CAME

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FA02237-EN

CE

ZL65

INSTALLATION MANUAL

EN English

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GENERAL PRECAUTIONS FOR INSTALLERS

⚠ 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. If you are automating a pedestrian gate that moves horizontally, this can be achieved if the corresponding distance is less than 8 mm. However, the distances indicated below are sufficient to avoid trapping the corresponding body parts:

- fingers, more than 25 mm;
- feet, more than 50 mm;
- head, more than 300 mm;
- for the entire body, more than 500 mm.

If you cannot achieve these distances, you will need to take suitable safety precautions. • 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. • Where operated with a hold-to-run control, install a STOP button to disconnect the main power supply to the operator, to block movement of the guided part. • 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 support service, 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. Please 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

002ZL65
Control panel for one or two-leaf swing gates, with programming display, on-board radio decoding and self-diagnosing safety devices.

Intended use

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.

Technical data

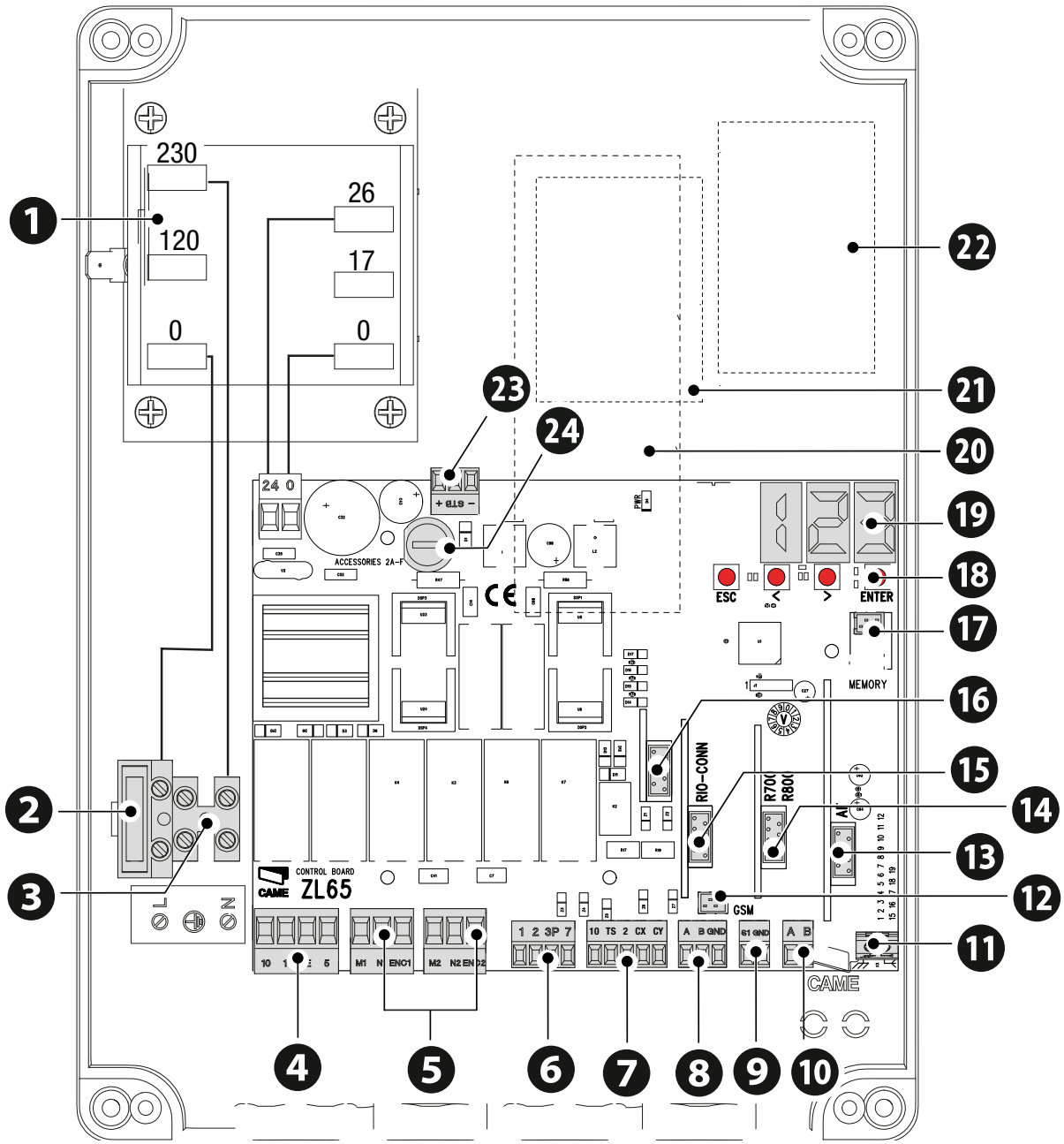
MODELS	ZL65
Power supply (V - 50/60 Hz)	230
Motor power supply (V)	24
Power (W)	300
Operating time (s)	180
Encoder	YES
Protection rating (IP)	54
Insulation class	II
Average life (cycles)**	100.000

Fuse table

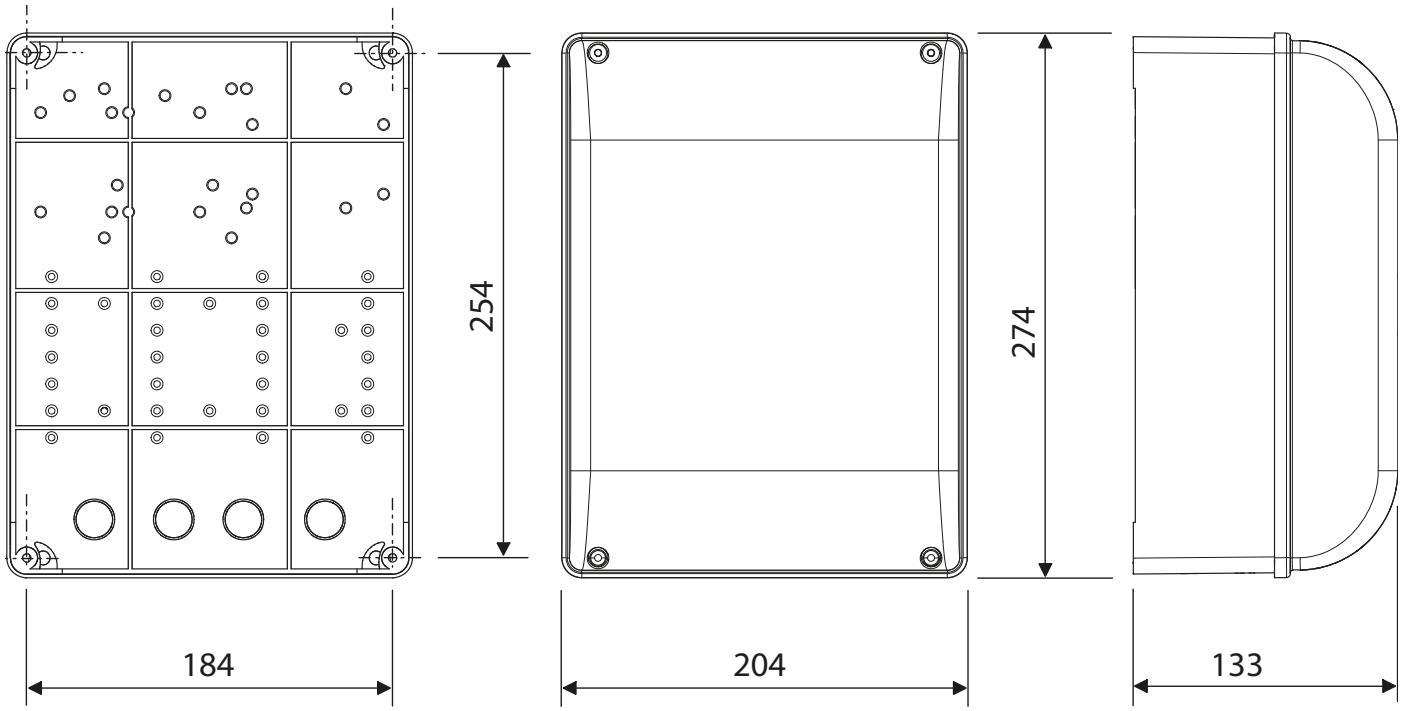
MODELS	ZL65
Line fuse	2 A F
Accessory fuse	2 A F

Description of parts

❶ Transformer
❷ Line fuse
❸ Power supply terminal board
❹ Terminal board for connecting the signalling devices
❺ Terminal boards for gearmotors with encoder
❻ Terminal board for connecting control devices
❼ Terminal board for connecting the safety devices
❽ Terminal board for CRP connection
❾ Terminal board for connecting the transponder selector switch
❿ Terminal board for connecting the keypad selector
⓫ Terminal board for connecting the antenna
⓬ Connector for the UR042 module
⓭ Connector for plug-in radio frequency card (AF)
⓮ Connector for the R700 or R800 decoding card
⓯ RIO CONN card connector
⓰ RSE card connector
⓱ Memory Roll card connector
⓲ Programming buttons
⓳ Display
⓴ Housing for UR042 module
㉑ Housing for the RGP1 module
㉒ Housing for the RLB card
㉓ Terminal board for connecting the RGP1 module
㉔ Accessories fuse



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 mm²	3G x 2.5 mm²
24 V AC/DC flashing beacon	2 x 0.5 mm²	2 x 0.5 mm²
TX Photocells	2 x 0.5 mm²	2 x 0.5 mm²
RX photocells	4 x 0.5 mm²	4 x 0.5 mm²
Command and control devices	*no. x 0.5 mm²	*no. x 0.5 mm²

* 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 that are IEC 60245 (IEC 57) compliant; when indoors, use H05VV-F cables that are IEC 60227 (IEC 53) compliant; For power supplies up to 48 V, use FROR 20-22 II cables compliant with standard 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).

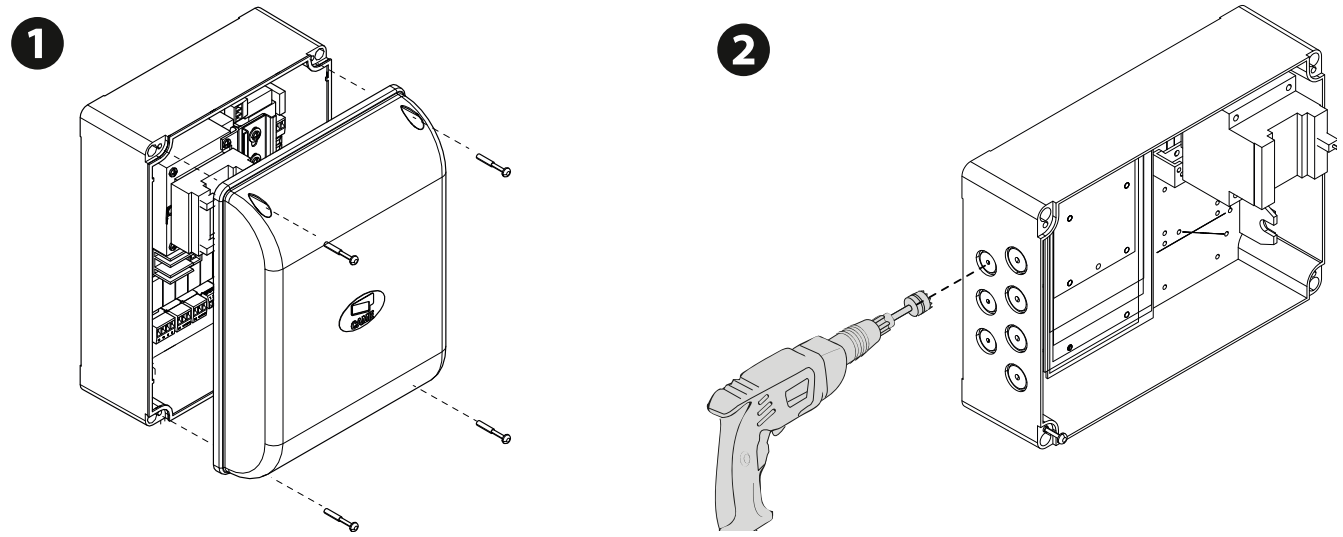
🕮 If the cable lengths differ from those specified in the table, define the cable cross-sections according to the actual power draw of the connected devices and in line with regulation CEI EN 60204-1.

🕮 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 FROHE 300/500 V shielded cable (3 x 0.5 mm²).

Preparing the control panel

❶ Separate the parts of the control panel.
❷ Drill the pre-marked holes. The diameter of the holes is 20 mm.

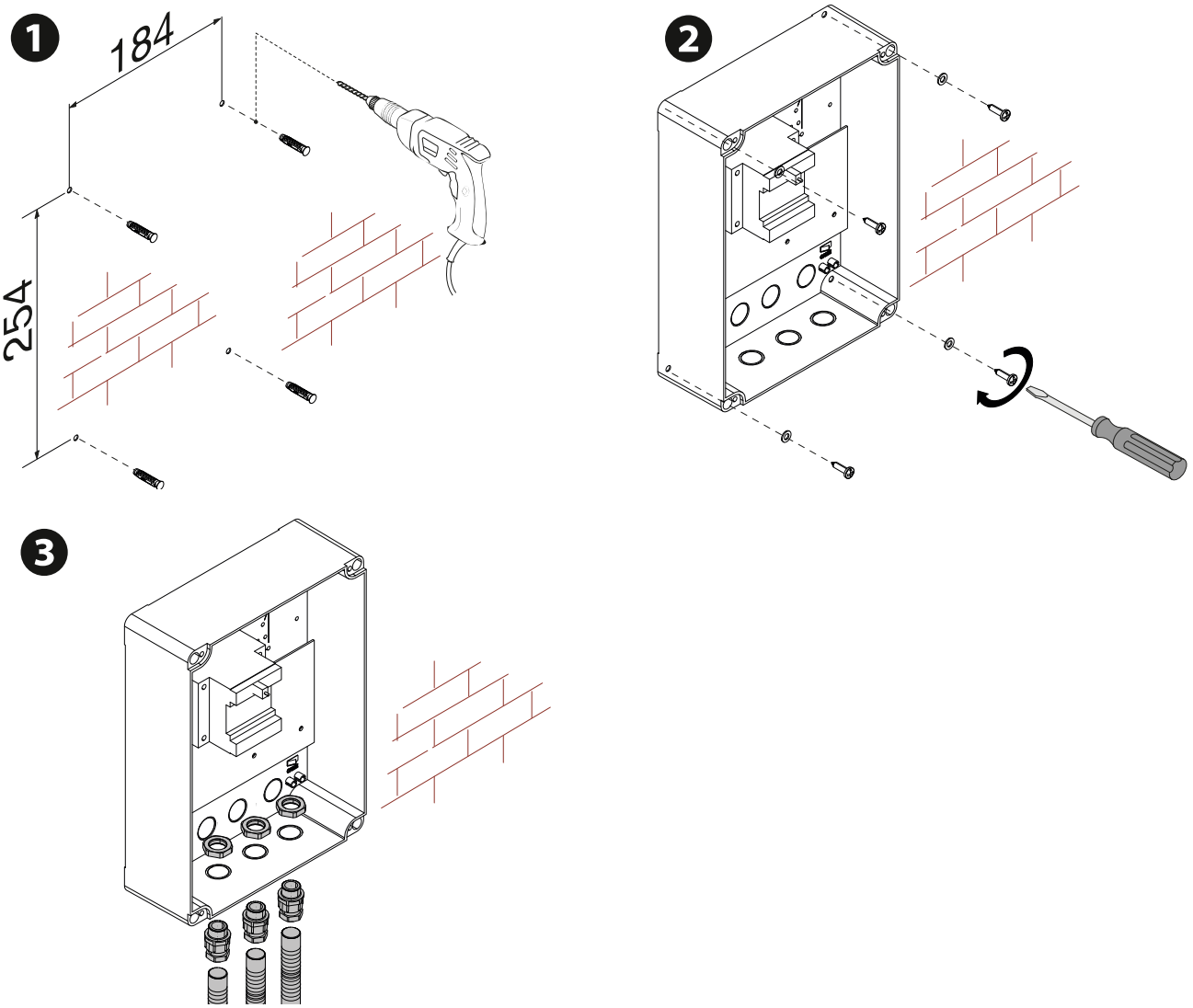


Fastening the control panel

❶ Drill the fixing points in the control panel in a protected area.
❷ Fasten the base using screws and plugs.

📖 Use Phillips round head screws (maximum diameter 6 mm).

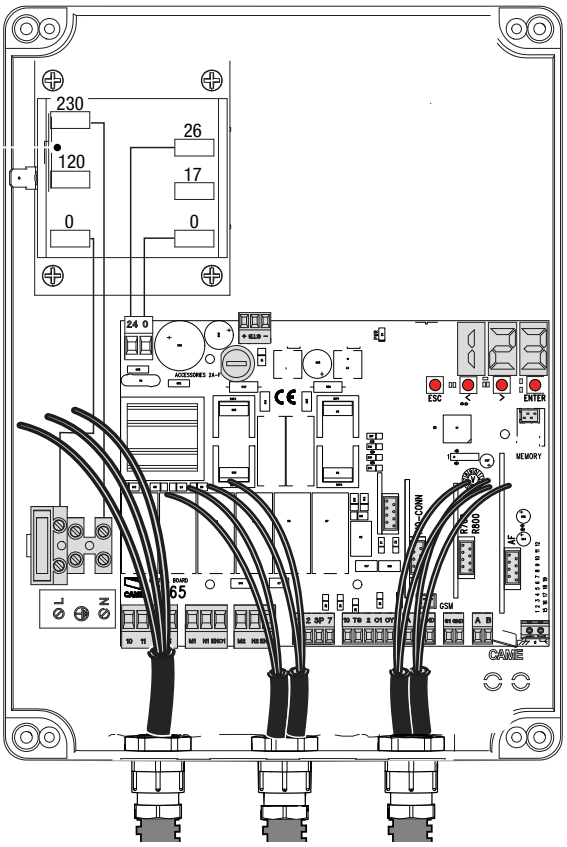
❸ Insert the cable gland with the corrugated tubes for threading the electrical cables



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.

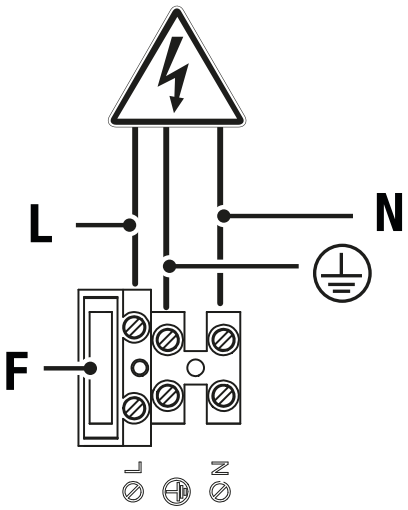


Connecting to the electrical network

Make sure the mains power supply is disconnected during all installation procedures.

⚠ Before working on the control panel, disconnect the mains power supply and remove the batteries, if any.

Power supply 230/120 V AC - 50/60 Hz



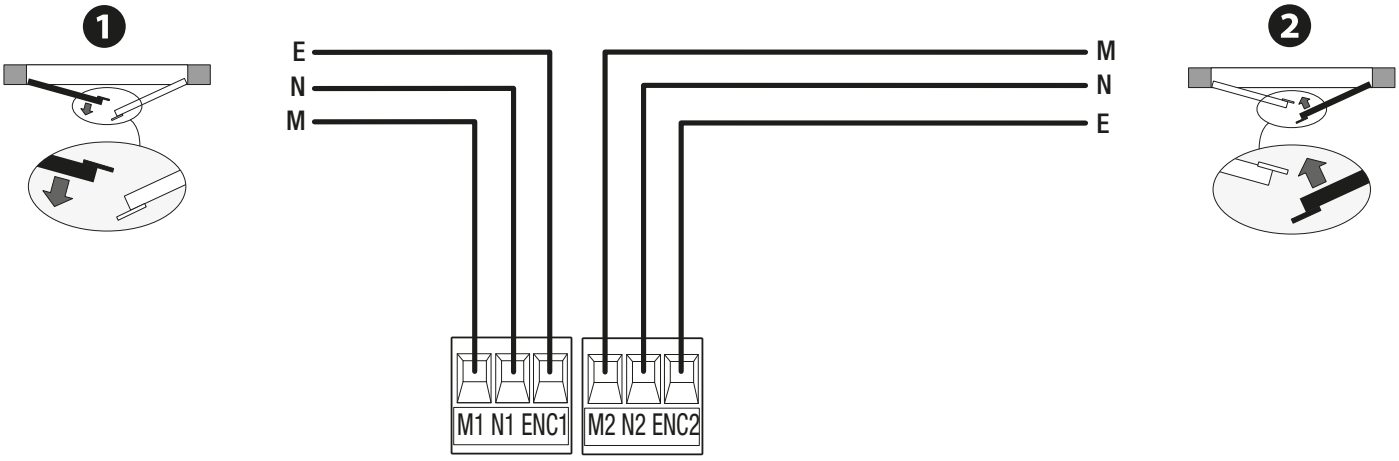
L - Phase
N - Neutral
F - Line fuse
⏚ - Earth

Connecting gearmotors for swing operators

Gearmotor with encoder

❶ **M1** = Gearmotor delayed while opening

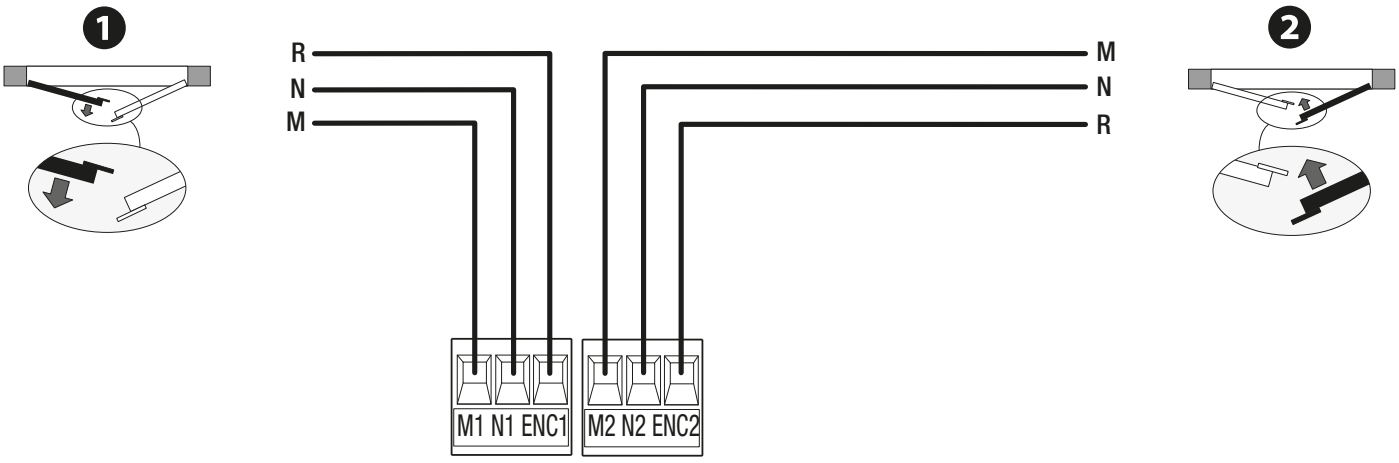
❷ **M2** = Gearmotor delayed while closing



Gearmotor without encoder

❶ **M1** = Gearmotor delayed while opening

❷ **M2** = Gearmotor delayed while closing



Connecting accessories

Power supply output for accessories 24 V

Device	Output	Power supply (V)	Maximum power (W)
Accessories	10 - 11	24 AC/DC	25
Flashing beacon	10 - E	24 AC/DC	25
Passage-open warning light	10 - 5	24 AC/DC	3
Electric lock	10 - 5	24 AC/DC	15

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

Command and control devices

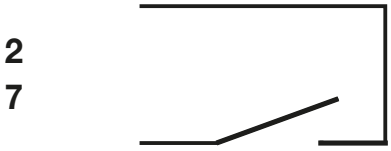
STOP button (NC contact)
This stops the operator and excludes automatic closing. Use a control device to resume movement.

📖 When the contact is being used, it must be activated during programming.

📖 See the [F1 – Total stop] function.

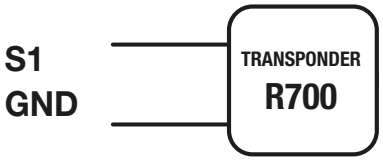
Control device (NO contact)
Open command
Partial Opening or Pedestrian command

📖 See the [F8 – 2-3P command] function.



Control device (NO contact)
Open command
Close command
Step-by-step command
Sequential command

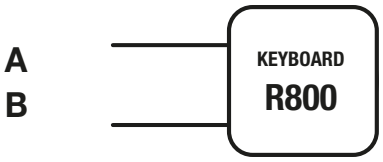
📖 See function [F7 - 2-7 command].



Transponder selector switch or card reader

📖 Insert the R700 card into the corresponding connector.

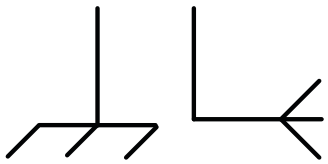
📖 See function [F14 Sensor type].



Keypad selector

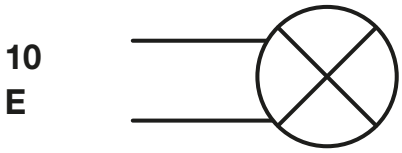
📖 Insert the R800 card into the corresponding connector.

📖 See function [F14 Sensor type].



Antenna with RG58 cable
Use this terminal to connect the antenna.

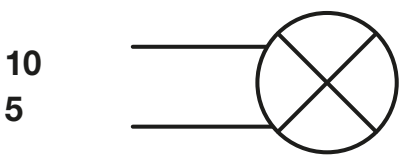
Signalling devices



Additional light
It increases the light in the manoeuvring area.

Flashing beacon
It flashes when the operator opens and closes.

📖 See function [F18 - Additional light].



Operator status warning light (Passage-open warning light)

📖 See function [F10 - Passage-open warning light].

Photocells and sensitive edges

Connect the devices to the CX and/or CY inputs.

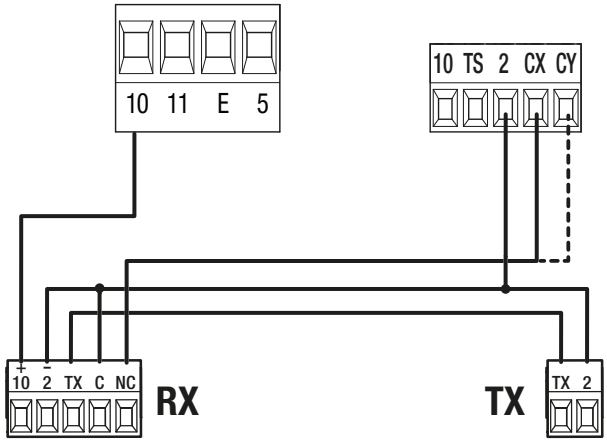
During programming, configure the type of action that must be performed by the device connected to the input.

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

🕮 For systems with multiple pairs of photocells, please see the manual for the relevant accessory.

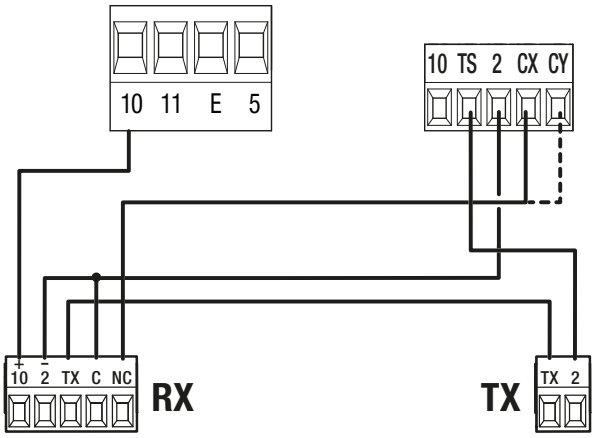
DIR photocells

Standard connection



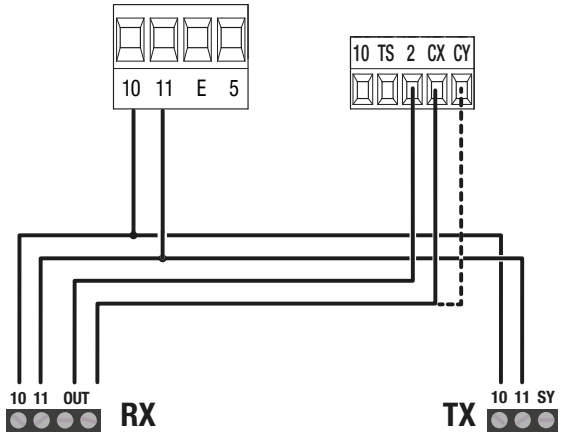
Connection with safety test

🕮 See function [F5] Safety devices test.



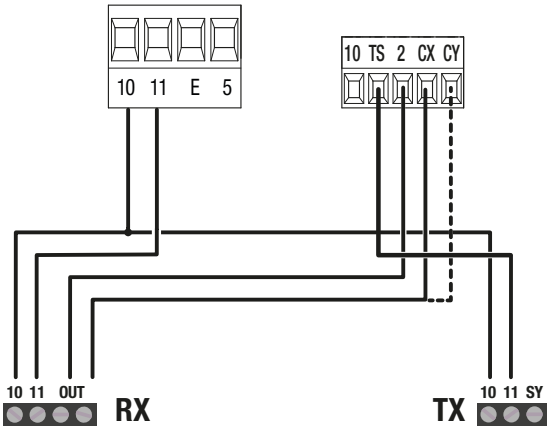
DXR / DLX photocells

Standard connection

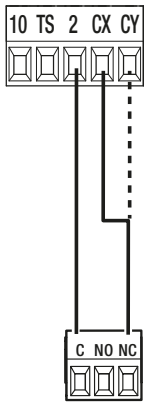


Connection with safety test

🕮 See function [F5] Safety devices test.

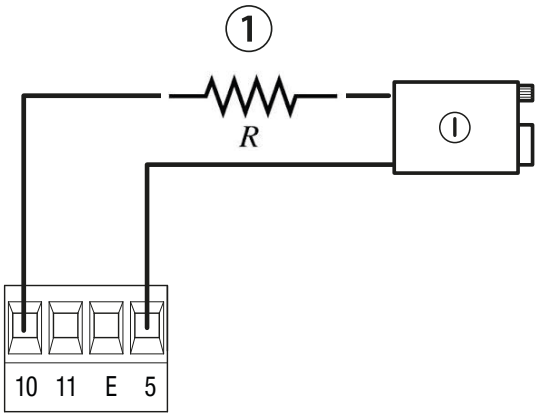


DFWN sensitive edge



DFWN

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

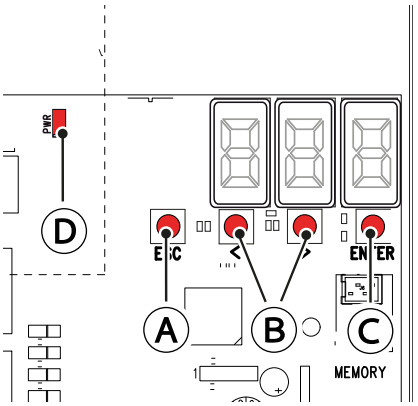


① **Resistance 6.8 Ω - 7 W**

📖 See function [F10] open warning light or enable electric lock.

📖 Replace the 2 A accessories fuse with a 3.15 A fuse.

Programming button functions and warning LEDs



Ⓐ 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
Stop the operator (outside the programming menu)

Ⓑ < > buttons

The < > buttons are used to perform the operations described below.
Navigate the menu
Increase or decrease values
< Close command (outside the programming menu)
> Open command (outside the programming menu)

Ⓒ ENTER button

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

Ⓒ 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.

Start programming with the functions indicated below.

A1 **Motor type**

F46 **Number of motors**

A3 **Travel calibration**

⚠ Complete programming and check the warning, safety and protection devices, and the manual release, are working properly.

📖 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.

Functions menu

Function		Parameters	Function description
F1	**Total stop**	OFF (Default) ON	The function is used to manage operator stops and exclusion of all other commands.When the function is activated, the 2-1 input is used as a normally closed contact. 📖 Use a control device to resume movement.

F2 **F3**	**CX input** **CY input**	OFF (Default) C1 = Reopen while closing (photocells) C2 = Reclose while opening (photocells) C3 = Partial stop Only with [F19 - Automatic close] activated. C4 = Obstacle standby (photocells) C7 = Reopen while closing (sensitive edges) C8 = Reclose while opening (sensitive edges)	The function is used to configure the CX (F2) and CY (F3) input.
F5	**Safety devices test**	OFF (Default) 1 = CX 2 = CY 4 = CX+CY	The function is used to check that the photocells connected to the selected inputs are operating correctly, after each opening and closing command. 📖 **Run the test by connecting the photocells to the TS terminal [see paragraph on Safety devices].**
F6	**Hold-to-run**	OFF (Default) ON	With the function active, the operator stops moving (opening or closing) when the control device is released. 📖 **When the function is active, it excludes all other control devices.**
F7	**Command 2-7**	0 = Step-by-step (default) - The first command is to open and the second to close. 1 = Sequential - The first command is to open, the second to STOP, the third to close and the fourth to STOP. 2 = Open 3 = Close	The function associates a command to the device connected on 2-7.
F8	**Command 2-3P**	0 = Pedestrian opening (Default) Complete opening of M2 only. 1 = Partial opening Partial opening of M2 only. 📖 **The degree of partial opening is set as a percentage using the [F36 – Adjusting the partial opening] function.** 2 = Open	Associate a command to the connected device on 2-3P.

F9	**Obstacle with motor stopped**	OFF (Default) ON	With the function active and the operator stopped, an open or close command is not performed if the safety devices detect an obstacle. The function is active when the passage is closed or open, or after a complete stop.
F10	**Passage-open warning light**	0 = Warning light on (default) - The light stays on when the operator is moving or the passage is open. 1 = Warning light flashing - The warning light flashes every half a second when the passage is opening and stays on when the passage is open. The light flashes every second when the passage is closing, and remains off when the passage is closed. 2 = The output enables an electric lock.	The function is used to set the type of warning for the open passage light or to enable the electric lock.
F11	**Encoder**	ON (Default) OFF	The function activates or deactivates the encoder. 📖 **If parameter [5 = ATI - F7204N] is selected under the function [A1 - Motor type], the encoder is set to OFF by default.**
F12	**Soft start**	OFF (Default) ON	The function is used to set a slowdown of a few seconds after each opening and closing command.
F13	**Closing thrust**	OFF (Default) 1 = Minimum thrust 2 = Medium thrust 3 = Maximum thrust	When the function is active, the leaves briefly exert a closing thrust.
F14	**Sensor type**	1 = Keypad selector (default) 0 = Transponder selector switch	Use the function to choose the connected control device.
F16	**Thrust**	OFF (Default) ON	When the function is active, before every manoeuvre, the leaves thrust inwards to release the electric lock.
F18	**Additional light**	0 =Flashing beacon (Default) 1 = Cycle light - The lamp stays on during the manoeuvre. 📖 **An automatic closing time must be set under [F19 – Automatic closing] to ensure correct operation.**	This function allows you to choose the operating mode of the lighting device connected to the output 10-E.

F19	**Automatic closure**	OFF (Default) From 1 to 180 seconds	The function is used to set the time before automatic closure, once the opening travel end point has been reached or once the photocells have caused a partial stop [C3]. 📖 **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.**
F20	**Automatic closing after either partial or pedestrian opening**	OFF 1 to 180 seconds (Default 10)	The function is used to set the time before automatic closure after a partial/pedestrian opening command has been performed or after the photocells have caused a partial stop [C3]. 📖 **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.**
F21	**Pre-flashing time**	OFF (Default) 1 to 10 seconds	The function adjusts the time for which the beacon is activated before each manoeuvre.
F22	**Operating time**	5 to 180 seconds (Default 120)	The function is used to set the gearmotor working time during opening and closing.
F23	**M1 opening delay time**	OFF 1 to 10 seconds (Default 2)	The function is used to adjust the delayed opening of the first leaf compared to the second.
F24	**M2 closing delay time**	OFF 0 to 25 seconds (Default 5)	The function is used to adjust the delayed closing of the second leaf compared to the first.
F26	**Thrust time**	1 to 2 seconds (Default 1)	The function is used to adjust the gearmotor closing thrust after an opening and closing command.
F27	**Electric lock time**	1 to 4 seconds (Default 1)	The function is used to adjust the electric lock release time after an opening and closing command.
F28	**Gate travel speed**	📖 **The parameters vary according to the motor selected in the [A1 – Motor type] function.**	The function is used to set the opening and closing speed. The percentage is calculated on the maximum travel speed.
F30	**Slowdown speed**	📖 **The parameters vary according to the motor selected in the [A1 – Motor type] function.**	The function is used to set the opening and closing slowdown speed. The percentage is calculated on the maximum travel speed. The function is used to set the slowdown speed during opening when the motor selected in function [A1 – Motor type] is number 6. The percentage is calculated on the maximum travel speed.

F31	**Closing slowdown speed**	15% to 60%	The function is used to set the slowdown speed during closing when the motor selected in function [A1 – Motor type] is number 6. The percentage is calculated on the maximum travel speed.
F33	**Calibration speed**	From 20% to 60% (Default 50%)	The function is used to set the speed during travel self-learning. The percentage is calculated on the maximum travel speed.
F34	**Travel sensitivity**	10% to 100% (Default 100%) **10% = minimum thrust and high obstruction sensitivity** **100 % =maximum thrust and low obstruction sensitivity**	The function adjusts the obstacle detection sensitivity during the gate travel in percentage terms.
F35	**Slowdown sensitivity**	10% to 100% (Default 100%) **10% = minimum thrust and high obstruction sensitivity** **100 % =maximum thrust and low obstruction sensitivity**	The function adjusts the obstacle detection sensitivity during slowdown in percentage terms.
F36	**Adjusting the partial opening**	10% to 80% (Default 40%)	For single-leaf gates, the function is used to set the leaf partial opening percentage with respect to the total travel. In two-leaf gates, the function is used to set the partial opening percentage of the leaf that moves first with respect to the total travel. 📖 **The function will not appear with ATI – F7204N motors [Function A1 set to 5].**
F37	**Opening slowdown point for M1**	1% to 60% (Default 25%)	The function is used to set the opening slowdown starting point for M1. The percentage is calculated on the total gate leaf travel. 📖 **The function will not appear with ATI – F7204N motors [Function A1 set to 5].**
F38	**M1 closing slowdown point**	1% to 60% (Default 25%)	The function is used to set the closing slowdown starting point for M1. The percentage is calculated on the total gate leaf travel. 📖 **The function will not appear with ATI – F7204N motors [Function A1 set to 5].**
F39	**M1 opening approach point**	1% to 10% (Default 10%)	The function is used to set the opening approach starting point for M1. The percentage is calculated on the total gate leaf travel. 📖 **The function will not appear with ATI – F7204N motors [Function A1 set to 5].**

F40	**M1 closing approach point**	1% to 10% (Default 10%)	The function is used to set the closing approach starting point for M1. The percentage is calculated on the total gate leaf travel. 📖 **The function will not appear with ATI – F7204N motors [Function A1 set to 5].**
F41	**Opening slowdown point for M2**	1% to 60% (Default 25%)	The function is used to set the opening slowdown starting point for M2. The percentage is calculated on the total gate leaf travel. 📖 **The function will not appear with ATI – F7204N motors [Function A1 set to 5].**
F42	**M2 closing slowdown point**	1% to 60% (Default 25%)	The function is used to set the closing slowdown starting point for M2. The percentage is calculated on the total gate leaf travel. 📖 **The function will not appear with ATI – F7204N motors [Function A1 set to 5].**
F43	**Opening approach point for M2**	1% to 10% (Default 10%)	The function is used to set the opening approach starting point for M2. The percentage is calculated on the total gate leaf travel. 📖 **The function will not appear with ATI – F7204N motors [Function A1 set to 5].**
F44	**Closing approach point for M2**	1% to 10% (Default 10%)	The function is used to set the closing approach starting point for M2. The percentage is calculated on the total gate leaf travel. 📖 **The function will not appear with ATI – F7204N motors [Function A1 set to 5].**
F46	**Number of motors**	2 (Default) 1	The function is used to set the number of motors controlling the gate. 📖 **Value 1 indicates that the M2 motor is being used**
F49	**RSE communication**	OFF 3 = CRP/CAME KEY (Default)	The function is used to configure the card inserted in the RSE connector.
F50	**Save data**	OFF ON (Run operation)	The function activates saving user data, timings and configurations to the memory device (memory roll). 📖 **The function is displayed only when a memory roll card is inserted into the control board.**

F51	**Read data**	OFF ON (Run operation)	The function activates uploading user data, timings and configurations on the memory device (memory roll). Any configurations already on the electronic board are overwritten. 📖 **The function is displayed only when a memory roll card is inserted into the control board.**
F56	**CRP address**	from 1 to 255 (Default 1)	The function assigns a unique identification code (CRP address) to the control board. 📖 **The function is used where there are multiple operators connected to the same communication BUS using the CRP protocol.**
F63	**RSE speed**	0 = 1200 bps 1 = 2400 bps 2 = 4800 bps 3 = 9600 bps 4 = 14400 bps 5 = 19200 bps 6 = 38400 bps (default) 7 = 57600 bps 8 = 115200 bps	The function is used to set the remote connection system communication speed on the RSE port.
F65 **F66**	**RIO ED T1** **RIO ED T2**	OFF (Default) P0 = It stops the gate and excludes automatic closing. Use a control device to resume movement. P7 = Reopen while closing. P8 = Reclose while opening.	The function is used to configure a wireless safety device. 📖 **The function only appears if the RIO CONN interface board is present.**
F67 **F68**	**RIO PH T1** **RIO PH T2**	OFF (Default) P1 = Reopen while closing. P2 = Reclose while opening. P3 = Partial stop. Only with [Automatic close] activated. P4 = Obstacle standby.	The function is used to configure a wireless safety device. 📖 **The function only appears if the RIO CONN interface board is present.**
F72	**Limit-switch function**	OFF = Deactivated 2 = Slowdown 3 = Opening limit-switch, closing slowdown (default)	The function is used to configure the inputs for slowdown switches and/or limit switches. 📖 **The function only appears for motors configured for this purpose.**
U1	**New user**	The function is used to 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.** 📖 See the [Saving a new user] section for information on the save procedure.	

U2	**Remove user**	The function is used to remove one of the registered users. 📖 See the [Remove registered users] section for information on how to remove them.	
U3	**Remove all**	OFF (Cancel operation) ON (Run operation)	Remove all registered users. 📖 "CLr" will appear to confirm deletion.
U4	**Radio decoding**	1 = All decoding (default) 2 = Rolling code 3 = TW key block	The function is used to choose the type of radio coding for the transmitters enabled to control the operator. 📖 If you choose [Rolling code] or [TW key block], any transmitters with a different type of radio coding saved previously will be deleted.
A1	**Motor type**	1 = AXI20 - AXI25 - F500 2 = FA7024CB 3 = FTX20DGC 4 = ATS 5 = ATI (A3024N, A5024N) - F7024N 6 = ATI30DGF - ATI50DGF	The function is used to set the type of gearmotor installed on M1 and M2.
A2	**Motor test**	OFF (Default) ON	The function is used to check the gate leaves open in the right direction. With the function active, the > key opens the gate leaf connected to M2, and the < key opens the gate leaf connected to M1. The movement continues while the key is pressed or until the end-of-travel limit switch is reached. When the key is released, the movement stops. 📖 If the leaf does not move in the correct direction, invert the motor phases.
A3	**Travel calibration**	OFF (Cancel operation) ON (Run operation)	The function is used to start travel self-learning. ⚠ During calibration, all safety devices are disabled, except for the STOP button [F1 – Total stop]. 📖 This function appears only if the [F11 - Encoder] function is active.
A4	**Parameter reset**	OFF (Cancel operation) ON (Run operation)	The function restores the factory configurations except for: [users], [CRP address], [RSE speed], [Radio decoding].
A5	**Manoeuvre counter**	001 = 100 manoeuvres 010 = 1000 manoeuvres 100 = 10000 manoeuvres 999 = 99900 manoeuvres CSt = maintenance work	The function is used to view the number of operator manoeuvres. 📖 The number of manoeuvres is the number shown multiplied by 100. 📖 The control panel regularly saves the number of manoeuvres automatically. In the event of an unexpected power outage, the number of manoeuvres last saved is restored.
H1	**FW version**	The function is used to display the firmware version.	

Saving a new user

Press **ENTER** to enter programming.

① Access: **U1** - New user. Press **ENTER** to confirm.

② Choose the function to be assigned to the user:
1 = Step-by-step - The first command is to open and the second to close.
2 = Sequential - The first command is to open, the second to STOP, the third to close and the fourth to STOP.
3 = Open
4 = Pedestrian/partial opening
Press ENTER to confirm.

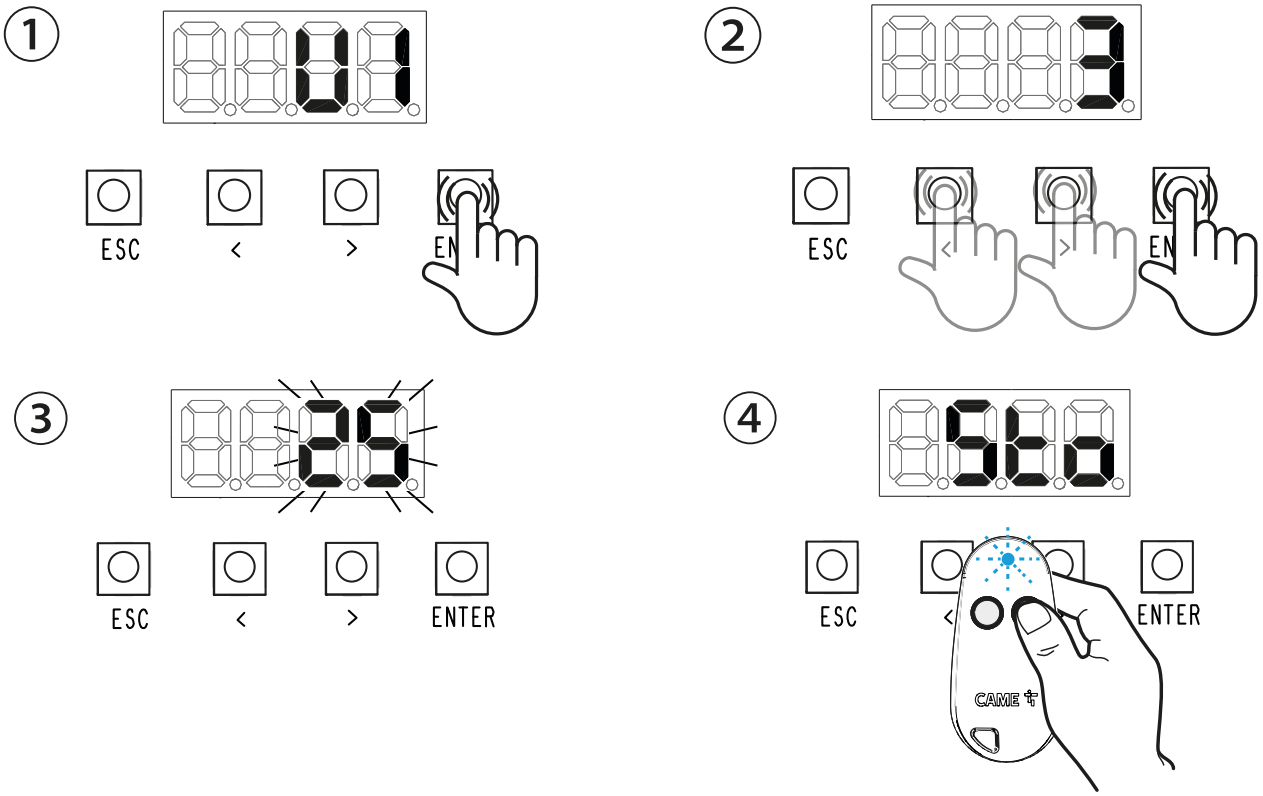
③ The first available position for storing will appear on the screen.

📖 The available positions are the ones with flashing numbers.

④ Within 10 seconds, send the code from the selector (transponder or keypad) or the transmitter key. [Sto] will appear to show acquisition has been successful.

📖 The board that manages the control devices (AF) must be inserted into the connector.

Repeat the procedure to add other users.



Removing registered users

Press **ENTER** to enter programming.

① Select: **U2** - Remove single user. Press **ENTER** to confirm.

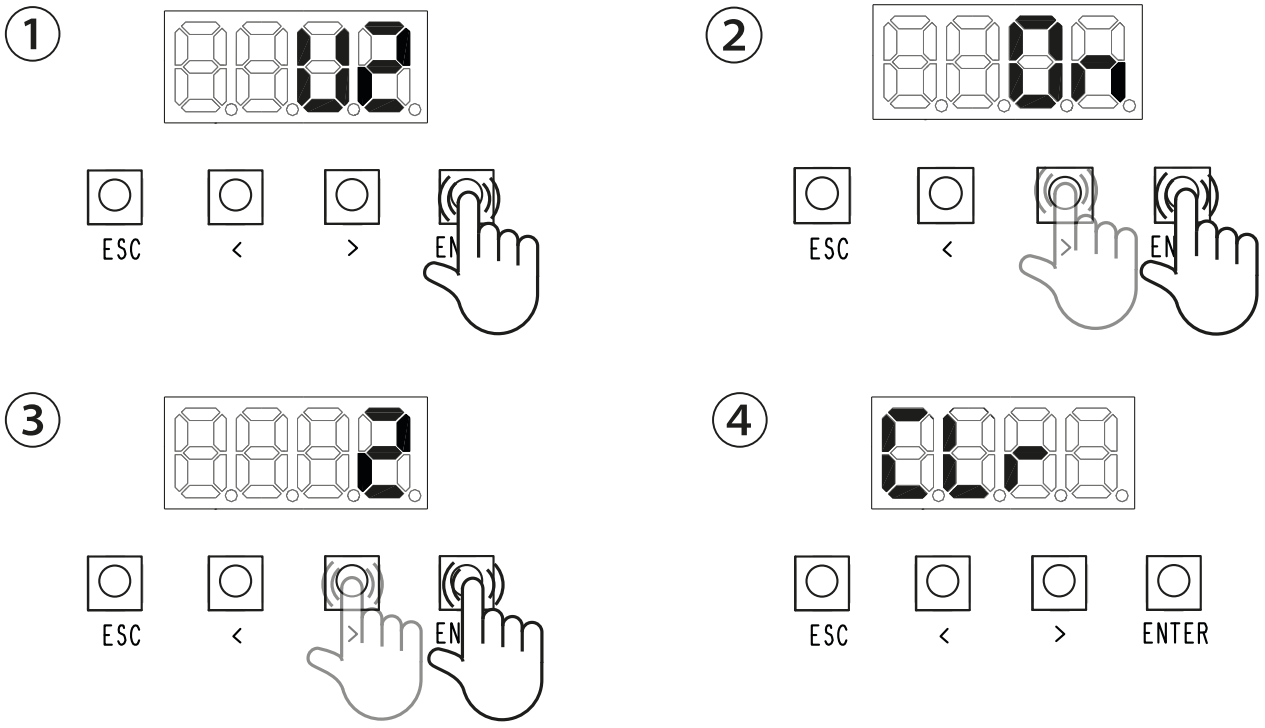
② Use the arrows to select **ON** and press **ENTER** to start the remove user procedure.

③ Use the arrows to choose the number associated with the user you want to remove and press **ENTER** to confirm.

📖 Alternatively, the control device associated with the user you want to remove can be activated.

④ "CLr" will appear to confirm deletion.

Repeat the procedure to remove other users.



Import/export data

Save user data and system configuration data on a MEMORY ROLL card.
The stored data can be reused for another control board of the same type to carry across the same configuration.

⚠ Before inserting and removing the MEMORY ROLL card, DISCONNECT THE MAINS POWER SUPPLY TO THE LINE.

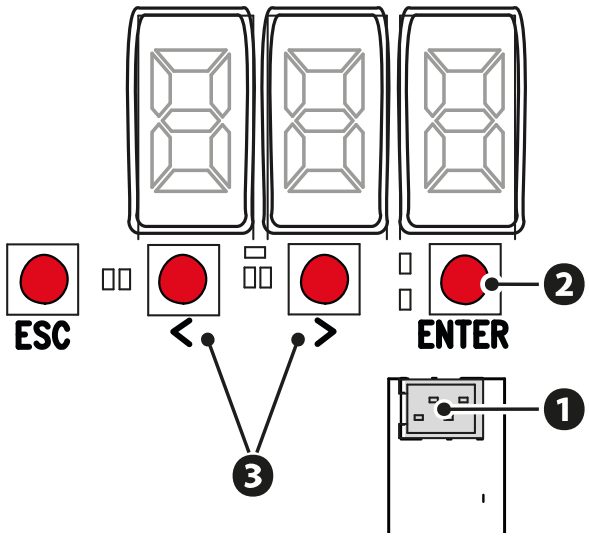
❶ Insert the MEMORY ROLL card into the corresponding connector on the control board.
❷ Press the "Enter" button to access programming.
❸ Use the arrows to choose the desired function.

🕮 The functions are displayed only when a MEMORY ROLL card is inserted.

F50 Save data
Save user data, timings and configurations to the memory device (memory roll).

F51 Read data
Upload user data, timings and configurations to the memory device (memory roll).

🕮 Once the data have been saved and loaded, the MEMORY ROLL can be removed.

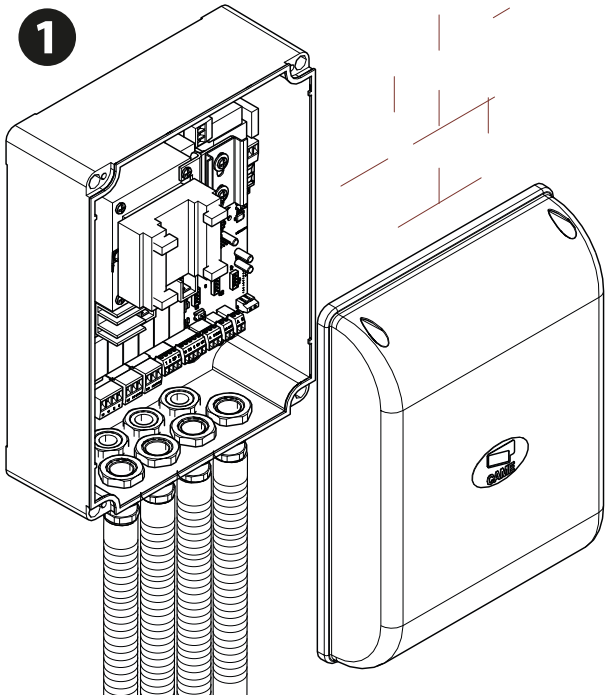


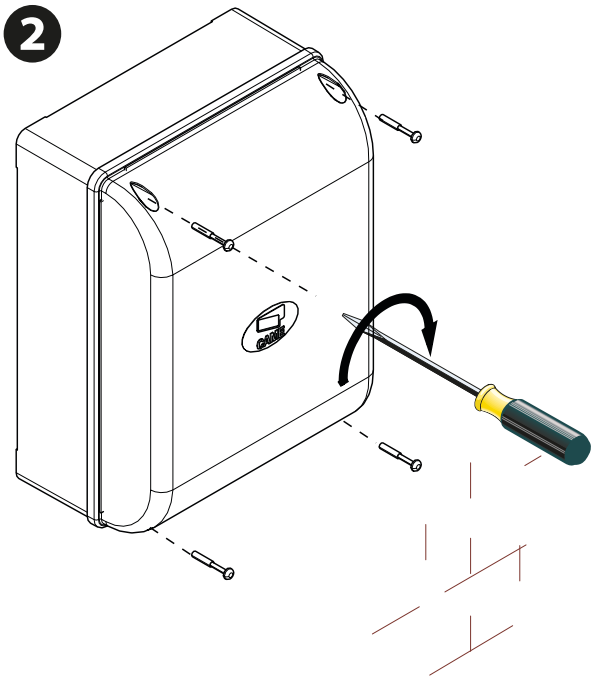
ERROR AND WARNING MESSAGES

E1	The travel calibration was interrupted to activate the STOP button.
E2	Adjustment error
E3	Encoder failure error
E4	Service test failure error
E7	Operating time error
E9	Obstacle detected during closing
E10	Obstacle detected during opening
E11	Maximum number of obstacles
E14	Serial communication error
E15	Incompatible remote control
E17	Wireless system communication error
E18	Wireless system not configured error
C0	Wired contact 1-2 (NC) is open
C1, C2, C3, C4	The wired photocell contacts (NC) are open.
C7, C8	The wired sensitive-edge contacts (NC) are open.
P0	The wireless radio stop contact (NC) is open.
P1, P2, P3, P4	The wireless radio photocell contacts (NC) are open.
P7, P8	The wireless radio sensitive-edge contacts (NC) are open.
---	Control board has no travel auto-learning

FINAL OPERATIONS

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





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