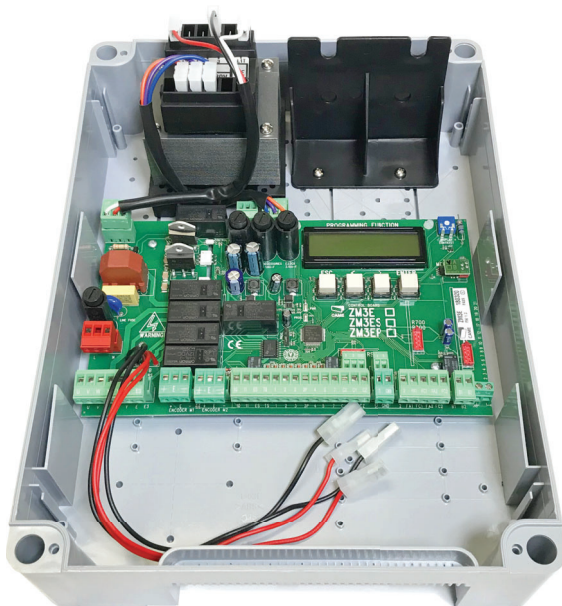


Control panel for 230 V gearmotors

FA02217-EN

CE

EAC



ZM3E

ZM3EC

ZM3EP

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. • 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.
- The product, in its original packaging supplied by the manufacturer, must only be transported in a closed environment (railway carriage, containers, closed vehicles).
- If the product malfunctions, stop using it and contact customer services at <https://www.came.com/global/en/contact-us> or via the telephone number on the website.
- The manufacture date is provided in the production batch printed on the product label. If necessary, contact us at <https://www.came.com/global/en/contact-us>.
- The general conditions of sale are given in the official CAME price lists.

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

PRODUCT DATA AND INFORMATION

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

002ZM3E

Multifunction control panel for swing gates with two leaves. Graphic signalling display and self-diagnosing safety devices and built-in radio decoding.

002ZM3EC

Multifunction control panel for swing doors with two leaves, complete with safety lock and buttons, with graphic programming and signalling display, plus self-diagnosing safety devices.

002ZM3EP

Multifunction control panel for swing gates with two leaves. Graphic programming and signalling display, self-diagnosing safety devices and built-in radio decoding.

Intended use

ZM3E - With the Green Power module connected to the control panel, the end installations fall within the scope of Regulation (EU) 2023/826; “Household and Office” spaces.

ZM3EC / ZM3EP - For end installations NOT falling within the scope of Regulation (EU) 2023/826.

Technical data

MODELS	ZM3E	ZM3EC	ZM3EP
Power supply (V - 50/60 Hz)	230 AC	230 AC	230 AC
Motor power supply (V)	230 AC	230 AC	230 AC
Power (W)	750	750	2400
Colour	RAL 7040	RAL 7040	RAL 7040
Operating temperature (°C)	-20 ÷ +55	-20 ÷ +55	-20 ÷ +55
Protection rating (IP)	54	54	54
Insulation class	II	II	II
Storage temperature (°C) *	-25 ÷ +70	-25 ÷ +70	-25 ÷ +70
Average life (hours) **	100.000	100.000	100.000

(*) Before installing the product, keep it at room temperature where it has previously been stored or transported at a very high or very low temperature.

(**) The average product life is a purely indicative estimate. It applies to compliant usage, installation and maintenance conditions. It is also influenced by other factors, such as climatic and environmental conditions (where present, see the MCBF table).

Fuse table

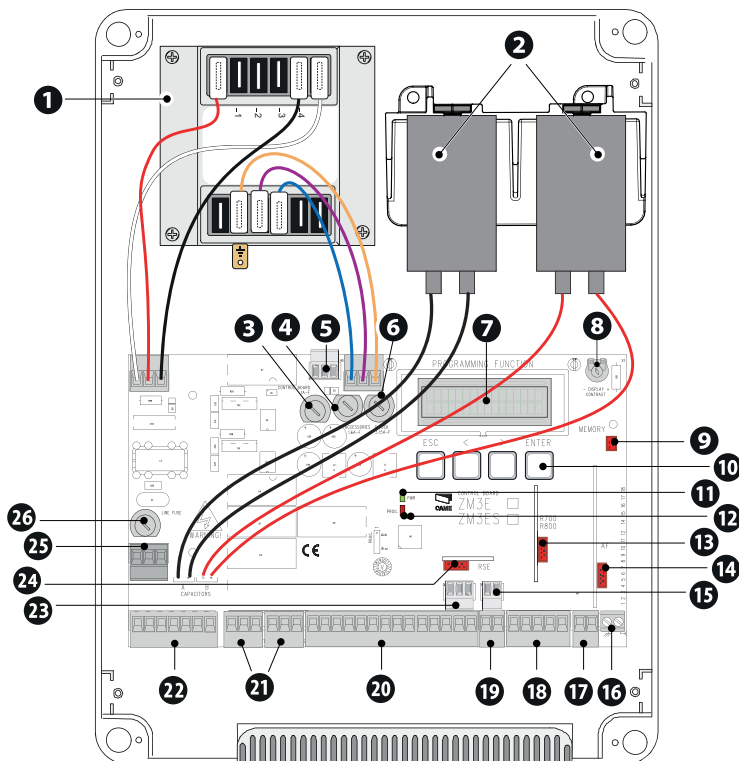
MODELS	ZM3E	ZM3EC	ZM3EP
Line fuse	5 A F	5 A F	10 A F
Control-board fuse	1 A F	1 A F	1 A F
Accessories fuse	1.6 A F	1.6 A F	1.6 A F

Description of parts

- | | |
|--|--|
| 1 Transformer | 10 Terminal board for connecting the keypad selector |
| 2 Capacitors * | 16 Terminal board for connecting the antenna |
| 3 Control board fuse | 17 Terminal board for B1-B2 output |
| 4 Accessories fuse | 18 Terminal board for connecting the limit switches |
| 5 Terminal board for connecting the RGP1 module | 19 Terminal board for connecting the transponder selector switch |
| 6 Electric-lock fuse | 20 Terminal board for connecting control and safety devices |
| 7 Display | 21 Terminal board for connecting the encoder |
| 8 Trimmer to adjust the display lighting | 22 Terminal boards for gearmotors |
| 9 Memory Roll card connector | 23 Terminal board for CRP connection |
| 10 Programming buttons | 24 RSE card connector |
| 11 Power LED | 25 Power supply terminal board |
| 12 Programming status warning LED | 26 Line fuse |
| 13 Connector for the R700 or R800 decoding card | |
| 14 Connector for plug-in radio frequency card (AF) | |

* Only for 230 V Frog gearmotors.

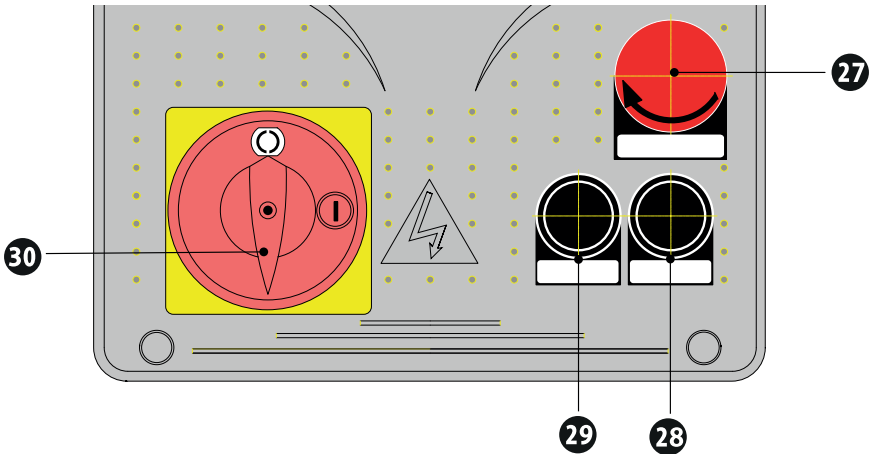
Use the black cables to connect M1 and the red cables to connect M2.



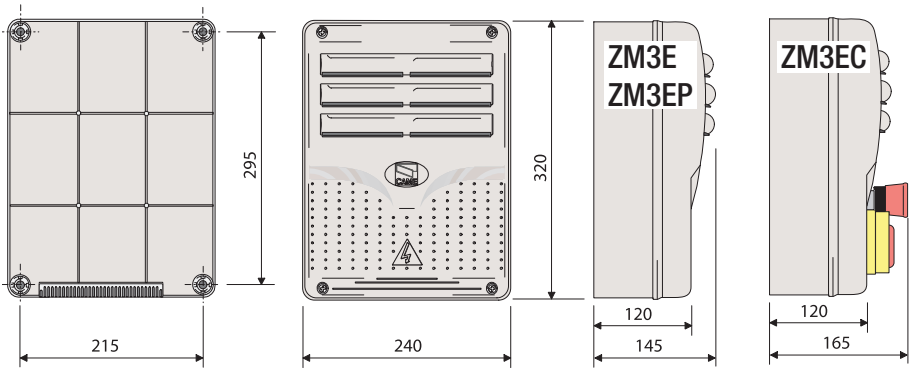
Only for ZM3EC

- 27 STOP button
- 28 CLOSING button

- 29 OPENING button
- 30 SAFETY LOCK knob



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 ²	3G x 2.5 mm ²
Flashing beacon 230 V AC	2 x 0.5 mm ²	2 x 0.5 mm ²
TX Photocells	2 x 0.5 mm ²	2 x 0.5 mm ²
RX photocells	4 x 0.5 mm ²	4 x 0.5 mm ²
12 V DC electric lock	2 x 1 mm ²	2 x 1.5 mm ²
Command and control devices	*no. x 0.5 mm ²	*no. x 0.5 mm ²


* 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).

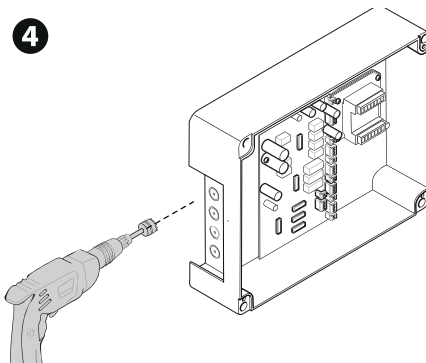
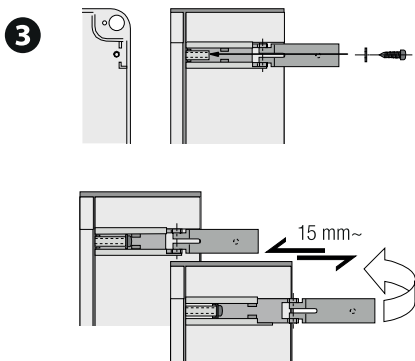
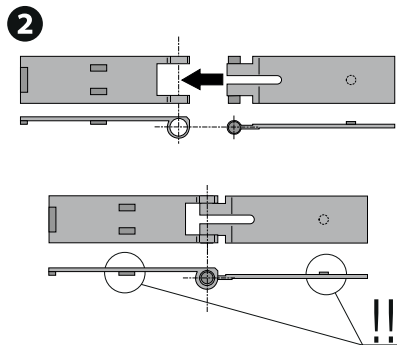
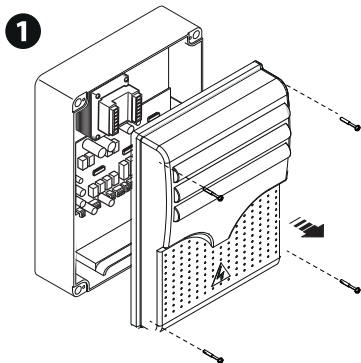
 If the cable lengths differ from those specified in the table, define the cable cross-sections according to the actual power draw of the connected devices and in line with regulation CEI EN 60204-1.

 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 mm² cable or a cable supplied by CAME on request (item code 801XA-0020). The maximum cable length is 30 m.

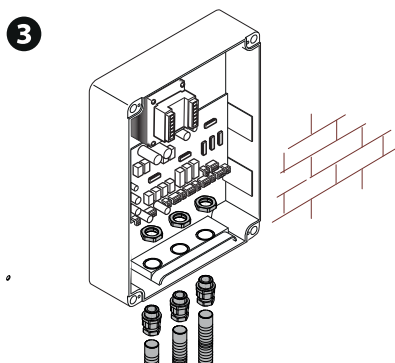
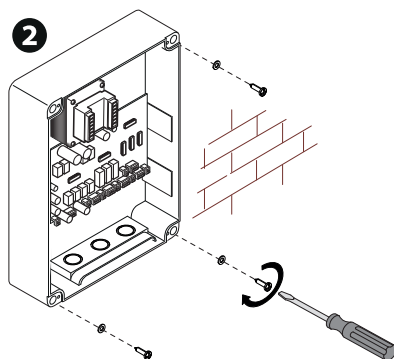
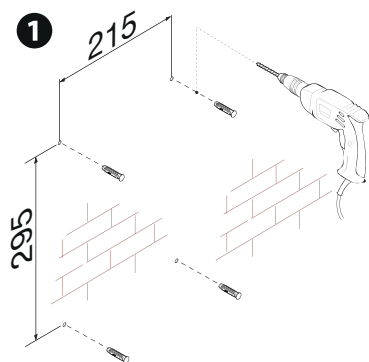
Preparing the control panel

- 1 Separate the parts of the control panel.
- 2 Assemble the pressure hinges.
- 3 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.
- 4 Drill the pre-marked holes. The diameter of the holes is 20 mm.





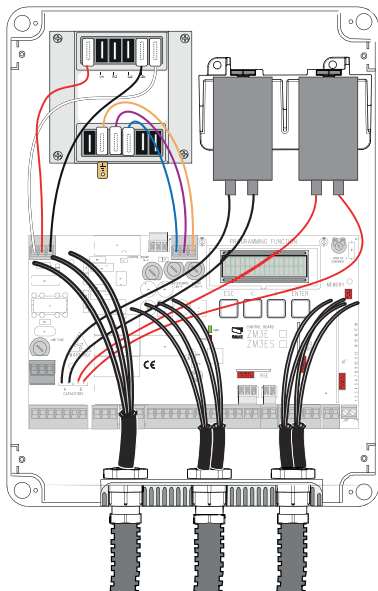
Fastening the control panel

- 1 Drill the fixing points in the control panel in a protected area.
 - 2 Fasten the base using screws and plugs.
 - 3 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)

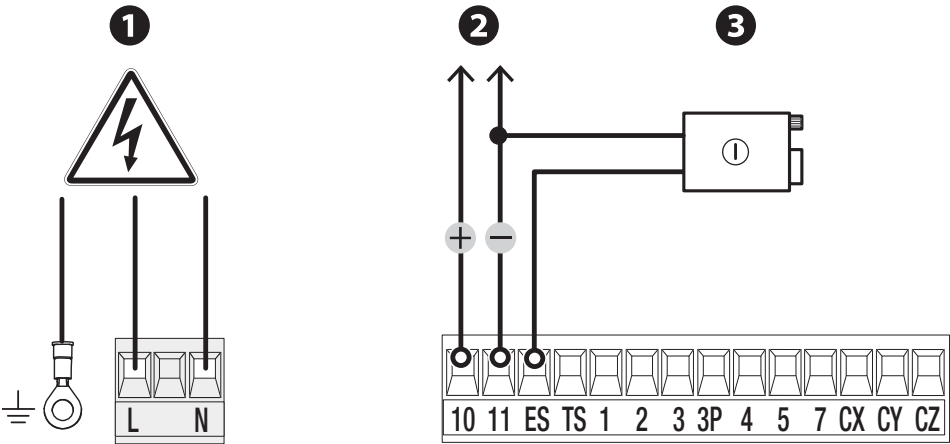
2 Power supply output for accessories 24 V

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.



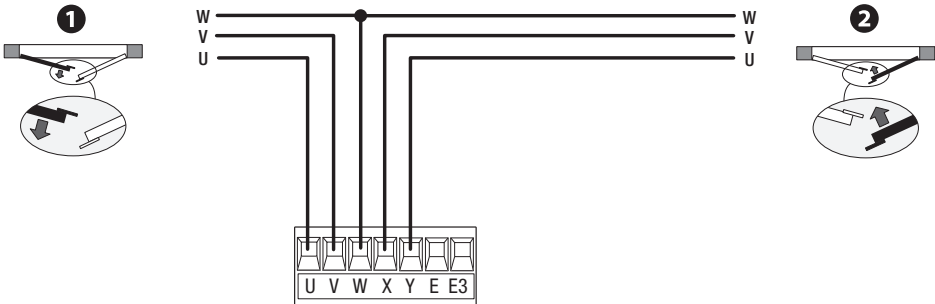
Maximum capacity of contacts

Device	Output	Power supply (V)	Power (W)
Accessories	10 - 11	24 AC	20
Additional light	E - E3	230 AC	60
Flashing beacon	W - E	230 AC	25
Operator status warning light	10 - 5	24 AC	3

Gearmotor without limit switch

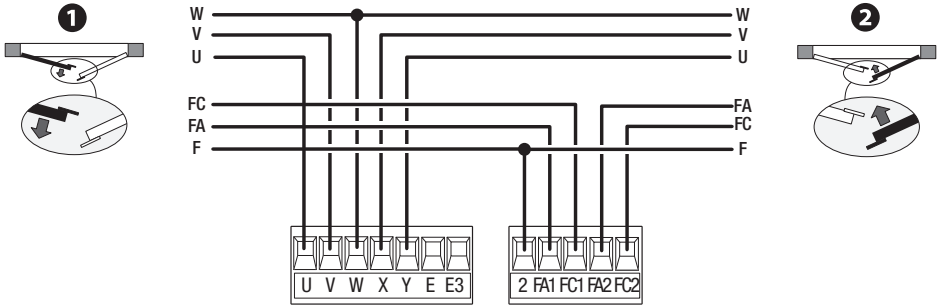
1 Gearmotor delayed while opening

2 Gearmotor delayed while closing



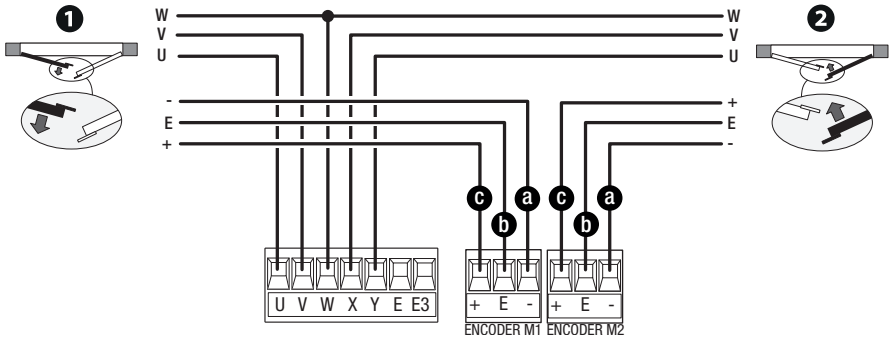
Gearmotor with limit switch

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



Gear motor with encoder

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



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

Command and control devices


1 STOP button (NC contact)

This stops the gate and excludes 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

PEDESTRIAN OPENING function

 See Command 2-3P 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 function

OPEN-STOP-CLOSE-STOP function.

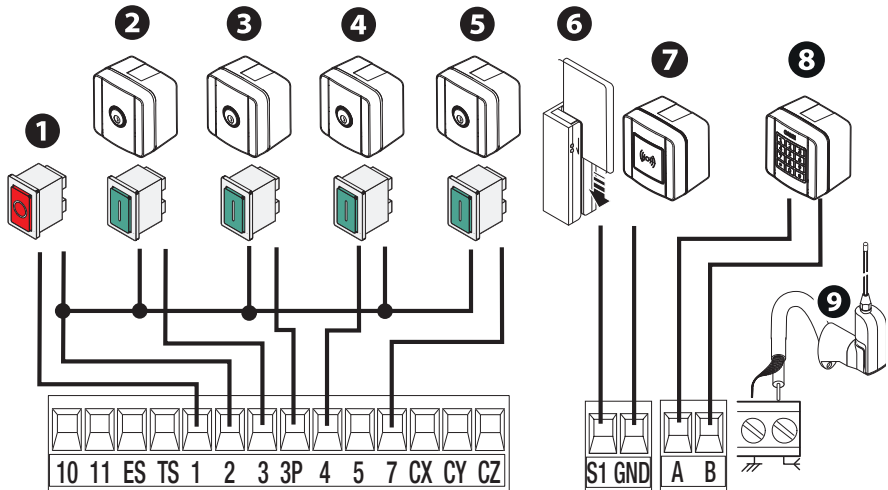
 See control function 2-7.

6 Card reader

7 Transponder selector switch

8 Keypad selector

9 Antenna with RG58 cable



Signalling devices

1 Flashing beacon

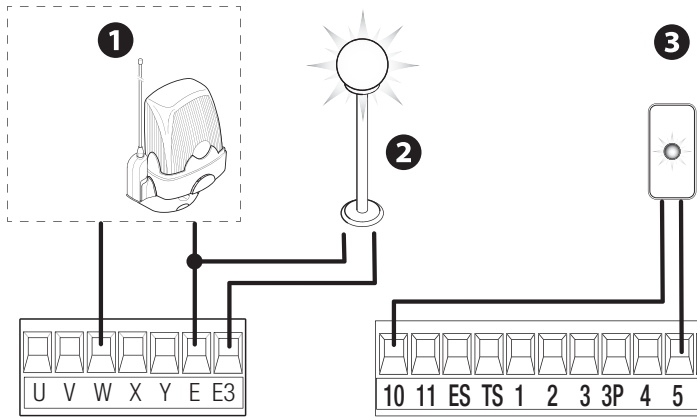
It flashes when the operator opens and closes.

2 Additional light

It increases the light in the manoeuvring area.

3 Operator status warning light

It notifies the user of the operator status.



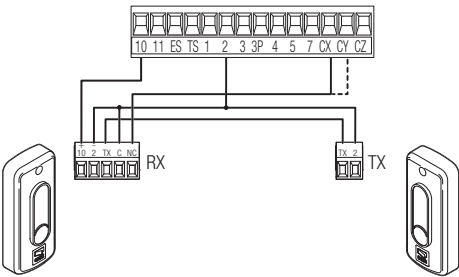
Safety devices

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.

DIR photocells

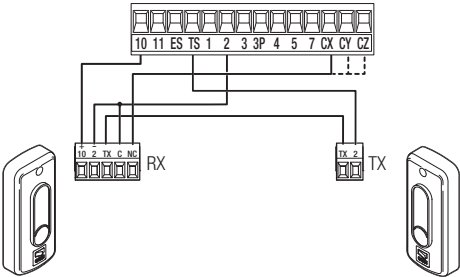
Standard connection



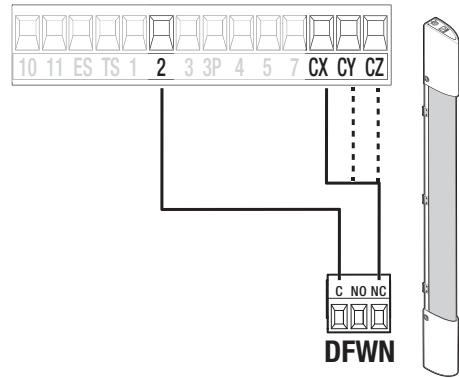
DIR photocells

Connection with safety test

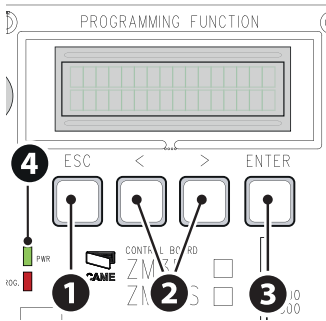
See [Safety devices test] function.



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 a choice

4 Power LED

The LED lights up when the board is powered up.

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]
------------	--	---

Automatic closure

Activate automatic closing.

[FUNCTIONS]	[Automatic close]	[Deactivated] [Activated] (Default)
-------------	-------------------	--

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]
-------------	---------------	---

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]
-------------	--------------------	--

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]
-------------	-----------------------	--

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]
-------------	----------------	--

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]
-------------	----------	--

Total stop

This stops the gate and excludes automatic closing. Use a control device to resume movement.

[FUNCTIONS]	[Total stop]	[Deactivated] [Activated] (Default)
-------------	--------------	--

CX input

Associate a function with the CX input.

[FUNCTIONS]	[CX input]	[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)
-------------	------------	---

CY input

Associate a function with the CY input.

[FUNCTIONS]	[CY input]	[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)
-------------	------------	---

CZ input

Associate a function with the CZ input.

[FUNCTIONS]	[CZ input]	[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)
-------------	------------	---

Closing thrust

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

[FUNCTIONS]	[Cl. thrust]	[Deactivated] (Default) [Activated]
-------------	--------------	--

Lock

Associate the electric lock release with a command.

[FUNCTIONS]	[Lock]	[Deactivated] (Default) [Close] [Open] [Open-Close]
-------------	--------	--

Configurations


Configure slowdowns and limit switches.

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

[FUNCTIONS]	[Config]	[Slow.] = Slowdown during opening and closing [Op.LS-CI.Slow.] = Opening limit-switch and closing slowdown. [ENCODER] = Encoder (Default) [Time LS] = Time limit switch [Limit switch] = Opening and closing limit-switches
-------------	----------	---

Limit switch

Configure the limit switch contacts as NO or NC.

 This function only appears when one of the follow parameters is selected from the [Config] function: [Limit switch] [Op.LS-CI.Slow.] [Slow.].

[FUNCTIONS]	[Limit switch]	[N.C.] (Default) [N.O.]
-------------	----------------	----------------------------

Command 2-7

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

[FUNCTIONS]	[Command 2-7]	[Open-Close](Default) [Op. Stop Cl.]
-------------	---------------	---


Command 2-3P

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

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

Additional light

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

[FUNCTIONS]	[Light E]	[Courtesy] The light stays on for 5 minutes. [Cycle] (Default) The lamp stays on during the manoeuvre.  The light remains off if an automatic closing time is not set.
-------------	-----------	---

B1-B2 output

Configure the contact.

[FUNCTIONS]	[Output B1-B2]	[Monostable] (Button) [Bistable] (Switch) (Default)
-------------	----------------	--

Slowdown speed

Set the slowdown speed.

[FUNCTIONS]	[Slow. speed]	
-------------	---------------	--

Number of motors

Set the number of motors that control the gate.

[FUNCTIONS]	[No. motors]	[M1 +M2] (Default) [M2]
-------------	--------------	----------------------------

Motor type

Set the type of gearmotor installed.

[FUNCTIONS]	[Motor type]	[FROG] (Default) [AXO] [FAST] [FERNI] [FROG-PLUS]
-------------	--------------	---

Sleep Mode

This reduces the consumption of the photocells when they are in standby.

[FUNCTIONS]	[Sleep Mode]	[Deactivated] (Default) [Activated]
-------------	--------------	--

CRP address

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

[FUNCTIONS]	[CRP address]	from [1] to [32]
-------------	---------------	------------------

CRP Baud rate

Set the communication speed of the remote connection system.

[FUNCTIONS]	[CRP Baud rate]	[1200] [2400] [4800] [9600] [19200] [38400] (Default) [57600] [115200]
-------------	-----------------	---

Removing obstacles


If an obstacle is detected by the sensitive edge or by the electronic board, the motion is inverted to create sufficient space to clear the obstacle.

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

[FUNCTIONS]	[Remove obstacle]	[Deactivated] (Default) [Activated]
-------------	-------------------	--

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]
---	---------------	--

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.]	
---	---------------	--


Encoder slowdown


Activate the opening and closing slowdown starting points.

[ENCODER]  This function appears only if the [ENCODER] parameter is activated from the [Config] function	[Enc. Slow.]	[ON] (Default) [OFF]
--	---------------------	-------------------------

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%)
--	-------------------------	------------------------------

Closing slowdown point for M1

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%)
--	------------------------	------------------------------

Closing slowdown point for M2


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%)
--	-------------------------	------------------------------


Closing approach point for M1

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%)
--	-------------------------	------------------------------


Opening approach point for M1

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 limit-switch has been reached.

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

[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)
------------	-------------	---

Partial opening time

Adjust M2 opening time.

[SET TIME]	[Part. open]	from 5 to 60 seconds (Default 10 seconds)
------------	--------------	---

Slowdown time


Set the slowdown time before each limit switch.

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

[SET TIME]	[Slow. time] function	[OFF] from [0 s] to [30 s] (Default 5 s)
------------	-----------------------	---

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.

[USERS]	[New user]	[Deactivated] [2-7] (Step-by-step or sequential control) [Open] [B1-B2] [2-3P] (Pedestrian or partial opening)
---------	------------	--

Edit name

Change the username or associated number.

[USERS]	[Edit name]	
---------	-------------	--

Edit code

Modify the code of a command associated to a user.

[USERS]	[Edit code]	
---------	-------------	--

Associated function

Associate a function with the user.

[USERS]	[Associated Func.]	[2-7] (Step-by-step or sequential control) (Default) [Open] [B1 -B2] [2-3P] (Pedestrian or partial opening)
---------	--------------------	--

Remove user

Remove one of the registered users.

[USERS]	[Delete user]	
---------	---------------	--

Remove all

Remove all registered users.

[USERS]	[Delete all users]	[Confirm? (No)] [Confirm? (Yes)]
---------	--------------------	-------------------------------------

Sensor type

Set the type of control device.

[USERS]	[SENSOR]	[Keypad] (Default) [Transponder]
---------	----------	-------------------------------------


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)]
---------	---------------	-------------------------------------

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]
---------	-----------------	--

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.

[INFO]	[Initial msg]	[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.
--------	---------------	---


Resetting the system

Restore factory settings.

[INFO]	[System reset]	[Confirm? (No)] [Confirm? (Yes)] Press ENTER to confirm.
--------	----------------	--

Motor test

Check the gate leaves open in the right direction.

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

Password

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

[Password]		[Confirm? (No)] [Confirm? (Yes)] Use the arrows to select a number. Press ENTER to confirm. Enter the password again.
-------------------	--	---

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)]
-------------------	---------------------	---

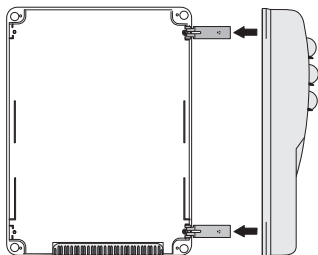
ERROR MESSAGES

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.

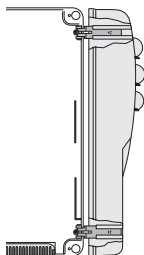
FINAL OPERATIONS

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

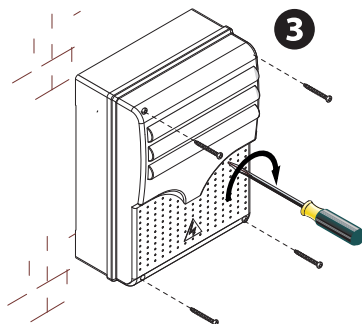
1



2



3





CAME.COM

CAME S.p.A.

Via Martiri della Libertà, 15

31030 Dosson di Casier

Treviso - Italy

Tel. (+39) 0422 4940

Fax (+39) 0422 4941

info@came.com - www.came.com