceeding it is always a good idea to check your local legislation on the matter.

DO NOT DISPOSE OF IN NATURE!



Came Cancelli Automatici s.p.a.

address	Via Martiri della Libertà	Street n.	15	postal code	31030
location	Dosson di Casier	province	Treviso	state	Italia

DECLARATION OF INCORPORATION

DECLARES THAT THE PARTLY COMPLETED MACHINERY
DRIVES FOR SWING GATES

A180; A1824; A18230; A3000; A3000A; A3006; A3100; A3106; A3024; A3024N; A5000; A5100;
A5000A; A5006; A5106; A5024; A5024N
AX302304; AX402306; AX412306; AX71230; AX3024; AX5024
STYLO-ME; STYLO-BS; STYLO-BD; STYLO-RME
KR300D; KR300S; KR310D; KR310S; KR510D; KR510S
FROG-A; FROG-AE; FROG-AV; FROG-A24; FROG-A24E; FROG-B; FROG-BI; FROG-J
FROG-PM4; FROG-PM6
MYTO-ME
F7000; F7001; F7024; F7024N; F4000; F4024
F1000; F1100; F1024; F500; F510
FE40230; FE4024; FE40230V; FE4024V
FA40230; FA40230CB; FA4024; FA4024CB

MEET THE APPLICABLE ESSENTIAL REQUIREMENTS

1.1.3; 1.1.5; 1.2.1; 1.2.2; 1.3.2; 1.3.7; 1.3.8.1; 1.4.1; 1.4.2; 1.5.1; 1.5.6; 1.5.8; 1.5.9; 1.5.13; 1.6.1;
1.6.3; 1.6.4; 1.7.1; 1.7.2; 1.7.4

COMPLIES WITH THE PROVISIONS OF THE FOLLOWING DIRECTIVES

DIRECTIVE 2006/42/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 17 May 2006 on machinery, and amending Directive 95/16/EC.

DIRECTIVE 2004/108/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 15 December 2004 on the approximation of the laws of the Member States relating to electromagnetic compatibility.

PERSON AUTHORISED TO COMPLETE THE RELEVANT TECHNICAL DOCUMENTATION

Came Cancelli Automatici s.p.a.

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location	Dosson di Casier	province	Treviso	state	Italia

The pertinent technical documentation has been drawn up in compliance with attached document IIB

Came Cancelli Automatici S.p.A., following a duly motivated request from the national authorities, undertakes to provide information related to the quasi machines,

and FORBIDS

commissioning of the above mentioned until such moment when the final machine into which they must be incorporated, has been declared compliant, if pertinent, to 2006/42/CE.

Dosson di Casier (TV)
06 March 2012

Gianhi Michielan
Managing Director

DDI BEN **A001b** ver. 4.2 February 2011
Translation of the Declaration in the original language

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CAME GROUP
Freedom in motion



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