CAME

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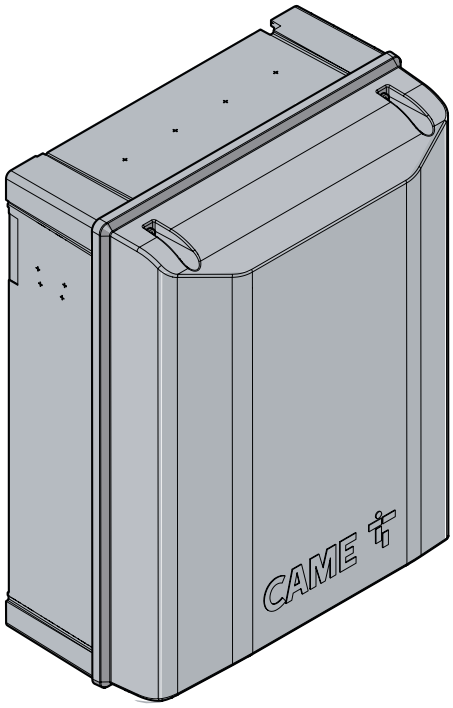
FA02251-EN

Control panel for 24 V gearmotors



ZLX24SA

ZLX24SR

INSTALLATION MANUAL

EN English

TABLE OF CONTENTS

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 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

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

801QA-0060

ZLX24SA - Multifunction control panel, with 230 VAC power supply, for 24 V swing gates with two leaves, with graphic programming and signalling display, safety device self-diagnostics, adaptive speed and torque technology, BUS CXN, 4 safety inputs and memory space for up to 1000 users.

801QA-0080

ZLX24SR - Multifunction control panel, with 120 VAC power supply, for 24 V swing gates with two leaves, with graphic programming display and signalling, safety device self-diagnostics, adaptive speed and torque technology, BUS CXN, 4 safety inputs and memory space for up to 1000 users.

Intended use

📖 After the Green Power module has been connected to the control panel, the product complies with Regulation (EU) 2023/826 regarding ecodesign requirements for energy consumption in standby and off mode for household and office equipment.

Technical data

MODELS	ZLX24SA	ZLX24SR
Power supply (V - 50/60 Hz)	230 AC	120 AC
Motor power supply (V)	24 DC	24 DC
Board power supply (V)	26 AC	26 AC
Standby consumption (W)	3	3
Power (W)	360	360
Transformer thermal protection (°C)	120	120
Colour	RAL 7040	RAL 7040
Operating temperature (°C)	-20 ÷ +55	-20 ÷ +55
Storage temperature (°C)*	-25 ÷ +70	-25 ÷ +70
Encoder	YES	YES
Protection rating (IP)	54	54
Insulation class	I	I
Average life (cycles)**	100.000	100.000

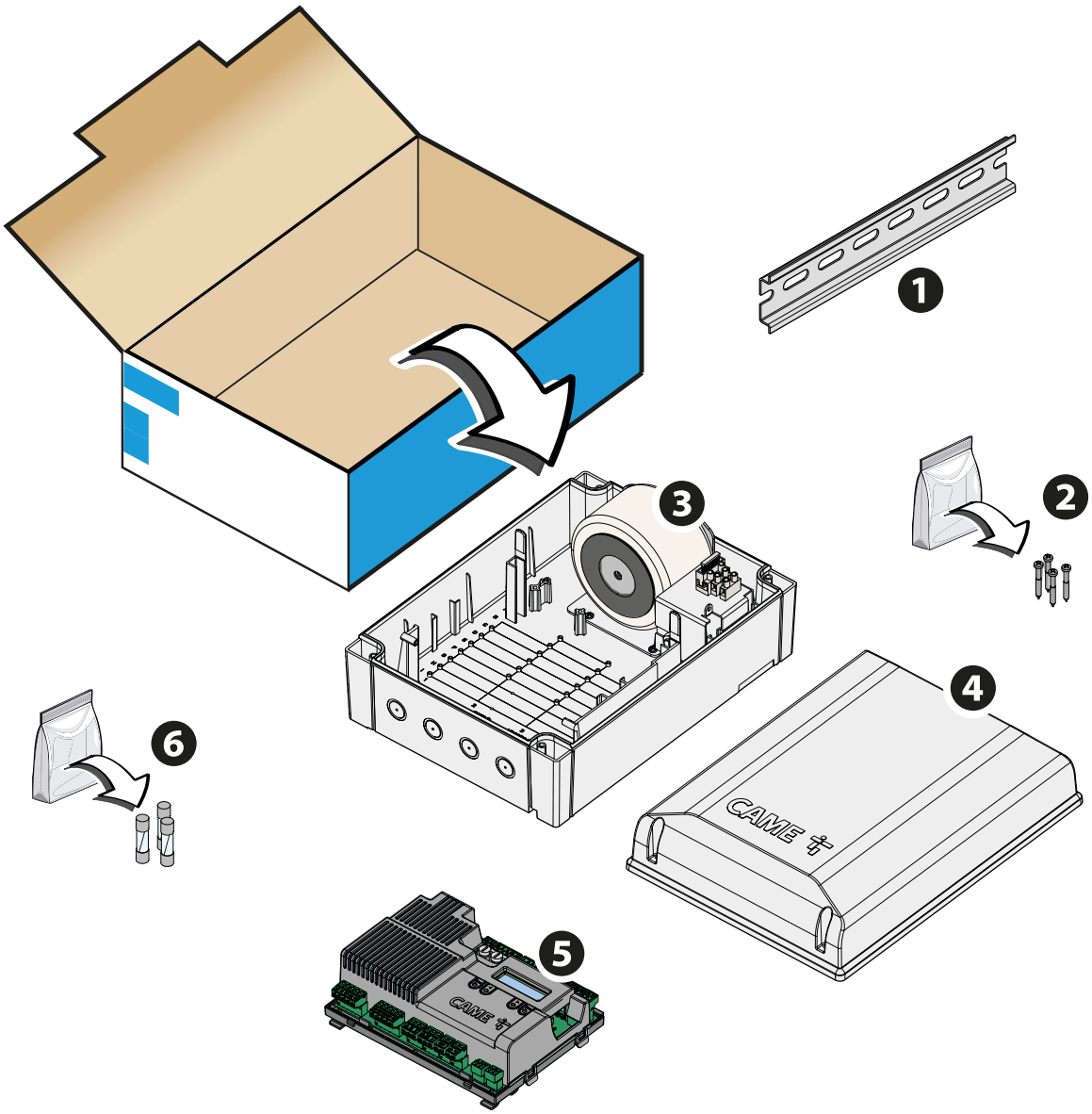
(*) Before installing the product, keep it at room temperature where it has previously been stored or transported at a very high or very low temperature.

(**) 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	ZLX24SA	ZLX24SR
Line fuse	3.15 A F	4 A F
Control-board fuse	1.6 A T	1.6 A T
Accessories fuse	1.6 A F	1.6 A F

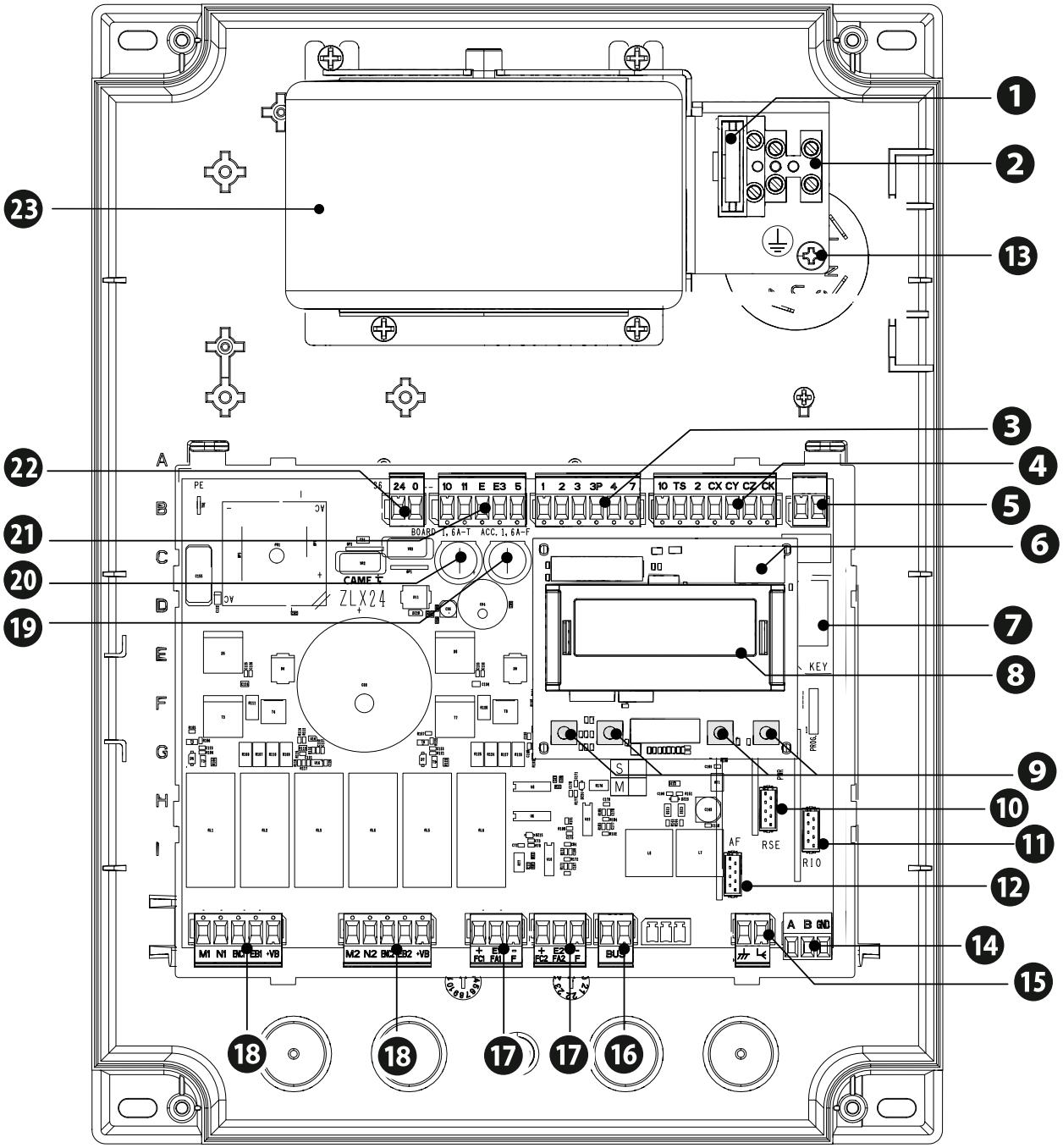
Description of parts



❶ DIN rail
❷ Cover fastening screws
❸ Control panel bottom with power transformer and terminal board
❹ Control panel cover
❺ Control board with card slot and board cover
❻ Spare fuses

Control panel

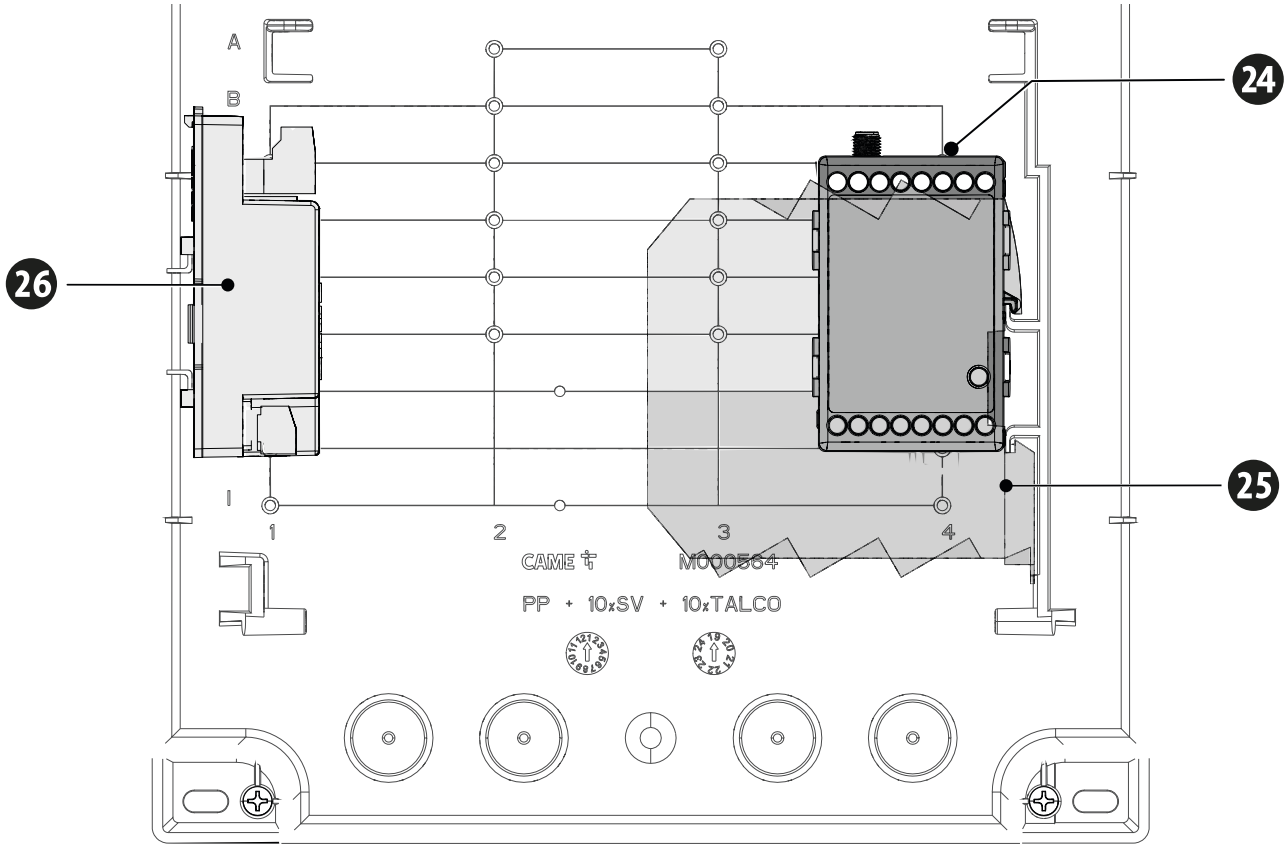
❶ Line fuse
❷ Power supply terminal board
❸ Terminal board for connecting control devices
❹ Terminal board for connecting the safety devices
❺ Terminal board for B1-B2 output
❻ Memory Roll card connector
❼ Connector for CAME KEY
❽ Display
❾ Programming buttons
❿ RSE card connector
⓫ RIO CONN card connector
⓬ Connector for plug-in radio frequency card (AF)
⓭ Earthing star point
⓮ Terminal board for CRP connection
⓯ Terminal board for connecting the antenna
⓰ Terminal board for CXN BUS accessories
⓱ Terminal boards for connecting micro limit switches and/or encoders
⓲ Terminal board for connecting the gearmotor with encoder or with slowdown switch and electric lock
⓳ Accessories fuse
⓴ Control board fuse
㉑ Terminal board for connecting the signalling devices
㉒ Terminal board for power supply to the control board
㉓ Transformer



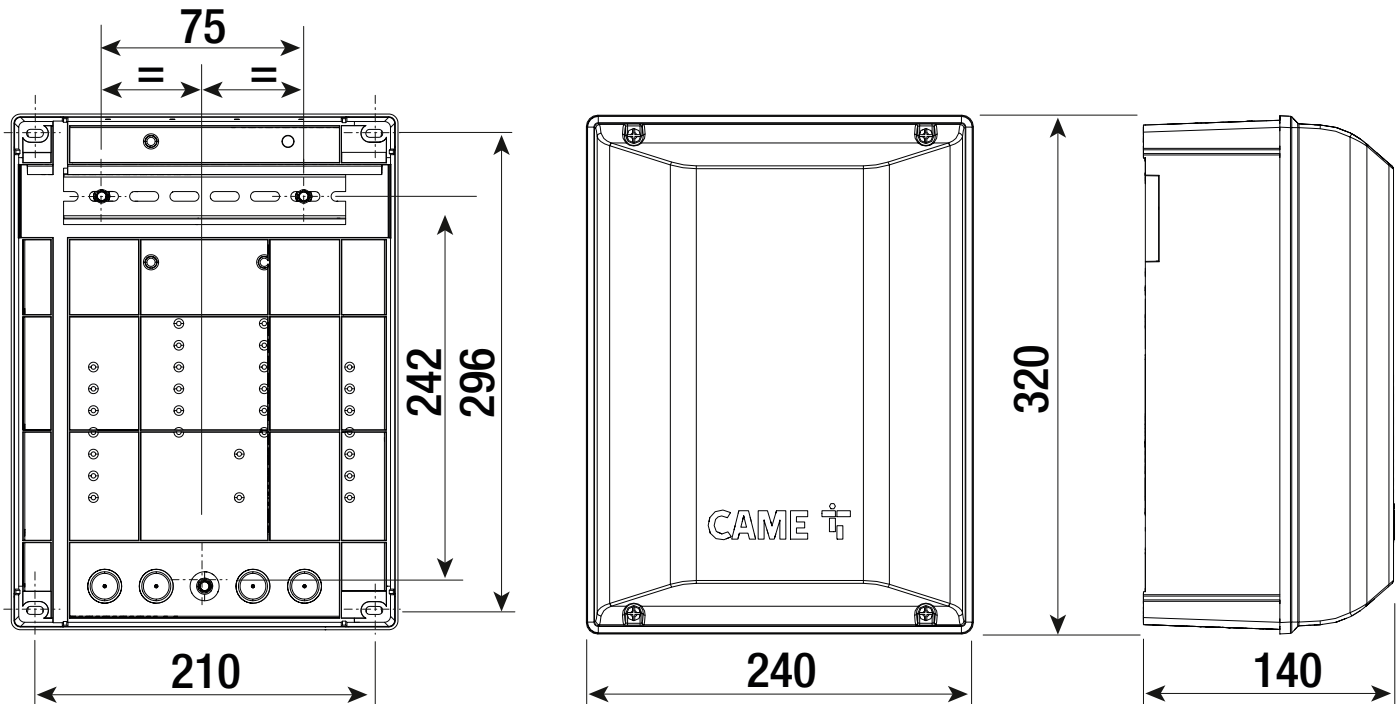
Optional accessories

㉔ RGSM001 module (806SA-0010) ㉕ SMA module (009SMA) ㉖ RLB battery charger board (002RLB)

📖 To control all required motors from the control panel, use two 7Ah batteries (846XG-0030) installed on an external panel.



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
24 V AC/DC flashing beacon	2 x 0.5 mm^2	2 x 0.5 mm^2
Flashing beacon 230 V AC	2 x 1 mm^2	2 x 1 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
Electric lock or electromagnet	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 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.

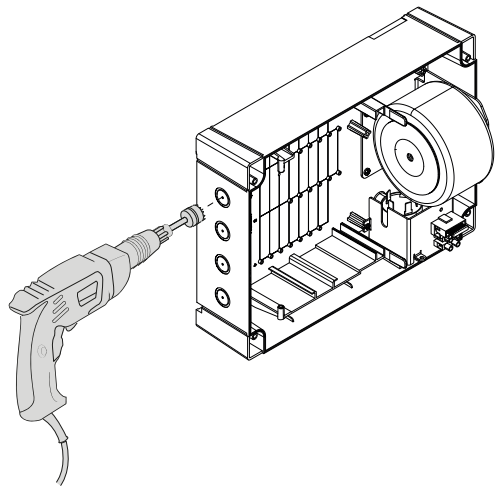
🕮 For multiple, sequential loads along the same line, recalculate the values in the table according to the actual power draw and distances. For information on connecting products not covered in this manual, please see the documentation accompanying the products themselves.

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

Fastening the control panel

DIN rail

1



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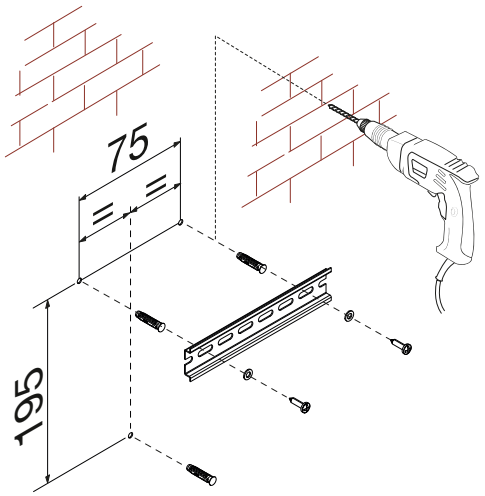

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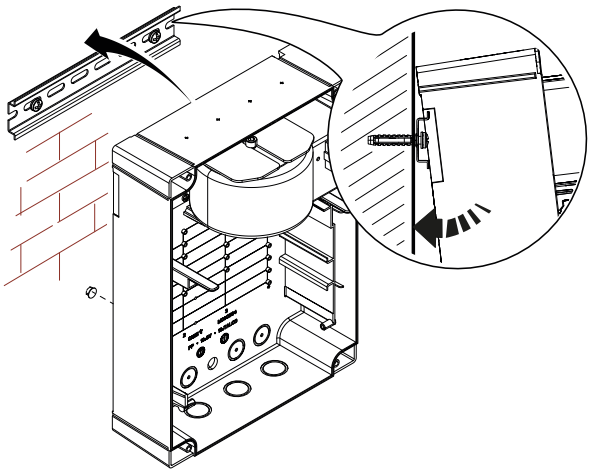

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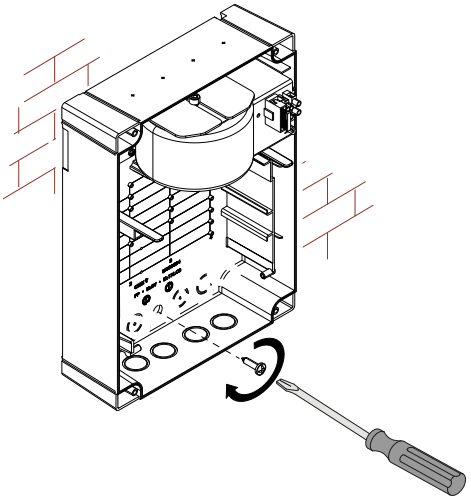

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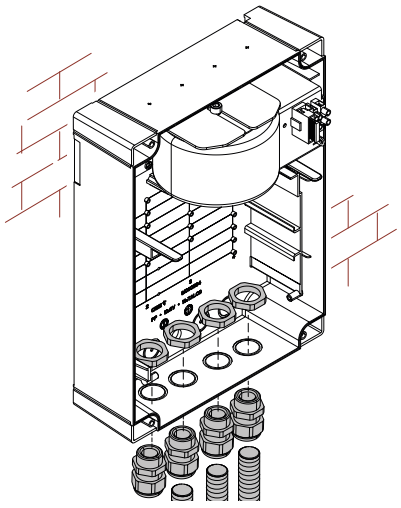
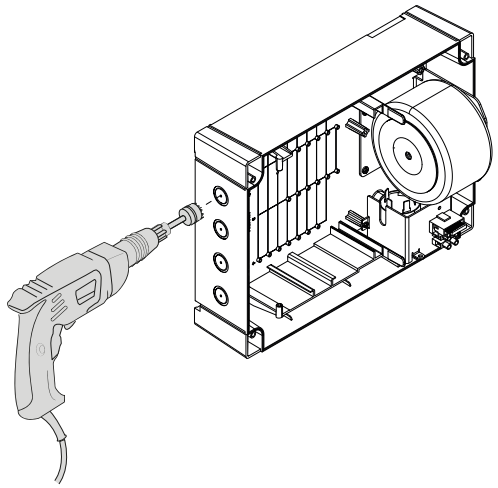


Wall-mounted

1



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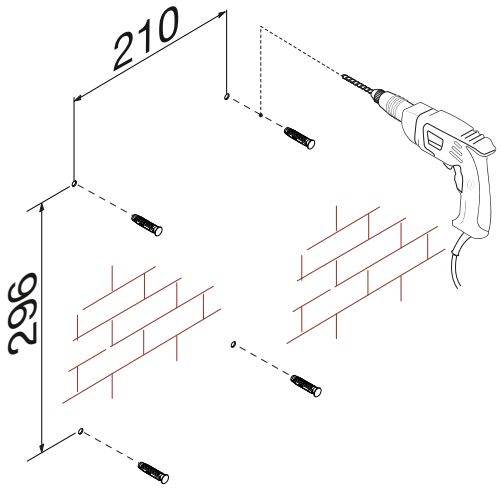

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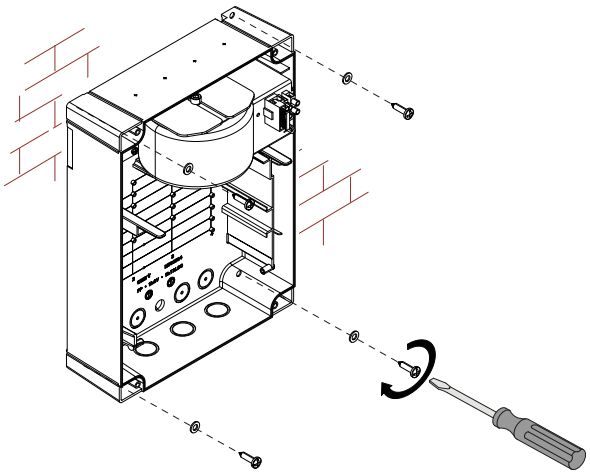
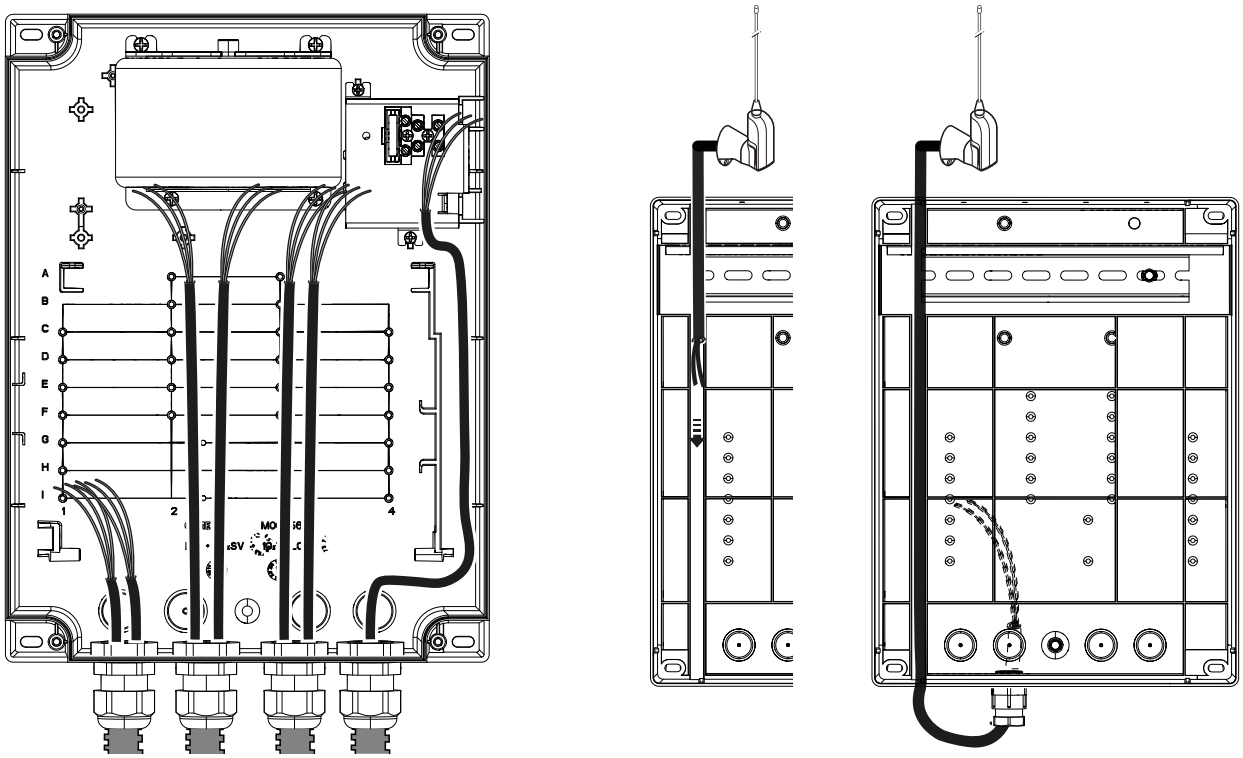


Passing the electrical cables

📖 Connect all wires and cables in compliance with the law.

📖 Use cable glands with corrugated tubing to connect the devices to the control panel. One of these must be for the power cable only.

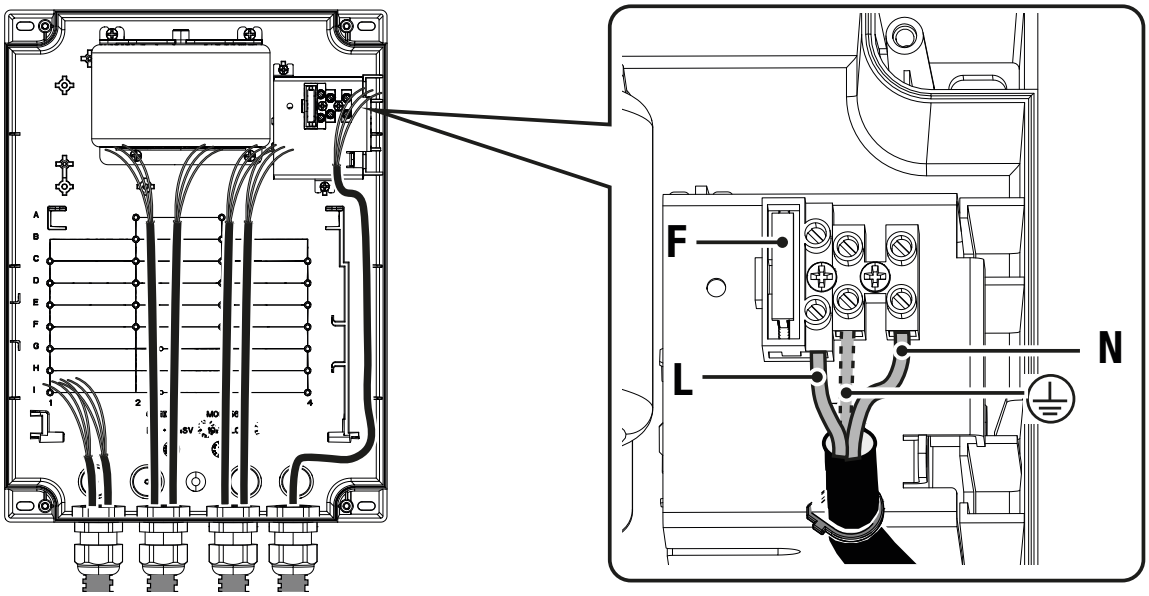


Mains connections

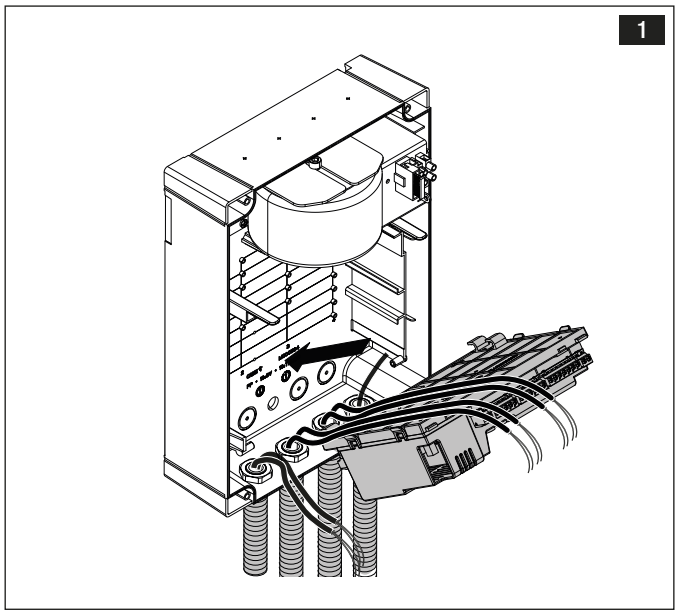
Power supply 230/120 V AC - 50/60 Hz

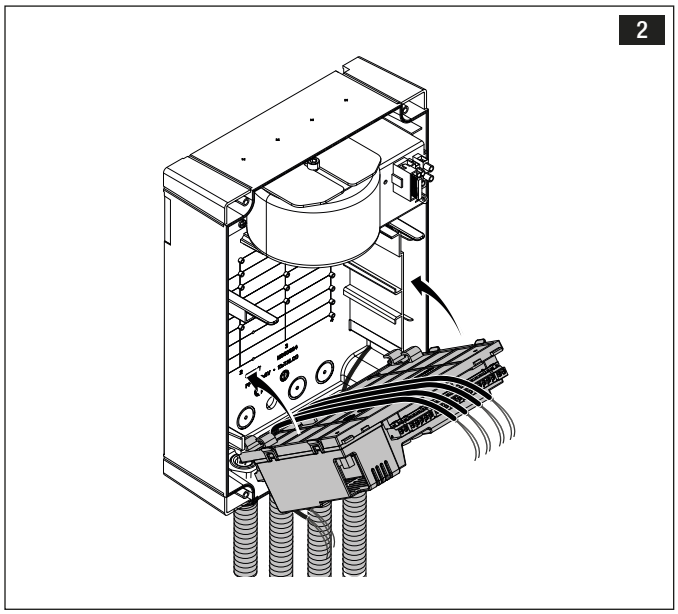
📖 The strap used to fix the cables is not supplied.

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



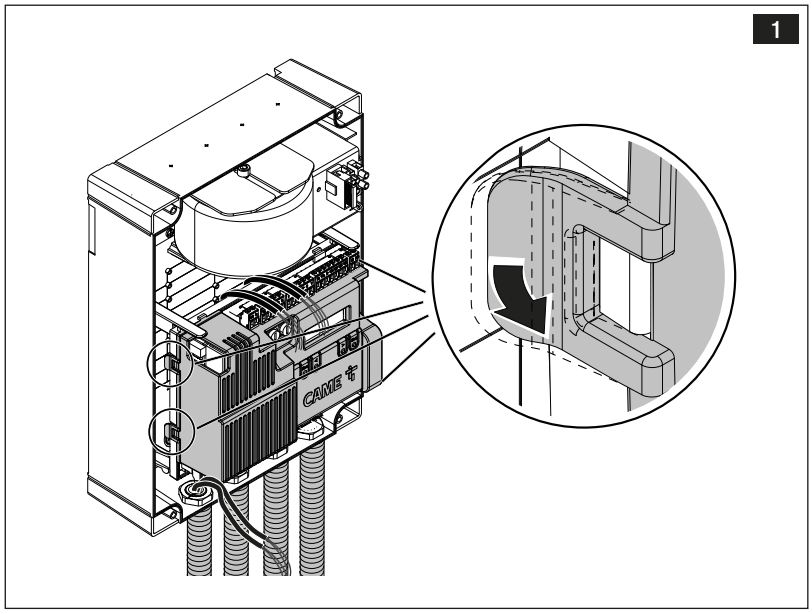
Electronic board fastening and support

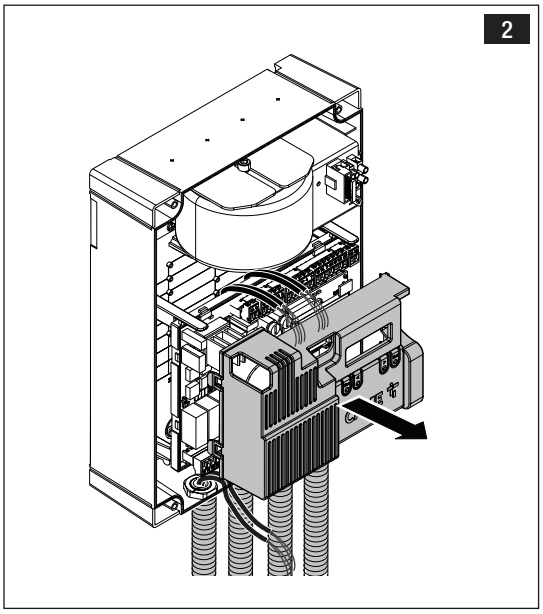




Remove the cover

📖 When installing plug-in boards or as needed, the board cover can be removed as shown in the images.



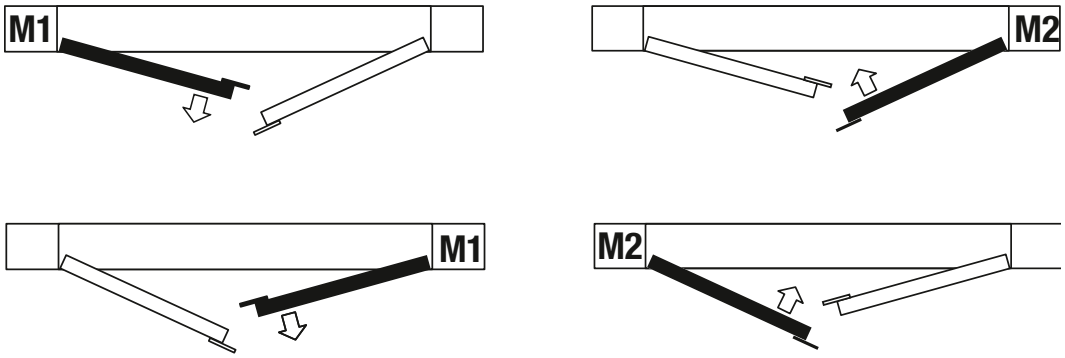


Connecting gearmotors for swing operators

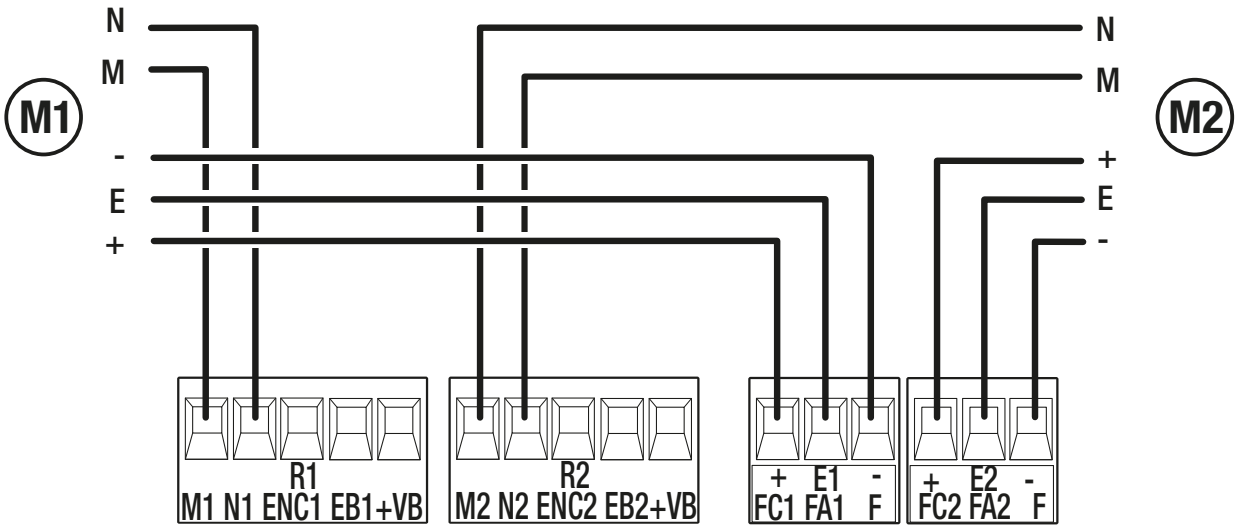
M1 = Gearmotor delayed while opening

M2 = Gearmotor delayed while closing

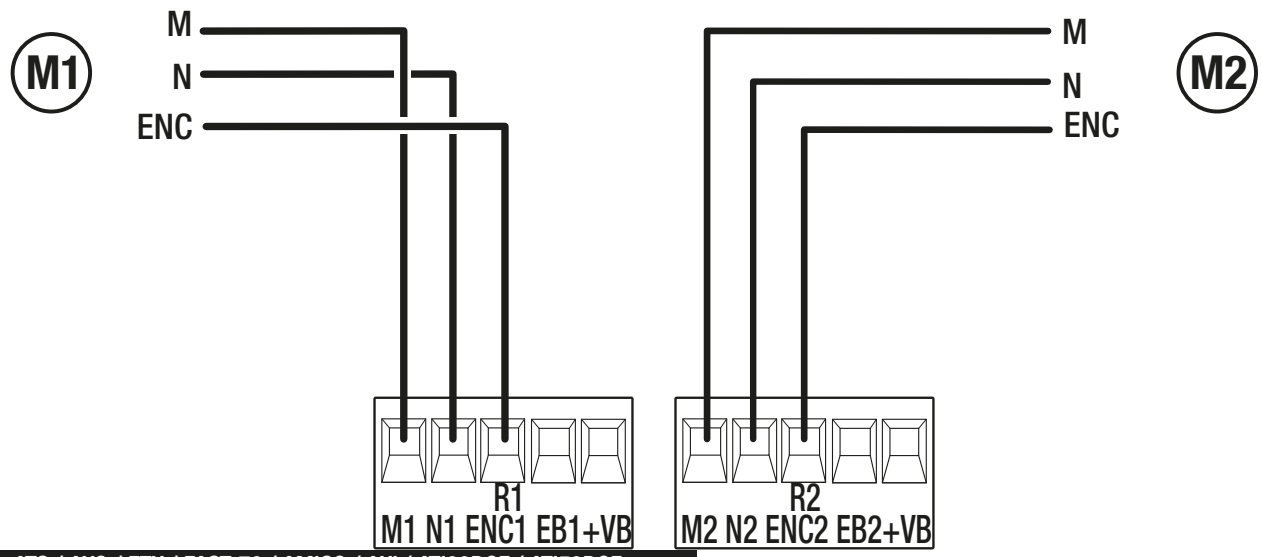
📖 Where there is only one gearmotor in the system, make the electrical connections on the gearmotor (M2).



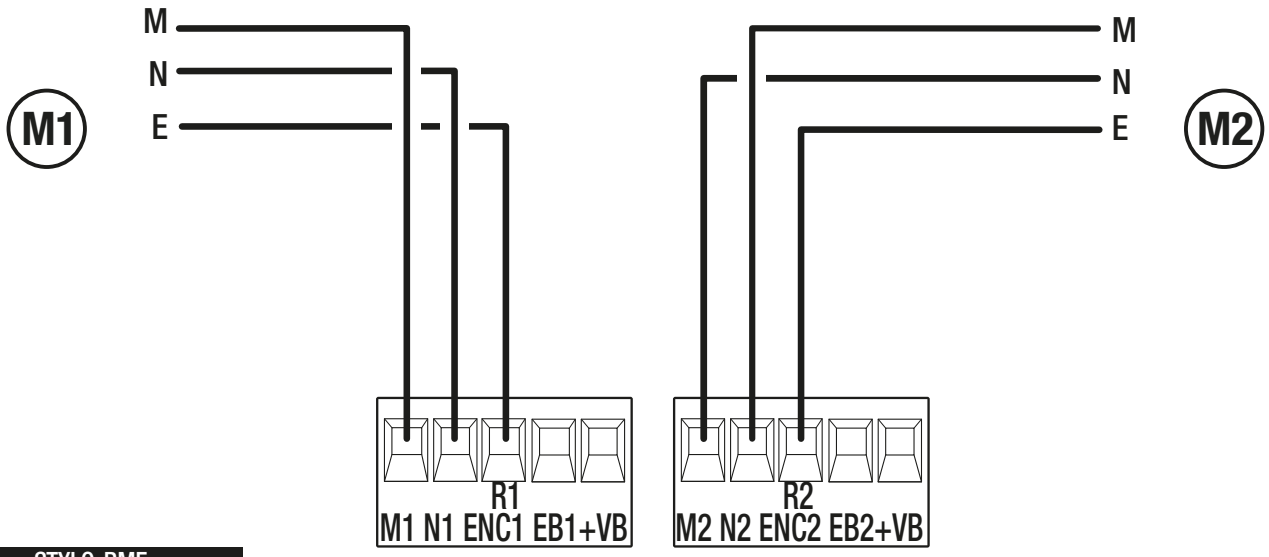
Gearmotor with encoder



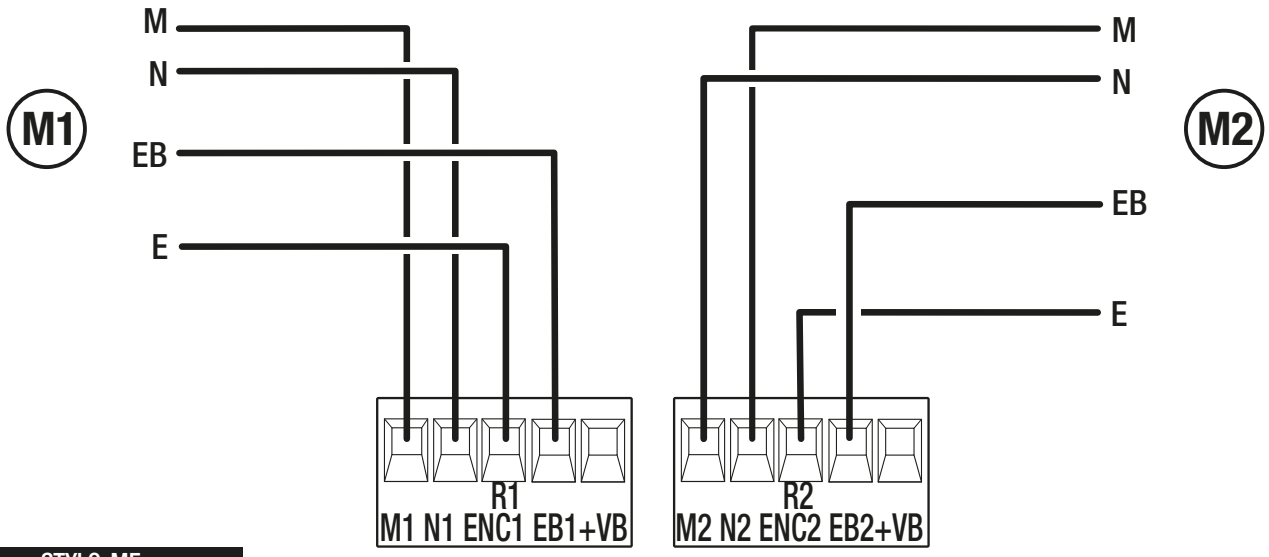
FROG-A24E / FERNI / FERNI-V / F4024E / F4024EP



ATS / AX0 / FTX / FAST-70 / AMICO / AXI / ATI30DGF / ATI50DGF

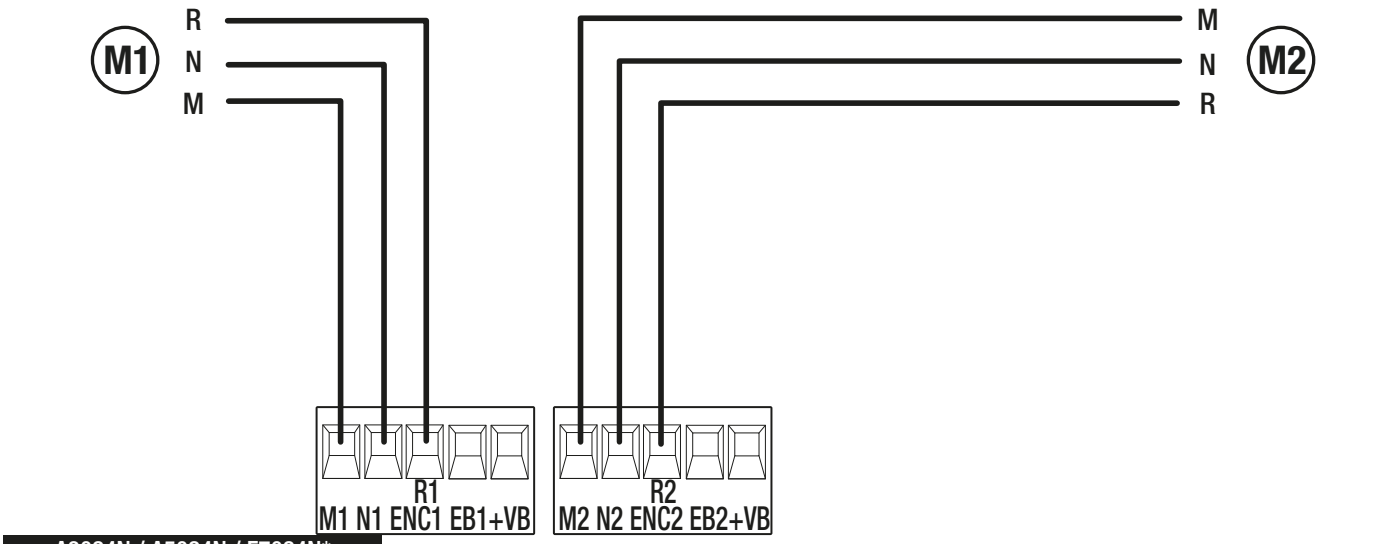


STYLO-RME



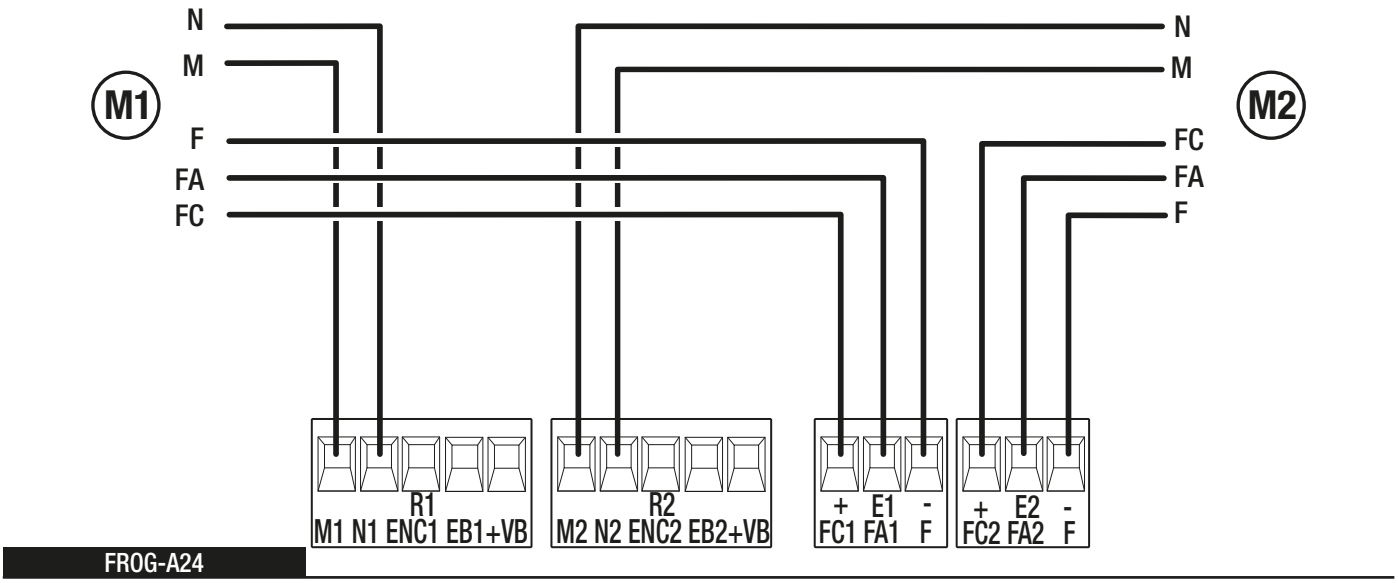
STYLO-ME

Gearmotor with slowdown switch

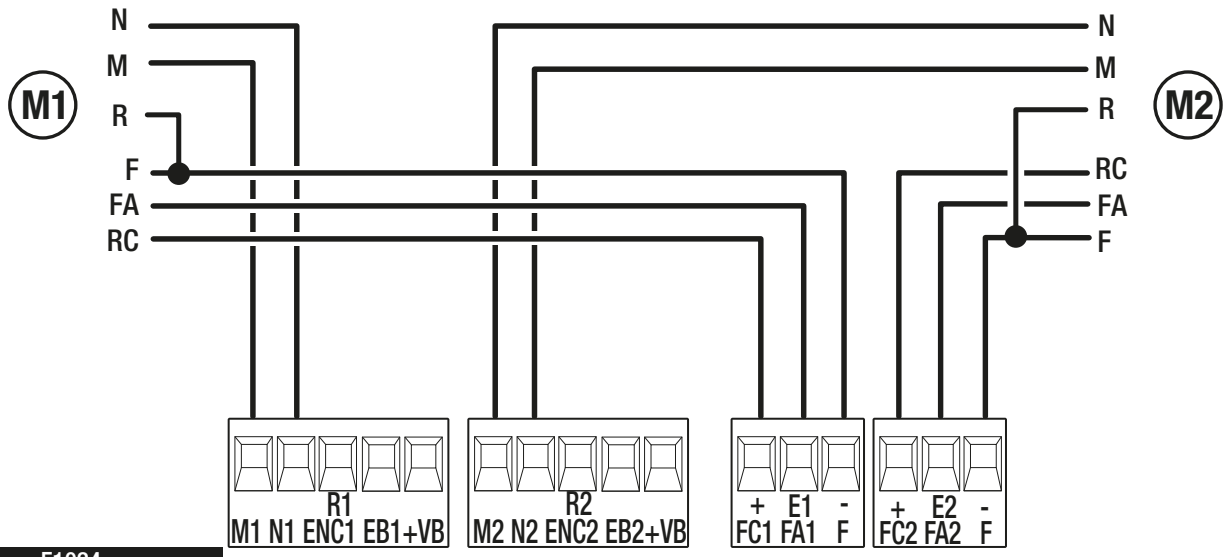


A3024N / A5024N / F7024N*

(*) With motor F7024N, check the micro limit switches are not pressed at the same time after installation. For programming information, see the [Commissioning with an F7024N motor] section.

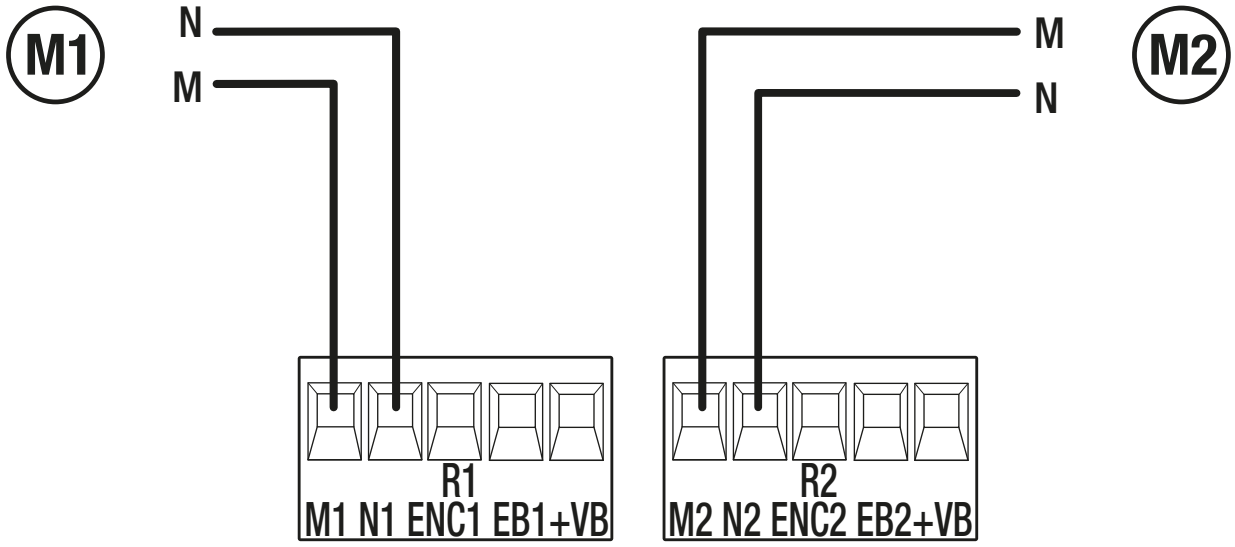


FROG-A24



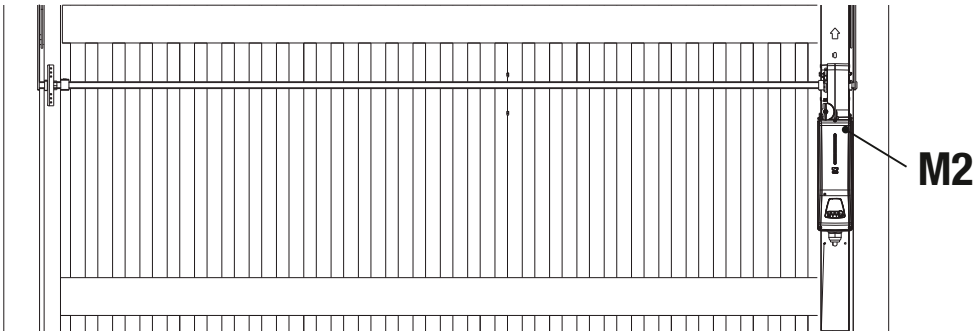
F1024

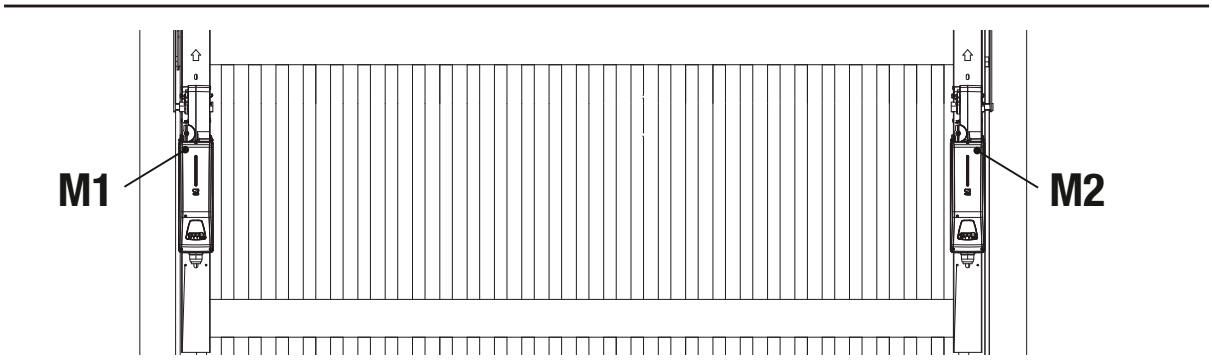
Gearmotor without encoder



Gearmotors for overhead operators

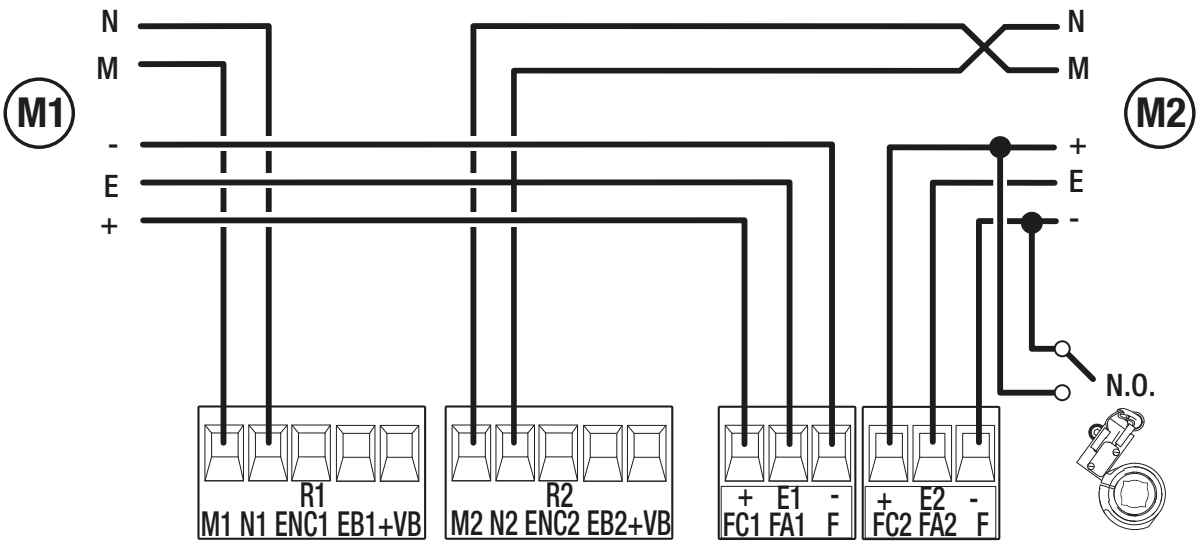
M1 and M2 are controlled as a pair and perform the same movements.





📖 Where there is only one gearmotor in the system, make the electrical connections on the gearmotor (M2).

⚠ Ensure the [Motor type] function is set to EM4024.



EM4024

Power supply output for accessories 24 V

🕮 The total power of the outputs listed below must not exceed the maximum output power [Accessories]

Device	Output		Power supply (V)	Maximum power (W)
Accessories	10 - 11		24 AC	20
Flashing beacon	10 - E		24 AC	10
Additional light	10 - E3		24 AC	10
Passage-open warning light	10 - 5		24 AC	3
Electric lock	+VB - EB1	+VB - EB2	12 DC	15
Electromagnet	+VB - EB1	+VB - EB2	24 DC	15

CXN BUS connection

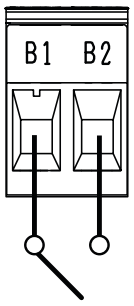
⚠ The output is set for CAME CXN BUS accessories only.

Device	Output	Power supply (V)	Maximum power (W)
BUS CXN	BUS	15 DC	15

Auxiliary connection output

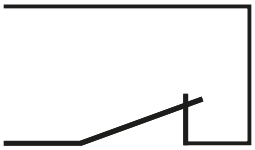
🕮 See the [Output B1-B2] function.

Device	Output	Rated current (A)	Rated voltage (V)
Auxiliary contact	B1 - B2	1	24 AC/DC



Command and control devices

1
2



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.

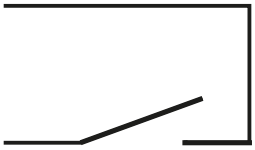
📖 See function [Total stop].

2
3

Control device (NO contact)
Open command

📖 When the [Hold-to-run] function is active, a control device must be set to OPEN.

2
3P



Control device (NO contact)
Partial Opening or Pedestrian command

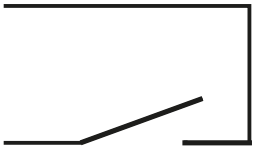
📖 See [Adjusting partial opening] function.

2
4

Control device (NO contact)
Close command

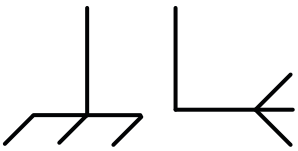
📖 When the [Hold-to-run] function is active, a control device must be set to CLOSE.

2
7



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

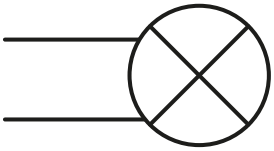
📖 See control [Function 2-7].



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

Signalling devices

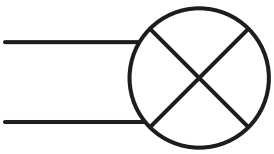
10
E3



Additional light
It increases the light in the manoeuvring area.

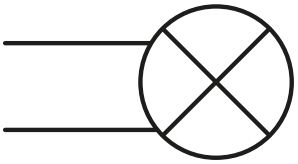
📖 See [Additional light] function.

10
E



Flashing beacon
It flashes when the operator opens and closes.

10
5



Operator status warning light (Passage-open warning light)

📖 See function [Passage-open warning light].

Safety devices

Connect the devices to inputs CX, CY CZ and/or CK.

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

🕮 If contacts CX, CY, CZ and CK are used, they must be configured during programming.

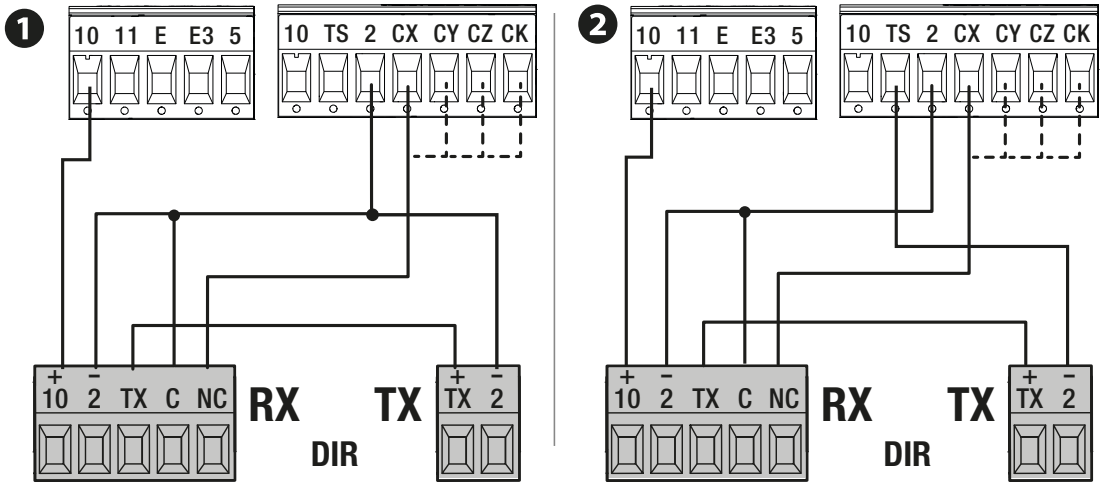
🕮 For systems with multiple pairs of photocells, please see the manual for the relevant accessory.

❶ Standard connection

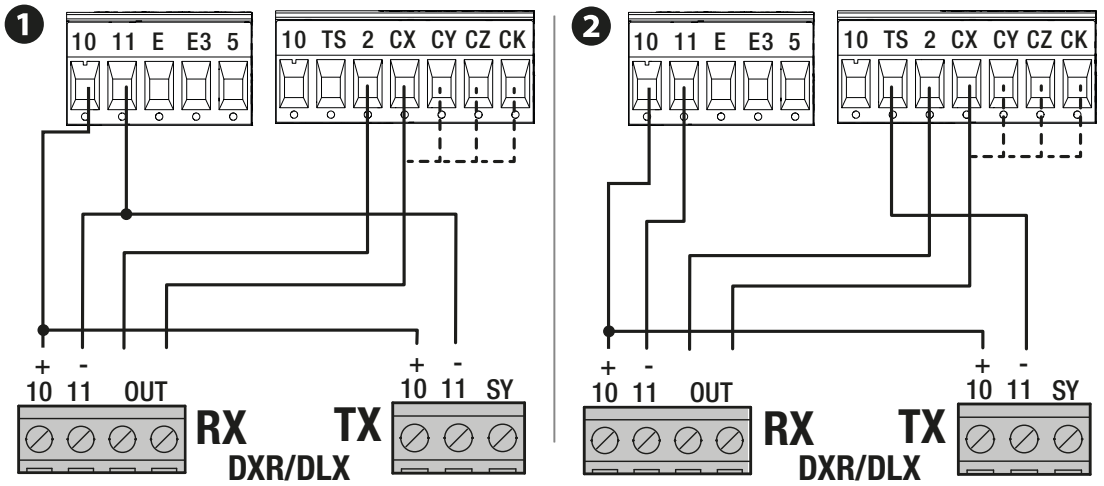
❷ Connection with safety test

🕮 See function [F5 – Safety devices test].

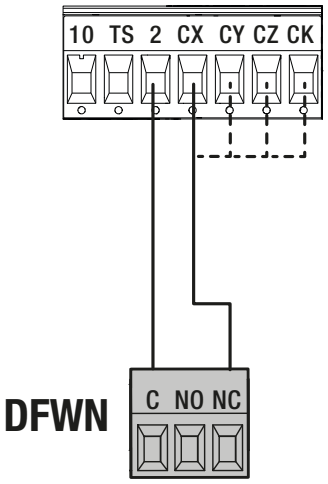
DIR photocells



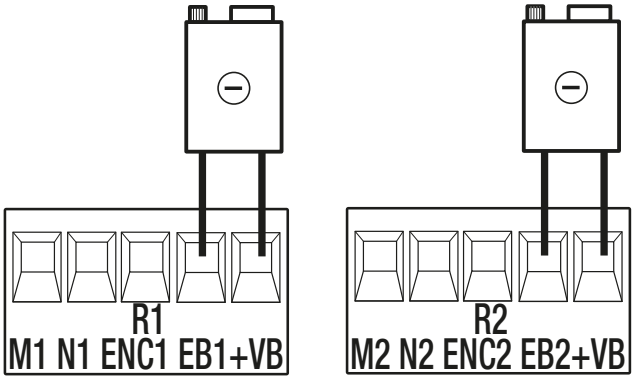
DXR / DLX photocells



DFWN sensitive edge



Electric lock or electromagnet



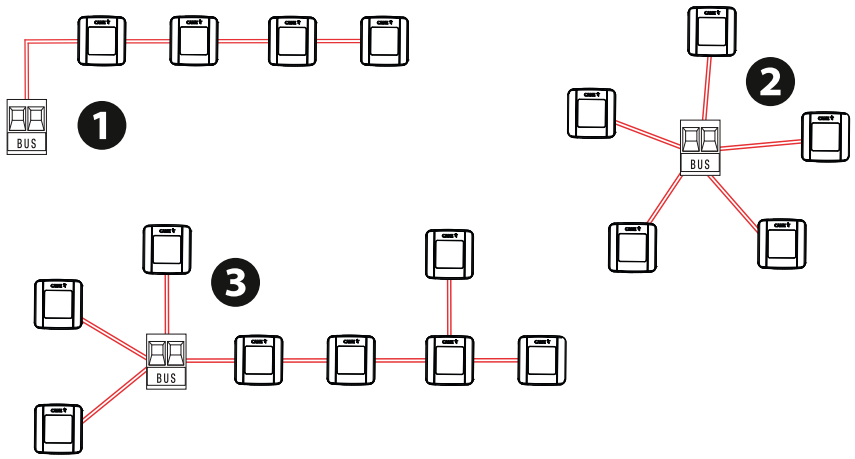
📖 See the [Lock] function.

Connecting accessories with BUS CXN system

The CXN CAME system is a two-wire non-polarised communication BUS which allows you to connect up all compatible CAME devices. Connection to the BUS can be in a chain, star or mixed formation. Once the system has been wired, and after having set the address on each device, the function of each accessory can be configured on the control panel. This method allows you to configure the set-up immediately without having to work directly on the accessories and system wiring later. The CXN BUS can support control devices, interfaces, photocells, safety devices, beacons and gateways at the same time.

Cabling

❶ Chain connection
❷ Star connection
❸ Mixed connection



Cable types and minimum thicknesses

Branch length	0 to 15 m	15 to 50 m
KRX BUS flashing beacon (max. 1 per branch)	FROR 2 x 0.5 mm²	FROR 2 x 1 mm²
Branch load below 20 CXN	FROR 2 x 0.5 mm²	FROR 2 x 0.5 mm²
Branch load above 20 CXN	FROR 2 x 0.5 mm²	FROR 2 x 1 mm²

📖 Do not use a shielded cable.

⚠ The maximum length of a single branch is 50 metres. The sum of all branches must not exceed 150 metres.

Maximum number of devices that can be connected, by type

Type of device	Maximum number of devices per type
Selectors	8
Photocell pairs	8
Interfaces	2
Flashing beacons	2

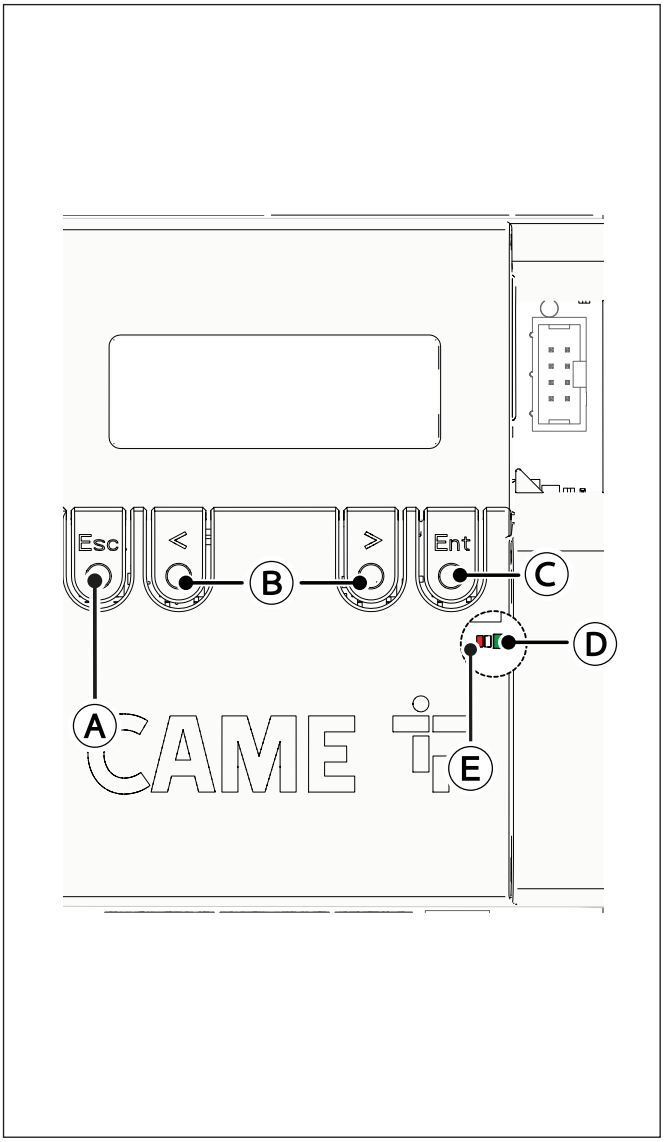
BUS CXN device consumption

LINK

📖 BUS CXN device consumption is calculated in CXN units.

Scan the QR code to access an interactive table showing consumption data, and calculate the maximum number of BUS devices you can connect to the control panel.

Programming button functions



Ⓐ 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
- Operator opening and closing (outside the programming menu)
- < 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 a choice
- Display the motor opening percentage

To display the motor opening percentage, press **ENTER** during a manoeuvre.

Press the key once to display the M1 opening percentage (motor 1)

Press the key twice to display the M2 opening percentage (motor 2)

Press the key three times to return to the main screen.

Ⓓ Power LED

The LED lights up when the board is powered up.

Ⓔ Programming LEDs

The LED flashes when the firmware is active and working on the board.

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 the device and begin programming.
» Start programming following the **WIZARD**. (Configuration > Wizard)
» Complete programming and check the warning, safety and protection devices, and the manual release, are working properly.
» Perform the first manoeuvre where you can see the gate in motion and with the photocells active, including where remotely controlled. 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.

🕮 If **CALIBRATION REQUIRED** appears on the display, you must calibrate the travel. The panel will not accept motion commands, except for the motor test.

Virtual encoder

Where this is no encoder, travel is managed via a VIRTUAL ENCODER.

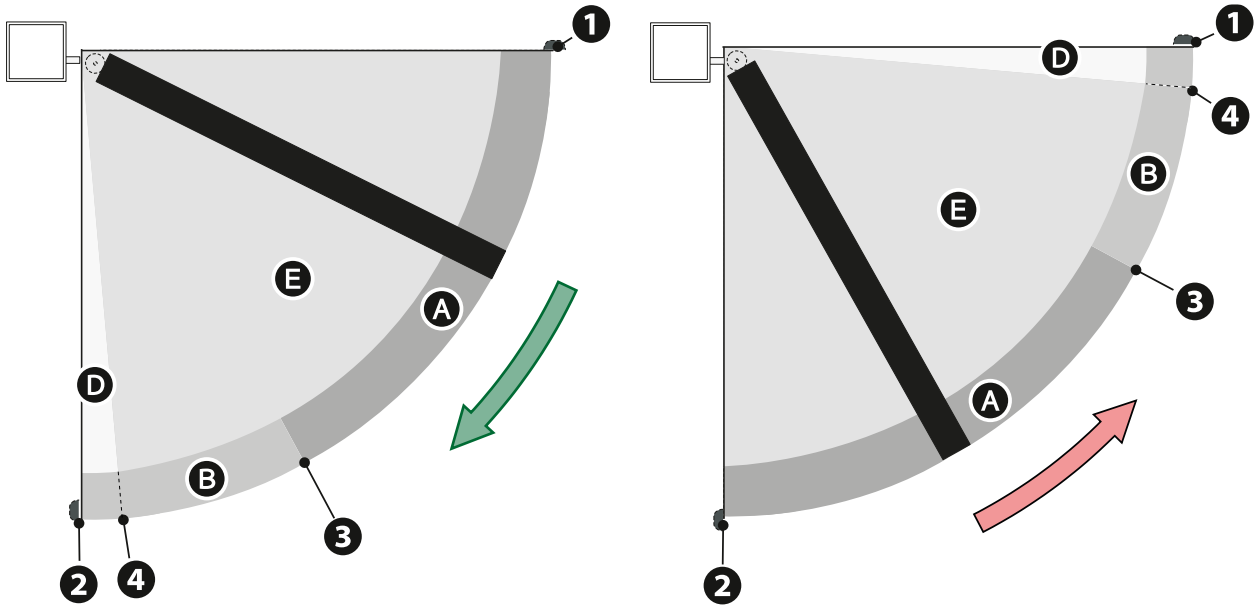
🕮 ALWAYS calibrate the travel, as with motors with an encoder.

To calibrate, perform the operations described below.
» Activate function [Travel calibration].
» Close M1 and “CL1” appears on the display. When it hits the strike plate, press the ENTER button.
» Close M2 and “CL2” appears on the display. When it hits the strike plate, press the ENTER button.
» Open M2 and “OP2” appears on the display. When it hits the strike plate, press the ENTER button.
» Open M1 and “OP1” appears on the display. When it hits the strike plate, press the ENTER button.
The “calibration completed” symbol shows on the display.

Diagrams showing leaf speed, slowdown and approach points

❶ Closing limit-switch
❷ Opening limit-switch
❸ Opening or closing slowdown point
❹ Opening or closing approach point

Ⓐ Opening or closing speed
Ⓑ Opening or closing slowdown speed
Ⓒ Approach speed (fixed)
Ⓓ Stop-motion zone in case of obstructions
Ⓔ Invert-motion zone in case of obstructions

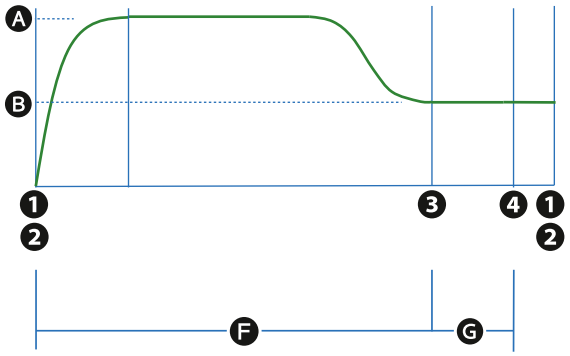


Graph showing speed curves during movement, slowdown and approach.

🕮 Moving between the various speeds always involves a gentle acceleration/slowdown slope.

Using slowdown space (slowdown space > 0)

🕮 With a slowdown space greater than 0, the obstruction detector, when near the approach points, is more sensitive, as per the impact testing.

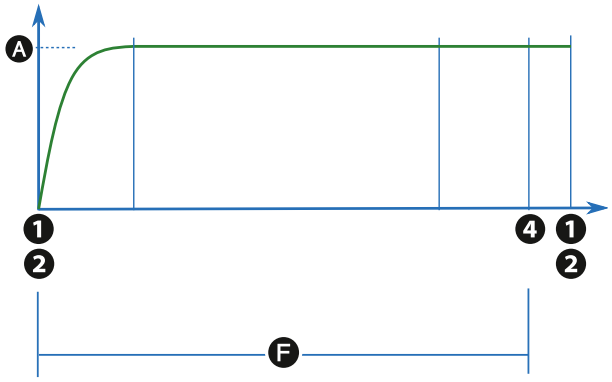


❶❷ Opening or closing limit-switch
❸ Opening or closing slowdown point
❹ Opening or closing approach point

Ⓐ Opening or closing speed
Ⓑ Opening or closing slowdown speed
Ⓒ Approach speed (fixed)

Ⓕ Obstruction travel sensitivity
Ⓖ Slowdown obstruction sensitivity

Without using slowdown space (slowdown space = 0)



- A Opening or closing speed
- C Approach speed (fixed)
- F Obstruction travel sensitivity

- 1 2 Opening or closing limit-switch
- 4 Opening or closing approach point

FUNCTIONS MENU

⚠ **When using a CAME KEY device, always update the board firmware to the latest version.**

🕮 Some functions may not be available with firmware versions prior to the latest one or without some accessory devices.

🕮 The functions relating to encoders and/or managing limit switches are only available for motors configured for this purpose.

Configuration

Motor settings

Path: CONFIGURATION > MOTOR SETTINGS > **Number of motors**

Number of motors	M1+M2 (Default) M2	Set the number of motors that control the gate.

Path: CONFIGURATION > MOTOR SETTINGS > **Motor type**

Motor type	Generic STYLO-ME STYLO-RME FTX FAST-70 AXI A1824 FERNI FERNI-V AXO A3024N/A5024N/F7024N FROG-A24 FROG-A24E (Default) ATS F1024 F4024E F4024EP EM4024 ATI-30DGF/50DGF	Set the type of gearmotor installed on M1 and M2. 🕮 If the value set for M1 is different to the value set for M2, only the value for M2 is shown here. 🕮 Selecting EM4024, M1 and M2 are controlled as a pair and perform the same movements. Check that the same opening and closing direction is set on both motors.

Path: CONFIGURATION > MOTOR SETTINGS > **Encoder**

Encoder	Activated (Default) Off	The function activates or deactivates the encoder. 🕮 The parameter is only available for motors that have an encoder. 🕮 If the value set for M1 is different to the value set for M2, only the value for M2 is shown here.

Path: CONFIGURATION > MOTOR SETTINGS > **Reduce speed**

Reduce speed	0% to 50% (Default 0%)	Reduce the minimum voltage applicable to the motor. 🕮 The parameter is only available for the Stylo ME and Stylo RME motors.

Path: CONFIGURATION > MOTOR SETTINGS > **Limit-switch function**

Limit-switch function	Off Stop in FA, stop in FC Slowdown in FA/FC Stop in FA, slowdown in FC	Set the operation of the inputs for slowdown/end-of-travel switches. 🕮 The function only appears for motors configured for this purpose. 🕮 If the value set for M1 is different to the value set for M2, only the value for M2 is shown here. 🕮 After modifying the function of the slowdown/end-of-travel inputs, recalibrate [Function Travel calibration].

Path: CONFIGURATION > MOTOR SETTINGS > **Input type FC/FA**		
Input type FC/FA	N.O. (Default) N.C. N.C. for FA input, N.O. for FC input	Set the inputs type FC/FA. 🕮 The function appears only with a generic motor or F1024. See [Motor type function]. 🕮 The function only appears if the [Limit-switch function] is active.

Path: CONFIGURATION > MOTOR SETTINGS > **Motor test**		
Motor test	The > key opens and closes gate leaf M2 The < key opens and closes gate leaf M1	The function is used to check the gate leaves open in the right direction. With the function active, the > key opens/closes the gate leaf connected to M2, and the < key opens/closes 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. 🕮 The leaves will move at reduced speed. 🕮 Every time the key is pressed (> for M2 and < for M1), the leaf direction changes from open to closed and vice versa. The change of direction is notified on the display.

Path: CONFIGURATION > MOTOR SETTINGS > **Travel calibration**	
Travel calibration	Start the travel self-learning.

Path: CONFIGURATION > MOTOR SETTINGS > **Motor power**		
Motor power	30% to 130% (Default 100%) 🕮 At 100%, the maximum thrust is the one pre-defined for the type of motor set. Increasing or decreasing the percentage increases or decreases the maximum thrust.	Increase or decrease the maximum thrust of motors connected on M1 and M2 during a manoeuvre. 🕮 Decreasing the thrust increases the obstacle-detection sensitivity.

Configure motor M1 and configure motor M2

From these sections, different values for motor M1 and M2 can be set for some functions in the [Motor settings] menu.

🕮 The sections only appear by selecting M1+M2 under the [Number of motors] function.

🕮 See the sections about the individual functions for more information.

Path: CONFIGURATION > MOTOR SETTINGS > CONFIGURE M1 > ...		
Configure M1	**Motor type**	Set the type of M1 gearmotor.
	Encoder	The function activates or deactivates the encoder on M1.
	Limit-switch function	Set the operation of the inputs for slowdown/end-of-travel switches for M1.
	Input type FC/FA	Set the FC/FA input type for M1.
	Motor power	Increase or decrease the maximum M1 thrust during a manoeuvre.

Path: CONFIGURATION > MOTOR SETTINGS > CONFIGURE M2 > ...		
Configure M2	**Motor type**	Set the type of M2 gearmotor.
	Encoder	The function activates or deactivates the encoder on M2.
	Limit-switch function	Set the operation of the inputs for slowdown/end-of-travel switches for M2.
	Input type FC/FA	Set the FC/FA input type for M2.
	Motor power	Increase or decrease the maximum M2 thrust during a manoeuvre.

Gate travel settings

Path: CONFIGURATION > GATE TRAVEL SETTINGS > **Opening speed**		
Opening speed	40% to 100% (Default 70%)	Set the opening speed for both motors (percentage of maximum speed). 🕮 If the value set for M1 is different to the value set for M2, only the value for M2 is shown here.

Path: CONFIGURATION > GATE TRAVEL SETTINGS > **Closing speed**		
Closing speed	40% to 100% (Default 70%)	Set the closing speed for both motors (percentage of maximum speed). 🕮 If the value set for M1 is different to the value set for M2, only the value for M2 is shown here.

Path: CONFIGURATION > GATE TRAVEL SETTINGS > **Travel AST control**		
Travel AST control	Deactivated (Default) = Maximum thrust and low obstruction sensitivity. Minimum Average Maximum = Minimum thrust and high obstruction sensitivity. Customised Customised closing Customised opening The personalised values to be used are expressed as a percentage: - from 10% (minimum thrust and high obstruction sensitivity) - to 100% (maximum thrust and low obstruction sensitivity)	Adjust the obstruction detection sensitivity during the gate travel in percentage terms.

Path: CONFIGURATION > GATE TRAVEL SETTINGS > **Soft start**		
Slowed start when closing	Deactivated (Default) 1% to 30%	The function defines the percentage of the total travel to be used for the slow start after each closing command. 📖 **The function appears only with [Motor type] set to EM4024.**

Path: CONFIGURATION > GATE TRAVEL SETTINGS > **Part. open point**		
Adjusting the partial opening	10% to 100% (Default 100%)	For single-leaf gates, it determines the partial opening percentage of the leaf with respect to the total travel. For two-leaf gates, it determines the partial opening percentage of the M2 leaf with respect to the total travel. 📖 **100% = Pedestrian opening**

Path: CONFIGURATION > GATE TRAVEL SETTINGS > **Op. approach point**		
Opening approach space	0.5% to 25.0% (Default 8.0%)	Set the percentage of the total travel to be used for the M1 and M2 opening approach. 📖 **If the value set for M1 is different to the value set for M2, only the value for M2 is shown here.**

Path: CONFIGURATION > GATE TRAVEL SETTINGS > **Cl. approach point**		
Closing approach space	0.5% to 25.0% (Default 8.0%)	Set the percentage of the total travel to be used for the M1 and M2 closing approach. 📖 **If the value set for M1 is different to the value set for M2, only the value for M2 is shown here.**

Path: CONFIGURATION > GATE TRAVEL SETTINGS > **Opening slowdown point**		
Opening slowdown space	Deactivated (Default) 1% to 50%	Set the percentage of the total travel in which M1 and M2, after the slowdown point during opening, proceed at a slowed constant speed. 🕮 If the value set for M1 is different to the value set for M2, only the value for M2 is shown here. 🕮 To configure M1 or M2 separately, use the [Configure M1] or [Configure M2] menu. 🕮 With the function deactivated, the gate still slows down near the approach space.

Path: CONFIGURATION > GATE TRAVEL SETTINGS > **Closing slowdown point**		
Closing slowdown space	Deactivated (Default) 1% to 50%	Set the percentage of the total travel in which M1 and M2, after the slowdown point during closing, proceed at a slowed constant speed. 🕮 If the value set for M1 is different to the value set for M2, only the value for M2 is shown here. 🕮 To configure M1 or M2 separately, use the [Configure M1] or [Configure M2] menu. 🕮 With the function deactivated, the gate still slows down near the approach space.

Path: CONFIGURATION > GATE TRAVEL SETTINGS > **Opening slowdown speed**		
Opening slowdown speed	10% to 50% (Default 40%)	Set the M1 and M2 slowdown speed during opening (as a percentage of the maximum speed). 🕮 If the value set for M1 is different to the value set for M2, only the value for M2 is shown here. 🕮 The parameter is only used with the [Opening slowdown point] function active. 🕮 For Stylo ME and Stylo RME motors it might be necessary to reduce the minimum voltage applicable to the motor to achieve the desired slowdown percentage. See function [Reduction of speed].

Path: CONFIGURATION > GATE TRAVEL SETTINGS > **Closing slowdown speed**		
Closing slowdown speed	10% to 50% (Default 40%)	Set the M1 and M2 slowdown speed during closing (as a percentage of the maximum speed). 🕮 If the value set for M1 is different to the value set for M2, only the value for M2 is shown here. 🕮 The parameter is only used with the [Closing slowdown point] function active. 🕮 For Stylo ME and Stylo RME motors it might be necessary to reduce the minimum voltage applicable to the motor to achieve the desired slowdown percentage. See function [Reduction of speed].

Path: CONFIGURATION > GATE TRAVEL SETTINGS > **Slowdown AST control**		
Slowdown AST control	Deactivated (Default) = Maximum thrust and low obstruction sensitivity. Minimum Average Maximum = Minimum thrust and high obstruction sensitivity. Customised Customised closing Customised opening The personalised values to be used are expressed as a percentage: - from 10% (minimum thrust and high obstruction sensitivity) - to 100% (maximum thrust and low obstruction sensitivity)	Adjust the obstruction detection sensitivity during slowdown in percentage terms. 🕮 The parameter is only used if the opening or closing slowdown point is active.

Path: CONFIGURATION > GATE TRAVEL SETTINGS > **Impact test**		
Impact test	Activate test mode Deactivate test mode	Activate/deactivate test mode for impact tests. With the function on, the operator does not signal errors connected to obstacle detection after more than one consecutive impact. 🕮 Test mode is deactivated automatically after 1 hour. 🕮 With the function on, the display shows the ⚠ icon.

Configure M1 travel and configure M2 travel

From these sections, different values for motor M1 and M2 can be set for some functions in the [Travel settings] menu.

🕮 The sections only appear by selecting M1+M2 under the [Number of motors] function.

🕮 See the sections about the individual functions for more information.

Path: CONFIGURATION > GATE TRAVEL SETTINGS > CONFIGURE M1 > ...		
Configure M1	Opening speed	Set the M1 opening speed (percentage of maximum speed).
	Closing speed	Set the M1 closing speed (percentage of maximum speed).
	Opening approach space	Set the percentage of the total travel to be used for M1 opening approach.
	Closing approach space	Set the percentage of the total travel to be used for M1 closing approach.
	Opening slowdown space	Set the percentage of the total travel in which M1, after the slowdown point during opening, proceeds at a slowed constant speed.
	Closing slowdown space	Set the percentage of the total travel in which M1, after the slowdown point during closing, proceeds at a slowed constant speed.
	Opening slowdown speed	Set the M1 slowdown speed during opening (as a percentage of the maximum speed).
	Closing slowdown speed	Set the M1 slowdown speed during closing (as a percentage of the maximum speed).

Path: CONFIGURATION > GATE TRAVEL SETTINGS > CONFIGURE M2		
Configure M2	Opening speed	Set the M2 opening speed (as a percentage of the maximum speed).
	Closing speed	Set the M2 closing speed (as a percentage of the maximum speed).
	Opening approach space	Set the percentage of the total travel to be used for M2 opening approach.
	Closing approach space	Set the percentage of the total travel to be used for M2 closing approach.
	Opening slowdown space	Set the percentage of the total travel in which M2, after the slowdown point during opening, proceeds at a slowed constant speed.
	Closing slowdown space	Set the percentage of the total travel in which M2, after the slowdown point during closing, proceeds at a slowed constant speed.
	Opening slowdown speed	Set the M2 slowdown speed during opening (as a percentage of the maximum speed).
	Closing slowdown speed	Set the M2 slowdown speed during closing (as a percentage of the maximum speed).

Path: CONFIGURATION > WIRED SAFETY DEVICES > **Total stop**		
Total stop	Deactivated (Default) On	Activate or deactivate input 2-1. If it is activated, the input is used as a normally closed contact. 📖 With the input open, this function excludes all commands, including any automatic closing.

Path: CONFIGURATION > WIRED SAFETY DEVICES > **CX input / CY input / CZ input / CK input**		
CX input **CY input** **CZ input** **CK 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) C13 = Reopen while closing, with immediate closure once the obstruction has been removed, even if the gate is not in motion r7 = Reopen while closing (sensitive edges with 8K2 resistor) r8 = Reclose while opening (sensitive edges with 8K2 resistor) r7 (two sensitive edges) = Reopen while closing (pair of sensitive edges with 8K2 resistor) r8 (two sensitive edges) = Reclose while opening (pair of sensitive edges with 8K2 resistor)	Associate a function with the CX, CY, CZ and CK input.

Path: CONFIGURATION > WIRED SAFETY DEVICES > **Safety devices test**

Safety devices test	Deactivated (Default) CX _ _ _ _ CY _ _ CX CY _ _ _ _ CZ _ CX _ CZ _ _ CY CZ _ CX CY CZ _ _ _ _ CK CX _ _ CK _ CY _ CK CX CY _ CK _ _ CZ CK CX _ CZ CK _ CY CZ CK CX CY CZ CK	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].

RIO safety devices

Path: CONFIGURATION > RIO SAFETY DEVICES > **RIO ED T1 / RIO ED T2**

RIO ED T1 **RIO ED T2**	Deactivated (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.	Associate one of the available functions with a wireless safety device. 🕮 The function only appears if the RIO CONN interface board is present.

Path: CONFIGURATION > RIO SAFETY DEVICES > **RIO PH T1 / RIO PH T2**

RIO PH T1 **RIO PH T2**	Deactivated (Default) P1 = Reopen while closing. P2 = Reclose while opening. P3 = Partial stop. Only with [Automatic close] activated. P4 = Obstacle standby. P13 = Reopening during closure with immediate stop once the obstacle has been removed, even with the gate not in motion.	Associate one of the available functions with a wireless safety device. 🕮 The function only appears if the RIO CONN interface board is present.

Path: CONFIGURATION > BUS DEVICES > **BUS (1 - 8) photocell**

BUS Photocell 1 **Photocell BUS 2** **Photocell BUS 3** **Photocell BUS 4** **Photocell BUS 5** **Photocell BUS 6** **Photocell BUS 7** **Photocell BUS 8**	Deactivated (Default) C1 = Reopen while closing (photocells) C2 = Reclose while opening (photocells) C3 = Partial stop Only with [Automatic close] activated. C4 = Obstacle standby (photocells) C13 = Reopen while closing, with immediate closure once the obstruction has been removed, even if the gate is not in motion Open Close	Associate a function with the input for the BUS photocells. 🕮 **The function only appears if there is a BUS photocell connected.**

Path: CONFIGURATION > BUS DEVICES > **BUS (1 - 8) key selector switch**

BUS 1 key selector **BUS 2 key selector** **BUS 3 key selector** **BUS 4 key selector** **BUS 5 key selector** **BUS 6 key selector** **BUS 7 key selector** **BUS 8 key selector switch**	Key to the right Key to the left	Step-by-step - The first command is to open and the second to close. Sequential - The first command is to open, the second to STOP, the third to close and the fourth to STOP. Open Close Partial opening Stop B1-B2 output BUS 1 module relay - Activate output 2 (relay output) on BUS 1 I/O module BUS 2 module relay - Activate output 2 (relay output) on BUS 2 I/O module	Associate a function with the BUS key selector input. Different functions can be set according to the key turning direction. 🕮 **The function only appears if there is a BUS key selector connected.**

Path: CONFIGURATION > BUS DEVICES > I/O MODULE BUS 1 > **Input I1 / Input I2**
Path: CONFIGURATION > BUS DEVICES > I/O MODULE BUS 2 > **Input I1 / Input I2**

input I1 **input I2**	Deactivated (Default) Stop = Stop the gate and exclude automatic closing. Use a control device to resume movement. 📖 If it is activated, the input is used as a normally closed contact. r7 = Reopen while closing (sensitive edge with 8K2 resistor). r8 = Reclose while opening (sensitive edge with 8K2 resistor). Partial opening Open Close Step-by-step - The first command is to open and the second to close. Sequential - The first command is to open, the second to STOP, the third to close and the fourth to STOP.	Associate a function with the I/O module inputs. 📖 The function only appears if there is a BUS I/O module connected.

Path: CONFIGURATION > BUS DEVICES > I/O MODULE BUS 1 > **Light output**
Path: CONFIGURATION > BUS DEVICES > I/O MODULE BUS 2 > **Light output**

Light output	Passage-open warning light - It notifies the user of the operator status. 📖 See function [Passage-open warning light]. Cycle lamp - The lamp stays on during the manoeuvre. Courtesy light - The light switches on when a manoeuvre starts and remains on once the manoeuvre has finished, for the time set under the [Courtesy time] function.	Associate a function with I/O module output 1. 📖 The function only appears if there is a BUS I/O module connected.

Path: CONFIGURATION > BUS DEVICES > I/O MODULE BUS 1 > **Relay output**
Path: CONFIGURATION > BUS DEVICES > I/O MODULE BUS 2 > **Relay output**

Relay output	User command (Default): the output is managed by user commands or timers AMF (Access Management Function) – The output is used to indicate the fully open passage position in AMF mode. 📖 The output remains open when the gate is fully open and remains closed in all other cases.	Associate a function with I/O module output 2. 📖 The function only appears if there is a BUS I/O module connected.

Path: CONFIGURATION > BUS DEVICES > I/O MODULE BUS 1 > **Relay output time** *Path:* CONFIGURATION > BUS DEVICES > I/O MODULE BUS 2 > **Relay output time**		
Relay output time	Bistable ON - 1 to 180 seconds (Default 1)	Associate a time with output 2 on the I/O modules. 🕮 The function only appears if there is a BUS I/O module connected.

BUS flashing beacon

Path: CONFIGURATION > BUS DEVICES > BUS FLASHING BEACON > **Opening colour**		
Opening colour	White Yellow Orange Red (Default) Purple Blue Light blue Green	Set the BUS flashing beacon colour during operator opening. 🕮 The function only appears if there is a BUS flashing beacon connected.

Path: CONFIGURATION > BUS DEVICES > BUS FLASHING BEACON > **Closing colour**		
Closing colour	White Yellow Orange Red (Default) Purple Blue Light blue Green	Set the BUS flashing beacon colour during operator closing. 🕮 The function only appears if there is a BUS flashing beacon connected.

Path: CONFIGURATION > BUS DEVICES > BUS FLASHING BEACON > **Auto. cl. colour**		
Automatic closing time colour	Off White Yellow Orange Red Purple Blue Light blue Green (Default)	Set the BUS flashing beacon colour during the automatic closing time. 🕮 The function only appears if there is a BUS flashing beacon connected.

Path: CONFIGURATION > BUS DEVICES > BUS FLASHING BEACON > **Pre-flashing colour**		
Pre-flashing colour	White (Default) Yellow Orange Red Purple Blue Light blue Green	Set the flash colour for before opening and closing manoeuvres (pre-flash). 🕮 The function only appears if there is a BUS flashing beacon connected.

Path: CONFIGURATION > BUS DEVICES > BUS FLASHING BEACON > **Signal error**		
Signal error	Deactivated (Default) White Yellow Orange Red Purple Blue Light blue Green	Set the colour of the BUS flashing beacon in the event of an error signal. 🕮 The warning light is activated after sending a command for movement. 🕮 The function only appears if there is a BUS flashing beacon connected.

BUS device lights

Path: CONFIGURATION > BUS DEVICES > BUS DEVICE LIGHTS > **Signal maintenance**		
Signal maintenance	Deactivated (Default) White Yellow Orange Red Purple Blue Light blue Green	Set the colour of the flash on enabled BUS devices (flashing beacons and selectors) when maintenance is necessary. With the function activated, these devices will signal that maintenance needs to be carried out at the start of each manoeuvre. 🕮 Configure maintenance and set the number of manoeuvres. See function [Configure maintenance]. 🕮 The function only appears if there is a BUS flashing beacon or a BUS selector connected.

Command inputs

Path: CONFIGURATION > COMMAND INPUTS > **Command 2-7**		
Command 2-7	Step-by-step (Default) - The first command is to open and the second to close. Sequential - The first command is to open, the second to STOP, the third to close and the fourth to STOP.	Associate a command to the connected device on 2-7.

Functions

Path: CONFIGURATION > FUNCTIONS > **Lock**		
Lock	Deactivated (Default) From closed From open From open and closed Continue Electromagnet 24 V 🕮 The electromagnet activates when the motor is stationary and deactivates during a manoeuvre.	Associate the electric lock/electromagnet release with a command. 🕮 The function cannot be used with STYLO-ME motors.

Path: CONFIGURATION > FUNCTIONS > **Closing thrust**		
Closing thrust	Reduced Normal (Default) Minimum Medium Maximum	When the leaves reach the closing limit-switch, the operator thrusts them towards the strike plate for a second.

Path: CONFIGURATION > FUNCTIONS > **Thrust**		
Thrust	Deactivated (Default) On	Before every opening or closing manoeuvre, the leaves thrust inwards to release the electric lock. 🕮 **The thrust motion is performed during opening or closing, depending on where the electric lock is active. See Function [Lock].**

Path: CONFIGURATION > FUNCTIONS > **Removing obstacles**		
Removing obstacles	Deactivated (Default) On	If the function is active, when the operator detects an obstacle via the AST control on the control board or via the sensitive edge, the leaf movement inverts to create the space required to free the obstacle and then stops.

Path: CONFIGURATION > FUNCTIONS > **B1-B2 output function**		
B1-B2 output function	User command (Default): the output is managed by user commands or timers AMF: passage open - Access Management Function. The output is used to indicate the fully open passage position in AMF mode. 🕮 **The output remains open when the gate is fully open and remains closed in all other cases.**	The function configures the contact B1-B2.

Path: CONFIGURATION > FUNCTIONS > **Hold-to-run**		
Hold-to-run	Deactivated (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.**

Path: CONFIGURATION > FUNCTIONS > **Obst. with motor stopped**		
Obstacle with motor stopped	Deactivated (Default) On	With the function active, the operator remains stopped if the safety devices detect an obstacle. The function is active when the gate is closed, open or after a complete stop.

Path: CONFIGURATION > TIMES > **Automatic close**

Automatic closure	Deactivated (Default) From 1 to 180 seconds	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.

Path: CONFIGURATION > TIMES > **Automatic partial close**

Automatic closing after either partial or pedestrian opening	Off 1 to 180 seconds (Default 10)	Set the time before automatic closure after a partial opening command. 🕮 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. **Apartment building mode** 🕮 The function is available only with the encoder active. With the Partial Opening command (2-3P), the leaf M2 opens. If an Open command (2-3) is then sent, both leaves fully open. With the [Automatic closing] function set, leaf M1 closes after the selected automatic closing time, while leaf M2 moves to the partial opening point set under [Partial opening adjustment]. 🕮 If the partial opening command is given from input (2-3P), the [Automatic closing after either partial or pedestrian opening] function must be deactivated. 🕮 To return to normal gate operation, send a closing command. 🕮 If the partial opening command is sent via a timer, after the set time the operator returns to normal operation and the leaves close. See function [Create timer].

Path: CONFIGURATION > TIMES > **M1 open delay**

M1 opening delay time	Off 1 to 10 seconds (Default 2)	Adjust the delayed opening of the first leaf compared to the second. 🕮 For motors with encoders only: if the distance between the two leaves is already sufficient to guarantee the delay time set, the delay will not be performed. 🕮 The function does not appear with EM4024 motors [Motor type function set to EM4024].

Path: CONFIGURATION > TIMES > **M2 open delay**		
M2 closing delay time	Off 1 to 25 seconds (Default 2)	Adjust the delayed opening of the second leaf compared to the first. 📖 For motors with encoders only: if the distance between the two leaves is already sufficient to guarantee the delay time set, the delay will not be performed. 📖 The function does not appear with EM4024 motors [Motor type function set to EM4024].

Path: CONFIGURATION > TIMES > **B1-B2 output time**		
B1-B2 output time	Bistable Monostable: on from 1 to 180 seconds (Default 1)	The function is used to set the B1-B2 output as bistable or monostable. Where the output is monostable, the contact closing time can be chosen.

Manage lights

Path: CONFIGURATION > MANAGE LIGHTS > **Passage-open warning light**		
Passage-open warning light	Warning light on (Default) - The warning light stays on when the gate is moving or open. Warning light flashing - The warning light flashes every half second when the gate is opening and stays on when the gate is open. The light flashes every second when the gate is closing, and remains off when the gate is closed.	It notifies the user of the operator status.

Path: CONFIGURATION > MANAGE LIGHTS > **Light E3**		
Additional light	Disabled (Default) Cycle lamp - The lamp stays on during the manoeuvre. 📖 The light remains off if an automatic closing time is not set. Courtesy light - The light switches on when a manoeuvre starts and remains on once the manoeuvre has finished, for the time set under the function [Courtesy time].	This function allows you to choose the operating mode of the lighting device connected to the output E3.

Path: CONFIGURATION > MANAGE LIGHTS > **Courtesy time**		
Courtesy time	60 to 180 seconds (Default 60)	Define how many seconds the additional light (set up as courtesy light) stays on after an opening or closing manoeuvre.

Path: CONFIGURATION > MANAGE LIGHTS > **Pre-flashing time**		
Pre-flashing time	Deactivated (Default) 1 to 10 seconds	Adjust the time for which the beacon is activated before each manoeuvre.

RSE communication

Path: CONFIGURATION > RSE COMMUNICATION > **RSE**		
RSE communication	CRP (Default) RTU MODBUS	Configure the function performed by the board connected to the RSE connector.

Path: CONFIGURATION > RSE COMMUNICATION > **CRP address**		
CRP address	1 to 254 (Default 1)	Assign 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.**

Path: CONFIGURATION > RSE COMMUNICATION > **RSE speed**		
RSE speed	4800 bps 9600 bps 14400 bps 19200 bps 38400 bps (Default) 57600 bps 115200 bps	Set the communication speed of the remote connection system.

External memory

Path: CONFIGURATION > EXTERNAL MEMORY > **Save data**	
Save data	Save 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.**

Path: CONFIGURATION > EXTERNAL MEMORY > **Read data**	
Read data	Upload 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.**

Parameter reset

Path: CONFIGURATION > **Parameter reset**		
Parameter reset	Confirm? NO Confirm? YES	Restore the factory configurations except for: [users], [timers], [no. motors], [motor type], [CRP address], [limit-switch inputs function], [RSE speed], [password], [language], [time format] and the settings related to the travel calibration.

Guided procedure (Wizard)

Path: CONFIGURATION > **Guided procedure (Wizard)**	
Guided procedure (Wizard)	You can use the system configuration wizard.

User management

New user

Path: USER MANAGEMENT > **New user**	
New user	Register up to a maximum of 1000 users and assign a function to each one. 🕮 The operation can be carried out using a transmitter or a BUS selector device (e.g. a keypad or transponder reader). The board that manages the transmitters (AF) must be inserted into the connector. 🕮 See the [Saving a new user] section for information on the save procedure.

Remove user

Path: USER MANAGEMENT > **Remove user**	
Remove user	Remove one of the registered users. 🕮 See the [Remove registered users] section for information on how to remove them.

Remove all

Path: USER MANAGEMENT > **Remove all**	
Remove all	Remove all registered users.

Radio decoding

Path: USER MANAGEMENT > **Radio decoding**		
Radio decoding	All decoding (Default) Rolling code TW Key block	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 saved previously will be deleted.

Self-Learning Rolling

Path: USER MANAGEMENT > **Self-Learning Rolling**		
Self-Learning Rolling	Deactivated (Default) On	Save a new rolling code transmitter by activating acquisition from a rolling code transmitter that has already been saved. The saving and acquisition procedures are explained in the transmitter manual.

Change mode

Path: USER MANAGEMENT > **Change mode**	
Change mode	Change the function assigned to a specific user. 🕮 For more information about the procedure, see the [Change a command assigned to a user] section.

Information

FW version

Path: INFORMATION > **FW version**		
FW version	Use the < > arrows to show: FW MC.x.x.xx (motor board firmware version) FW UI.x.x.xx (display board firmware version) GUI x.x (graphics)	Display the firmware version and the GUI installed.

BUS device status

Path: INFORMATION > **BUS device status**		
BUS device status	BUS 1-8 photocell BUS 1-8 selector switch BUS 1 / 2 flashing beacon I/O BUS 1 / 2 module	Show the status of all devices that can be connected to the BUS and managed by the firmware in use. **Available device statuses:** - OK - Not communicating - Safety device active - BUS address conflict

Manoeuvre counter

Path: INFORMATION > **Manoeuvre counter**		
Manoeuvre counter	Total manoeuvres - Manoeuvres performed since the operator was installed. Partial manoeuvres - Manoeuvres carried out after the last maintenance.	View the number of total or partial operator manoeuvres (after maintenance). 🕮 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.

Configure maintenance

Path: INFORMATION > **Maintenance conf.**		
Configure maintenance	Deactivated (Default) from 1 x100 to 500 x100	Set the number of manoeuvres the operator can perform before a maintenance warning signal is generated. 🕮 The warning is displayed as a [Maintenance required] message and signalled by 3 + 3 flashes every hour on the device [Passage-open warning light].

Maintenance reset

Path: INFORMATION > **Maintenance reset**	
Maintenance reset	Reset the number of partial manoeuvres.

Errors list

Path: INFORMATION > **Errors list**	
Errors list	View the last 8 errors detected. The error list can be deleted. Use the arrows to scroll through the list. To cancel the error list, select [Delete errors] Press ENTER to confirm.

Timer management

Show clock

Path: TIMER MANAGEMENT > **Show clock**	
Show clock	Enable the clock on the display.

Set the clock

Path: TIMER MANAGEMENT > **Set the clock**	
Set the clock	Set the date and time. Use the arrows and the Enter button to enter the desired values.

Automatic DST

Path: TIMER MANAGEMENT > **Automatic DST**		
Automatic DST	Deactivated (Default) On Summer changeover: +1 hour on the last Sunday in March (change to daylight saving time). Winter changeover: -1 hour on the last Sunday in October (change to standard time).	Enable automatic daylight saving time setting. 🕮 Valid in Central Europe only UTC+1.

Time format

Path: TIMER MANAGEMENT > **Time format**		
Time format	24-hour 12-hour	Choose the clock display format.

Create new timer

Path: TIMER MANAGEMENT > **Create new timer**	
Create new timer	Time one or more types of activation chosen from those available. 🕮 For more information about the procedure, see the [Create a new timer] section.

Remove timer

Path: TIMER MANAGEMENT > **Remove timer**		
Remove timer	0 = [Opening] P = [Partial opening] B = [Output B1-B2] R = [BUS module relay]	The function allows you to remove one of the saved timings.

Language

Path: LANGUAGE		
Language	Italiano (IT) English (EN) (Default) Français (FR) Deutsch (DE) Español (ES) Português (PT) Русский (RU) Polski (PL) Românesc (RO) Magyar (HU) Hrvatski (HR) Український (UA) Nederlands (NL)	Set the display language.

Password

Enable password

Path: PASSWORD > **Enable password**	
Enable password	Set a 4-digit password. The password will be requested to anyone who wants to access the main menu. 🕮 **This option only shows if a password has NOT been enabled.** Use the arrows and the Enter button to dial the desired code. Enter the password again using the arrows and the Enter button to confirm.

Remove password

Path: PASSWORD > **Remove password**	
Remove password	Remove the password that protects access to the main menu. 🕮 **This option only shows if a password has been enabled.**

Change password

Path: PASSWORD > **Change password**	
Change password	Change the password protecting access to the main menu. 🕮 **This option only shows if a password has been enabled.** Use the arrows and the Enter button to dial the desired code. Enter the password again using the arrows and the Enter button to confirm.

Forgotten password

If you lose the password, you will need to reset the board to its factory settings. See [Factory reset].

Factory reset

To restore the electronic board data to factory settings:

Disconnect the control board from the power supply and wait for it to switch off.

Press and hold the < and > buttons, then reconnect the control board to the power supply.

Continue to press and hold the < > buttons until [Factory reset] is displayed.

Select [Confirm? YES]

Press **ENTER** to confirm.

🕮 When you reset the control board, all saved users, set times, manoeuvre configurations and calibration operations are deleted.

Saving a new user

Press **ENTER** to enter programming.

Access: [USER MANAGEMENT] > **New user**

Press **ENTER** to confirm.

Choose the function to be assigned to the user:

Step-by-step - The first command is to open and the second to close.
Sequential
The first command is to open, the second to STOP, the third to close and the fourth to STOP.
Open
Partial/pedestrian opening
B1-B2 output
BUS 1 module relay - Activate output 2 (relay output) on BUS 1 I/O module
BUS 2 module relay - Activate output 2 (relay output) on BUS 2 I/O module

You will be asked to enter your user code. Send the code from the control device within 10 seconds.

🕮 The operation can be carried out by using a transmitter or a BUS selector device (e.g. a keypad or transponder reader). The board that manages the control devices (AF) must be inserted into the connector.

Repeat the procedure to add other users.

Removing a registered user

Press **ENTER** to enter programming.

Access: [USER MANAGEMENT] > **Remove user**

Press **ENTER** to confirm.

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.

A confirmation request appears on the display:

Confirm? NO
Confirm? YES

Select [Yes] using the arrows and press **ENTER** to confirm deletion.

Repeat the procedure to remove other users.

Change a command assigned to a user

Press **ENTER** to enter programming.

Access: [USER MANAGEMENT] > **Change mode**

Press **ENTER** to confirm.

Use the arrows to choose the number associated with the user you want to edit. Press **ENTER** to confirm.

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

Choose the new command to associate with the user:

Step-by-step - The first command is to open and the second to close.
Sequential - The first command is to open, the second to STOP, the third to close and the fourth to STOP.
Open
Partial opening
B1-B2 output
BUS 1 module relay - Activate output 2 (relay output) on BUS 1 I/O module
BUS 2 module relay - Activate output 2 (relay output) on BUS 2 I/O module

Press **ENTER** to confirm.

A confirmation request appears on the display:

Confirm? NO
Confirm? YES

Select [Yes] using the arrows and press **ENTER** to confirm your choice.

Repeat the procedure to edit other users.

Creating a new timer

You can create up to 8 timers and 16 special days. Special days are exceptions to the weekly schedule. They refer to a specific day (e.g. a bank holiday). Special days can only be set from the CAME app [CONNECT SetUp].

Wired commands always take priority over commands set on the timer. Commands set on the timer take priority over commands forwarded by registered users (selectors and transmitters).

Example:
- The wired command connected to terminal 2-4 closes the operator even if the timer is set to [Opening].
- A closing command sent from the transmitter of a registered user is not performed by the gate if the timer is set to [Opening].

Press **ENTER** to enter programming.
Path: TIMER MANAGEMENT > **Create new timer**
Use the arrows to choose the command to associate with the timer:

Open
Partial opening
B1-B2 output
BUS 1 module relay - Activate output 2 (relay output) on BUS 1 I/O module
BUS 2 module relay - Activate output 2 (relay output) on BUS 2 I/O module

Press **ENTER** to confirm.

Start time

Use the arrows to set the command activation time. Press **ENTER** to confirm.

End time

Use the arrows to set the command deactivation time. Press **ENTER** to confirm.

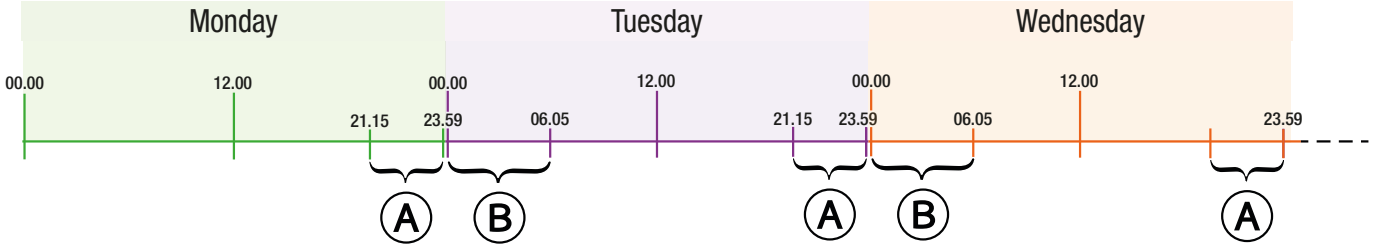
Select days
All week

- Press [Select days] to choose one or more days of the week individually.
- Press [All week] to select the whole week.

Press **ENTER** to confirm.
Repeat the procedure to set other timers.

How to add a timer over two days

Create two single timers as specified in the above procedure.



A = First timer

B = Second timer

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.

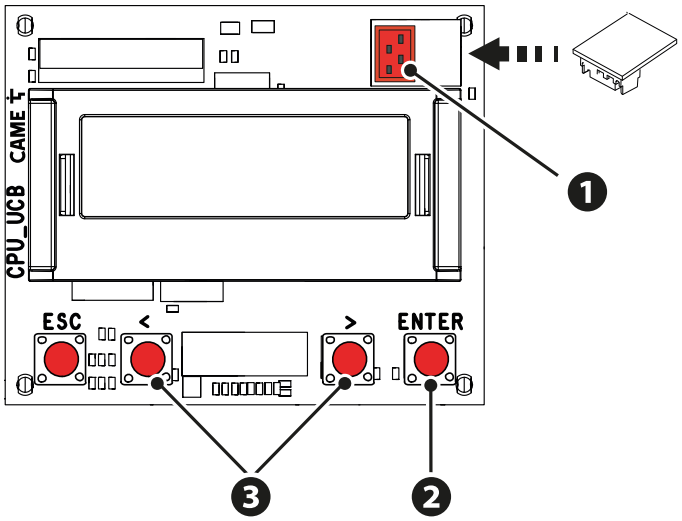
❸ Use the arrows to choose the desired function.

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

Path: CONFIGURATION > EXTERNAL MEMORY > **Save data**	
Save data	Save user data, timings and configurations to the memory device (memory roll).

Path: CONFIGURATION > EXTERNAL MEMORY > **Read data**	
Read data	Upload user data, timings and configurations to the memory device (memory roll).

🕮 Once the data have been saved and loaded, remove the MEMORY ROLL card.



DISPLAY WARNINGS KEY

	The encoder is deactivated.
	The [Impact test] function is on.
→|	The operator detected an obstacle during closing.
|←	The operator detected an obstacle during opening.
→|2	The operator detected two obstacles during closing. 📖 The number on the display varies according to the number of obstructions detected. 📖 When the maximum number of detected obstructions has been reached, the operator stops and an error message shows on the display.
2|←	The operator detected two obstacles during opening. 📖 The number on the display varies according to the number of obstructions detected. 📖 When the maximum number of detected obstructions has been reached, the operator stops and an error message shows on the display.
	There is at least one programmed timer.
	A programmed timer is running. 📖 With the timer programmed for opening or partial opening, any given radio command will always allow opening. The wired commands continue to operate normally.
i3	2-3 command input active
i4	2-4 command input active
i7	2-7 command input active
i3p	2-3P command input active
fc1	Input for M1 motor slowdown during closing active
fc2	Input for M2 motor slowdown during closing active
fa1	Input for M1 motor slowdown during opening active
fa2	Input for M2 motor slowdown during opening active
C<n>	Wired safety device active 📖 The <n> value is associated with the selected parameter for the functions [CX input] [CY input] [CZ input] [CK input].
r7	R7 safety device (sensitive edge) active
r8	R8 safety device (sensitive edge) active
2r7	R7 safety device (pair of sensitive edges) active
2r8	R8 safety device (pair of sensitive edges) active

c<n>	BUS photocell safety device active 🕮 The <n> value is associated with the selected parameter for the [BUS photocell] functions.
c23	Open command active for BUS photocells
c24	Close command active for BUS photocells
C0	Total stop active
P<n>	RIO safety device active 🕮 The <n> value is associated with the selected parameter for the functions [RIO ED T1 - RIO ED T2] and [RIO PH T1 - RIO PH T2]
BUS address conflict	ID conflict detected on BUS devices.
Check BUS device	No BUS device with a safety function configured.
RIO not configured	The RIO Conn board is not configured or has no safety configuration.
Calibration needed	Travel calibration required.
wizard	Select a motor type.
Maintenance required	Maintenance required (excl. encoder and manoeuvres exceeded for maintenance).
OP	Passage fully open
CL	Passage fully closed

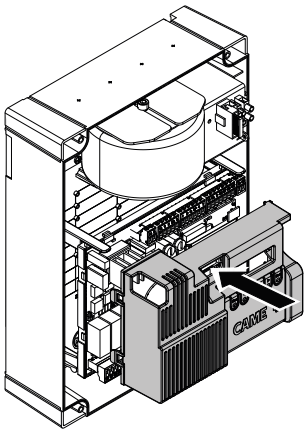
ERROR MESSAGES

E1	Motor M1 calibration error
E2	Motor M2 calibration error 📖 With an EM4024 motor, E2 indicates a calibration error on M1 or M2.
E3	Encoder signal not detected error
E4	Service test failure error
E7	Operating time error
E9	Consecutive obstacles detected during closing
E10	Consecutive obstacles detected during opening
E11	Maximum number of obstacles
E12	Motor supply voltage missing or insufficient
E13	Limit switch input error or both limit switches open
E15	Incompatible transmitter error
E17	Wireless system communication error
E18	Wireless system not configured error
E24	Communication error or malfunction of a BUS safety device
E25	Address settings error on BUS devices

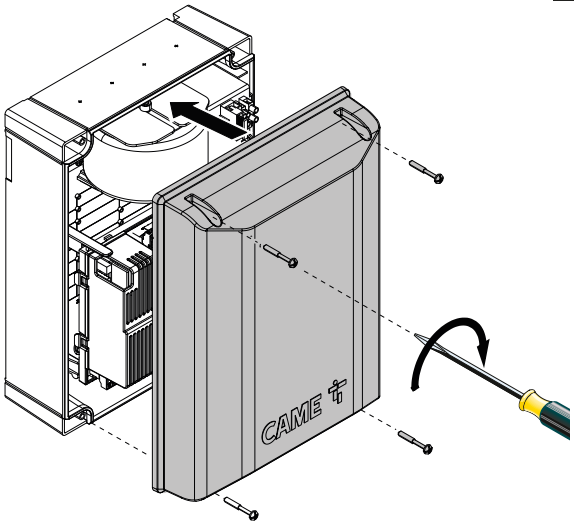
FINAL OPERATIONS

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

1



2



AFFIX THE PRODUCT LABEL
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