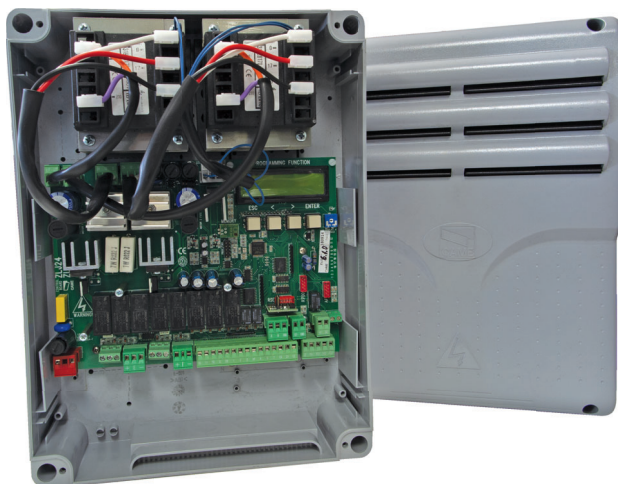


## Control panel for 24 V gearmotors

FA01571-EN



# ZLJ24 ZLJ24Z

## INSTALLATION MANUAL

EN English

**△ Important safety instructions.**


**△ Please follow all of these instructions. Improper installation may cause serious bodily harm.**

**△ Before continuing, please also read the general precautions for users.**

Only use this product for its intended purpose. Any other use is hazardous. • The manufacturer cannot be held liable for any damage caused by improper, unreasonable or erroneous use. • This product has been designed to be assembled to partly completed machinery and/or equipment so as to build machinery as regulated by the Machinery Directive 2006/42/EC. • The final installation must comply with the Machinery Directive (2006/42/EC) and the European reference standards in force. • The manufacturer declines any liability for using non-original products, which would also void the warranty. • All operations indicated in this manual must be carried out exclusively by skilled and qualified personnel and in full compliance with the regulations in force. • The device must be installed, wired, connected and tested according to good professional practice, in compliance with the standards and laws in force. • Make sure the mains power supply is disconnected during all installation procedures. • All the components (e.g. actuators, photocells and sensitive edges) needed for the final installation to comply with the Machinery Directive (2006/42/EC) and with the reference harmonised technical standards are specified in the general CAME product catalogue or on the website [www.came.com](http://www.came.com). • Check that the temperature ranges given are suitable for the installation site. • Make sure that no direct jets of water can wet the product at the installation site (sprinklers, water cleaners, etc.). • Make sure you have set up a suitable dual-pole cut-off device along the power supply that is compliant with the installation rules. It should completely cut off the power supply according to category III surcharge conditions. • Demarcate the entire site properly to prevent unauthorised personnel from entering, especially minors.

- Use suitable protection to prevent any mechanical hazards due to persons loitering within the operating range of the operator.
- The electrical cables must pass through special pipes, ducts and cable glands in order to guarantee adequate protection against mechanical damage.
- The electrical cables must not touch any parts that may overheat during use (such as the motor and transformer).
- Before installation, check that the guided part is in good mechanical condition, and that it opens and closes correctly.
- The product cannot be used to automate any guided part that includes a pedestrian gate, unless it can only be enabled when the pedestrian gate is secured.
- Make sure that nobody can become trapped between the guided and fixed parts, when the guided part is set in motion.
- All fixed controls must be clearly visible after installation, in a position that allows the guided part to be directly visible, but far away from moving parts. In the case of a hold-to-run control, this must be installed at a minimum height of 1.5 m from the ground and must not be accessible to the public.
- If not already present, apply a permanent tag that describes how to use the manual release mechanism close to it.
- Make sure that the operator has been properly adjusted and that the safety and protection devices and the manual release are working properly.
- Before handing over to the final user, check that the system complies with the harmonised standards and the essential requirements of the Machinery Directive (2006/42/EC).
- Any residual risks must be indicated clearly with proper signage affixed in visible areas, and explained to end users.
- Put the machine's ID plate in a visible place when the installation is complete.
- If the power supply cable is damaged, it must be immediately replaced by the manufacturer or by an authorised technical assistance centre, or in any case, by qualified staff, to prevent any risk.
- Keep this manual inside the technical folder along with the manuals of all the other devices used for your automation system.
- Make sure to hand over to the end user all the operating manuals of the products that make up the final machinery.

## 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 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, etc.) can be disposed of easily as solid urban waste, separated for recycling.

Before dismantling and disposing of the product, please always check the local laws in force.

DISPOSE OF THE PRODUCT RESPONSIBLY.

### DISPOSING OF THE PRODUCT




Our products are made of various materials. Most of these materials (aluminium, plastic, iron and electrical cables) are classified as solid urban waste. They can be separated for recycling and disposed of at authorised waste treatment plants. Other components (electronic boards, transmitter batteries, etc.) may contain pollutants.

These must be removed and disposed of by an authorised waste disposal and recycling firm.

It is always advisable to check the specific laws that apply in your area.

DISPOSE OF THE PRODUCT RESPONSIBLY.

## Key

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

The measurements, unless otherwise stated, are in millimetres.

## Description

### 002ZLJ24

Multifunction control panel for swing gates with two leaves. Graphic programming display and signalling and self-diagnostics using safety devices.

### 002ZLJ24Z

Multifunction control panel for swing gates with two leaves. Graphic programming display and signalling and self-diagnostics using safety devices.

## Technical data

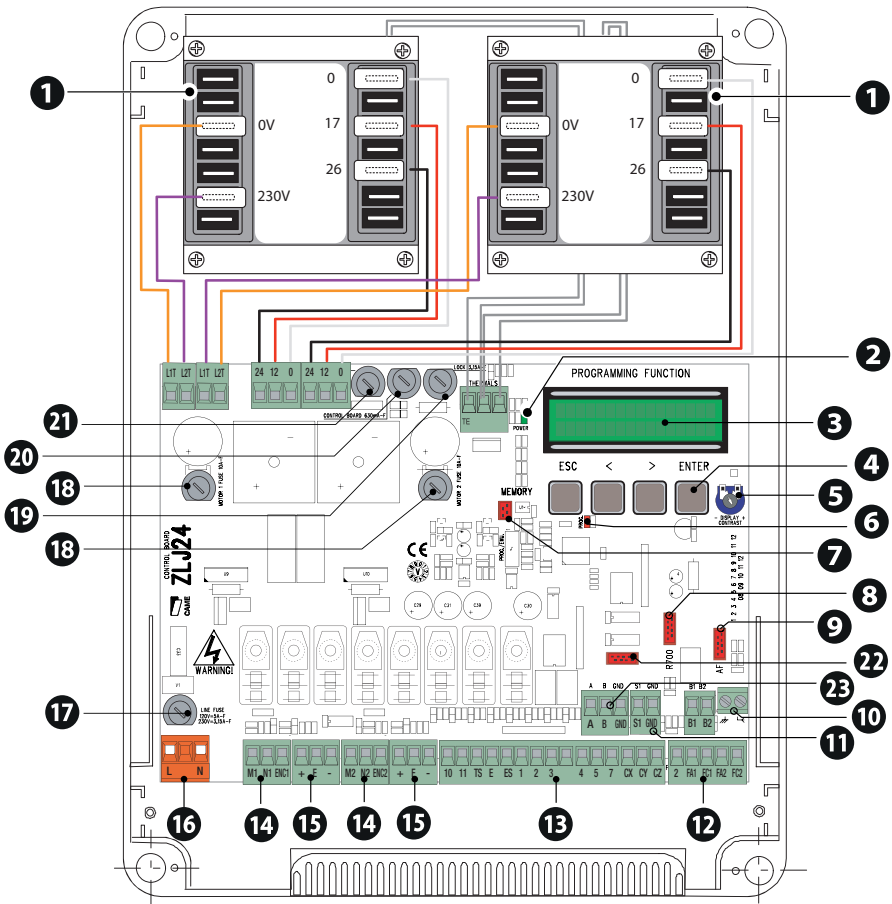
MODELS	ZLJ24
Motor power supply (V)	24 DC
Board power supply (V)	24 AC
Standby consumption (W)	10
Power (W)	500
Transformer thermal protection (°C)	120°
Colour	RAL 7040
Operating temperature (°C)	-20 ÷ +55
Operating time (s)	150
Duty cycle	HEAVY-DUTY SERVICE
Protection rating (IP)	54
Insulation class	II

## Fuse table

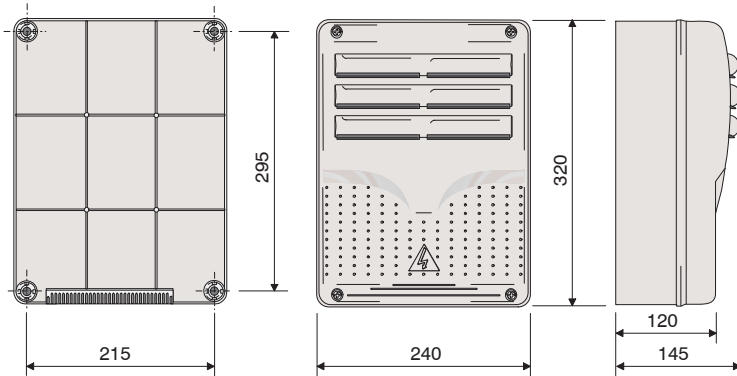
MODELS	ZLJ24
Line fuse	3.15 A F
Control-board fuse	630 mA F
Accessory fuse	2 A F

## Description of parts

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>1 Transformer</li> <li>2 Power LED</li> <li>3 Display</li> <li>4 Programming buttons</li> <li>5 Trimmer to adjust the display lighting</li> <li>6 Programming status warning LED</li> <li>7 Memory Roll card connector</li> <li>8 Connector for the R700 decoding card</li> <li>9 Connector for plug-in radio frequency card (AF)</li> <li>10 Terminal board for connecting the antenna</li> <li>11 Terminal board for connecting the transponder selector switch</li> </ul> | <ul style="list-style-type: none"> <li>12 Terminal board for connecting the limit switches</li> <li>13 Terminal board for connecting control and safety devices</li> <li>14 Terminal board for connecting the gearmotor</li> <li>15 Terminal board for connecting the encoder</li> <li>16 Power supply terminal board</li> <li>17 Line fuse</li> <li>18 Motor fuse</li> <li>19 Electric-lock fuse</li> <li>20 Control board fuse</li> <li>21 Accessories fuse</li> <li>22 RSE card connector</li> <li>23 Terminal board for CRP connection</li> </ul> |
|---|---|



## Size



## Cable types and minimum thicknesses

Cable length (m)	up to 20	from 20 to 30
Power supply 230 V AC	3G x 1.5 mm <sup>2</sup>	3G x 2.5 mm <sup>2</sup>
24 V AC/DC flashing beacon	2 x 0.5 mm <sup>2</sup>	2 x 0.5 mm <sup>2</sup>
TX Photocells	2 x 0.5 mm <sup>2</sup>	2 x 0.5 mm <sup>2</sup>
RX photocells	4 x 0.5 mm <sup>2</sup>	4 x 0.5 mm <sup>2</sup>
12 V DC electric lock	2 x 1 mm <sup>2</sup>	2 x 1.5 mm <sup>2</sup>
Command and control devices	*no. x 0.5 mm <sup>2</sup>	*no. x 0.5 mm <sup>2</sup>

\* no. = see product assembly instructions

**Warning:** the cable cross-section is indicative and varies according to the motor power and cable length.

📖 When operating at 230 V and outdoors, use H05RN-F cables compliant with 60245 IEC 57 (IEC); when operating indoors, use H05VV-F cables compliant with 60227 IEC 53 (IEC). For power supplies up to 48 V, you can use FROR 20-22 II cables compliant with EN 50267-2-1 (CEI).

📖 To connect the antenna, use RG58 cable (up to 5 m).

📖 To connect to the CRP, use a UTP CAT5 cable (up to 1,000 m long).

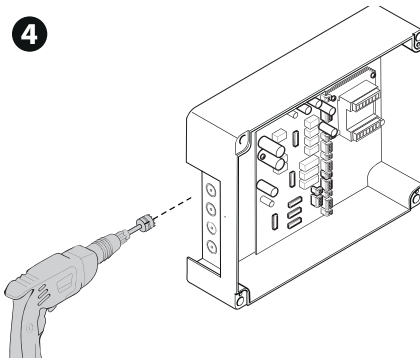
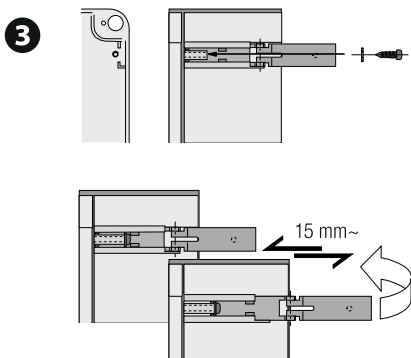
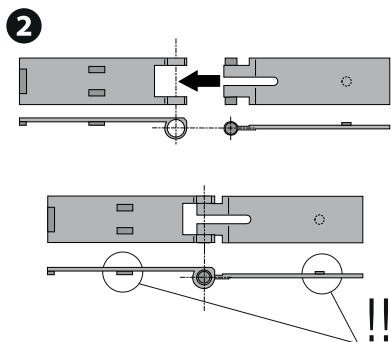
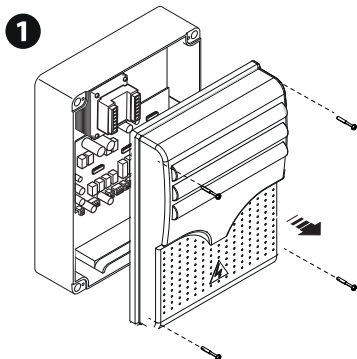
📖 If the cable lengths differ from those specified in the table, define the cable cross-sections according to the actual power draw of the connected devices and in line with regulation CEI EN 60204-1.

📖 For multiple, sequential loads along the same line, recalculate the values in the table according to the actual power draw and distances. For information on connecting products not covered in this manual, please see the documentation accompanying the products themselves.

📖 To connect the encoder, use a FRORPU 3 x 0.5 mm<sup>2</sup> cable or a cable supplied by CAME on request (item code 801XA-0020).


## Preparing the control panel

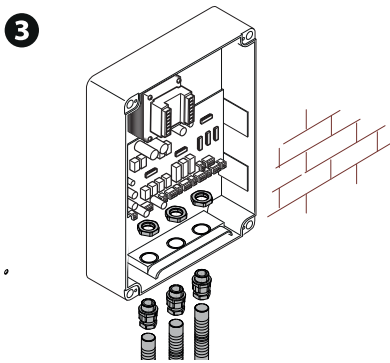
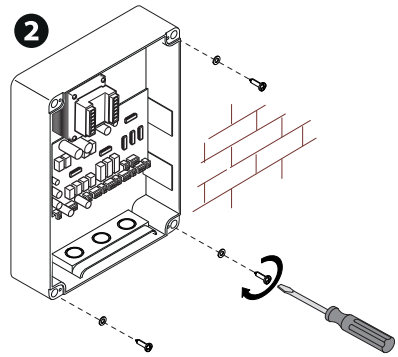
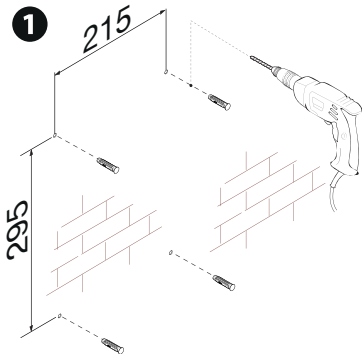
- ❶ Separate the parts of the control panel.
- ❷ Assemble the pressure hinges.
- ❸ Insert the hinges into the box (either on the left or the right) and fasten them using the screws and washers supplied. The hinges slide to rotate.
- ❹ Drill the pre-marked holes. The diameter of the holes is 20 mm.





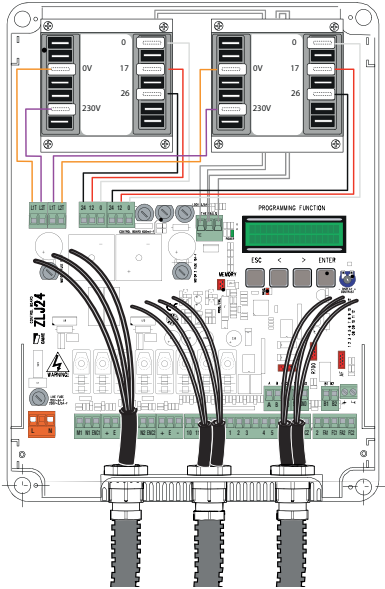
## Fastening the control panel

- 1 Drill the fixing points in the control panel in a protected area.
  - 2 Fasten the base using screws and plugs.
-  Use Phillips round head screws (maximum diameter 6 mm).
- 3 Insert the cable gland with the corrugated tubes for threading the electrical cables



### Preparing the electrical cables

- 📖 Connect all wires and cables in compliance with the law.
- 📖 Use cable glands to connect the devices to the control panel. One of these must be used exclusively for the power supply cable.



## Power supply

### 1 Connecting to the mains (230/120 V AC - 50/60 Hz)

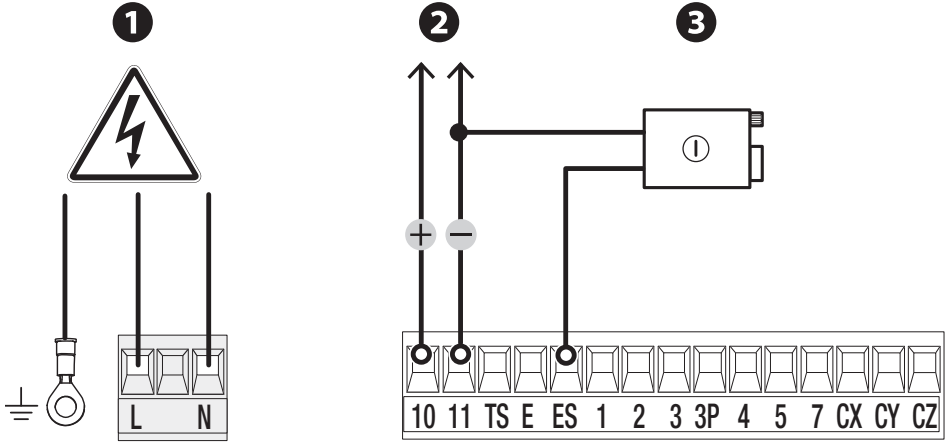
### 2 Power supply output for accessories

The output normally delivers 24 V AC.

The output delivers 24 V DC when the batteries start operating, if they are installed.

 The sum of the power draw for the connected accessories must not exceed 50 W.

### 3 Connection for the 12 V AC electric lock - 15 W max.



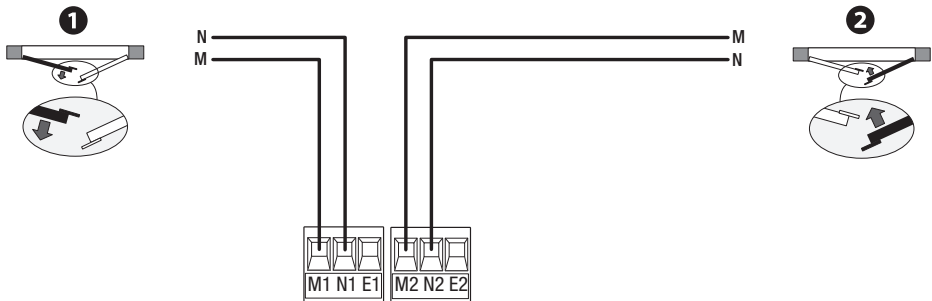
### Maximum capacity of contacts

Device	Output	Power supply (V)	Power (W)
Accessories	10 - 11	24 AC/DC	50
Flashing beacon	10 - E	24 AC/DC	25
Operator status warning light	10 - 5	24 AC/DC	3

### Gearmotor without limit switch

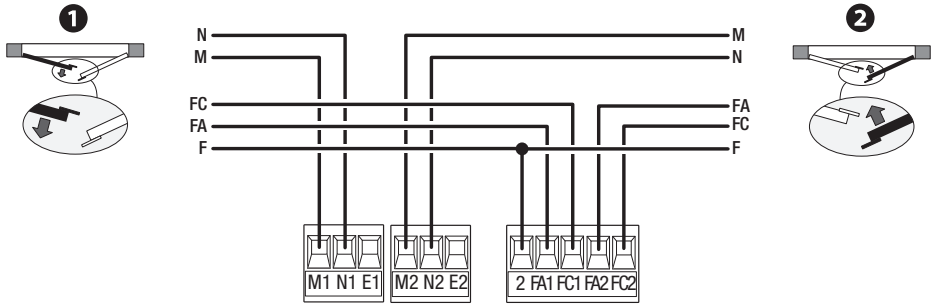
1 Gearmotor delayed while opening

2 Gearmotor delayed while closing



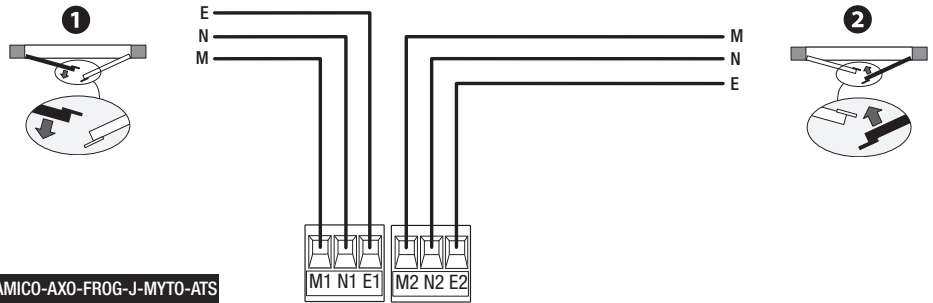
## Gearmotor with limit switch

- 1 Gearmotor delayed while opening
- 2 Gearmotor delayed while closing

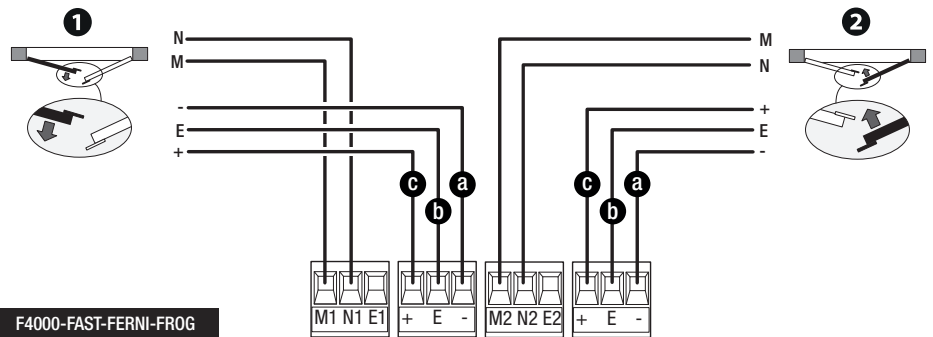


## Gear motor with encoder

- 1 Gearmotor delayed while opening
- 2 Gearmotor delayed while closing



AMICO-AX0-FROG-J-MYTO-ATS



F4000-FAST-FERNI-FROG

- a Green cable
- b Brown cable
- c White cable

## Command and control devices

### 1 STOP button (NC contact)

Stop the gate and exclude automatic closing. Use a control device to resume movement.

📖 If the contact is not used, it must be deactivated during programming.

### 2 Control device (NO contact)

OPEN ONLY function

📖 When the [HOLD-TO-RUN] function is active, the control device must be connected during OPENING.

### 3 Control device (NO contact)

PARTIAL OPENING function

### 4 Control device (NO contact)

CLOSE ONLY function

📖 When the [HOLD-TO-RUN] function is active, the control device must be connected during CLOSING.

### 5 Control device (NO contact)

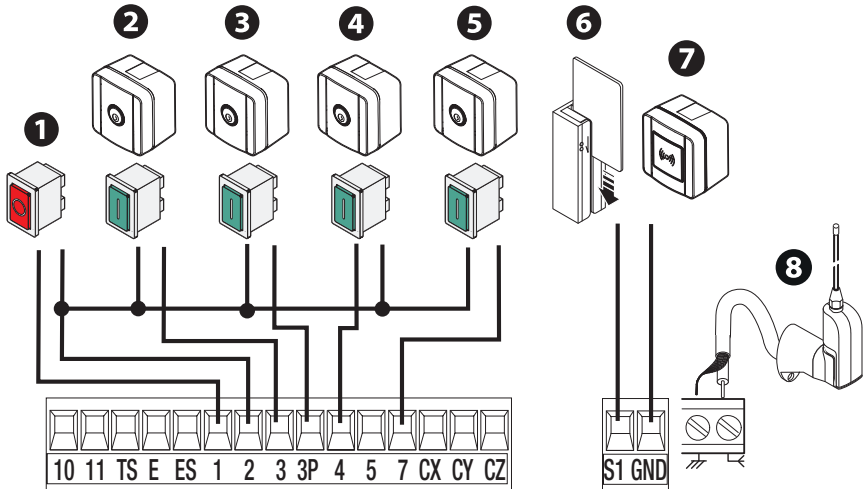
OPEN-CLOSE (step-by-step) or OPEN-STOP-CLOSE-STOP (sequential) function

📖 See control function 2-7.

### 6 Card reader

### 7 Transponder selector switch

### 8 Antenna with RG58 cable



## Signalling devices

### 1 Flashing beacon

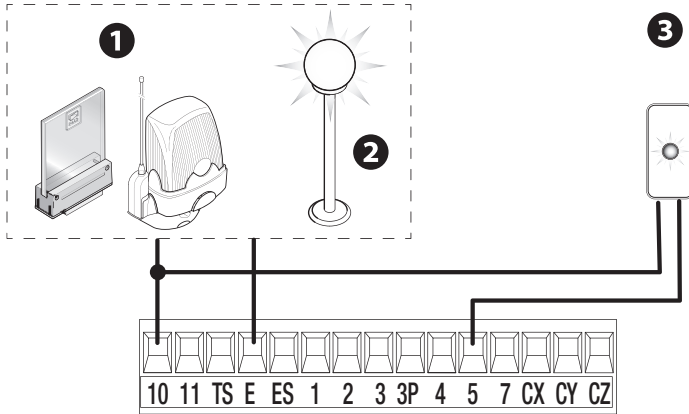
It flashes when the operator opens and closes.

### 2 Additional light

It increases the light in the manoeuvring area.

### 3 Operator status warning light

It notifies the user of the operator status.



## Safety devices

During programming, configure the type of action that must be performed by the device connected to the input. Connect the safety devices to the CX, CY and/or CZ inputs (NC contacts).

If contacts CX, CY and CZ are not used, they must be deactivated during programming.

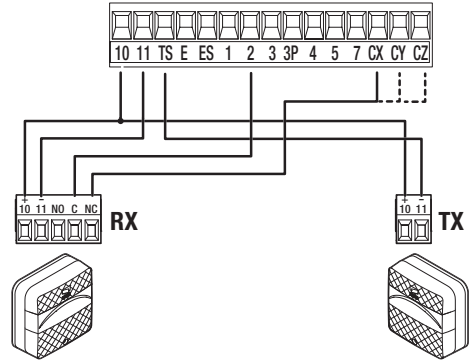
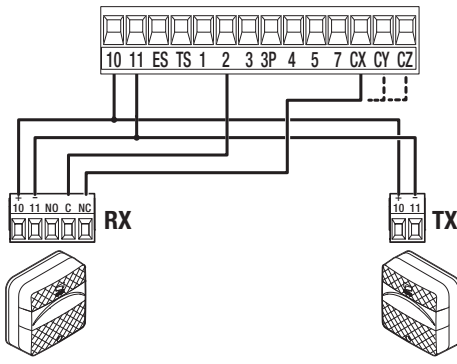
### DELTA photocells

Standard connection

### DELTA photocells

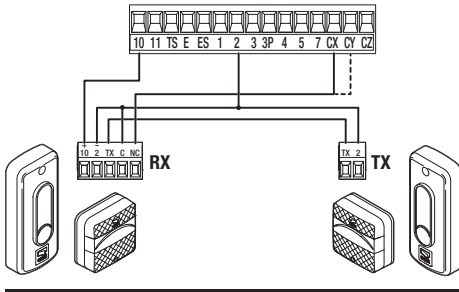
Connection with safety test

See [Safety devices test] function.



### DIR / DELTA-S photocells

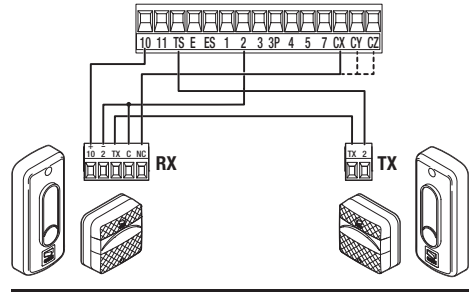
Standard connection



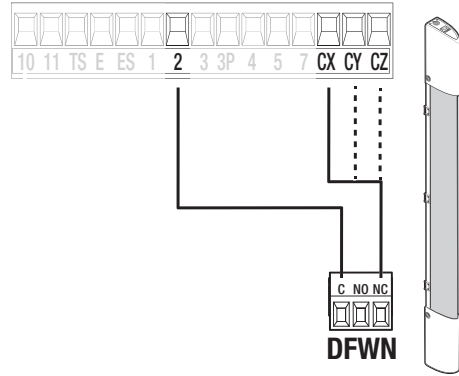
### DIR / DELTA-S photocells

Connection with safety test

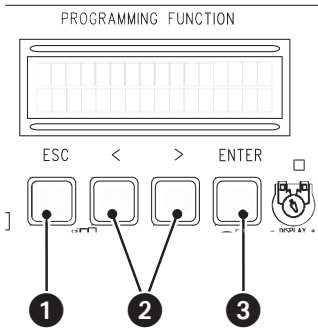
See [Safety devices test] function.



### DFWN sensitive edge



Programming button functions



**1 ESC button**

The ESC button is used to perform the operations described below.  
 Exit the menu  
 Delete the changes  
 Go back to the previous screen

**2 < > buttons**

The <> buttons are used to perform the operations described below.  
 Navigate the menu  
 Increase or decrease values

**3 ENTER button**

The ENTER button is used to perform the operations described below.  
 Access menus  
 Confirm choice

Getting started

Once the electrical connections have been made, proceed with commissioning. Only skilled and qualified staff may perform this operation.

Make sure that there are no obstacles in the way.

Power up and proceed with the operations indicated below.

**Motor type**

**Number of motors**

**Total stop**

**Travel calibration**

After powering up the system, the first manoeuvre is always to open the gate. Wait for the manoeuvre to be completed.

Press the ESC button or STOP button immediately in the event of any faults, malfunctions, strange noises or vibrations, or unexpected behaviour in the system.

At the end of commissioning, check the correct operation of the device using the buttons near the display. Check that the accessories also work correctly.

Functions menu

**LANGUAGE**

Choose the display language.

[LANGUAGE]		[Italiano] (Default) [English] [Français] [Deutsch] [Español] [Português euro] [Português bras]
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### Automatic closure

Activate automatic closing.

[FUNCTIONS]	[Automatic close]	[Deactivated] [Activated] (Default)
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### Hold-to-run

With the function active, the operator opening movement (command 2-3) or closing movement (command 2-4) is interrupted when the control device is released.

 When the function is active, it excludes all other control devices.

[FUNCTIONS]	[Hold-to-run]	[Deactivated] (Default) [Activated] [Closing]
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### Detecting obstacles

With the function active, the gate remains idle if the safety devices detect an obstacle. The function is active when the gate is closed, open or after a complete stop.

[FUNCTIONS]	[Obstruction det.]	[Deactivated] (Default) [Activated]
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### Safety devices test

Check that the photocells connected to the inputs are operating correctly, after each opening and closing command.

[FUNCTIONS]	[Safety devices test]	[Deactivated] (Default) [CX] [CY] [CZ] [CX+CY] [CX+CZ] [CY+CZ] [CX+CY+CZ]
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### Pre-flashing


The flashing beacon is activated before each manoeuvre.

 The pre-flashing duration is set with the [Pre-flashing T.] function

[FUNCTIONS]	[Pre-flashing]	[Deactivated] (Default) [Activated]
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### Thrust

Before every opening or closing manoeuvre, the leaves thrust inwards to release the electric lock.

 The thrust time is set with the [Thrust T.] function

[FUNCTIONS]	[Thrust]	[Deactivated] (Default) [Close] [Open] [Open-Close]
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### Total stop

Stop the gate and exclude automatic closing. Use a control device to resume movement.

<b>[FUNCTIONS]</b>	<b>[Total stop]</b>	[Deactivated] [Activated] (Default)
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### CX input

Associate a function with the CX input.

<b>[FUNCTIONS]</b>	<b>[CX input]</b>	[Deactivated] [C1] = Reopen while closing (photocells) [C2] = Reclose while opening (Photocells) [C3] = Partial stop (Default) Only with [Automatic close] activated. [C4] = Obstacle standby (Photocells) [C7] = Reopen while closing (sensitive edges) [C8] = Reclose while opening (sensitive edges)
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### CY input

Associate a function with the CY input.

<b>[FUNCTIONS]</b>	<b>[CY input]</b>	[Deactivated] (Default) [C1] = Reopen while closing (photocells) [C2] = Reclose while opening (Photocells) [C3] = Partial stop Only with [Automatic close] activated. [C4] = Obstacle standby (Photocells) [C7] = Reopen while closing (sensitive edges) [C8] = Reclose while opening (sensitive edges)
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## CZ input

Associate a function with the CZ input.

<b>[FUNCTIONS]</b>	<b>[CZ input]</b>	[Deactivated] [C1] = Reopen while closing (Photocells) (Default) [C2] = Reclose while opening (Photocells) [C3] = Partial stop Only with [Automatic close] activated. [C4] = Obstacle standby (Photocells) [C7] = Reopen while closing (sensitive edges) [C8] = Reclose while opening (sensitive edges)
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## Closing thrust

When the leaves reach the closing limit-switch, the operator performs a closing thrust for a few seconds.

<b>[FUNCTIONS]</b>	<b>[Cl. thrust]</b>	[Deactivated] (Default) [Activated]
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## Lock

Associate the electric lock release with a command.

<b>[FUNCTIONS]</b>	<b>[Lock]</b>	[Deactivated] (Default) [Close] [Open] [Open-Close]
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## Configurations

Configure slowdowns and limit switches.

 **[Slow.] and [Op.LS-Cl.Slow.] must be configured with the [Slow. T].**

<b>[FUNCTIONS]</b>	<b>[Config]</b>	[Slow.] = Slowdown during opening and closing [Op.LS-Cl.Slow.] = Opening limit-switch and closing slowdown. [ENCODER] = Encoder (Default) [Time LS] = Time limit switch [Limit switch] = Opening and closing limit-switches
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## Limit switch

Configure the limit switch contacts as NO or NC.

<b>[FUNCTIONS]</b>	<b>[Limit switch]</b>	[N.C.] (Default) [N.O.]
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### Command 2-7

Associate a command with the device connected to 2-7.

<b>[FUNCTIONS]</b>	<b>[Command 2-7]</b>	[Open-Close](Default) [Op. Stop Cl.]
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### Command 2-3P

Associate a command to the connected device on 2-3P.

<b>[FUNCTIONS]</b>	<b>[Command 2-3P]</b>	[Partial]  <b>The degree of opening of the leaf is set with the [Part. open] function in the [SET TIME] menu.</b> [Pedestrian] (Default)
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### Additional light

Choose the operating mode of the lighting device connected to the output.

<b>[FUNCTIONS]</b>	<b>[Light E]</b>	[Flashing light] (Default) [Courtesy] The light stays on for 5 minutes. [Cycle] The lamp stays on during the manoeuvre.  <b>The light remains off if an automatic closing time is not set.</b>
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### B1-B2 output

Configure the contact.

<b>[FUNCTIONS]</b>	<b>[Output B1-B2]</b>	[Monostable] (Button) [Bistable] (Switch) (Default)
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### CRP address

Set the peripheral number. This function is needed where there are multiple operators in the same system.

<b>[FUNCTIONS]</b>	<b>[CRP address]</b>	from [1] to [32]
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### CRP Baud rate

Set the communication speed of the remote connection system.

<b>[FUNCTIONS]</b>	<b>[CRP Baud rate]</b>	[1200] [2400] [4800] [9600] [19200] [38400] (Default) [57600] [115200]
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### Removing obstacles

If an obstacle is detected by the sensitive edge or by the amperometric sensor on the electronic board, movement is inverted to create a space sufficient to clear the obstacle.

If this function is deactivated, the motion is inverted until the limit-switch is reached.

<b>[FUNCTIONS]</b>	<b>[Remove obstacle]</b>	[Deactivated] (Default) [Activated]
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### Number of motors

Set the number of motors that control the gate.

<b>[SET TRAVEL]</b>	<b>[No. motors]</b>	[M1+M2] (Default) [M2]
---------------------	---------------------	---------------------------

### Motor type

Set the type of gearmotor installed.

<b>[SET TRAVEL]</b>	<b>[Motor type]</b>	[FROG-F4024E] (Default) [FROG-J] [FROG-FL] [AMICO] [MYTO] [AXO-ATS] [FAST] [FERNI] [ATI]
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### Manoeuvring speed

Set the travel speed (percentage of maximum speed).

<b>[SET TRAVEL]</b>	<b>[Manoeuvre speed %]</b>	from [20%] to [100%] (Default 100%)
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### Slowdown speed

Set the slowdown speed (percentage of maximum speed).

<b>[SET TRAVEL]</b>	<b>[Slowing down speed %]</b>	from [5%] to [80%] (Default 80%)
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## Soft start

Set a slowdown of a few seconds after each opening and closing command.

[SET TRAVEL]	[Soft Start]	[Deactivated] (Default) [Activated]
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## Amperometric sensitivity

 This function only appears if the [Encoder] function is deactivated.

 With the function deactivated, the leaves stop if an obstacle is detected.

Manage the sensitivity of obstacle detection.

Depending on the parameter set in the [Config] function, there are different possible operations in the event of an obstacle.

[Time limit switch] - it stops the gate leaves during a manoeuvre.

[Limit-switch] - invert travel during a manoeuvre.

[Slow.] - invert travel during a manoeuvre and stop the leaves during slowdown.

[Op.LS-CI.Slow.] - invert travel during a manoeuvre and stop the leaves during closing slowdown.

[SET TRAVEL]	[Amperom. sens.]	[Deactivated] (Default) [Activated]
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## Travel amperometrics

Adjust the amperometric sensitivity.

 The function appears only if the [Amperom. sens.] function is activated.

[SET TRAVEL]	[Amperom. travel]	
--------------	-------------------	--

## Slowdown time


Set the slowdown time before each limit switch.

 This function appears only with the [Op.LS-CI.Slow.] or [Slow.] parameters from the [Config] function.

[SET TRAVEL]	[Slow. time] function	from [0 s] to [30 s] (Default 20 s)
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## Sensitivity


Activate the obstacle-detection sensitivity.

[ENCODER]  This function appears only if the [ENCODER] parameter is activated from the [Config] function	[Sensitivity]	[Activated] (Default) [Deactivated]
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## Travel sensitivity


Adjust the obstruction detection sensitivity during boom travel.

 This function appears only if the [Sensitivity] function is active.


[ENCODER]  This function appears only if the [ENCODER] parameter is activated from the [Config] function	[Travel sens.]	
---	----------------	--

### Slowdown sensitivity

Adjust the obstruction detection sensitivity during slowdown.

 This function appears only if the [Sensitivity] and [Enc. Slow.] functions are active.

#### [ENCODER]

 This function appears only if the [ENCODER] parameter is activated from the [Config] function


#### [Slow. sens.]

### Opening slowdown point for M1

Set the opening slowdown starting point for M1 (percentage of the total travel).

 This function appears only if the [Enc. Slow.] function is active.

#### [ENCODER]


 This function appears only if the [ENCODER] parameter is activated from the [Config] function

#### [M1 Slow. OP. %]


From 1% to 60% (Default 10%)

### M1 closing slowdown point

Set the closing slowdown starting point for M1 (percentage of the total travel).

 This function appears only if the [Enc. Slow.] function is active.

#### [ENCODER]


 This function appears only if the [ENCODER] parameter is activated from the [Config] function

#### [M1 Slow. CL. %]


From 1% to 60% (Default 10%)

### Opening slowdown point for M2

Set the opening slowdown starting point for M2 (percentage of the total travel).

 This function appears only if the [Enc. Slow.] function is active.

#### [ENCODER]


 This function appears only if the [ENCODER] parameter is activated from the [Config] function

#### [M2 Slow. OP. %]


From 1% to 60% (Default 10%)

### M2 closing slowdown point

Set the closing slowdown starting point for M2 (percentage of the total travel).

 This function appears only if the [Enc. Slow.] function is active.

#### [ENCODER]

 This function appears only if the [ENCODER] parameter is activated from the [Config] function


#### [M2 Slow. CL. %]

From 1% to 60% (Default 10%)

### M1 closing approach point

Set the closing approach starting point for M1 (percentage of the total travel).

**[ENCODER]**

 This function appears only if the [ENCODER] parameter is activated from the [Config] function


**[M1 Appr. CL. %]**

From 1% to 15% (Default 15%)

### Closing approach point for M2

Set the closing approach starting point for M2 (percentage of the total travel).

**[ENCODER]**

 This function appears only if the [ENCODER] parameter is activated from the [Config] function


**[M2 Appr. CL. %]**

From 1% to 15% (Default 15%)

### M1 opening approach point

Set the opening approach starting point for M1 (percentage of the total travel).

**[ENCODER]**

 This function appears only if the [ENCODER] parameter is activated from the [Config] function


**[M1 Appr. OP. %]**

From 1% to 15% (Default 15%)

### Opening approach point for M2

Set the opening approach starting point for M2 (percentage of the total travel).

**[ENCODER]**

 This function appears only if the [ENCODER] parameter is activated from the [Config] function


**[M2 Appr. OP. %]**

From 1% to 15% (Default 15%)

### Travel calibration

Start the travel self-learning.

**[ENCODER]**

 This function appears only if the [ENCODER] parameter is activated from the [Config] function

**[Calibrate travel]**

[Confirm? (No)]  
[Confirm? (Yes)]

### Automatic closing time

Set the time before automatic closure is activated, once the opening travel end point has been reached.

 The function does not work if any of the safety devices are triggered when an obstacle is detected, after a complete stop, during a power outage or if there is an error.

**[SET TIME]**

**[ACT]**

from 0 to 300 seconds (Default 10 seconds)



**Pedestrian automatic closing time**

Set the time that must pass before automatic closing is activated, once the limit switch has been reached for a pedestrian opening (complete opening of only one of the two leaves) or partial opening (partial opening of only one of the two leaves).

**[SET TIME]****[Pedestrian ACT]**

from 0 to 300 seconds (Default 10 seconds)

**Operating time**

Set the gearmotor working time during opening and closing.

**[SET TIME]****[Operating time]**

from 10 to 150 seconds (Default 90 seconds)

**M1 opening delay**

Adjust the delay in starting the opening manoeuvre for M1 with respect to M2.

**[SET TIME]****[Open delay M1]**

from 0 to 10 seconds (Default 2 seconds)

**M2 closing delay**

Adjust the delay in starting the closing manoeuvre for M2 with respect to M1.

**[SET TIME]****[Cl.delay M2]**

from 0 to 60 seconds (Default 2 seconds)

**Pre-flashing time**

Set the time for which the beacon is activated before each manoeuvre.

**[SET TIME]****[Pre-flashing T.]**

from 1 to 60 seconds (Default 5 seconds)

**Electric lock time**

Adjust the electric lock release time after an opening or closing command.

**[SET TIME]****[Lock time]**

from 1 to 5 seconds (Default 2 seconds)

**Thrust time**


Adjust the gearmotor closing thrust time after an opening or closing command.

**[SET TIME]****[Thrust T.]**

from 1 to 10 seconds (Default 1 second)

## New user

Register up to a maximum of 250 users and assign a function to each one.

 The operation can be carried out by using a transmitter or another control device. The boards that manage the control devices (AF - R700 - R800) must be inserted into the connectors.

 Download the LIST OF REGISTERED USERS form from the docs.came.com portal by typing in L20180423.

<b>[USERS]</b>	<b>[New user]</b>	[Deactivated] [2-7] (Step-by-step or sequential control) [Open] [B1 -B2] [2-3P] (Pedestrian or partial opening)  1 -Choose the function to be assigned to the user. 2 -Press ENTER to confirm. You will be asked to enter your user code. 3 -Send the code from the control device.  Repeat the procedure to add other users.
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## Edit name

Change the username or associated number.

<b>[USERS]</b>	<b>[Edit name]</b>	
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## Edit code

Modify the code of a command associated to a user.

<b>[USERS]</b>	<b>[Edit code]</b>	
----------------	--------------------	--

## Associated function

Associate a function with the user.

<b>[USERS]</b>	<b>[Associated Func.]</b>	[2-7] (Step-by-step or sequential control) [Open] [B1 -B2] [2-3P] (Pedestrian or partial opening)
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## Remove user

Remove one of the registered users.

<b>[USERS]</b>	<b>[Delete user]</b>	
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### Remove all

Remove all registered users.

[USERS]	[Delete all users]	[Confirm? (No)] [Confirm? (Yes)]
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### Save memory

Save the system users and settings in the Memory Roll.

[USERS]	[Save memory]	[Confirm? (No)] [Confirm? (Yes)] Press ENTER to confirm.
---------	---------------	--

### Load the memory

Load the users and system settings from the Memory Roll.

 **The boards must be the same version, otherwise only the users can be loaded.**

[USERS]	[Load memory]	[Confirm? (No)] [Confirm? (Yes)]
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### Radio decoding

Choose the type of radio coding for the transmitters enabled to control the operator.

 **If you choose the type of radio coding for the transmitters [Rolling code] or [TW key block], any transmitters with a different type of radio coding saved previously will be deleted.**

[USERS]	[Radio decoding]	[All decoding] [Rolling code] [TW Key block]
---------	------------------	--

### Self-Learning

Save a new transmitter by copying an existing one without following the add new user procedure [New User].

[USERS]	[Self-Learning]	[Deactivated] (Default) [Activated]
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### Version

Display the firmware version number.

[INFO]	[Version]	
--------	-----------	--

### No. runs

Display the number of completed manoeuvres.

[INFO]	[No. runs]	
--------	------------	--

## Initial message

Change the initial message.

<b>[INFO]</b>	<b>[Initial msg]</b>	[WWW.CAME.COM] (Default) Press ENTER to change the initial message. Use the ENTER key to move the cursor forwards. Use the ESC key to move the cursor backwards. Use the arrows to select a letter or a number. Press and hold ENTER for a few seconds to confirm.
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## Resetting the system

Restore factory settings.

<b>[INFO]</b>	<b>[System reset]</b>	[Confirm? (No)] [Confirm? (Yes)] Press ENTER to confirm.
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## Motor test

Check the gate leaves open in the right direction.

<b>[MOT TEST]</b>		[<=M1 M2=>] Press and hold the button < button. Check that M1 performs opening. Press and hold the button > button. Check that M2 performs opening.  <b>If the leaf does not move in the correct direction, invert the motor phases.</b>
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## Password

Set a 4-digit password to access the main menu.

<b>[Password]</b>		[Confirm? (No)] [Confirm? (Yes)] Use the arrows to select a number. Press ENTER to confirm. Enter the password again.
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### Change password

Change the password.

[Password]

[Change PSW]

[Confirm? (No)]

[Confirm? (Yes)]

Use the arrows to select a number.

Press ENTER to confirm.

Enter the password again.

### Remove password

Remove the password.

[Password]

[Delete PSW]

[Confirm? (No)]

[Confirm? (Yes)]

## ERROR MESSAGES

### Encoder - ERROR

The Encoder is disconnected.  
The Encoder is broken.

### Error!

The Encoder is disconnected.  
The Encoder is broken.

### Safety test - ERROR

The photocells are not correctly connected or configured.

### Limit-switch - ERROR

Malfunctioning limit-switch contacts.

### Operating time - ERROR

Finished the maximum work time set.

### Safety devices - STOP

Contact 1-2 (NC) is open.

### C1

The (NC) contacts are open.

### C3

The (NC) contacts are open.

### C4

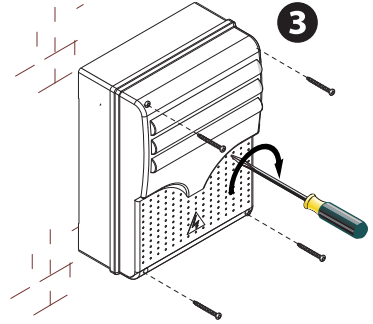
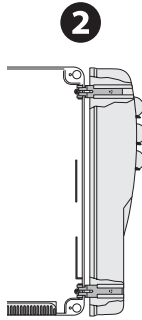
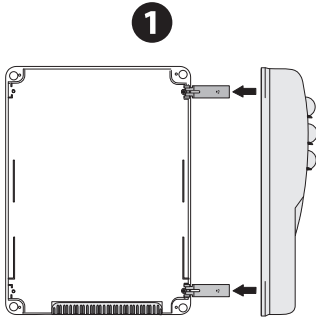
The (NC) contacts are open.

### C7

The (NC) contacts are open.

## FINAL OPERATIONS

 Before closing up the casing, check that the cable inlets are sealed to stop insects getting in and to prevent damp.



Fabricante / Manufacturer / Hersteller / Fabricator / Fabricants / Fabricante  
/ Wytwórca / Fabrikant

**Came S.p.a.**

Indirizzo / adresse / adresse / dirección / endereço / adres / adres

Via Martiri della Libertà 15 31030 - Dosson di Casier Treviso - Italy



DICHIARA CHE IL QUADRO COMANDO PER MOTORIDUTTORI A 24 V / DECLARES THAT THE CONTROL PANEL FOR 24 V GEARMOTORS IS FIT FOR USE / DÉCLARE QUE LE STÉRIERUNG FÜR 24 V ANTRIEBE / DÉCLARE QUE LE ARMONIE DE COMMANDE POUR MOTORREDUCTEURS 24 V / DECLARA QUE LAS CUADRO DE MANDO PARA MOTORREDUCTORES DE 24 V / DECLARA QUE AS CUADRO DE COMANDO PARA MOTORREDUCTORES A 24 V / OSMAZDAJE ZE CENTRALIA STERUJĄCĄ DO NAFEDOW ZASILANYCH NAFĘCIEM 24 V / VERKLAART DAT DE STUURPANEEL VOOR 24 V-MOTOREN

ZLJ24  
ZLJ24CP  
ZLJ24Z

E' CONFORME ALLE DISPOSIZIONI DELLE SEGUENTI DIRETTIVE / IT COMPLIES WITH THE PROVISIONS OF THE FOLLOWING DIRECTIVES / DEN VORGABEN DER FOLGENDEN RICHTLINIEN ENTSPRECHEN / EST CONFORME AUX DISPOSITIONS DES DIRECTIVES SUIVANTES / CUMPLEN CON LAS DISPOSICIONES DE LAS SIGUIENTES DIRECTIVAS / ESTAO DE ACORDO COM AS DISPOSIÇÕES DAS SEQUINTES DIRECTIMAS / SA ŽODINE ZA POSTANOVNAMI NASTEPLJAJUJOČI DREKTYVOI EUROPEJSKIHI / VOLGDEN AAN DE VOORSCHRIFTEN VAN DE VOLGENDE RICHTLIJNEN:

- COMPATIBILITA' ELETTROMAGNETICA / ELECTROMAGNETIC COMPATIBILITY / ELEKTROMAGNETISCHE VERTRÄGLICHKEIT / COMPATIBILITE ELECTROMAGNETIQUE / COMPATIBILIDAD ELECTROMAGNETICA / COMPATIBILIDADE ELECTROMAGNETICA / КОМПАТИБІЛНІСТЬ ЕЛЕКТРОМАГНЕТНОЇ ЗЧУВ'Я / ELEKTROMAGNETISCHE COMPATIBILITEIT - 2014/30/UE.  
- BASSA TENSIONE / LOW VOLTAGE / NIEDERSPANNUNG / BASSE TENSION / BAJA TENSÓN / BAJA TENSÃO / NISKIEGO NAPIĘCIA / LAAGSPANNING : 2014/35/UE.

Riferimento norme armonizzate ed altre norme tecniche / Refer to European regulations and other technical regulations / Harmonisierter Normen und andere technische Vorgaben / Referência normas harmonizadas et aux autres normes techniques / Referencia normas armonizadas e outras normas técnicas / Odnoznac normy uzgodnione i inne normy techniczne / Gebruiknormen en andere technische normen waarnaar is verwezen

EN 61000-6-2:2005

EN 61000-6-3:2007+A1:2011

EN 62333:2008

EN 60335-1:2012+A11:2014

EN 60335-2-103:2015

ASSEMBLIATO CORRETTAMENTE CON I MOTORIDUTTORI INDICATI NEL MANUALE DI INSTALLAZIONE, RISPETTA I REQUISITI ESSENZIALI APPLICATI / CORRECTLY ASSEMBLED WITH THE GEARMOTORS INDICATED IN THE INSTALLATION MANUAL, MEET THE APPLICABLE ESSENTIAL REQUIREMENTS / KORREKT MONTIERT MIT DEN IN DER INSTALLATIONSANLEITUNG ANGEZEIGTEN GETRIEBEMOTOREN, DEN WESSENTLICHEN ANFORDERUNGEN ENTSPRECHEN / CORRECTEMENT ASSEMBLÉ AVEC LES MOTEURREDUCTEURS INDICÉS DANS LE MANUEL D'INSTALLATION, RESPECTE LES CONDITIONS REQUISES NECESSAIRES APPLIQUEES / MONTADO CORRECTAMENTE CON LOS MOTORREDUCTORES INDICADOS EN EL MANUAL DE INSTALACION, CUMPLEN CON LOS REQUISITOS ESSENCIALES APLICADOS / MONTADOS CORRECTAMENTE COM OS MOTORREDUCTORES INDICADOS NO MANUAL DE INSTALACAO O REQUISITOS ESSENCIAIS APLICADOS / PRZYMOWIOWO ZMONTOWANE Z MOTEORREDUKTORAMI WSKAZANYMI W INSTRUKCJI MONTAZI, SPELNIAJA PODSTAWOWE WYMAGANIE WYTLINKI / CORRECT GEARMOTOREN MET DE MOTORREDUCTOREN AANGEGEVEN IN DE INSTALLATIE-HANDLEIDING, 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; 1.5.10; 1.5.11; 1.5.13; 1.6.1; 1.6.3; 1.6.4;

1.7.1; 1.7.2; 1.7.4

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La documentazione tecnica pertinente è stata compilata in conformità all'allegato VIII. / The pertinent technical documentation has been drawn up in compliance with attached document VIII. / Die relevante technische Dokumentation wurde entsprechend der Anlage VIII ausgearbeitet. / La documentation technique spécifique a été remplie conformément à l'annexe VIII / La documentación técnica pertinente ha sido redactada en cumplimiento con el anexo VIII. / A documentação técnica pertinente ta preenchida de acordo com o anexo VIII. / Osobnowa dokumentacja techniczna została zestawiana zgodnie z załącznikiem VIII. / De technische documentatie terzide is opgesteld in overeenstemming met de bijlage VIII.

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La messa in servizio finale di una macchina non è stata dichiarata conforme, se del caso alla 2006/42/CE / commissioning of the above mentioned unit such as stated when the final machine into which they must be incorporated, has been declared compliant, / permito, la 2006/42/CE / de inbrenging van de "Eindmachine" in de unvollständige Maschine eingebaut wird, die konform erklärt wurde, gegebenenfalls gemäß der Richtlinie 2006/42/EG. / la mise en service finale de 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 deverá ser incorporada, não for declarada em conformidade, de acordo com a 2006/42/CE. / uruchomienie urzadzenia do czasu, kiedy maszyna, do której ma być wstawiona, nie zostanie oznajmiona jako zgodna z wymaganiami dyrektywy 2006/42/WE, jeśli taka procedura była konieczna. / deen in werking te stellen zolang de eindmachine waarin de niet-volledige machine moet worden ingebouwd in overeenstemming is verklaard, indien toepasselijk met de richtlijn 2006/42/EG.

Dosson di Casier (TV)

5 Novembre / November / November /  
Novembre / Novembre / Novembro /  
Listopad / November 2018

Administratore Delegato / Managing Director /  
General Director / Directeur Général / Director General /  
Administrador Delegado / Dyrektor Zarządzający /  
Algemeen Directeur

Andrea Mazzetto

Fascicolo tecnico a supporto / Supporting technical dossier / Unterstützung technische Dossier / soutien dossier technique / apoyo expediente técnico / spóler dossier técnico / wspierający dokumentacji technicznej / ondersteunende technische dossier: 00ZL124

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