CAME

Control panel for 230 V gearmotors

CE

EAC
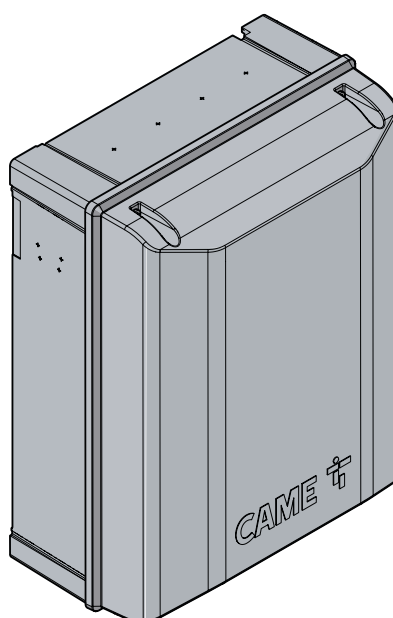
ZLX230S

INSTALLATION MANUAL

EN | English

TABLE OF CONTENTS

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

DISMANTLING AND DISPOSAL

☛ CAME S.p.A. employs an Environmental Management System at its premises. This system is certified and compliant with the UNI EN ISO 14001 standard to ensure that the environment is respected and safeguarded. Please continue safeguarding the environment. At CAME we consider it one of the fundamentals of our operating and market strategies. Simply follow these brief disposal guidelines:

♻ DISPOSING OF THE PACKAGING

The packaging materials (cardboard, plastic, etc.) can be disposed of easily as solid urban waste, separated for recycling.

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

DISPOSE OF THE PRODUCT RESPONSIBLY

♻ DISPOSING OF THE PRODUCT

Our products are made of various materials. Most of these materials (aluminium, plastic, iron and electrical cables) are classified as solid urban waste. They can be separated for recycling and disposed of at authorised waste treatment plants.

Other components (electronic boards, transmitter batteries, etc.) may contain pollutants.

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

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

DISPOSE OF THE PRODUCT RESPONSIBLY

PRODUCT DATA AND INFORMATION

Key

📖 This symbol shows which parts to read carefully.

⚠ This symbol shows which parts describe safety issues.

☛ This symbol shows what to tell users.

The measurements, unless otherwise stated, are in millimetres.

Description

801QA-0130

Multifunction control panel, with power supply 230 V AC, for double-leaf swing gates 230 V, with graphic programming and signalling display, safety device self-diagnostics, Digital Torque Control, CXN BUS, 4 safety inputs, timer for programming, 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	ZLX230S
Power supply (V - 50/60 Hz)	220 AC to 240 AC
Motor power supply (V)	220 AC to 240 AC
Standby consumption (W)	0,8
Power (W)	1100
Motor power (W)	950
Colour	RAL 7040
Operating temperature (°C)	-20 ÷ +55
Storage temperature (°C)*	-25 ÷ +70
Encoder	YES
Protection rating (IP)	54
Insulation class	I
Average life (cycles)**	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	ZLX230S
Line fuse	5 A F

⚠ The accessories fuse is not on this board. See the [Short circuit check procedure] section for more information.

Description of parts
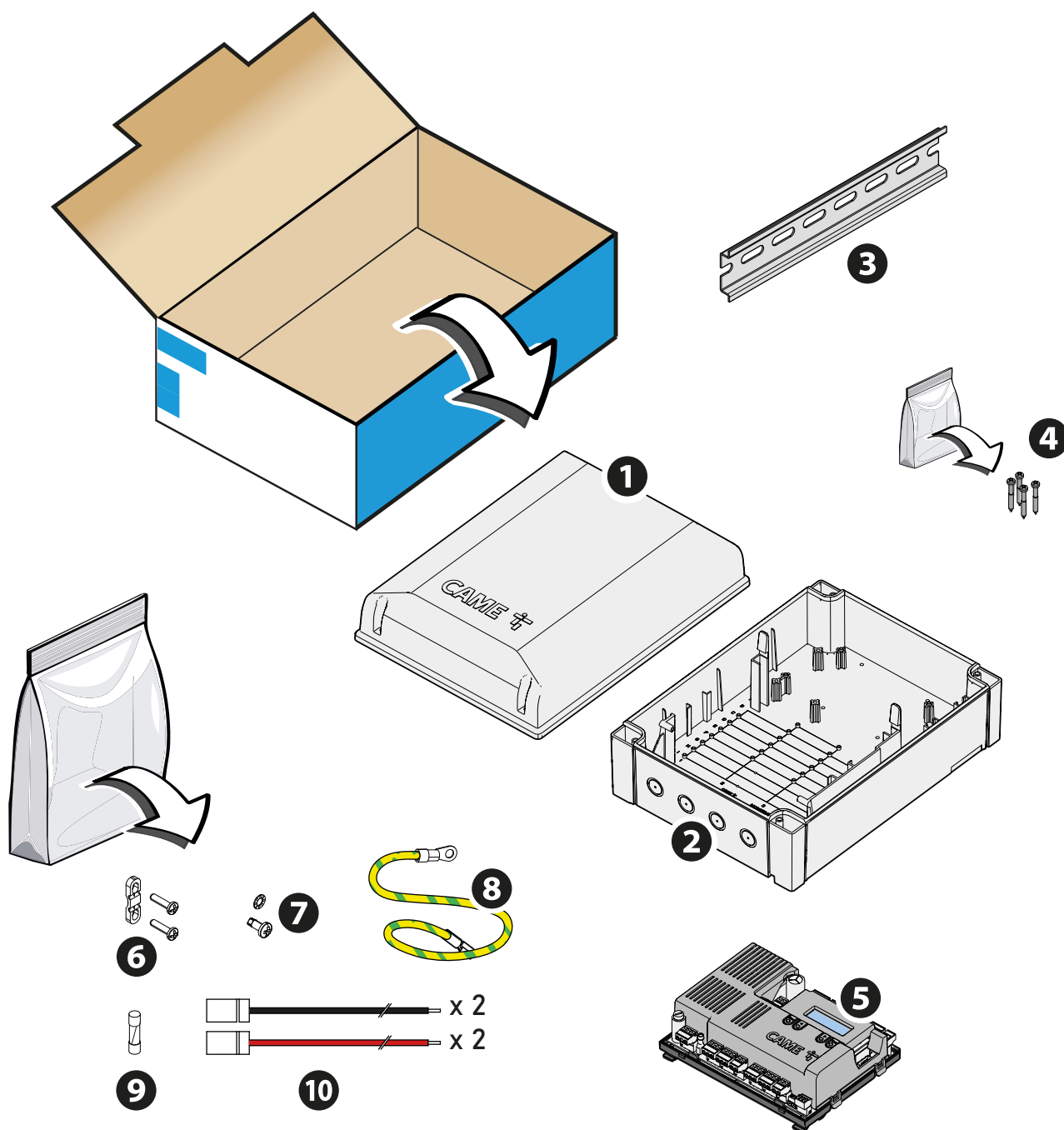
❶ Control panel cover
❷ Control panel back
❸ DIN rail
❹ Cover fastening screws
❺ Control board with card slot and board cover
❻ Cable clamp and fixing screws (3.9X19 UNI6954)

❼ Knurled washer (M4 UNI8842A) and fixing screw (M4X10) for earth star centre.
❽ Functional earth cable
❾ Line fuse
❿ Breakaway capacitor connection cables

Control panel

① Capacitor housing
② Terminal board for connecting control devices
③ Terminal board for connecting the safety devices
④ Terminal board for B1-B2 output
⑤ Display
⑥ Connector for CAME KEY
⑦ RSE card connector
⑧ RIO CONN card connector
⑨ Connector for plug-in radio frequency card (AF)
⑩ Terminal board for CRP connection
⑪ Terminal board for connecting the antenna

⑫ Terminal board for CXN BUS accessories
⑬ Accessory power supply terminal board and connecting warning devices
⑭ Terminal boards for connecting the capacitors
⑮ Programming buttons
⑯ Terminal board for connecting micro limit switches or encoders
⑰ Flashing beacon terminal board
⑱ Terminal boards for connecting the gearmotors
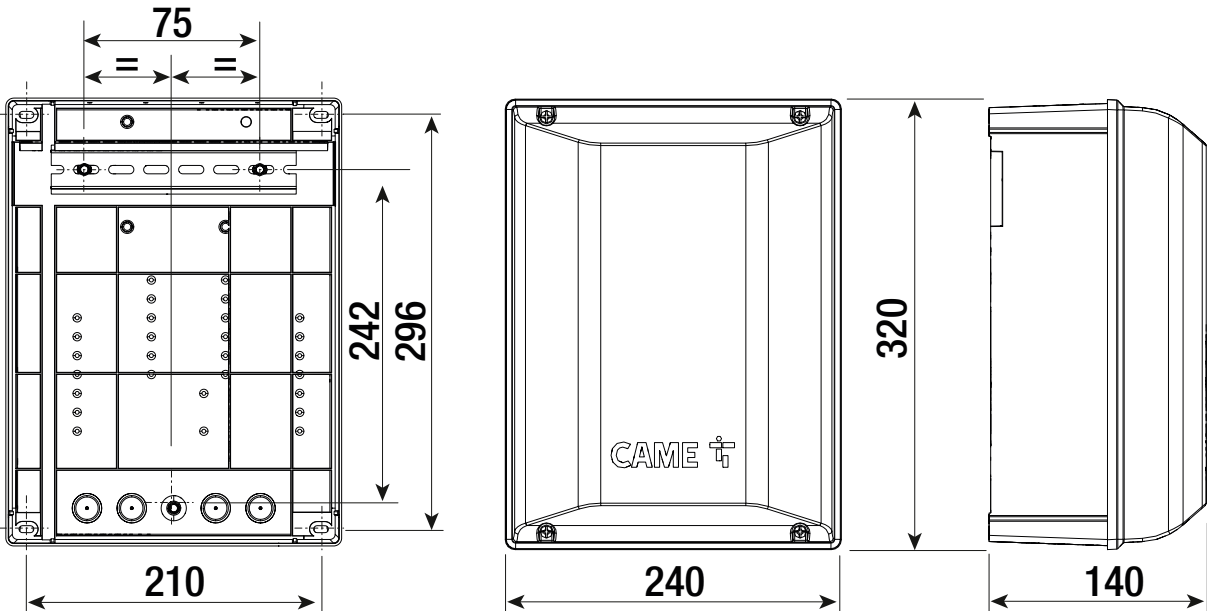⑲ Line fuse
⑳ Power supply terminal board
㉑ Earthing star point
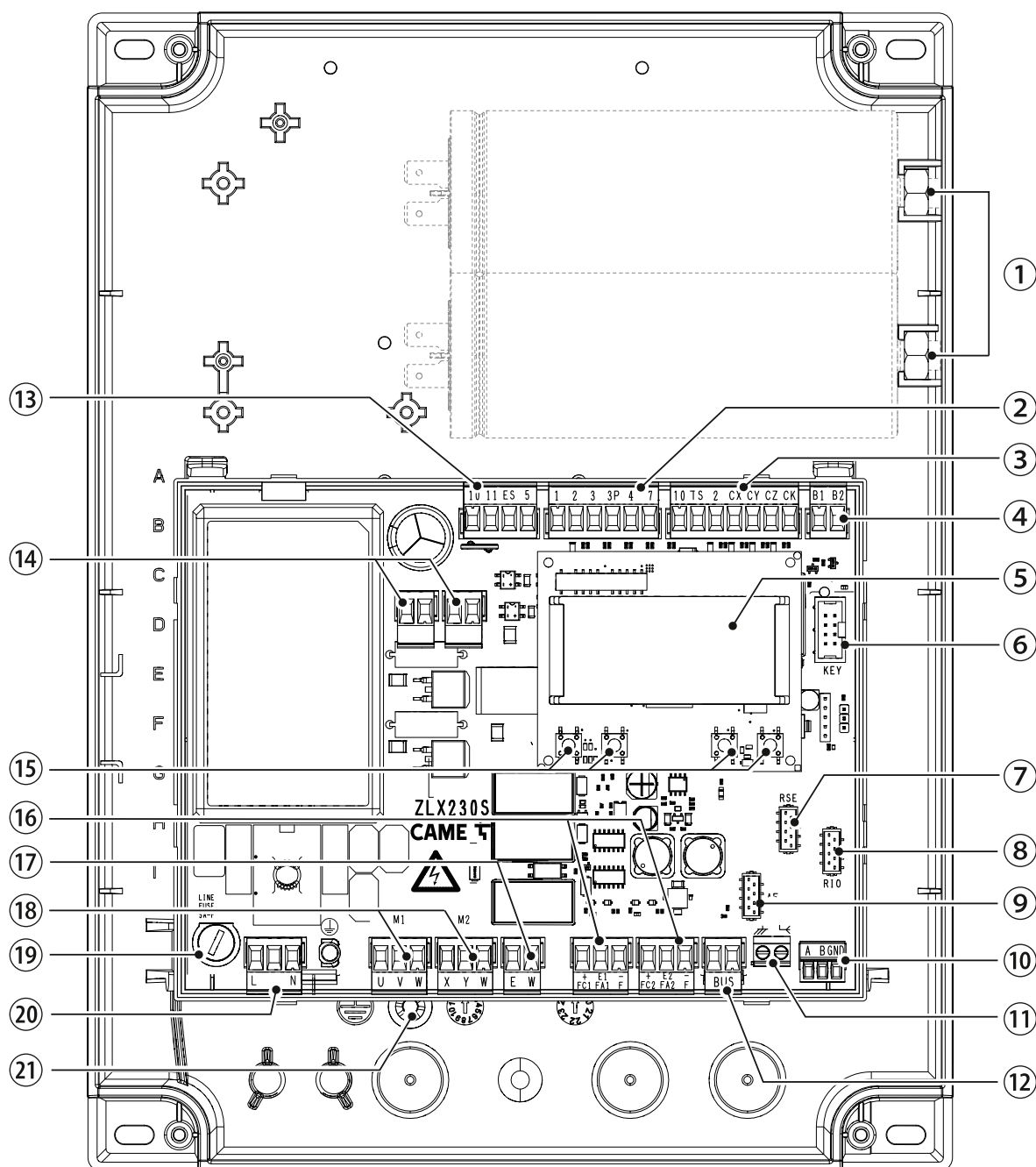
Optional accessories

② RGSM001 module (806SA-0010)

② SMA module (009SMA)
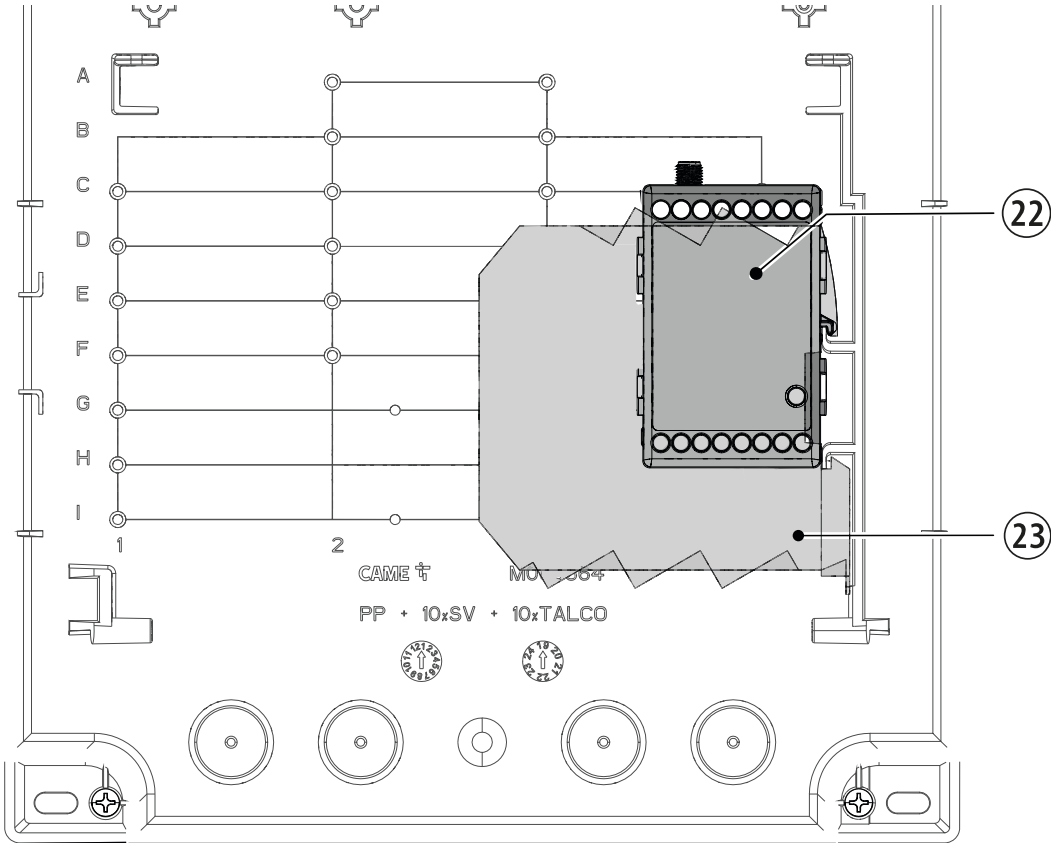
Size

Cable types and minimum thicknesses

Cable length (m)	up to 20	from 20 to 30
Power supply 230 V AC	3G x 1.5 mm^2	3G x 2.5 mm^2
Flashing beacon 230 V AC	2 x 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).
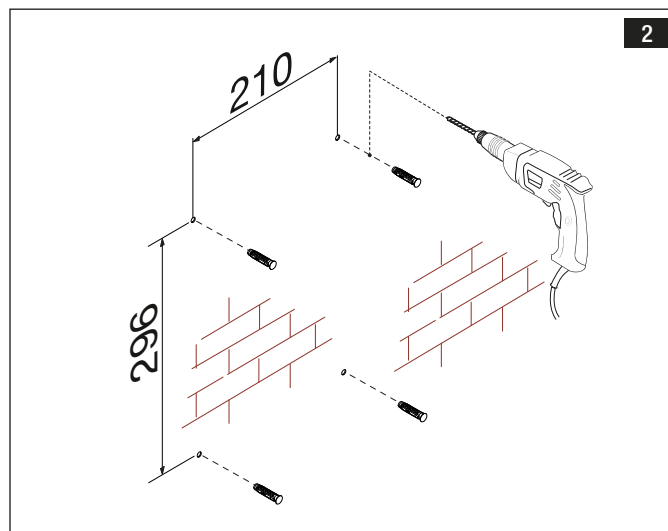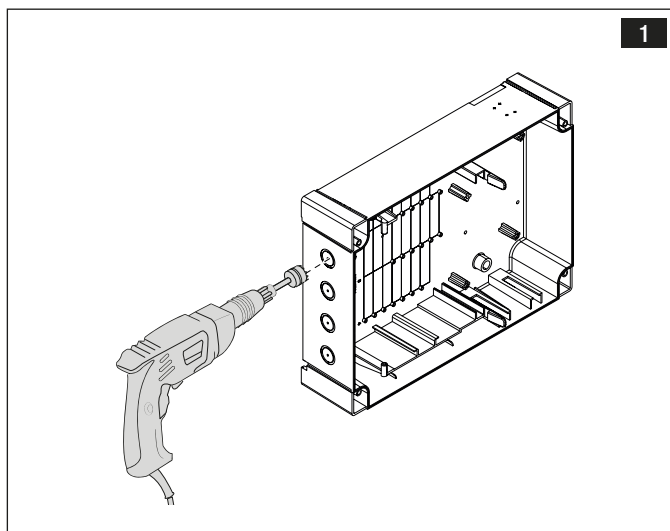
Fastening the control panel

DIN rail
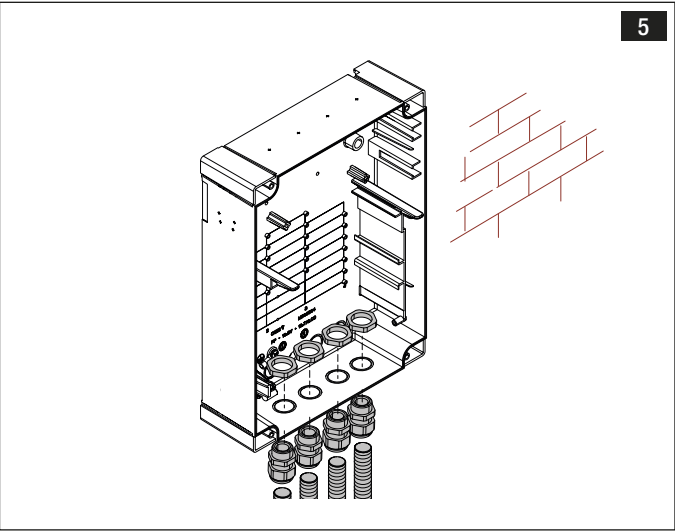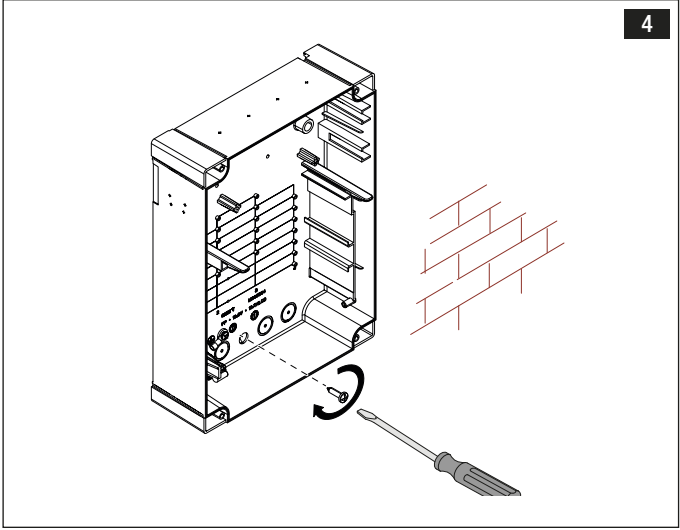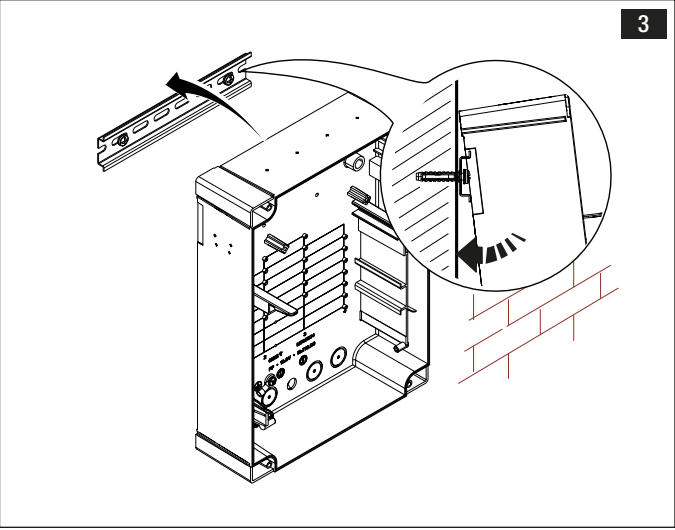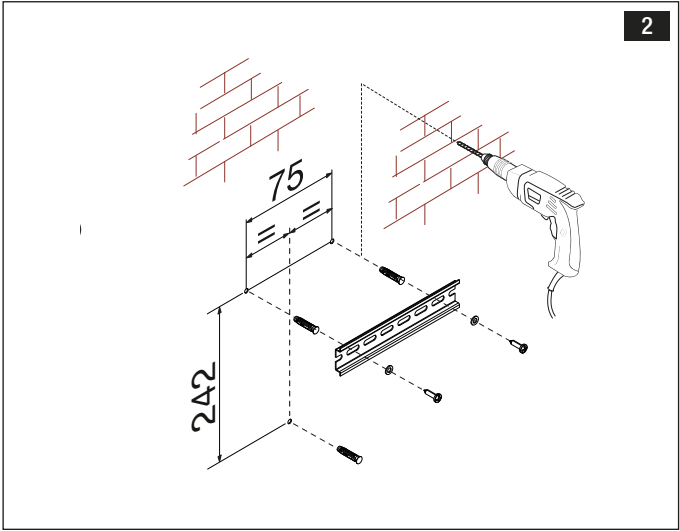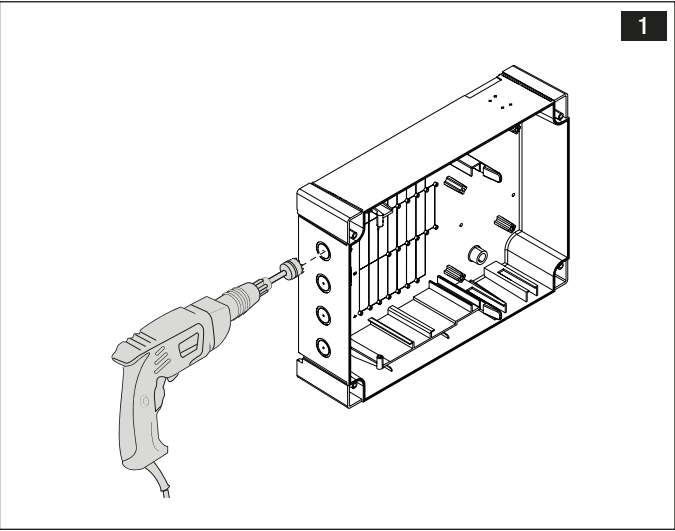
Wall-mounted
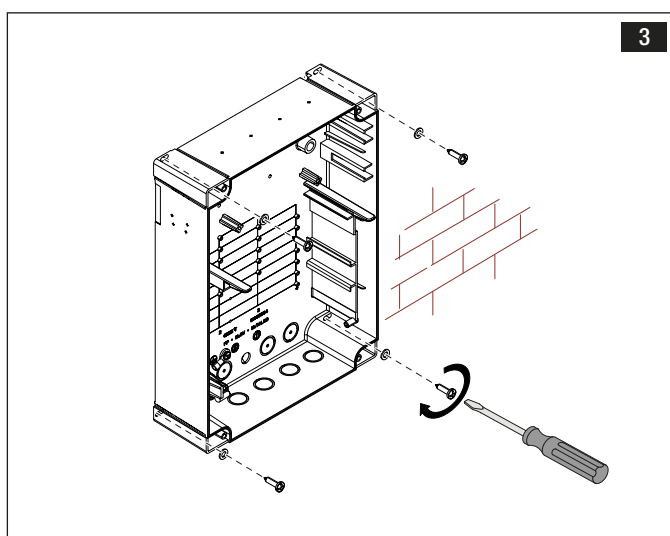
ELECTRICAL CONNECTIONS

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.
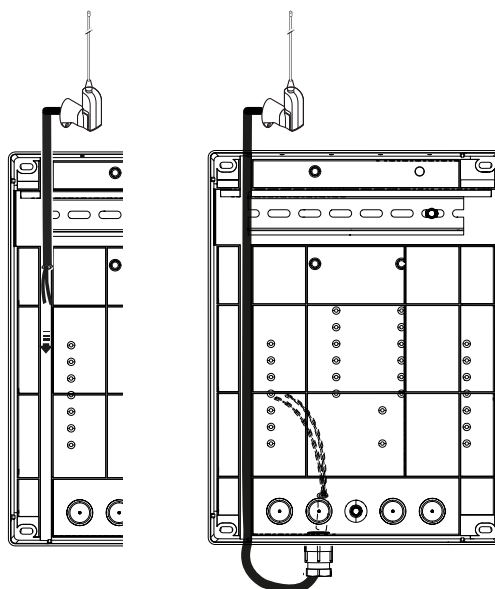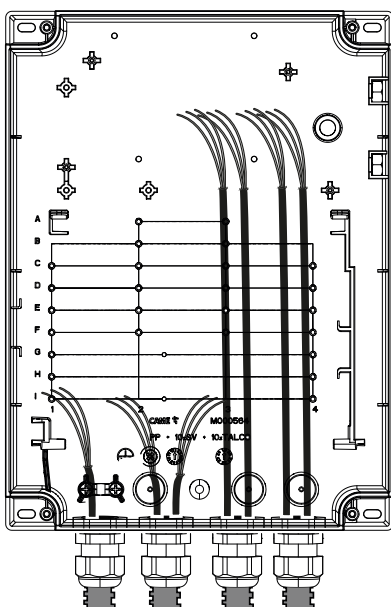
Fixing earth cable

Secure the supplied cable clamp with the screws provided. ❻

With an eyelet (not supplied) connect the earth cable ⏚ with the earth star centre ㉑ on the box.

Connect the eyelet on the functional earth cable ❽ and secure the eyelets using the knurled washer and screw provided. ❼

Connect the functional earth cable ⎓ to the control board using the Faston. See section [Mains connections].
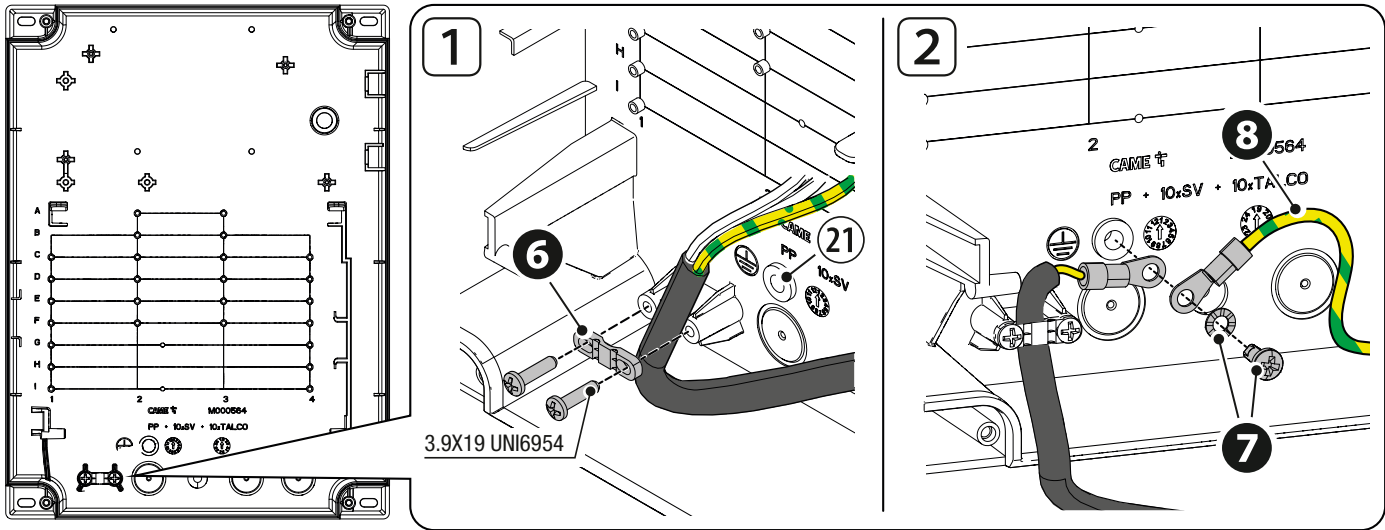
Electronic board fastening and support
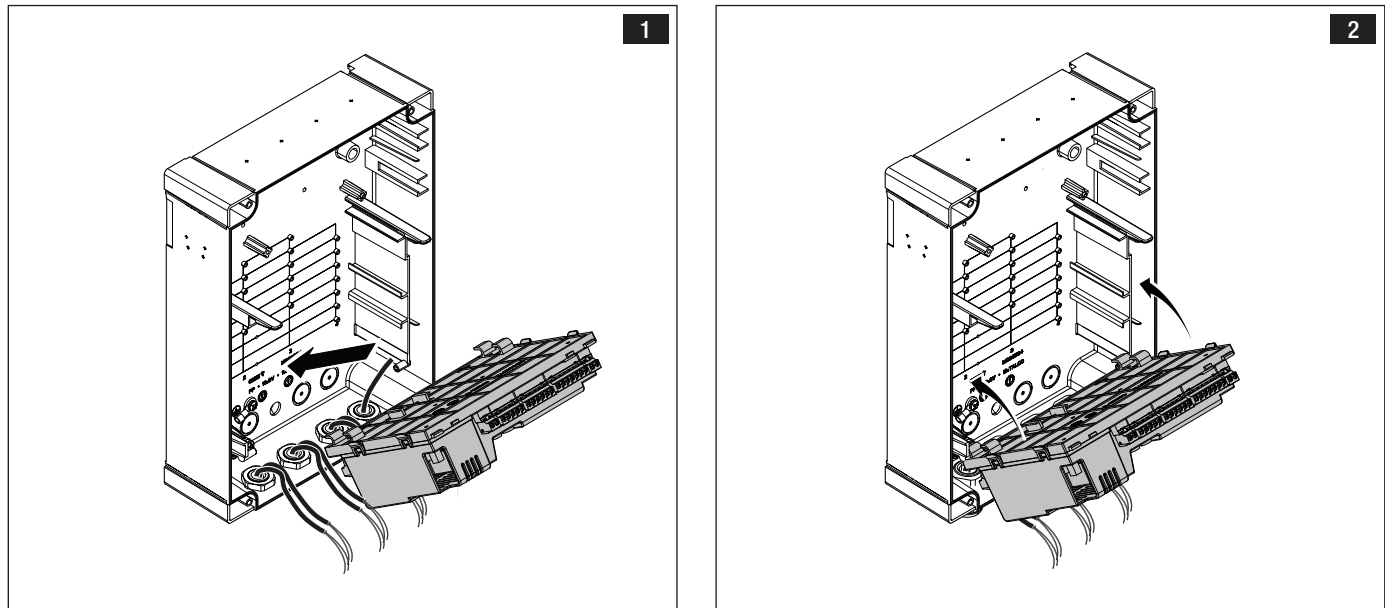
Remove the cover

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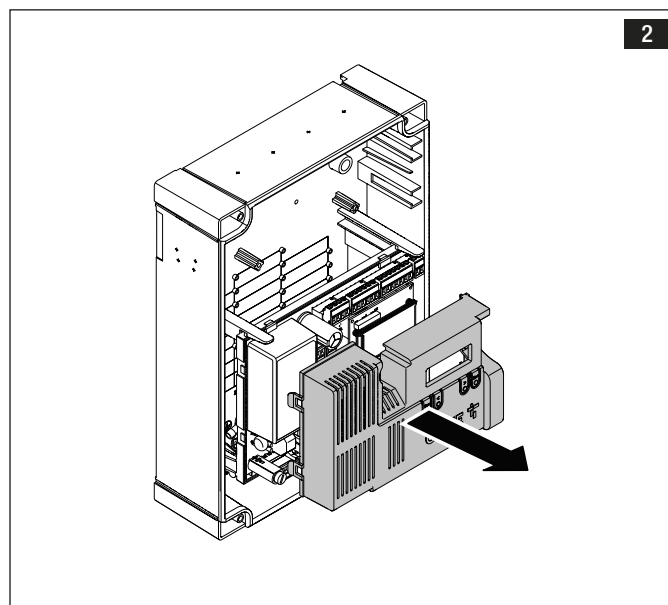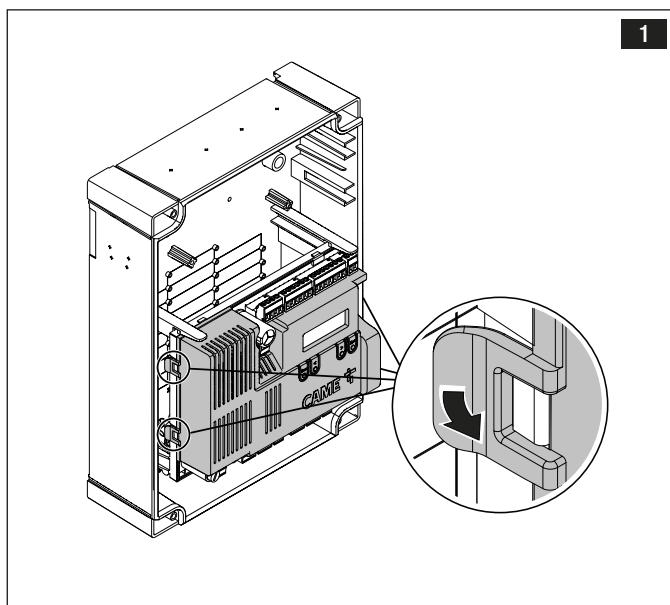
Connecting to the electrical network

Power supply 230 V AC - 50/60 Hz

L - Phase   **N** - Neutral   **F** - Line fuse   ⏚ - Functional earth cable   ⏚ - Earth
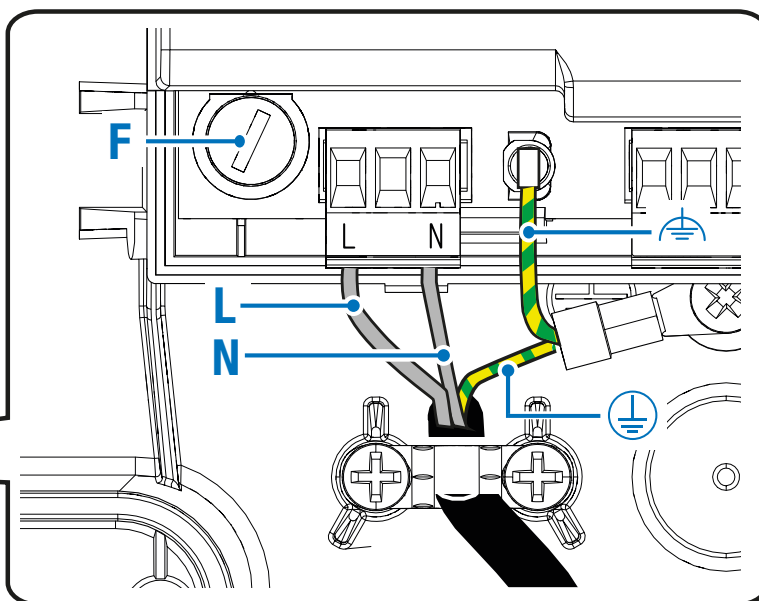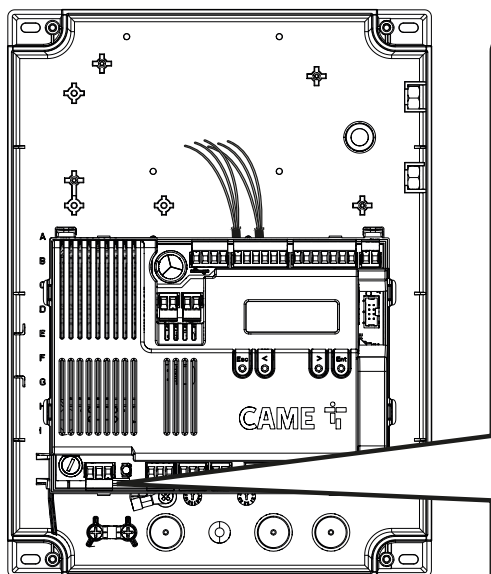
Connecting gearmotors for swing operators

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).
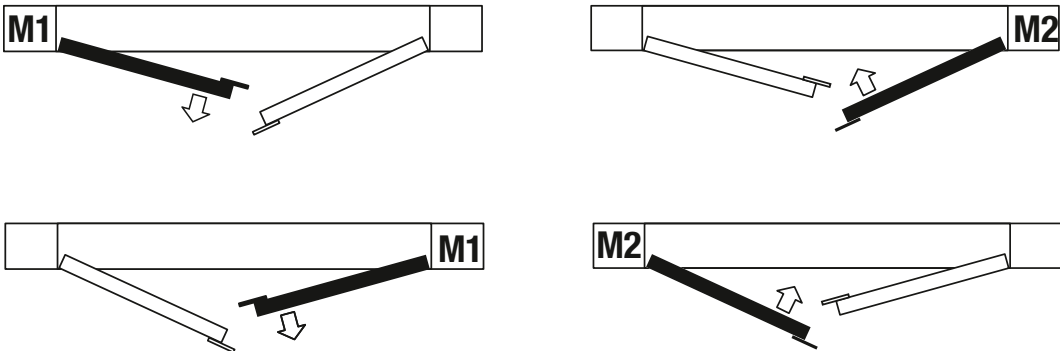
Gearmotors without encoder

U	V	W

X	Y	W

Gearmotor with encoder

U	V	W

X	Y	W

+ FC1	E1 FA1	- F

+ FC2	E2 FA2	- F
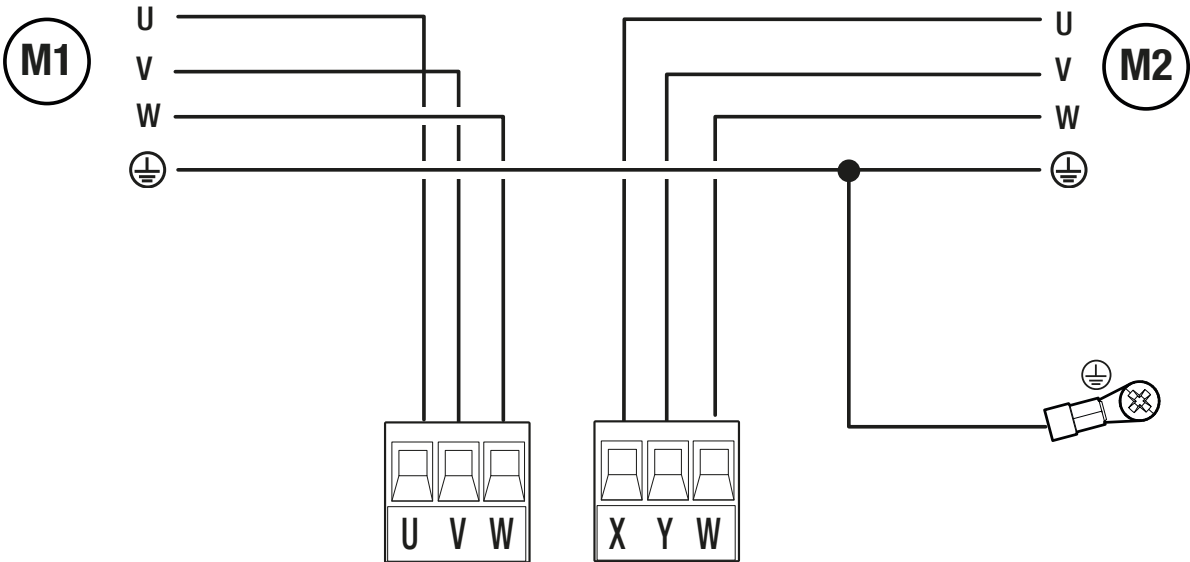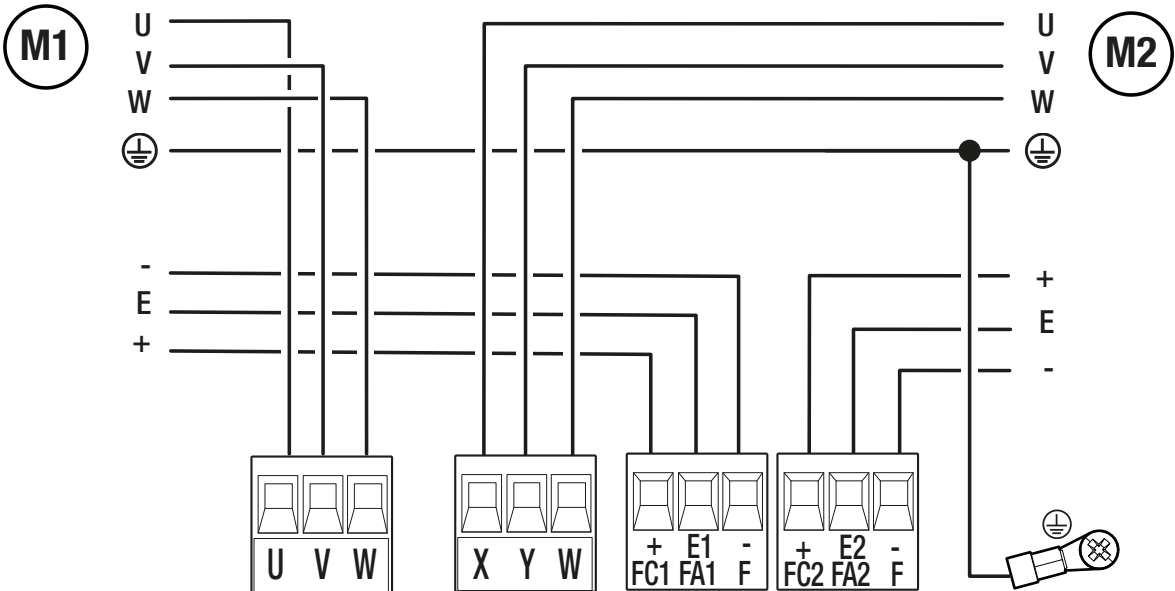
Gearmotors with limit switch
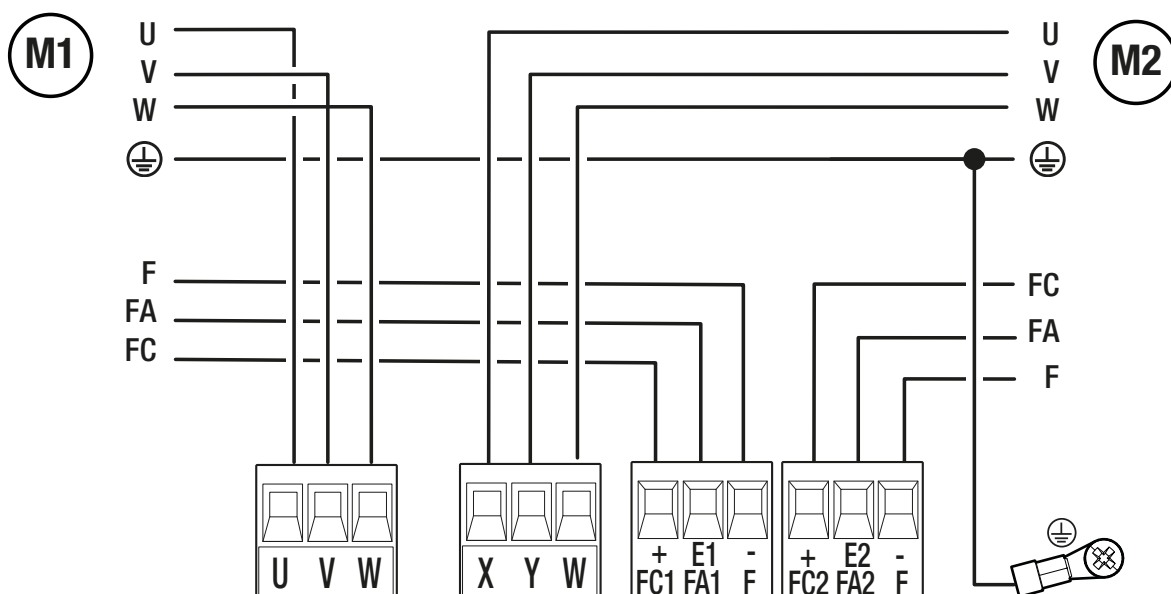
Capacitor connection

⚠ Do not connect capacitors if they are already present on the motor.
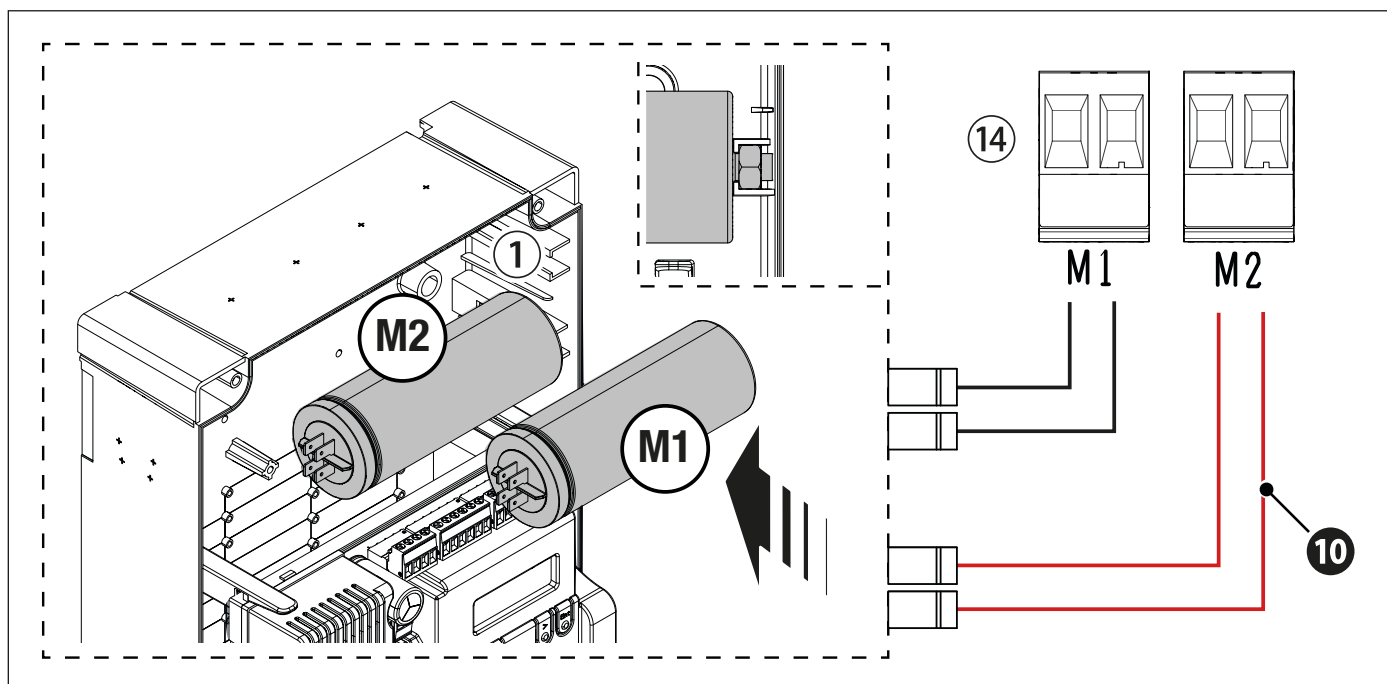
Connecting accessories

Power supply output for accessories 24 V

📖 All 24 V accessory outputs are in direct current (DC).

📖 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 DC	20
Passage-open warning light	10 - 5	24 DC	3
Electric lock	10 - ES	12 DC	15
Electromagnet	10 - ES	24 DC	15

Power supply output for accessories 230 V

Device	Output	Power supply (V)	Frequency (Hz)	Maximum power (W)
Flashing beacon	E - W	230 AC	50/60	8*

(*) For incandescent or neon bulbs, the maximum power of the flashing beacon is 60 W.

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
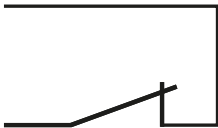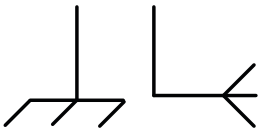
Auxiliary connection output

Device	Output	Rated current (A)	Rated current (V)
Auxiliary contact	B1 - B2	1	24 AC/DC
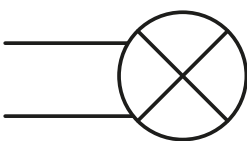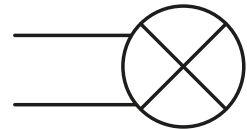
📖 See the [Output B1-B2] function.
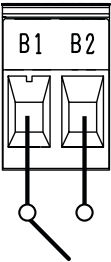
Command and control devices

1
2
STOP button (NC contact)
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
With the encoder active, see function [Adjusting partial opening].

With the encoder not active, see function [Partial opening time].

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

E
W
Flashing beacon or additional light
Depending on configuration, it flashes when the operator opens and closes, or increases lighting in the manoeuvre area.
See [Light E-W] function.

10
5
Operator status warning light (Passage-open warning light)
See function [Passage-open warning light].

Photocells and sensitive edges

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 [Safety devices test] function.

DIR photocells
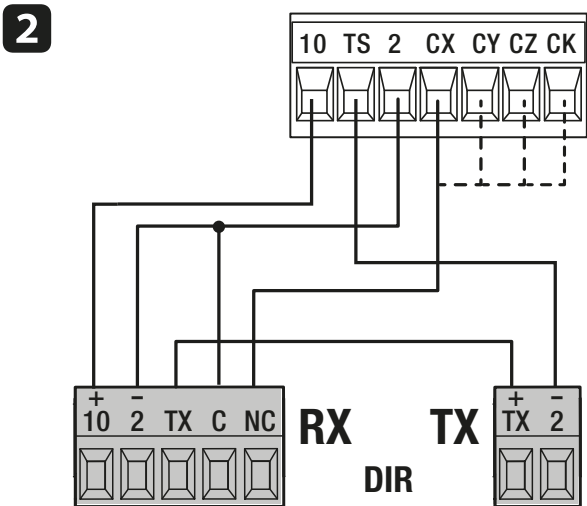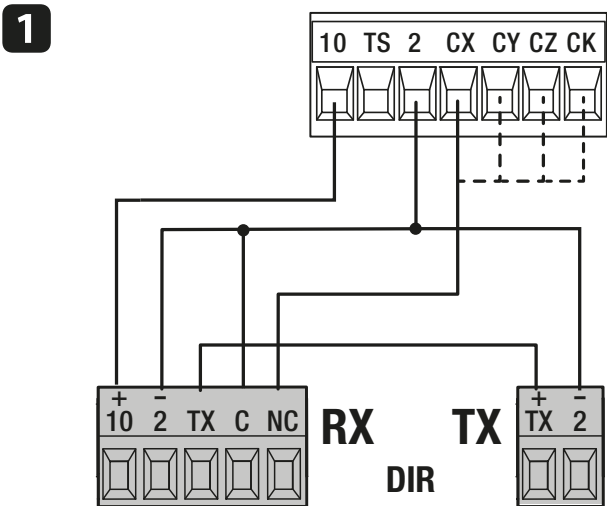
DXR / DLX photocells

DFWN sensitive edge

10	TS	2	CX	CY	CZ	CK

DFWN

C	NO	NC
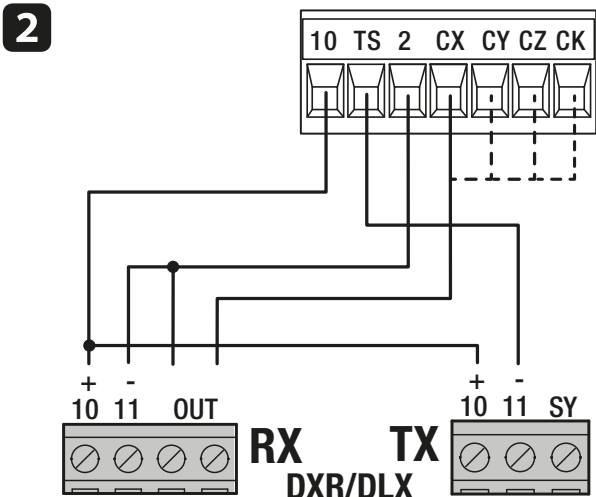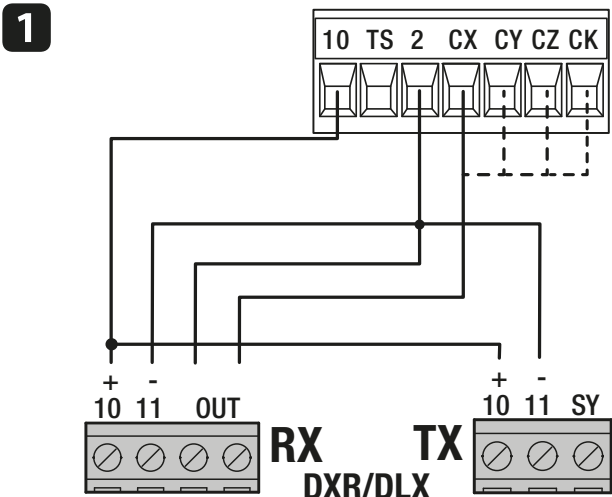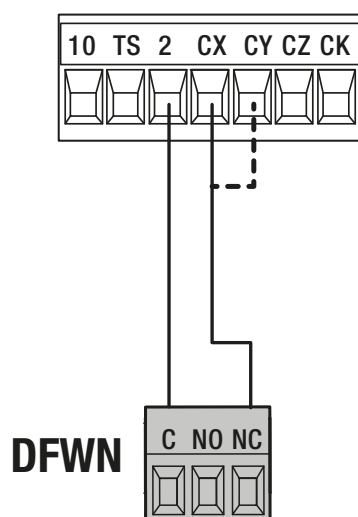
Electric lock or electromagnet

📖 See the [Lock] function.

10	11	ES	5
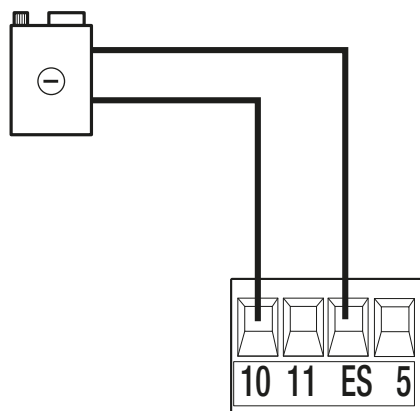
Connecting accessories with BUS CXN system

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
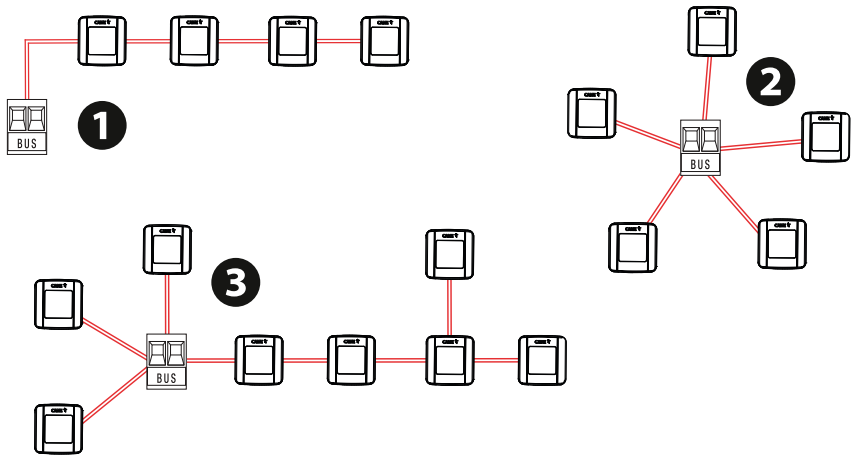
Cable types and minimum thicknesses

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

📖 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

📖 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.

LINK

Programming button functions

📖 After one minute of inactivity, the display switches to standby mode. Press any key to reactivate it.
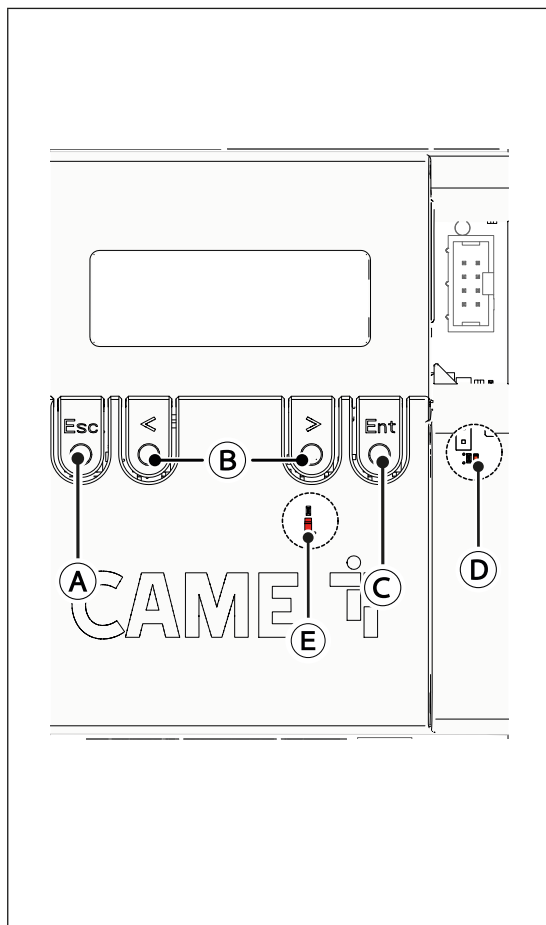
Ⓐ **ESC button**

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**
- Access menus
- Confirm a choice
- Display the motor opening/closing percentage
To display the motor opening percentage, press **ENTER** during a manoeuvre.

Ⓓ **Programming LEDs**
The LED flashes when the firmware is active and working on the board.

Ⓔ **Power LED**
The LED lights up when the board is powered up.

Getting started

Once the electrical connections have been made, proceed with commissioning. Only skilled and qualified staff may perform this operation.
- » Make sure that there are no obstacles in the way.
- » Power up 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.

Diagrams showing leaf speed and slowdown (only for motors without an encoder or with an inactive encoder)

❶ Closing limit-switch
❷ Opening limit-switch

Ⓐ Maximum speed time during opening and closing for M1 [Function M1 opening and closing travel time]
Ⓑ Maximum speed time during opening and closing for M2 [Function M2 opening and closing travel time]
Ⓒ Slowdown time during opening and closing for M1 and M2 [Function M1 and M2 opening and closing slowdown time]
Ⓐ + Ⓒ = Stroke time in opening and closing M1
Ⓑ + Ⓒ = Opening and closing travel time of M2
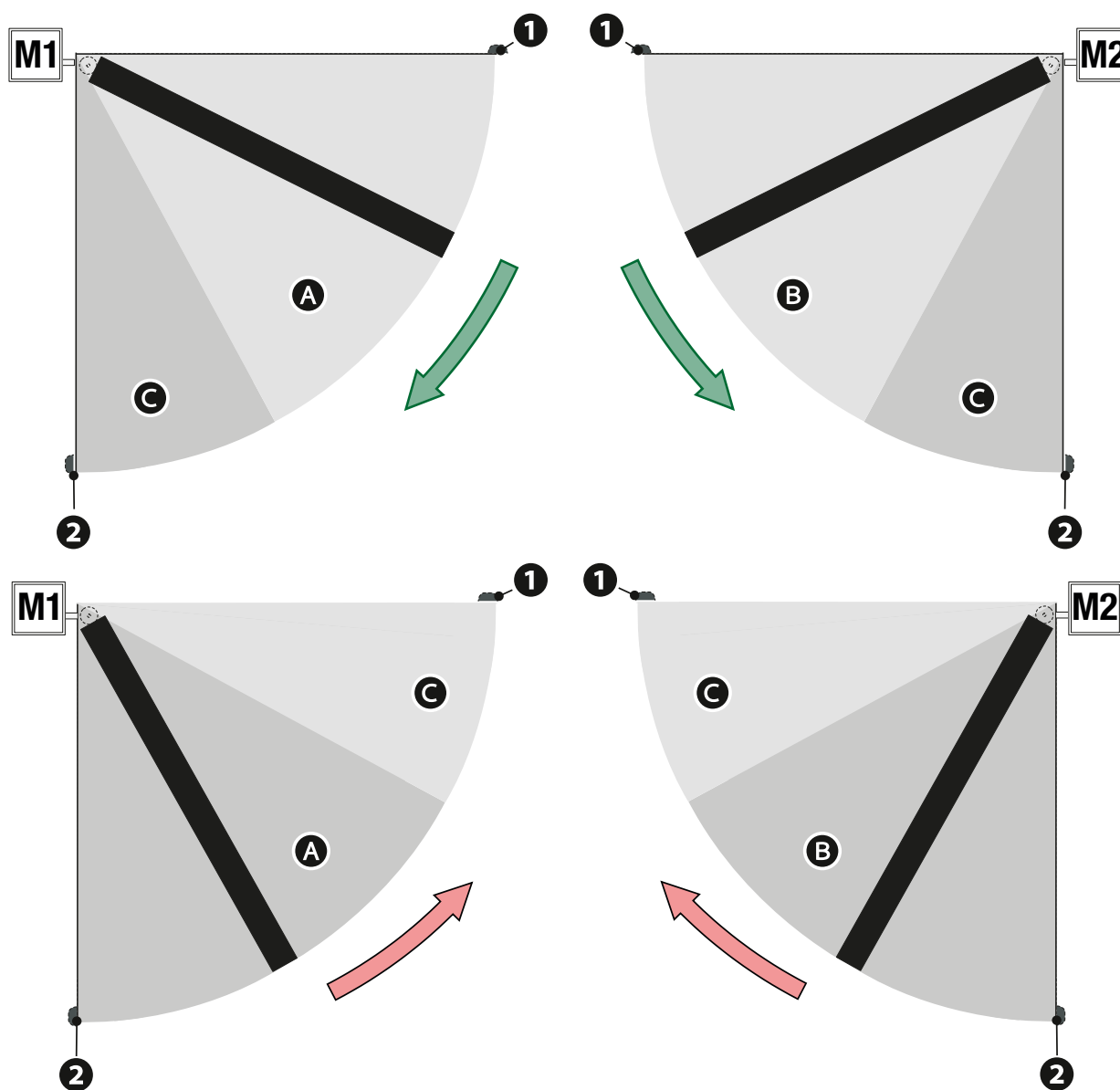
Diagrams showing leaf speed, slowdown and approach points

❶ Closing limit-switch
❷ Opening limit-switch
❸ Opening or closing slowdown point
❹ Opening or closing approach point
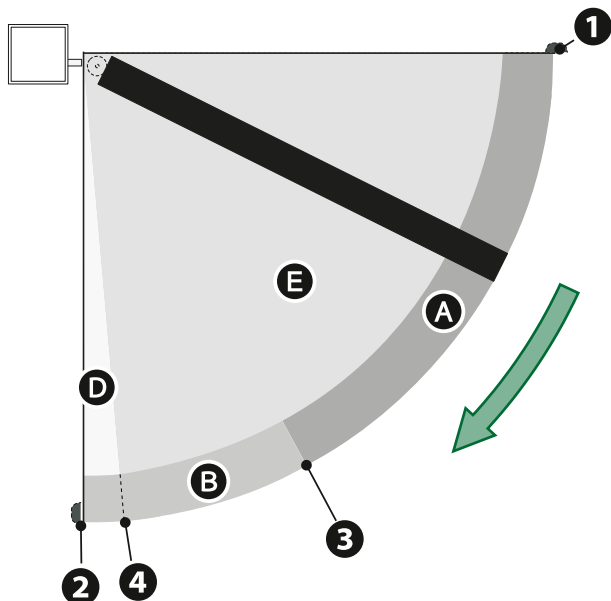
Ⓐ Opening or closing speed
Ⓑ Opening or closing slowdown speed
Ⓓ Stop-motion zone in case of obstructions
Ⓔ Invert-motion zone in case of obstructions
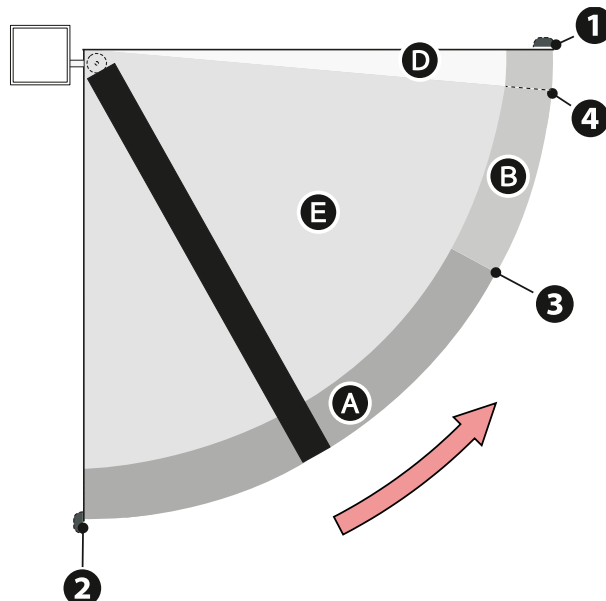
Graph showing speed curves during movement, slowdown and approach.

Using slowdown space (slowdown space > 0)
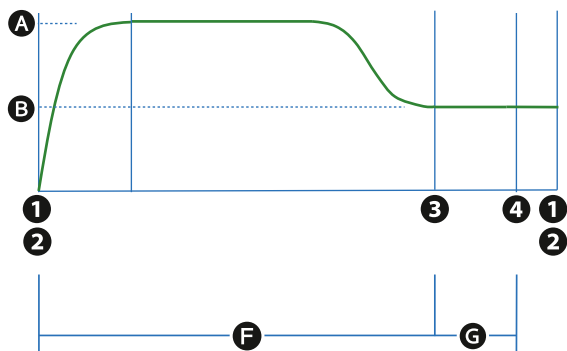
❶❷ Opening or closing limit-switch
❸ Opening or closing slowdown point
❹ Opening or closing approach point

Ⓐ Opening or closing speed
Ⓑ Opening or closing slowdown and approach speed

Ⓕ Obstruction travel sensitivity
Ⓖ Slowdown obstruction sensitivity

Without using slowdown space (slowdown space = 0)
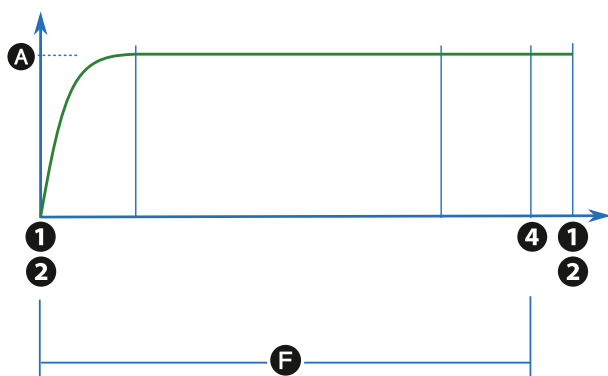
Ⓐ Opening or closing speed
Ⓕ Obstruction travel sensitivity

❶❷ Opening or closing limit-switch
❹ 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) Only M2	The function is used to set the number of motors controlling the gate.

Path: CONFIGURATION > MOTOR SETTINGS > **Motor type**		
Motor type	Generic (Default) FAST-70 FAST-40 F1000-F1100 FERNI-40 KRONO ATI-ATIx0AGS ATI30AGF ATI50AGF ATS AXO AX71230 FROG-A FROG-AE F40230E	The function is used to 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.

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 > **Limit-switch function**		
Limit-switch function	Off Stop in FA, stop in FC Slowdown in FA/FC Stop in FA, slowdown in FC	The function is used to configure the inputs for slowdown switches and/or limit switches. 📖 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 > **Input type FC/FA**		
Input type FC/FA	N.O. (Default) N.C. N.C. for FA input, N.O. for FC input	The function allows you to configure the type of FC/FA inputs. 📖 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 > button opens/closes the gate leaf connected to M2, and the < button opens/closes the gate leaf connected to M1. The movement continues as long as the button is pressed or until the end-of-travel limit switch is reached. When the button is released, the movement stops. 📖 If the leaf does not move in the correct direction, invert the motor phases. 📖 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	The function is used to start travel self-learning. 📖 The parameter is only available for motors that have an encoder.

Path: CONFIGURATION > MOTOR SETTINGS > **Motor power - DTC**		
Engine power - DTC (Digital Torque Control)	10% to 100% (Default 100%)	The function allows you to increase or decrease the maximum thrust of motors connected on M1 and M2 during a manoeuvre.

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.

⚠ If there is a motor with an encoder and a motor without an encoder in the installation, the encoder will be deactivated by default.

Path: CONFIGURATION > MOTOR SETTINGS > CONFIGURE M1		
Configure M1	Motor type	Set the type of M1 gearmotor.
	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.
	Engine power - DTC (Digital Torque Control)	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.
	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.
	Engine power - DTC (Digital Torque Control)	Increase or decrease the maximum M2 thrust during a manoeuvre.

Gate travel settings

Path: CONFIGURATION > GATE TRAVEL SETTINGS > **Part. open point**		
Adjusting the partial opening	10% to 100% (Default 100%) 📖 100% = Pedestrian opening	For single-leaf gates, the function is used to set the leaf partial opening percentage with respect to the total travel. For two-leaf gates, the function is used to set the partial opening percentage of the leaf M2 with respect to the total travel. 📖 The parameter is only available for motors that have an encoder.

Path: CONFIGURATION > GATE TRAVEL SETTINGS > **Op. approach point**		
Opening approach space	0.5% to 25.0% (Default 8.0%)	The function allows you to set the percentage of the total travel to be used for the opening approach of 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. 📖 The parameter is only available for motors that have an encoder.

Path: CONFIGURATION > GATE TRAVEL SETTINGS > **Cl. approach point**		
Closing approach space	0.5% to 25.0% (Default 8.0%)	The function allows you to set the percentage of the total travel to be used for the closing approach of 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. 📖 The parameter is only available for motors that have an encoder.

Path: CONFIGURATION > GATE TRAVEL SETTINGS > **Opening slowdown point**		
Opening slowdown point	Deactivated (Default) 1% to 50%	The function allows you to set the percentage of the total travel in which M1 and M2, after the slowdown point during opening, proceeds 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. 📖 The parameter is only available for motors that have an encoder.

| Closing slowdown point | Deactivated (Default)
1% to 50% | The function allows you to set the percentage of the total travel in which M1 and M2, after the slowdown point during closing, proceeds at a slowed constant speed.

📖 To configure M1 or M2 separately, use the [Configure M1] or [Configure M2] menu.

📖 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 available for motors that have an encoder. |

| M1 and M2 opening and closing travel time | 5 to 180 seconds (Default 25) | The function is used to modify the opening and closing travel time for both motors.

📖 The parameter is only available for motors that do not have an encoder or if the encoder is deactivated. See the [Encoder] function.

📖 To configure M1 or M2 separately, use the [Configure M1] or [Configure M2] menu.

📖 If the value set for M1 is different to the value set for M2, only the value for M2 is shown here. |

| M1 and M2 opening and closing slowdown time | Deactivated (Default)
1 to 30 seconds | The function is used to modify the opening and closing slowdown time for both motors.

📖 The parameter is only available for motors that do not have an encoder or if the encoder is deactivated. See the [Encoder] function.

📖 Add the slowdown time to the travel time. |

| Partial opening time | Off
1 to 30 seconds (Default 10) | The function allows you to adjust the partial opening time of the operator.

📖 The parameter is only available for motors that do not have an encoder or if the encoder is deactivated. See the [Encoder] function.

⚠ The partial opening time must not exceed the M2 opening and closing travel time. See the [M2 opening and closing travel time] function. |

Path: CONFIGURATION > GATE TRAVEL SETTINGS > **Opening slowdown speed**

Opening slowdown speed	📖 The parameters vary according to the motor selected under the [Motor type] function.	The function is used to set the opening slowdown speed of M1 and M2. The percentage is calculated based on the maximum travel speed. 📖 If the value set for M1 is different to the value set for M2, only the value for M2 is shown here. 📖 The slowdown speed may vary according to the weight of the leaf and the mechanical characteristics of the system.

Path: CONFIGURATION > GATE TRAVEL SETTINGS > **Closing slowdown speed**

Closing slowdown speed	📖 The parameters vary according to the motor selected under the [Motor type] function.	The function is used to set the closing slowdown speed of M1 and M2. The percentage is calculated based on the maximum travel speed. 📖 If the value set for M1 is different to the value set for M2, only the value for M2 is shown here. 📖 The slowdown speed may vary according to the weight of the leaf and the mechanical characteristics of the system.

Path: CONFIGURATION > GATE TRAVEL SETTINGS > **Travel sensitivity**

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. ⚠ Change the parameter in compliance with the regulations on impact force. 📖 The parameter is only available for motors that have an encoder.

Path: CONFIGURATION > GATE TRAVEL SETTINGS > **Slowdown sensitivity**

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. ⚠ Change the parameter in compliance with the regulations on impact force. 📖 The parameter is only available for motors that have an encoder. 📖 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	The functions activates or deactivates test mode for impact test checks. 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.

Encoder active

Path: CONFIGURATION > GATE TRAVEL SETTINGS > CONFIGURE M1		
Configure M1	**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 point	Set the percentage of the total travel in which M1, after the slowdown point during opening, proceeds at a slowed constant speed.
	Closing slowdown point	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).

Encoder not active

Path: CONFIGURATION > GATE TRAVEL SETTINGS > CONFIGURE M1		
Configure M1	**Travel time**	The function is used to modify the M1 opening and closing travel time.
	Slowdown time	The function is used to modify the M1 opening and closing slowdown time.
	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).

Encoder active

Configure M2	**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 point	Set the percentage of the total travel in which M2, after the slowdown point during opening, proceeds at a slowed constant speed.
	Closing slowdown point	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).

Encoder not active

Configure M2	**Travel time**	The function is used to modify the M2 opening and closing travel time.
	Slowdown time	The function is used to modify the M2 opening and closing travel time.
	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).

Wired safety devices

Total stop	Deactivated (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. By activating a device (normally closed) connected to input 2-1, the operator stops and all commands are excluded, including any automatic closing. 📖 Use a control device to resume movement.

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)	The function allows you to configure the CX, CY, CZ and CK inputs.

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	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 Photocells and sensitive edges].

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.	The function is used to configure 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.	The function is used to configure a wireless safety device. 📖 The function only appears if the RIO CONN interface board is present.

BUS Devices

BUS (b1-b8) photocell functions*

(*) As set on the device DIP switch.

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	The function is used to configure the BUS photocell input. 📖 The function only appears if there is a BUS photocell connected.

BUS (b21-b28) key selector switch functions*

(*) As set on the device DIP switch.

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	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	The function allows you to configure the BUS key selector input. Different configurations can be set according to the key turning direction. Key to the right Key to the left 📖 The function only appears if there is a BUS key selector connected.

I/O BUS 1 (b11) module / I/O BUS 2 (b12) module functions*

(*) As set on the device DIP switch.

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 = It stops the operator and excludes 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.	The function allows you to configure the inputs on the I/O modules. 📖 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.	This function allows you to configure output 1 on the I/O modules. 📖 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	Bistable ON - 1 to 180 seconds (Default 1)	This function allows you to configure 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	This function allows you to set the colour of the BUS flashing beacon 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	This function allows you to set the colour of the BUS flashing beacon 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)	The function allows you to 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	The function allows you to 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	The function allows you to 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	The function allows you to 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.	The function associates a command to the device connected 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.	This function allows you to choose the operating mode of the electric lock/electromagnet.

Path: CONFIGURATION > FUNCTIONS > **Closing thrust**		
Closing thrust	Deactivated (Default) Minimum Medium Maximum	When the function is active, the leaves briefly exert a closing thrust.

Path: CONFIGURATION > FUNCTIONS > **Thrust**		
Thrust	Deactivated (Default) On	When the function is active, before every 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	The function allows you to activate the Remove obstruction mode where an obstacle is detected.

Path: CONFIGURATION > FUNCTIONS > **B1-B2 output**		
B1-B2 output	Bistable Monostable: on from 1 to 180 seconds (Default 1)	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 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.

Path: CONFIGURATION > FUNCTIONS > **Dynamic automatic closing time**		
Dynamic automatic closing time	Deactivated (Default) On	When the function is active, the automatic closing time increases progressively with intensive use of the operator. This function stops the motor from overheating.

Times

Path: CONFIGURATION > TIMES > **Automatic close**		
Automatic closure	Deactivated (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.

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

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 or pedestrian 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)	The function is used to 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.

Path: CONFIGURATION > TIMES > **M2 close delay**

M2 closing delay time	Off 1 to 25 seconds (Default 2)	The function is used to adjust the delayed closing 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.

Manage lights

Path: CONFIGURATION > MANAGE LIGHTS > **Passage-open warning light**		
Passage-open warning light	Warning light on (Default) - The light stays on when the operator is moving or the passage is open. 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.	The function is used to set the type of warning for the open passage light.

Path: CONFIGURATION > MANAGE LIGHTS > **Light E-W**		
Light E-W	Flashing beacon (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 E - W.

Path: CONFIGURATION > MANAGE LIGHTS > **Courtesy time**		
Courtesy time	60 to 180 seconds (Default 60)	The function allows you to set the 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	The function adjusts the time for which the beacon is activated before each manoeuvre.

RSE communication

Path: CONFIGURATION > RSE COMMUNICATION > **RSE1**		
RSE communication - RSE1	CRP (Default) RTU MODBUS	This function allows you to configure the communication mode of the RSE interface (terminal A-B-GND).

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

Path: CONFIGURATION > RSE COMMUNICATION > **RSE speed**		
RSE speed	4800 bps 9600 bps 14400 bps 19200 bps 38400 bps (Default) 57600 bps 115200 bps	The function allows you to set the communication speed of the remote connection system.

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	The function is used to register up to a maximum of 1000 users and assign a function to each one. 🕮 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 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	The function is used to 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	The function is used to remove all registered users.

Radio decoding

Path: USER MANAGEMENT > Radio decoding		
Radio decoding	All decoding (Default) Rolling code 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 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	The function is used to save a new rolling code transmitter by activating acquisition from a rolling code transmitter that has already been stored. 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 x.x.xx (firmware) GUI x.x (graphics)	The function is used to 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	The function shows 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

Manoeuvre counter	Total manoeuvres - Manoeuvres performed since the operator was installed. Partial manoeuvres - Manoeuvres carried out after the last maintenance.	The function allows you to view the number of total or partial operator manoeuvres (after maintenance). 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

Configure maintenance	Deactivated (Default) from 1 x100 to 500 x100	The function allows you to 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

Maintenance reset	Reset the number of partial manoeuvres.

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

Show clock	The function is used to enable the clock on the display.

Set the clock

Set the clock	The function is used to 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).	The function allows you to 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	The function allows you to choose the clock display format.

Create new timer

Path: TIMER MANAGEMENT > Create new timer	
Create new timer	The function allows you to time one or more types of activation chosen from those available. 📖 For more information about the procedure, see the [Set a new timer] section.

Remove timer

Path: TIMER MANAGEMENT > Remove timer		
Remove timer	O = [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) Slovenský (SK)	The function allows you to 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	The function allows you to 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	The function allows you to change the password that protects 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.
Path: 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.
Path: 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.

Path: 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.
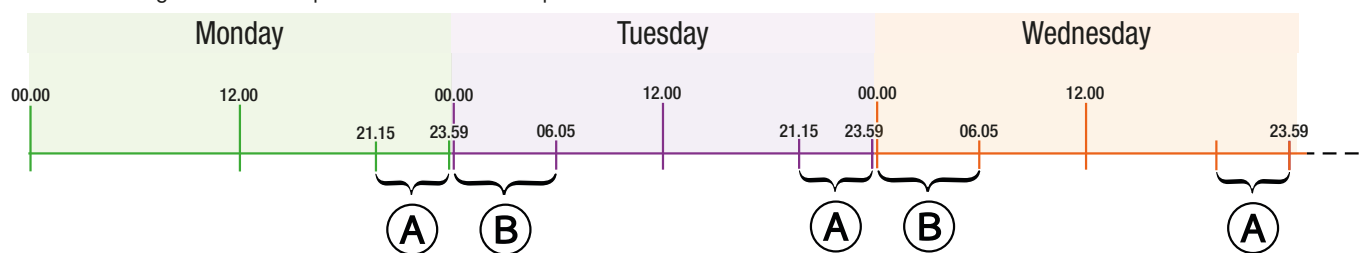
> Select days
> All week

- 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

DISPLAY WARNINGS KEY

Ⓔ	The encoder is deactivated.
Ⱥ	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.

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]
OP	Passage fully open
CL	Passage fully closed

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).

Error messages

E1	Calibration error
E2	Calibration error
E3	Encoder signal not detected error
E4	The service test failed
E7	Operating time error
E9	Consecutive obstacles detected during closing
E10	Consecutive obstacles detected during opening
E11	The maximum number of obstacles detected consecutively has been exceeded
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 **During a manoeuvre:** communication error or malfunction of a BUS safety device
E25	Conflicting addresses for configured BUS devices
E30	Board not working

SHORT CIRCUIT CHECK PROCEDURE

In the event of a short-circuit on the 24V accessories, the power supply and the signal LED go out. The board is switched off.

To check for short circuits:
» Check there are no other reasons for the board power supply being interrupted;
» Disconnect the 10-11 output;
» Disconnect the 10-2 output;
» Remove any engaged cards (RSE, RIO, AF);
If the board switches back on correctly, a short circuit may have occurred on the 24V accessories.

FINAL OPERATIONS

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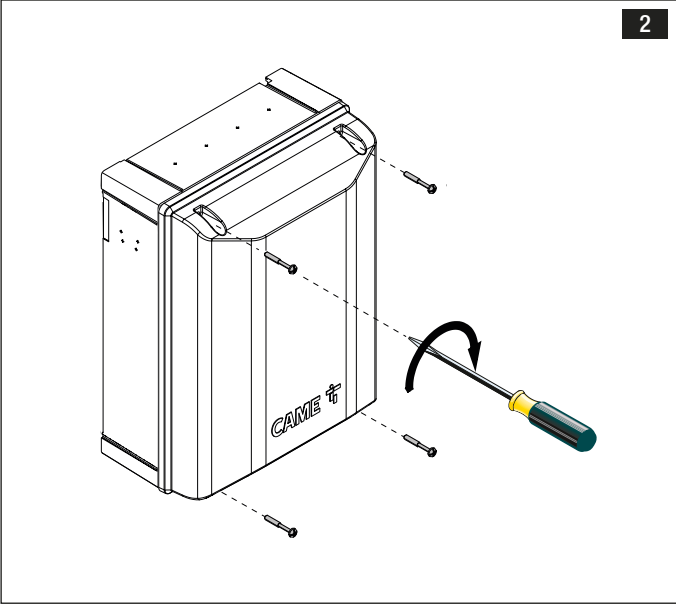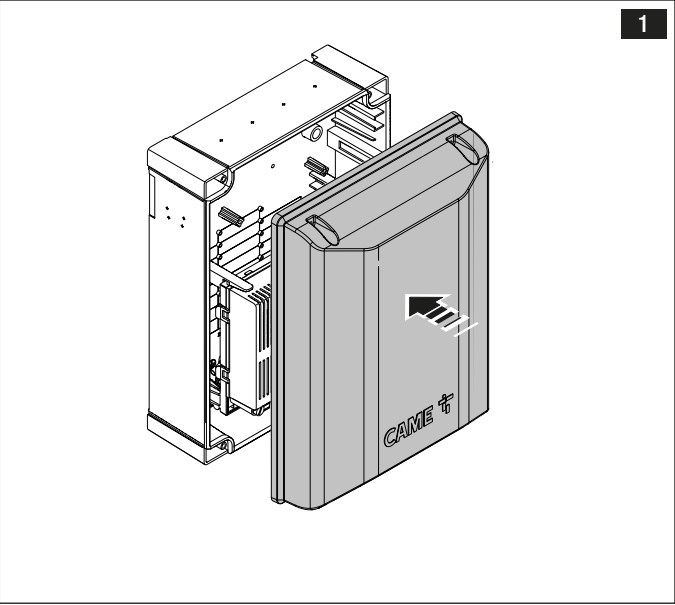
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