

**CAME.COM** 



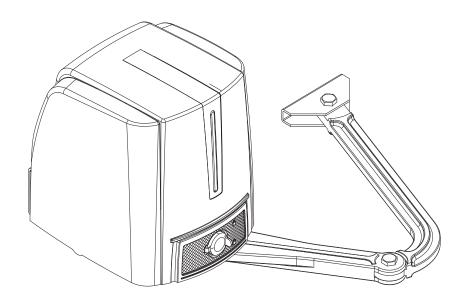
## **Swing-gate operator**

FA01047-EN





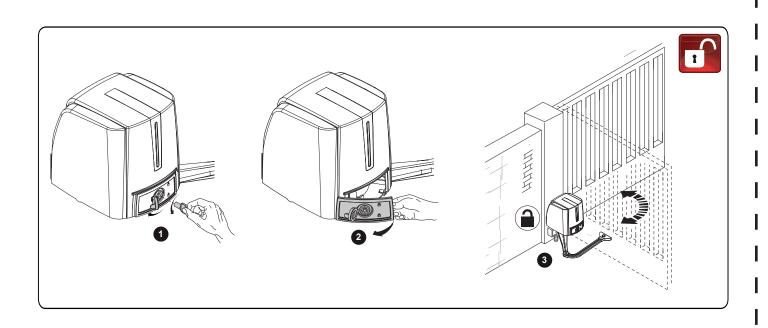


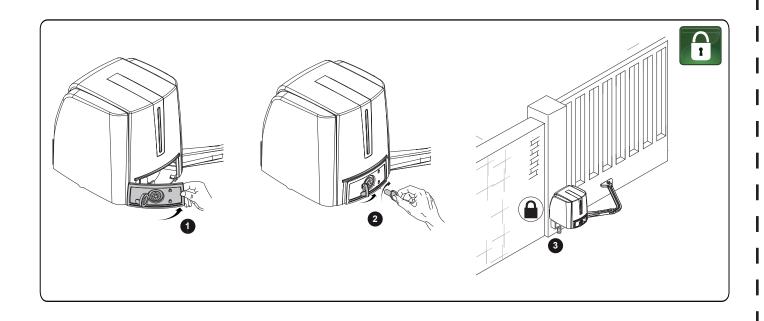


## FA7024CB / FST23DLC

**INSTALLATION MANUAL** 

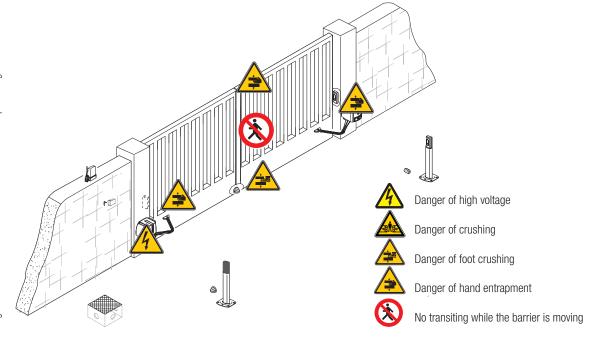
EN English





# WARNING! Important safety instructions. Follow all of these instructions. Improper installation can cause serious bodily harm. Before continuing, also read the general precautions for users.

Before continuing, also read the general precautions for users. • Use this product only for its specifically intended use. Any other use is hazardous. • The manufacturer can not be held liable for any damage caused by improper, unreasonable, and erroneous use. • This manual's product is defined by the Machinery Directive 2006/42/CE as partly-completed machinery. • Partly-completed machinery is an assembly that almost constitutes a machine, but which, alone, cannot ensure a clearly defined application. • Partly-completed machinery is only destined to be incorporated or assembled to other machinery or other partly-completed machinery or apparatuses to build machinery that is regulated by the Machinery Directive 2006/42/CE. • The final installation must comply with the Machinery Directive 2006/42/CE. • The final installation must comply with the Machinery Directive 2006/42/CE. • The final installation must comply with the Machinery Directive 2006/42/CE. • The final installation must comply with the Machinery Directive 2006/42/CE. • The final installation must comply with the Machinery Directive 2006/42/CE. • The final installation must comply with the Machinery Directive 2006/42/CE. • The final installation install does not be part or on the destined by applicable standards and laws. • Do not install the operator or onto elements that could yield and bend. If necessary, add suitable reinforcements to the anchoring points • Do not install door or gate leaves on tilted surfaces. • Check that the temperature ranges given and those of the location match. • Check that no lawn watering devices spray the product with water from the bottom up. • Demarcate the entire site to prevent unauthorized personnel to enter; especially children and minors. • Use suitable protections to prevent any mechanical hazards due to persons lotering within the operating range of the machinery. • Avoid crushing over fingers between the transmission arm and the mechanical stops. • Do not stand between the opening leaf and the fence wall, to avo



#### LEGEND

- This symbol shows which parts to read carefully.
- ⚠ This symbol shows which parts describe safety issues.
- This symbol shows which parts to tell users about.

The measurements, unless otherwise stated, are in millimeters.

#### DESCRIPTION

**FA7024CB** - Irreversible operator featuring a control board with functions display, on-board radio decoding and hinged transmission arm for swing gates with leaves each up to 2.3 m long and C max. 200 mm.

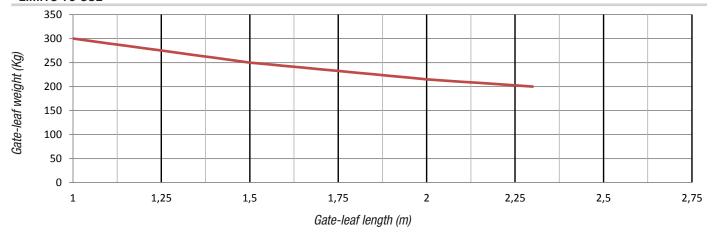
**FTS23DLC** - Irreversible operator featuring a control board with functions display, on-board radio decoding and hinged transmission arm for swing gates with leaves each up to 2.3 m long and C max. 300 mm.

#### **INTENDED USE**

This operator is designed to power swing gates for residential and apartment block use.

Do not install of use this device in any way, except as specified in this manual.

#### LIMITS TO USE



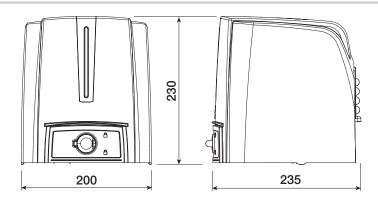
△ It always advisable to fit an electric lock on swing gates. It makes for a more reliable closure.

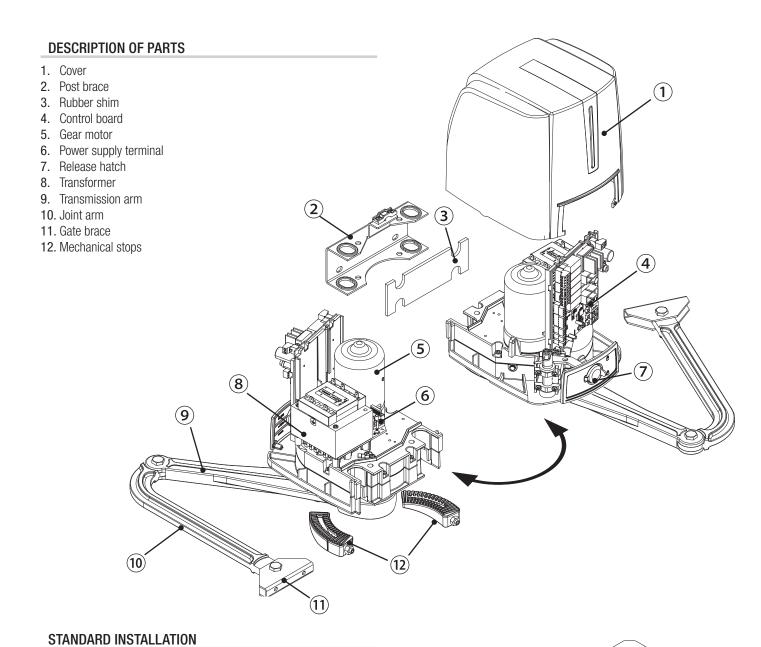
#### **TECHNICAL DATA**

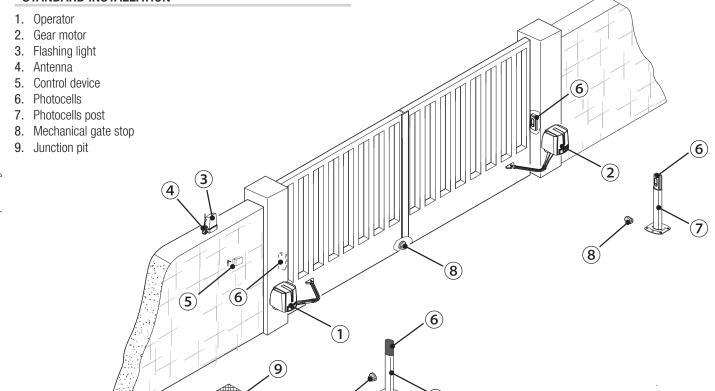
Туре	FA7024CB - FTS23DLC
Protection rating (IP)	54 series
Power supply (V - 50/60 Hz)	230 AC
Motor power supply (V)	24 DC
Stand-by consumption (W)	5.5 series
Stand-by consumption with the RGP1 (W) module	0.5 series
Power (W)	140 series
Torque (Nm)	180 max
Opening time at 90° (s)	13 to 30
Cycles/hour (no.)	65 series
Operating temperature (°C)	-20 to +55
Insulation class	1
Acoustic pressure dB (A)	≤70
Weight (kg)	12 series

#### **DIMENSIONS**

(mm)

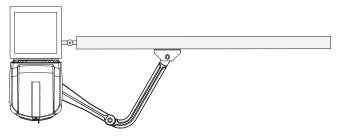


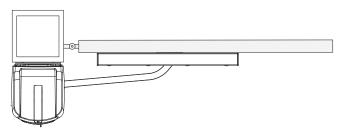




(8)

#### APPLICATION EXAMPLES





Fitted with standard jointed transmission-arm.

Fitted with the STYLO-BD straight transmission-arm and slide rail.

#### **GENERAL INSTRUCTIONS FOR INSTALLING**

#### PRELIMINARY CHECKS

△ Before beginning the installation, do the following:

- check that the bracketsanchoring point is resistant;
- check that there are no obstruction or impediments near the operator;
- set up suitable tubes and conduits for the electric cables to pass through, making sure they are protected from any mechanical damage.

#### **CABLE TYPES AND MINIMUM THICKNESSES**

Connection	cable length		
Connection	< 20 m	20 < 30 m	
Input voltage for the product 230 V AC (1P+N+PE)	3G x 1.5 mm <sup>2</sup>	3G x 2.5 mm <sup>2</sup>	
24 V DC gearmotor	3 x 1.5 mm <sup>2</sup>	3 x 2.5 mm <sup>2</sup>	
Electric lock	2 x 0.5	2 x 0.5 mm <sup>2</sup>	
Flashing light	2 x 0.5	mm <sup>2</sup>	
Command and control devices	I devices 2 x 0.5 mm <sup>2</sup>		
TX Photocells	2 x 0.5	mm <sup>2</sup>	
RX photocells 4 x 0.5 mm <sup>2</sup>		mm <sup>2</sup>	

- △ When operating at 230 V and outdoors, use H05RN-F-type cables that are 60245 IEC 57 (IEC) compliant; whereas indoors, use H05VV-F-type cables that are 60227 IEC 53 (IEC) compliant. For power supplies up to 48 V, you can use FROR 20-22 II-type cables that comply with EN 50267-2-1 (CEI).
- To connect the antenna, use the RG58 (we suggest up to 5 m).
- For combined connection and CRP, use a UTP CAT5-type cable (up to 1,000 m long).
- If cable lengths differ from those specified in the table, establish the cable sections depending on the actual power draw of the connected devices and according to the provisions of regulation CEI EN 60204-1.
- For multiple, sequential loads along the same line, the dimensions on the table need to be recalculated according to the actual power draw and distances. For connecting products that are not contemplated in this manual, see the literature accompanying said products

#### INSTALLING

The following drawings are mere examples in that the space for fastening the operator and accessories varies depending on the installation area. It is up to the installer to find the most suitable solution.

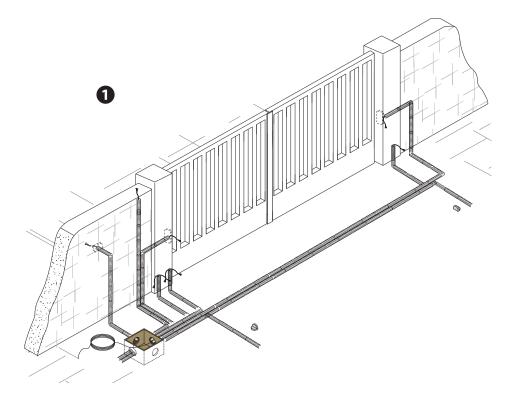
They refer to the assembly of the gearmotor and of the arms on the left and with inwards opening.

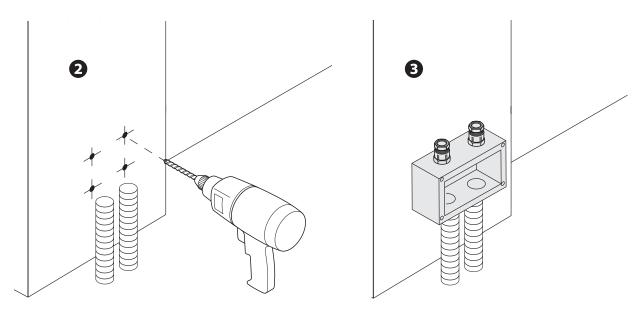
- The gearmotor and arms assembly on the right is symmetrical.
- For outward openings, there is a dedicated chapter: OUTWARD OPENING CONNECTIONS AND INSTALLING.

#### **CORRUGATED TUBE LAYING**

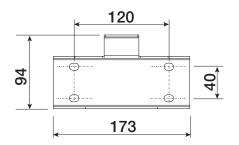
Fit junction boxes and corrugated tubing needed for the incoming connections from the distribution pit.

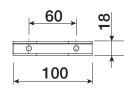
The number of tubes depends on the type of system and the accessories you are going to fit. You will need at least two corrugated tubes where the operator is installed (on the gate leaf that opens first).





Establish where you will fit the gate brace and measure where the gate-post brace will fit. Make sure to respect the quotas shown in the drawing and table.



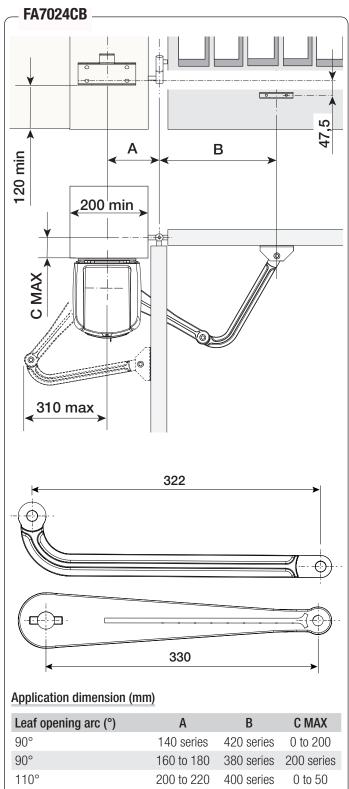


FST23DLC

90°

90°

110°



410 max
414
390
Application dimension (mm)  Leaf opening arc (°)  A  B  C MAX

140 series

160 to 180

200 to 220

Leaf opening arc (°)	Α	В	C MAX
90°	140 series	420 series	0 to 200
90°	160 to 180	380 series	200 series
110°	200 to 220	400 series	0 to 50

Page 8 - Manual FA01047-EN - 08/2018 - © CAME S.p.A. - Original instructions

0 to 300

300 series

0 to 50

490 series

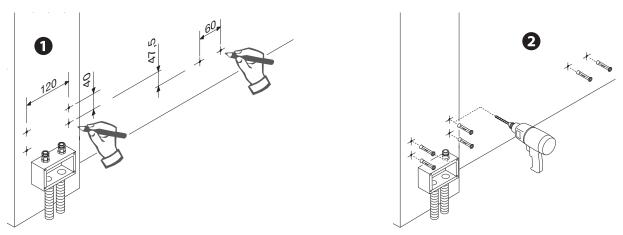
460 series

470 series

Marked the spots where the gate-post brace and gate brace will be fitted. The center-distances of the holes on the braces are shown in the Application dimensions paragraph.

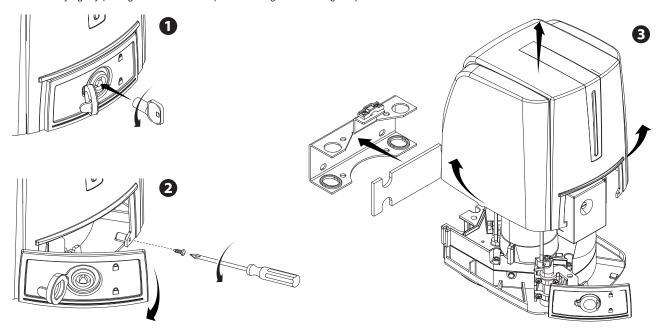
Drill the anchoring points, fit the dowels or use plugs that will hold fast the screws.

The drawings are mere examples. Installers should carefully choose the most suitable set up according to the type and thickness of the gate leaf.



Before installing the operator, remove the cover as described below:

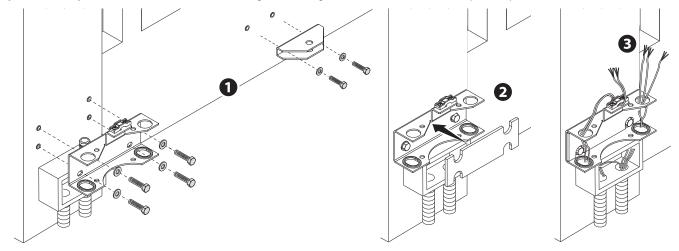
- release the gear motor •.
- open the hatch door and loosen the screw that fastens the casing to the gearmotor 2.
- llift the cover by lightly pulling on its sides and pull out the gearmotor's gate-post brace 3.



Use suitable screws to fasten the brackets  $oldsymbol{0}$ .

Fit the rubber shim into the gate-post brace 2.

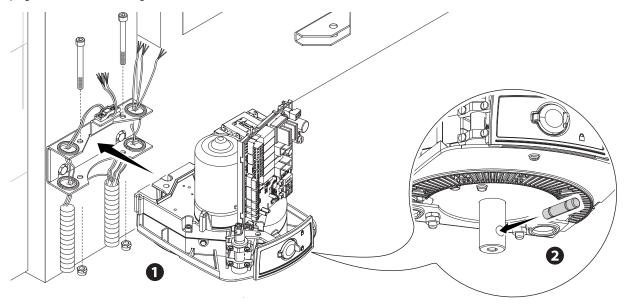
Lay the necessary electrical cables and run them through the cable gland and lock them to the clamp of the post brace §.



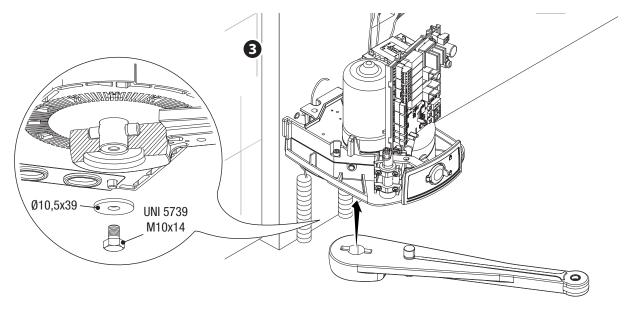
Page 9 - Manual FA01047-EN - 08/2018 - © CAME S.p.A. - Original instructions

#### **FASTENING THE OPERATOR**

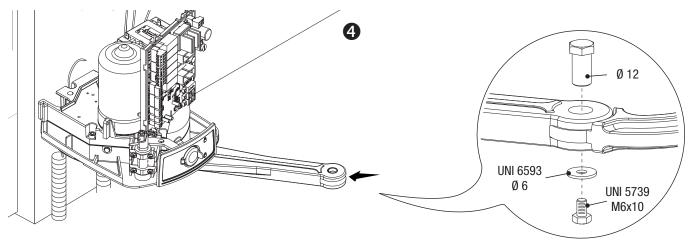
Fit the plug into the socket on the gearmotor drive-shaft 2.



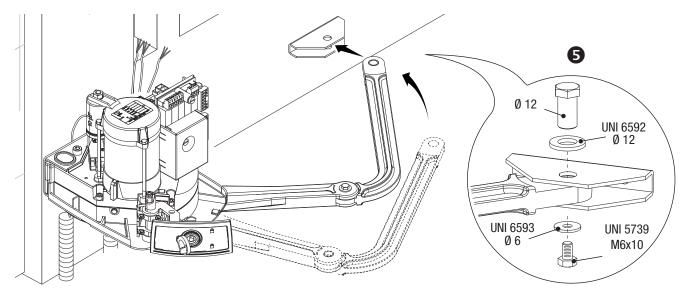
Fasten the transmission arm to the drive-shaft using the slow-shaft washer and bolt  ${\bf 3}$ .



Pin the driven arm to the transmission arm and tighten the washer and bolt  $oldsymbol{4}$ .



Release the gearmotor (see RELEASING THE GEARMOTOR) and fit the driven arm to the gate brace as shown in the drawing 9.



△ CAUTION! If no gate-leaf stops are in place, you must fit the mechanical stops.

#### **FASTENING THE MECHANICAL STOPS**

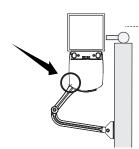
Release the gearmotor.

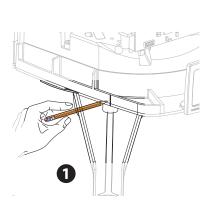
#### When opening.

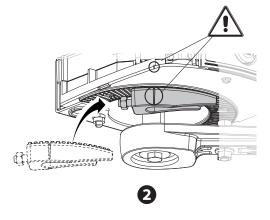
Entirely open the gate leaf. Mark the casing where the center of the arm is **①**.

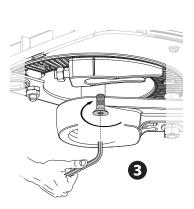
Manually close the gate leaf. Place the mechanical stop under the casing. The mark on the case must match the groove on the stop, as shown ②.

Fasten the stop using the screw 3.







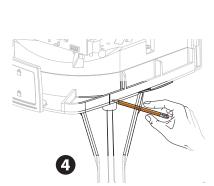


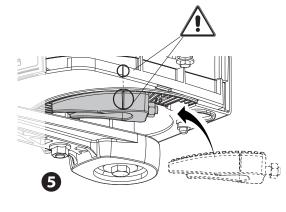
#### When closing.

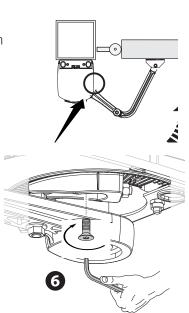
Close the leaf. Mark the casing where the center of the arm is 4.

Manually open the leaf. Place the second mechanical stop against the opposite side of the arm. The mark on the casing must match the groove on the stop **⑤**.

Fasten the stop using the screw **6**.

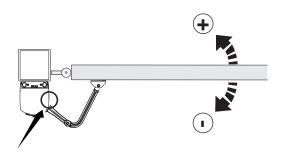


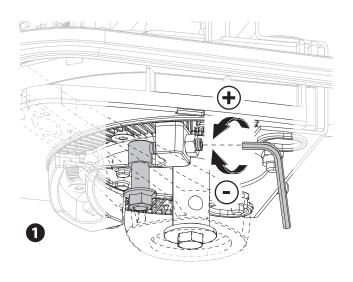


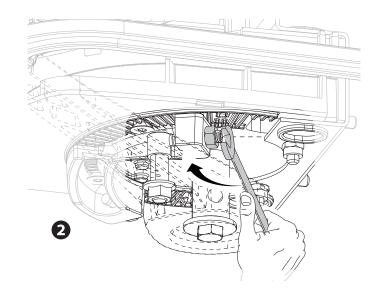


#### **ESTABLISHING THE LIMIT-SWITCH POINTS**

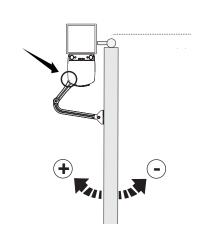
With the gearmotor released and the gate-leaf closed, adjust the closing limit-switch grub screw by turning it clockwise or counterclockwise  $\bullet$ . Tighten the nut to fasten the grub-screw  $\bullet$ .

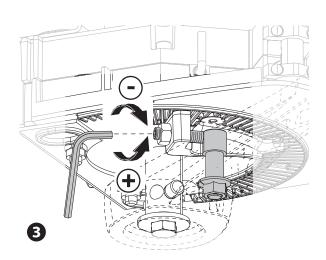


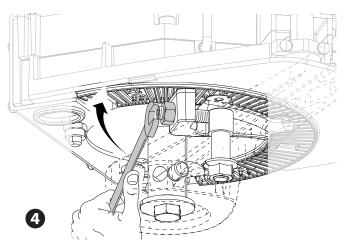




In the same way, set the opening limit-switch on the other stop's grub screw  $\ensuremath{\mathfrak{3}}\ensuremath{\mathfrak{4}}.$ 







#### **ELECTRICAL CONNECTIONS AND PROGRAMMING**

△ Caution! Before working on the control panel, cut off the mains power supply and remove any batteries.

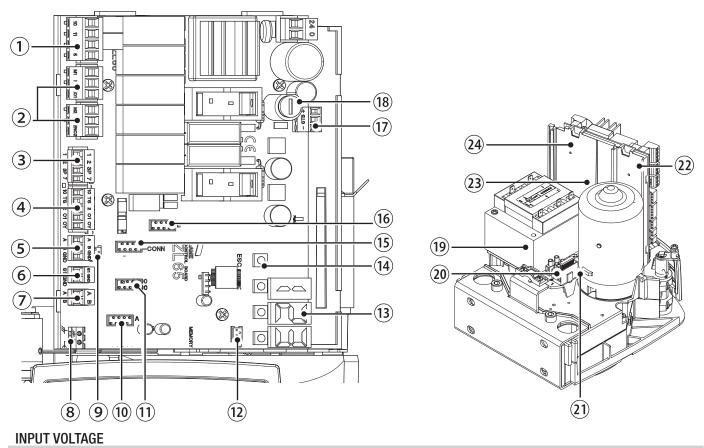
All wiring connections are quick-fuse protected.

FUSES	ZL65
LINE - Line	2 A-F = 230 V
ACCESSORIES - Accessories	2 A-F

#### **DESCRIPTION OF PARTS**

- 1. Terminals for signaling devices
- 2. Gearmotors with encoder terminals
- 3. Control devices terminals
- 4. Safety devices terminals
- 5. CRP connection terminals
- 6. Keypad selector terminal
- 7. Terminals for transponder devices
- 8. Antenna terminal
- 9. CONNECT GW module connector
- 10. AF card slot
- 11. R700/R800 card connector
- 12. Memory Roll card connector
- 13. Display

- 14. Programming buttons
- 15. Connector for the RIO-CONN card
- 16. RSE card slot
- 17. Terminals for the RGP1 module
- 18. Accessories fuse
- 19. Transformer
- 20. Power supply terminal board
- 21. Line fuse
- 22. Housing for the CONNECT GW module
- 23. Housing for the RGP1 module
- 24. Housing for the RLB card





Gate-open signal output.

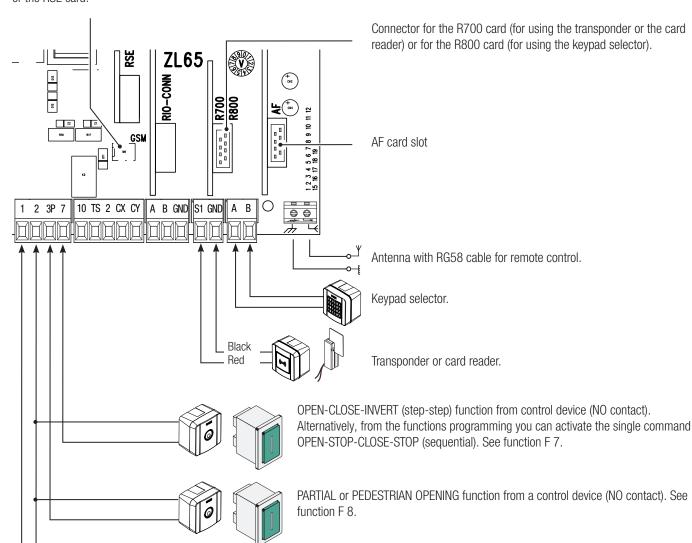
(Contact rated for: 24 V AC/DC - 3 W max.). See function F 10.

Output for connecting either flashing or cycle light. (Contact rated for: 24 V AC/DC - 25 W max). See function F 18.

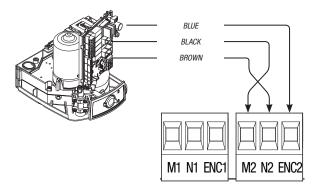
WARNING! YOU MUST CUT OFF THE MAINS POWER SUPPLY and remove the batteries - if present, before fitting any plug-in card (such as AF, R800).

Connector for the CONNECT GW module.

CONNECT GW does not work if it is connected to the RGP1 module or the RSE card.



STOP button (NC contact). For stopping the gate while excluding automatic closing. To resume movement press the control button or use another control device. See function F1.



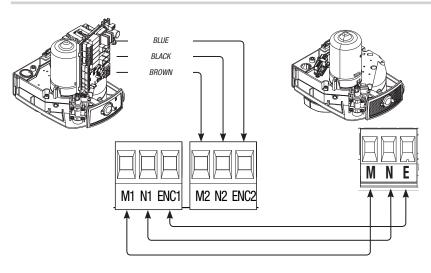
Operator installed on the left (outer view). (Default setting)



Operator installed on the right (inner view).

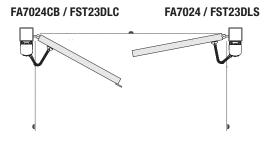


#### CONNECTING THE OPERATOR AND GEARMOTOR

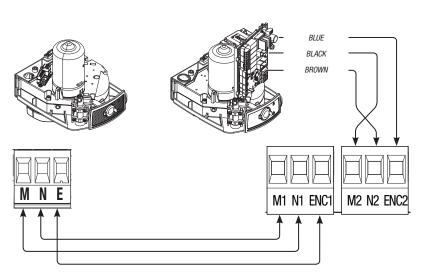


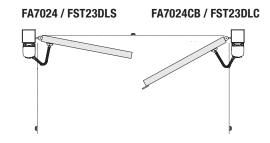
Operator installed on the left and gearmotor installed on the right (inner view) with operator delayed when closing.

(Default setting)



Operator fitted to the right and gearmotor to the left (inner view) with operator delayed when opening.





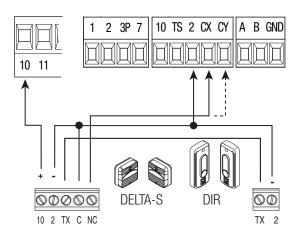
#### **SAFETY DEVICES**

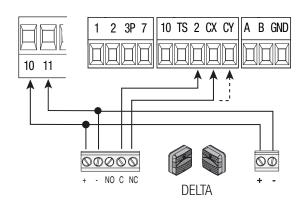
#### **Photocells**

Configure contact CX or CY (NC), safety input for photocells.

See CX input functions (Function F2) or CY (Function F3) in:

- C1 reopening during closing. When the gate is closing, opening the contact triggers the inversion of movement until the gate is fully open again;
- C2 reclosing during opening. When the gate is opening, opening the contact triggers the inversion of movement until the gate is completely closed.
- C3 partial stop. Stopping of the gate, if it is moving, with consequent automatic closing (if the automatic closing function has been entered);
- C4 obstruction wait. Gate stops, if it is moving, and once the obstruction is removed, it resumes its movement.
- If contacts CX and CY are not used they should be deactivated during programming.





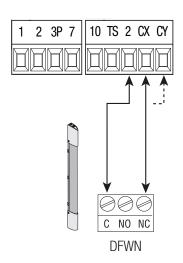
#### **Sensitive Safety Edges**

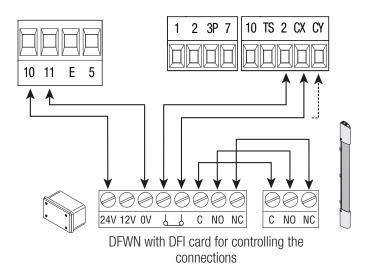
Configure contact CX or CY (NC), safety input for sensitive safety-edges.

See CX input functions (Function F2) or CY (Function F3) in:

- C7 reopening during closing. When the gate is closing, opening the contact triggers the inversion of movement until the gate is fully open again;
- C8 reclosing during opening. When the gate is opening, opening the contact triggers the inversion of movement until the gate is fully closed.

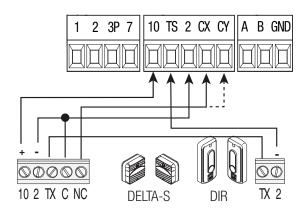
If contacts CX and CY are not used they should be deactivated during programming.

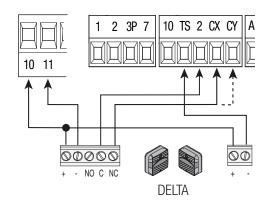




#### Connecting the safety devices (i.e. the safety test)

At each opening and closing command, the control board checks the efficacy of the safety devices (such as photocells). Any malfunction will inhibit any command and E 4 will appear on the display. For this type of connection, enable function F 5.





#### **WIRELESS DEVICES**

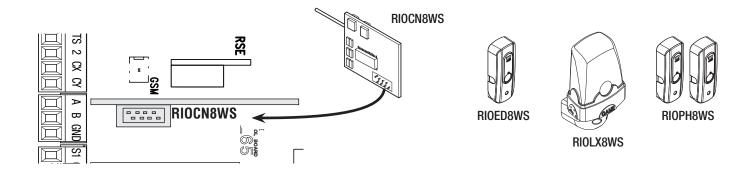
Plug the RIOCN8WS card into its corresponding connector on the control board.

Set the function which is to be associated with the wireless device (F 65, F66, F 67 and F 68).

Configure the wireless accessories (see the folder of the accessory you want to configure).

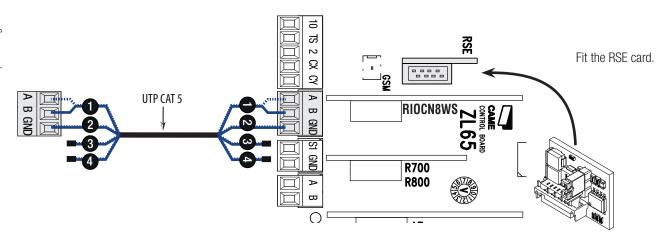
If the devices are not configured with the RIOCN8WS card, the E 18 error message is displayed.

△ If the system has radiofrequency interferences, the wireless system will inhibit the operator's normal operating mode and the E 17 error message is displayed.

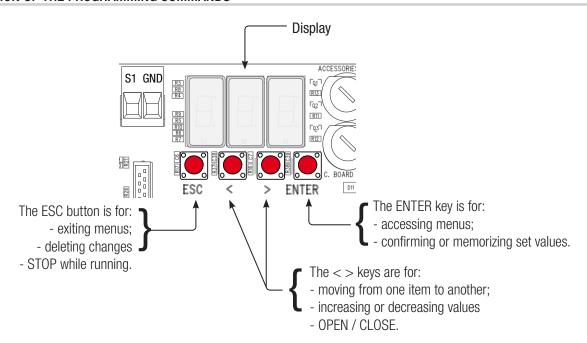


#### CONNECTION WITH CAME REMOTE PROTOCOL (CRP)

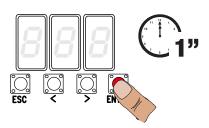
Serial connection of the RS485 with RSE card to the home & building automation system via CRP (Came Remote Protocol).



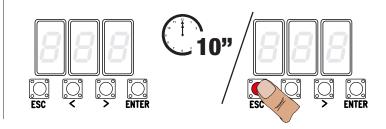
#### **DESCRIPTION OF THE PROGRAMMING COMMANDS**



To enter the menu, keep the ENTER button pressed for at least one second.



To exit the menu, wait 10 seconds or press ESC.



#### **FUNCTIONS MENU**

⚠ When programming, the operator needs to be in stop mode.

<u> </u>	When programming, the operator needs to be in stop mode.		
F1	Total stop [1-2]	NC input – Gate stop that excludes any automatic closing; to resume movement, use the control device. The safety device should be fitted into 1-2. If unused, select OFF.  OFF (default) / ON	
F2	Input [2-CX]	Input NC - Can associate: C1 = reopening during closing by photocells, C2 = reclosing during opening by photocells, C3 = partial stop, C4 = obstruction wait, C7 = reopening during closing by sensitive safety-edges (with clean contact), C8 = reclosing during opening by sensitive safety-edges (with clean contact).  The C3 Partial stop function only appears if the F 19 Automatic closing time function is activated.  OFF (default) / C1 / C2 / C3 / C4 / C7 / C8	
opening by photocells, C3 = partial stop, C4 = obstruction wait, C7 = reopening by sensitive safety-edges (with clean contact), C8 = reclosing during opening by sensitive safety-edges (with clean contact).		The C3 Partial stop function only appears if the F 19 Automatic closing time function is activated.	
F5	Safety test	After every opening or closing command, the board will check whether the photocells are working properly.  — The safety test is always active for wireless devices.	

**OFF** (**default**) / **1** = CX / 2 = CY / 4 = CX + CY

The gate opens and closes by keeping the button pressed. Opening button on contact 2-3P and

F23	Delay in opening time	After an opening command, the M1 gearmotor starts delayed. The delay time is settable between one and ten seconds. $0 = Deactivated / / 2 = 2 seconds (default) / / 10 = 10 seconds$
F24	Closing delay time	After either a closing command or an automatic closing, the M2 gearmotor starts delayed. The delay time is adjustable between one and five seconds. $0 = Deactivated //5 = 5 seconds (default) //25 = 25 seconds$
F26	Closing thrust time	After an opening or closing command, the gearmotor thrusts inward for an adjustable time between one and two seconds. $1 = 1 \ second \ (default) / 2 = 2 \ seconds$
F27	Lock time	After an opening or closing command, the electric lock releases for an adjustable time between one and four seconds.  1 = 1 second (default) //4 = 4 seconds
F28	Gate travel speed	Setting the gate's opening and closing speeds, calculated as a percentage.  60 = 60% of the maximum speed // 100 = 100% of the maximum speed (default)  For FA7024CB gearmotors, the minimum speed is 50.
F30	Slow-down speed	Setting the gate's opening and closing slow-down speed, calculated as a percentage. $10 = 10\%$ of the maximum speed // $50 = 50\%$ of the maximum speed ( <b>default</b> ) // $60 = 60\%$ of the maximum speed For FA7024CB gearmotors, the minimum speed is 30.
F33	Calibration speed	Setting the gearmotors' speeds during calibration, calculated as a percentage. $20 = 20\%$ of the maximum speed / / $50 = 50\%$ of the maximum speed ( <b>default</b> ) / / $60 = 60\%$ of the maximum speed
F34	Travel sensitivity	Adjusting obstruction detection sensitivity during gate travel. <b>10</b> = Maximum sensitivity // <b>100</b> = Minimum sensitivity ( <b>default</b> )
F35	Slow-down sensitivity	Adjusting obstruction detection sensitivity during slow-down. <b>10</b> = Maximum sensitivity // <b>100</b> = Minimum sensitivity ( <b>default</b> )
F36	Adjusting the partial opening	Adjustment as a percentage of total travel, during gate opening.  10 = 10% of the travel / / 40 = 40% of the travel (default) / / 80 = 80% of the travel
F37	Opening slow-down point for the M1 motor	Adjustment as a percentage of total travel, of the beginning slow-down point of gearmotor M1 during opening.  This function only appears if the Encoder function is activated.  1 = 1% of the travel // 25 = 25% of the travel (default) // 60 = 60% of the travel
F38	Closing slow-down point of the M1 motor	Adjustment as a percentage of total travel, of the beginning slow-down point of gearmotor M1 during closing.  This function only appears if the Encoder function is activated.  1 = 1% of the travel // 25 = 25% of the travel (default) // 60 = 60% of the travel
F39	Opening approach point of the M1 motor	Adjusting as a percentage of the total travel, the gearmotor M1 opening approach starting point.  This function only appears if the Encoder function is activated.  1 = 1% of the travel // 10 = 10% of the travel (default)
F40	Closing approach point for motor M1	Adjusting as a percentage of the total travel, the gearmotor M1 closing approach starting point.  This function only appears if the Encoder function is activated.  1 = 1% of the travel // 10 = 10% of the travel (default)
F41	Opening slow-down point for the M2 motor	Adjustment as a percentage of total travel, of the beginning slow-down point of gearmotor M2 during opening.  This function only appears if the Encoder function is activated.  1 = 1% of the travel // 25 = 25% of the travel (default) // 60 = 60% of the travel
F42	Closing slow-down point of the M2 motor	Adjustment as a percentage of total travel, of the beginning slow-down point of gearmotor M2 during closing.  This function only appears if the Encoder function is activated.  1 = 1% of the travel // 25 = 25% of the travel (default) // 60 = 60% of the travel

#### **SETTING UP**

Once the connections are all set, have skilled, qualified staff commission the barrier into service.

Before continuing, make sure that the way is clear from any obstruction.

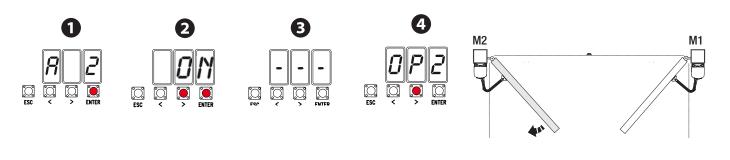
Power up and begin configuring the system. **Important!** Start programming by first doing the following functions:

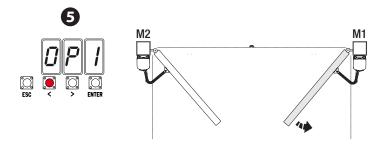
- MOTOR TYPE (A 1);
- NUMBER OF MOTORS (F 46);
- TRAVEL CALIBRATION (A 3).

#### **MOTORS TEST**

- **1** Select A 2. Press ENTER to confirm.
- 2 Select ON and press ENTER to confirm the motors test procedure.
- 3 The following [---] characters will be displayed while waiting for a command.
- 4 Keep pressed the > key and check whether the second gearmotor's leaf (M2) will perform an opening maneuver.
- **5** Perform the same procedure with the < key to check the first gearmotor leaf (M1).

lf the leaf performs an opening maneuver, invert the motor's phases.

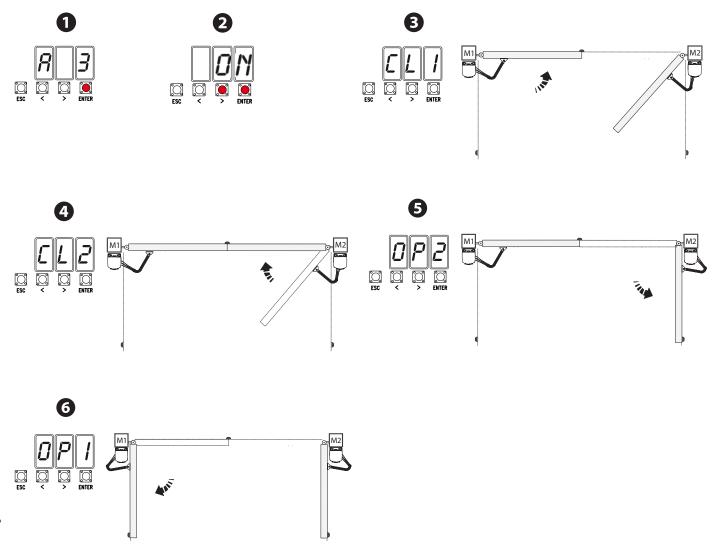




Before calibrating the gate travel, position the gate half-way, check that the maneuvering area is clear of any obstruction and check that there are mechanical opening and closing stops.

Important! During calibration, all safety devices will be disabled.

- **1** Select A 3 and press ENTER to confirm.
- 2 Select ON and press ENTER to confirm the automatic travel calibration operation.
- 3 The first gearmotor leaf will perform a closing maneuver until the closing strike...
- 4 ... then, the second gearmotor leaf will perform the same maneuver...
- **5** ...the second gearmotor's leaf will perform an opening maneuver until the closing strike...
- **6** ... the first gearmotor's leaf will perform the same maneuver.



#### **MANAGING USERS**

When adding and deleting users, the flashing numbers appearing are those numbers that are available and usable to assign to a new user (max. 250 users).

Before registering the users, make sure the AF radio-frequency card is fitted into the connector (see paragraph called CONTROL DEVICES).

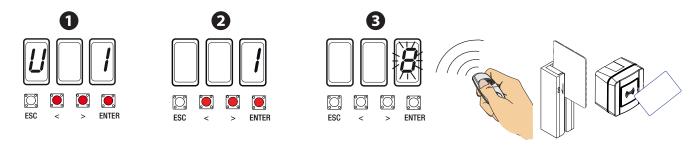
#### **ENTERING A USER WITH AN ASSOCIATED COMMAND**

- Select U1. Press ENTER to confirm.
- 2 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...

3 ... a number between 1 and 250 will start flashing for a few seconds. Send the code from the transmitter or other control device such as a sensor, card reader or keypad selector.

If you want to add another command on the same transmitter, repeat the procedure and associated it on another button.



Register the users in the REGISTERED USERS list.

#### LIST OF REGISTERED USERS.

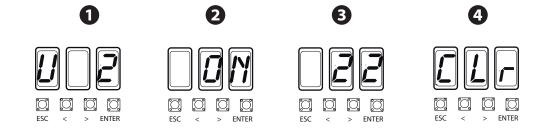
Download the LIST OF REGISTERED USERS form from the portal docs.came.com Enter L20180423.

#### **DELETING SINGLE USERS**

- 1 Select U2. Press ENTER to confirm.
- **2** Select **ON**. Press ENTER to confirm the deletion procedure.

Use the arrow keys select the number of the user you wish to delete.

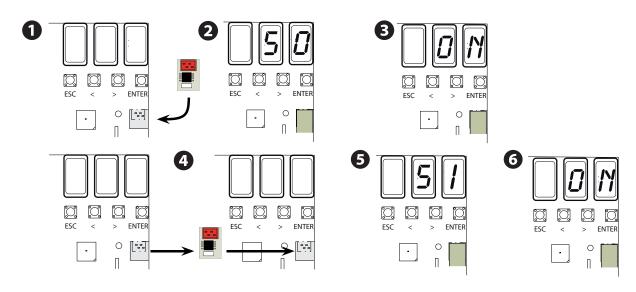
- 3 Press ENTER to confirm.
- 4 ... CLr will appear on the screen to confirm deletion.



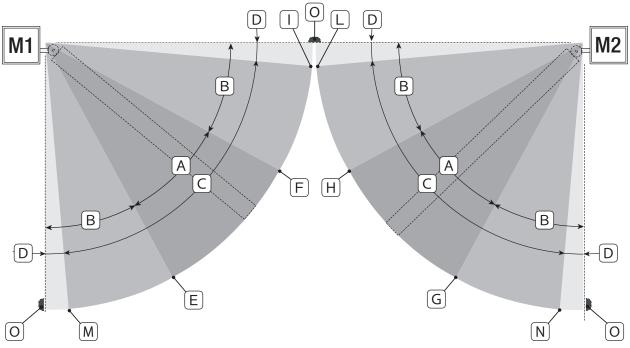
For saving user and system configuration data with the Memory Roll, and for then reusing them on another control board, even on fitted into another system.

Caution! Fitting and extracting the Memory Roll must be done with the mains power disconnected.

- Fit the Memory Roll into the its corresponding connector on the control board.
- 2 Select **F50**. Press ENTER to confirm.
- **3** Select **ON**. Press ENTER to confirm the data saving procedure.
- 4 Extract the Memory roll and fit it into the connector of another control board.
- **5** Select F51. Press ENTER to confirm.
- **6** Select **0N**. Press ENTER to confirm the data uploading procedure.



#### SLOW-DOWN POINTS AND END-STROKE AREAS



A = Movement area at normal speed.

 $\mathsf{B}^\star = \mathsf{Movement}$  area at slowed-down speed.

C = Encoder intervention zone with movement inversion.

D = Encoder intervention zone with movement stopped.

E = Opening slow-down starting point for M1.

F = Closing slow-down starting point for M1.

G = Opening slow-down starting point for M2.

H = Closing slow-down starting point for M2.

 $I^{**}$  = Closing approach starting point for M1.

 $L^{**}$  = Closing approach starting point for M2.

 $M^{**}$  Opening slow-down starting point for M1.

 $N^{**}$  = Opening approach starting point for M2.

0 = Strike plates..

\* Minimum 600 mm from the strike plate.

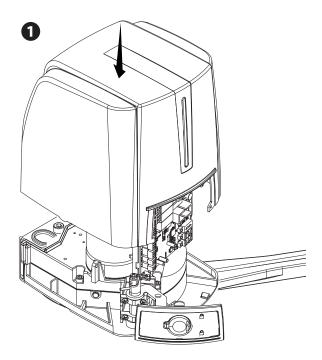
 $^{\star\star}$  Set the closing-rest percentage for function F 39 - F 40 for the first motor (M1) and F43 - F44 for the second motor (M2) so as to achieve a distance of less than 50 mm from the strike plate.

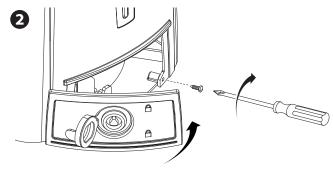
Page 25 - Manual FA01047-EN - 08/2018 - © CAME S.p.A. - Original instructions

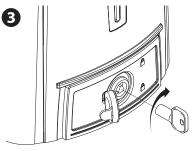
#### FINAL OPERATIONS

Once you have finished with the connections and started up the operator, fit the casing over the gearmotor  $\bullet$ . Fit the casing over the gearmotor and close the hatch  $\circ$ .

Lock the gearmotor using the key and fit the protection cap **3**.







#### **ERROR MESSAGE**

The error messages appear on the display.

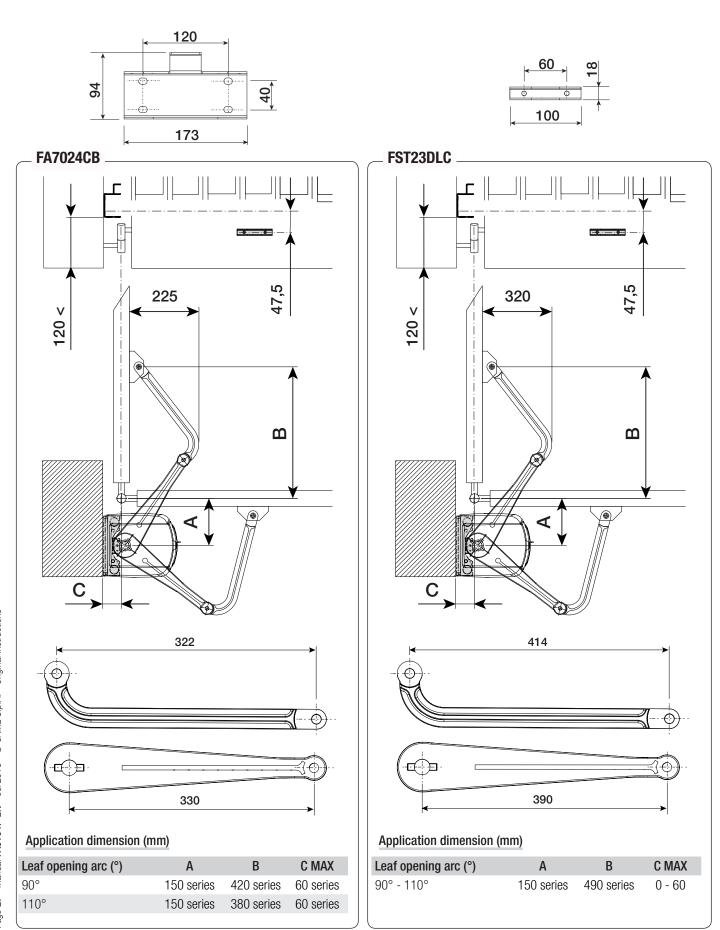
E 1	The travel calibration was interrupted when the STOP button was activated
E 2	Calibrating the incomplete travel
E 3	Encoder broken
E 4	Services test error
E 7	Insufficient operating time
E 9	Closing obstruction
E 10	Opening obstruction
E 11	Maximum number of detected obstructions
E 14	Serial communication error
E 15	Non compatible transmitters.
E 17	Wireless system error
E 18	The wireless system hasn't been configured.

#### **INSTALLING AND CONNECTIONS FOR OUTER OPENING**

Below you can find the only procedures that vary from the standard installation.

#### Fastening the braces

Establish where you will fit the gate brace and measure where the gate-post brace will fit. Make sure to respect the quotas shown in the drawing and table.



#### Fastening the mechanical stops

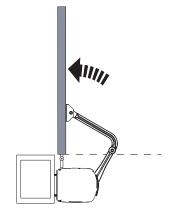
Release the gearmotor.

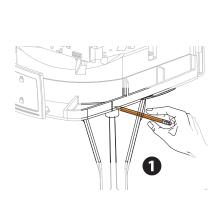
#### When opening.

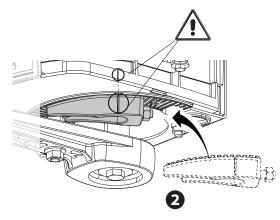
Entirely open the gate leaf. Mark the casing where the center of the arm is **①**.

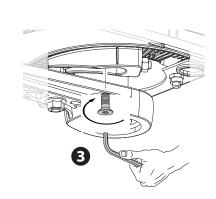
Manually close the gate leaf. Place the mechanical stop under the casing. The mark on the case must match the groove on the stop, as shown ②.

Fasten the stop using the screw **3**.









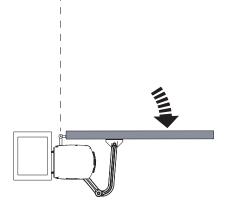
#### When closing.

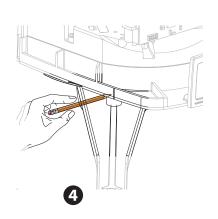
Close the leaf. Mark the casing where the center of the arm is  $oldsymbol{0}$ .

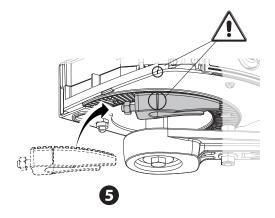
Manually open the leaf. Place the second mechanical stop against the opposite side of the arm.

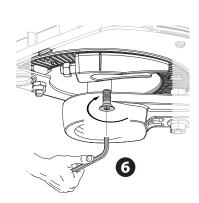
The mark on the casing must match the groove on the stop  ${\bf G}$ .

Fasten the stop using the screw **6**.



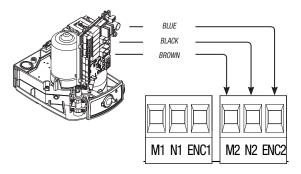




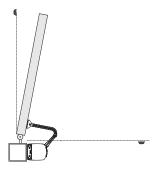


#### Establishing the limit-switch points

Please refer to the chapter on opening inwards.



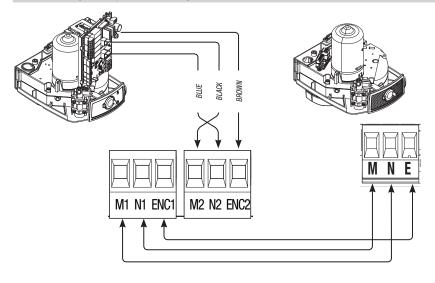
Operator installed on the left (outer view).



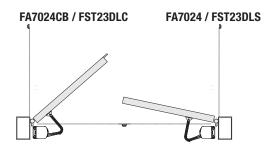
Operator installed on the right (inner view).



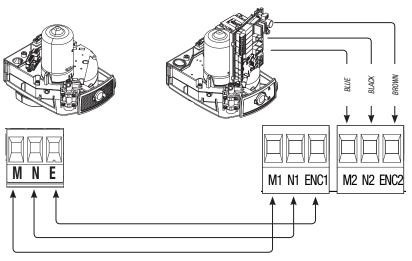
#### Connecting the operator and gearmotor

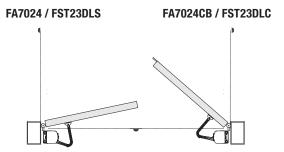


Operator installed on the left and gearmotor installed on the right (inner view) with operator delayed when closing.



Operator fitted to the right and gearmotor to the left (inner view) with operator delayed when opening.





#### WHAT TO DO IF ...

ISSUES	POSSIBLE CAUSES	POSSIBLE FIXES
It neither opens nor closes	<ul> <li>Power supply missing</li> <li>The gear motor is stuck</li> <li>The transmitter emits a weak signal or no signal</li> <li>The buttons or selectors are jammed</li> </ul>	<ul> <li>Check main power supply</li> <li>Lock the gearmotor</li> <li>Replace the batteries</li> <li>Check the state of all devices</li> </ul>
The gate opens but does not close	The photocells are working	Check that there are no obstructions in the photocells' area of operation

⚠ If the problem cannot be solved by following the fixes in the table or if any malfunctions, anomalies, noises, vibrations or suspicious and unexpected behavior is experienced on the system, call for qualified assistance.

#### DISMANTLING AND DISPOSAL

© CAME S.p.A. employs an Environmental Management System at its premises. This system is certified and compliant with the UNI EN ISO 14001 regulation standard to ensure that the environment is respected and safeguarded.

Please continue safeguarding the environment. At CAME we consider it one of the fundamentals of our operating and market strategies. Simply follow these brief disposal guidelines:

#### DISPOSING OF THE PACKAGING

The packaging materials (cardboard, plastic, and so on) should be disposed of as solid household waste, and simply separated from other waste for recycling.

Always make sure you comply with local laws before dismantling and disposing of the product.

DISPOSE OF RESPONSIBLY!

#### DISPOSING OF THE PRODUCT

Our products are made of various materials. Most of these (aluminum, plastic, iron, electrical cables) are classified as solid household waste. They can be recycled by separating them before dumping at authorized city plants.

Whereas other components (control boards, batteries, transmitters, and so on) may contain hazardous pollutants.

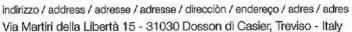
These must therefore be disposed of by authorized, certified professional services.

Before disposing, it is always advisable to check with the specific laws that apply in your area.

DISPOSE OF RESPONSIBLY!

Fabbricante / Manufacturer / Hersteller / Fabricant / Fabricante / Fabricante / Wytwórca / Fabrikant

#### Came S.p.a.





DICHIARA CHE L'AUTOMAZIONE PER CANCELLI A BATTENTE / DECLARES THAT THE DRIVE FOR SWING GATE / ERIL ÄRT DASS DIE AUTOMATISIERUNG FÜR FLÜGELTORE / DECLARE QUE LE AUTOMATISATION POUR PORTAILS A BATTANTS / DECLARA QUE LAS AUTOMATIZACION PARA PUERTAS BATTENTES / DECLARA QUE AS AUTOMATIZAÇÕES PARA PORTÕES A BATENTE / OSWIADCZA ZE AUTOMATYKA DO BRAM SKRZYDLOWYCH / VERKLAART DAT DE AUTOMATISERING VOOR DRAAIHEKKEN

### FA7024CB FST23DLC

E' CONFORME ALLE DISPOSIZIONI DELLE SEGUENTI DIRETTIVE / IT COMPLIES WITH THE PROVISIONS OF THE FOLLOWING E' CONFORME ALLE DISPOSIZIONI DELLE SEGUENT DIRETTIVE I TOMPLES WITA THE PROVISIONS OF THE POLLEWING DIRECTIVES / DEN VORGABEN DER FOLGENDEN RICHTLINIEN ENTSPRECHEN / IL EST CONFORMES AUX DISPOSITIONS DES DIRECTIVES SUIVANTES / CUMPLEN CON LAS DISPOSICIONES DE LAS SIGUIENTES DIRECTIVAS / ESTÃO DE ACORDO COM AS DISPOSIÇÕES DAS SEGUINTES DIRECTIVAS / SA ZGODNE Z POSTANOWIENIAMI NASTEPUJACYCH DYREKTYW EUROPEJSKICH / VOLDOEN AAN DE VOORSCHRIFTEN VAN DE VOLGENDE RICHTLIJNEN:

- COMPATIBILITA' ELETTROMAGNETICA / ELECTROMAGNETIC COMPATIBILITY / ELEKTROMAGNETISCHE VERTRÄGLICHKEIT / COMPATIBILITÉ ÉLECTROMAGNÉTIQUE / COMPATIBILIDAD ELECTROMAGNÉTICA / COMPATIBILIDADE ELETROMAGNÉTICA / KOMPATYBILNOSCI ELEKTROMAGNETYCZNEJ / ELEKTROMAGNETISCHE COMPATIBI-LITEIT: 2014/30/UE.

Riferimento norme armonizzate ed altre norme tecniche / Refer to European regulations and other technical regulations / Harmonisierte Bezugsnormen und andere technische Vorgaben / Reference aux normes harmonisées et aux autres normes techniques / Referencia normas armonizadas y otras normas técnicas / Referência de normas harmonizadas e outras normas técnicas / Odnosne normy ujednolicone i inne normy techniques / Gebarroprissates en andere techniques porten pagarragar is techniczne / Geharmoniseerde en andere technische normen waarnaar is

EN 61000-6-2:2005 EN 61000-6-3:2007+A1:2011 EN 62233:2008 EN 60335-1:2012+A11:2014 EN 60335-2-103:2015

RISPETTA I REQUISITI ESSENZIALI APPLICATI: / MEET THE APPLICABLE ESSENTIAL REQUIREMENTS: / DEN WESENTLICHEN ANGEWANDTEN ANFORDERUNGEN ENTSPRECHEN: / RESPECTENT LES CONDITIONS REQUISES NECESSAIRES APPLIQUEES: / CUMPLEN CON LOS REQUISITOS ESENCIALES APLICADOS: / RESPEITAM O REQUISITOS ESSENCIAIS APLICADOS: / SPEŁNIAJA PODSTAWOWE WYMAGANE WYRUNKI: / VOLDOEN AAN DE TOEPASBARE MINIMUM EISEN:

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; 1.5.9; 1.5.13; 1.6.1; 1.6.3; 1.6.4; 1.7.1; 1.7.2; 1.7.4

PERSONA AUTORIZZATA A COSTITUIRE LA DOCUMENTAZIONE TECNICA PERTINENTE / PERSON AUTHORISED TO COMPILE THE RELEVANT TECHNICAL DOCUMENTATION / PERSON DIE BEVOLLMÄCHTIGT IST, DIE RELEVANTEN TECHNISCHEN UNTERLAGEN ZUSAMMENZUSTELLEN / DOCUMENTATION TECHNIQUE SPECIFIQUE D'AUTORISATION A CONSTRUIRE DE / PERSONA FACULTADA PARA ELABORAR LA DOCUMENTACIÓN TÉCNICA PERTINENTE / PESSOA AUTORIZADA A CONSTITUIR A DOCUMENTAÇÃO TÉCNICA PERTINENTE / OSOBA UPOWAZNIONA DO ZREDAGOWANIA DOKUMENTACJI TECHNICZNEJ / DEGENE DIE GEMACHTIGD IS DE RELEVANTE TECHNISCHE DOCUMENTEN SAMEN TE STELLEN.

CAME S.p.a.

La documentazione tecnica pertinente è stata compilata in conformità all'allegato VIIB. / The pertinent technical documentation has been drawn up in compliance with attached document VIIB. / Die relevante technische Dokumentation wurde entsprechend der Anlage VIIB ausgestellt. / La documentation technique spécifique a été remplie conformément à l'annexe IIB / La documentación técnica pertinente ha sido relenada en cumplimiento con el anexo VIIB. / A documentação técnica pertinente foi preenchida de acordo com o anexo VIIB. / Odnosna dokumentacja techniczna zostala zredagowana zgodnie z zalacznikiem VIIB. / De technische documentatie terzake is opgesteld in overeenstemming met de bijlage VIIB.

CAME S.p.a. si impegna a trasmettere, in risposta a una richiesta adeguatamente motivata delle autorità nazionali, informazioni pertinenti sulle quasi macchine, e / Came S.p.A., following CAME S.p.a. si impegna a trasmettere, in risposta a una incriesta a deguatamente motivata deire autorita radiorital, impegna a trasmettere, in risposta a una incriesta a deguatamente motivata deire autorita radiorital, incrinational perimente soile quasi machines, and 7 be rimaziona perimente soile quasi machines, and 7 be rimazional perimente. S.p.A. verpflichtet sich aut eine angemessen motivierte Anfrage der staatlichen Behörden Informationen über die unvollständigen Maschinen, zu übermitteln, und 7 Came S.p.A. s'engage à transmettre, en réponse à une demande bien fondée de la part des autorités nationales, informaciones relacionades con las cuasimáquinas 7 Came S.p.A. compromete-se em transmitir, em resposta a una solicitud adecuadamente fundada por parte de las autoridades nacionais, informaciones relacionadas con las cuasimáquinas 7 Came S.p.A. compromete-se em transmitir, em resposta a una solicituda apropriadamente pelas autoridades nacionais, informaciones relacionadas con las cuasimáquinas 7 Came S.p.A. compromete-se em transmitir, em resposta a una solicituda apropriadamente pelas autoridades nacionais, informaciones relacionadas con las cuasimáquinas 7 Came S.p.A. compromete-se em transmitir, em resposta a una solicituda omotivada apropriadamente pelas autoridades nacionais, informaciones relacionadas con las cuasimáquinas 7 Came S.p.A. verbindit zich entre em contrastica de desente informaciones con contrastication de relacional cont nationale autoriteiten de relevante informatie voor de niet voltooide machine te verstrekken,

VIETA / FORBIDS / VERBIETET / INTERDIT / PROHIBE / PROIBE / ZABRANIA SIE / VERBIEDT

la messa in servizio finchè la macchine into which they must be incorporate non è stata dichiarata conforme, se del caso alla 2006/42/CE / 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 / die Inbetriebnahme bevor die "Endmaschine" in die die unvollständige Maschine eingebaut wird, als konform erklärt wurde, gegebenenfalls gemäß der Richtlinie 2006/42/EU. / la mise en service tant que la machine finale dans laquelle elle doit être incorporée n'a pas été déclarée conforme, le cas échéant, à la norme 2006/42/CE. / la puesta en servicio hasta que la máquina final en la que será incorporada no haya sido declarada de conformidad de acuerdo a la 2006/42/CE / a colocação em funcionamento, até que a máquina final, onde devem ser incorporadas, não for declarada em conformidade, se de acordo com a 2006/42/CE. / Uruchomienia urzadzenia do czasu, kiedy maszyna, do której ma byc wbudowany, nie zostanie oceniona jako zgodna z wymogami dyrektywy 2006/42/WE, jesli taka procedura była konieczna. / deze in werking te stellen zolang de eindmachine waarin de niet voltooide machine moet worden ingebouwd in overeenstemming is verklaard, indien toepasselijk met de richtlijn 2006/42/EG.

Dosson di Casier (TV) 29 Marzo / March / März / Mars / Marzo / Março / Marzec / Maart 2018

Legale Rappresentante / Legal Representative /Gesetzlicher Vertreter / Representant Legal / Representante Legal / Representante Legal / Prawny Przedstawiciel / Juridische Vertegenwoordiger

in Paolo Meguzzo 11

Fascicolo tecnico a supporto / Supporting technical dossier / Unterstützung technische Dossier / soutenir dossier technique / apoyo expediente técnico / apoiar dossier técnico / wspieranie dokumentacji technicznej / ondersteunende technische dossier: 001FA7024CB

#### Came S.p.a.

The contents of this manual may change, at any time, and without notice.



#### **CAME S.P.A.**

Via Martiri Della Libertà, 15 31030 Dosson di Casier - Treviso - Italy tel. (+39) 0422 4940 - fax. (+39) 0422 4941