

Sliding-gate operators

FA01310-EN



BX704AGS
BX704ALS

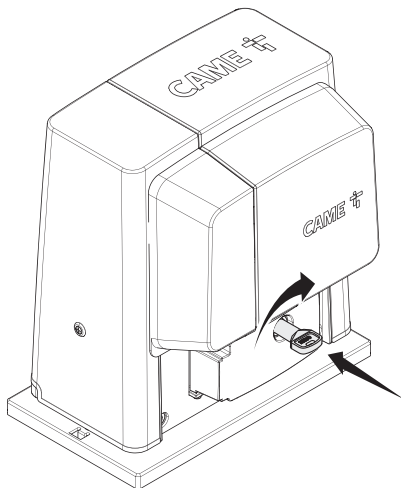
BX708AGS

BX708RGS
BX708ALS

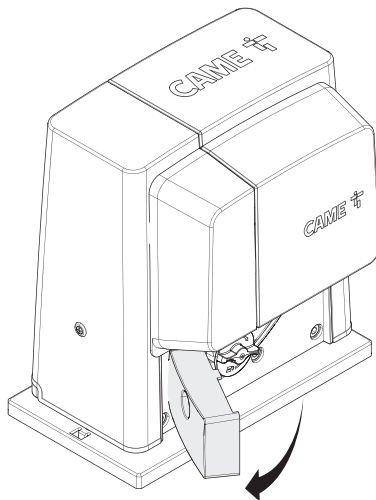
INSTALLATION MANUAL



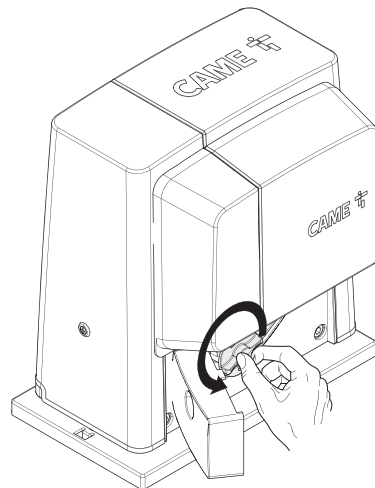
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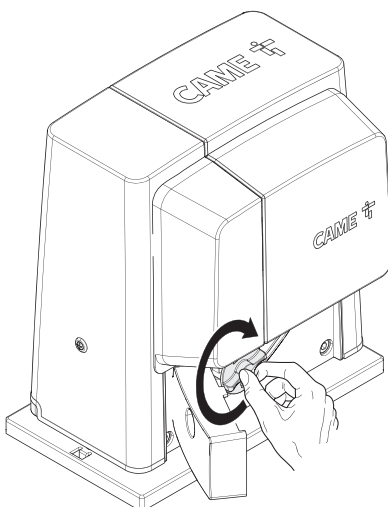
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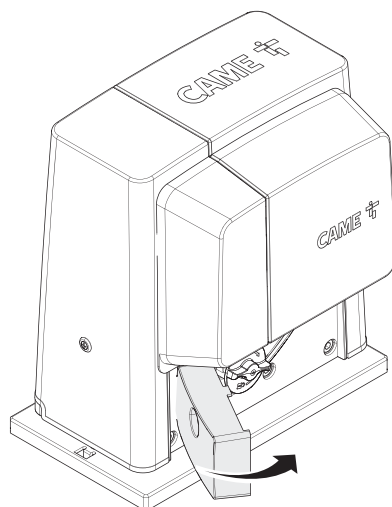
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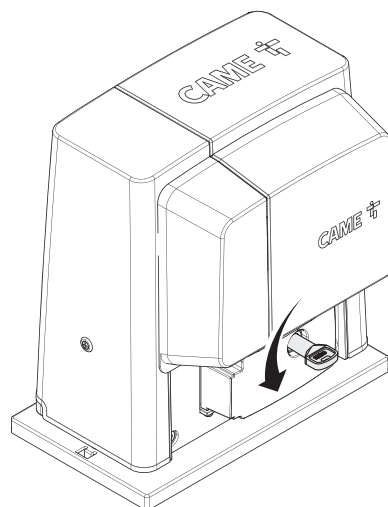
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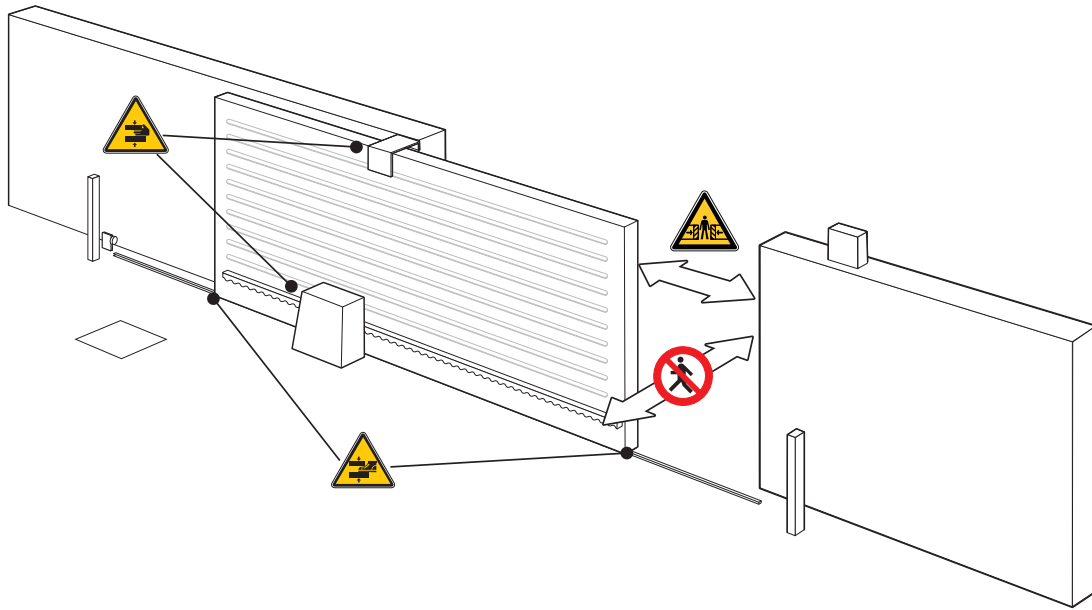
⚠ Important safety instructions.

⚠ 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 is defined by the Machinery Directive (2006/42/EC) as partly completed machinery. • Partly completed machinery means an assembly which is almost machinery but which cannot in itself perform a specific application. • Partly completed machinery is only intended to be incorporated into or assembled with other machinery or other partly completed machinery or equipment thereby forming machinery to which the Machinery Directive (2006/42/EC) applies. • 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. • Check that the temperature ranges given are suitable for the installation site. • Do not install on slopes i.e. any surfaces that are not perfectly level. • Do not install the operator on surfaces that could yield and bend. If necessary, add suitable reinforcements to the anchoring points. • 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. • In case of manual handling, have one person for every 20 kg that needs hoisting; for non-manual handling, use proper hoisting equipment in safe conditions. • 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. • Use additional protection to prevent your fingers from being crushed between the pinion and rack. • All fixed controls must be clearly visible after installation, in a position that allows the guided part to be directly visible, but far away from moving parts. In the case of a hold-to-run control, this must be installed at a minimum height of 1.5 m from the ground and must not be accessible to the public. • If not already present, apply a permanent tag that describes how to use the manual release mechanism close to it. • Make sure that the operator has been properly adjusted and that the safety and protection devices and the manual release are working properly. • Before handing over to the final user, check that the system complies with the harmonised standards and the essential requirements of the Machinery Directive (2006/42/EC). • Any residual risks must be indicated clearly with proper signage affixed in visible areas, and explained to end users. • Put the machine's ID plate in a visible place when the installation is complete. • If the power-supply cable is damaged, it must be immediately replaced by the manufacturer or by an authorised technical assistance centre, or in any case, by qualified staff, to prevent any risk. • Keep this manual inside the technical folder along with the manuals of all the other devices used for your automation system. • Make sure to hand over to the end user all the operating manuals of the products that make up the final machinery.


Main points of danger for people




 No transiting while the barrier is moving.

 Risk of entrapment.

 Risk of trapping hands.

 Risk of trapping feet.

DISMANTLING AND DISPOSAL

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

DISPOSING OF THE PACKAGING

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

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

DISPOSE OF THE PRODUCT RESPONSIBLY

DISPOSING OF THE PRODUCT

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





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

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

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

DISPOSE OF THE PRODUCT RESPONSIBLY

Key

-  This symbol shows which parts to read carefully.
-  This symbol shows which parts describe safety issues.
-  This symbol shows what to tell users.
-  The measurements, unless otherwise stated, are in millimetres.

Description

801MS-0020

BX704AGS - Operator complete with control board with programming display, built-in radio decoder, movement and obstruction-detection device and mechanical limit switches for sliding gates weighing up to 400 kg that are up to 14 m in length.

801MS-0030

BX708AGS - Operator complete with control board with programming display, built-in radio decoder, movement and obstruction-detection device and mechanical limit switches for sliding gates weighing up to 800 kg that are up to 14 m in length.

801MS-0021

BX704ALS - Operator complete with control board with programming display, built-in radio decoder, movement and obstruction-detection device and mechanical limit switches for sliding gates weighing up to 400 kg that are up to 14 m in length.

801MS-0031


BX708ALS - Operator complete with control board with programming display, built-in radio decoder, movement and obstruction-detection device and mechanical limit switches for sliding gates weighing up to 800 kg that are up to 14 m in length.

801MS-0060

BX708RGS - Operator complete with control board with programming display, built-in radio decoder, movement and obstruction-detection device and mechanical limit switches for sliding gates weighing up to 800 kg that are up to 14 m in length.

Intended use

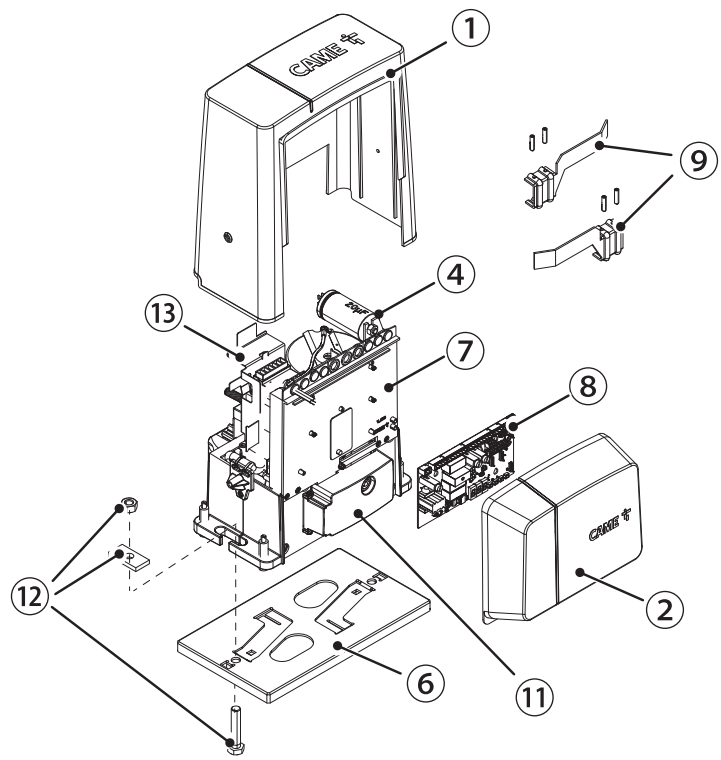
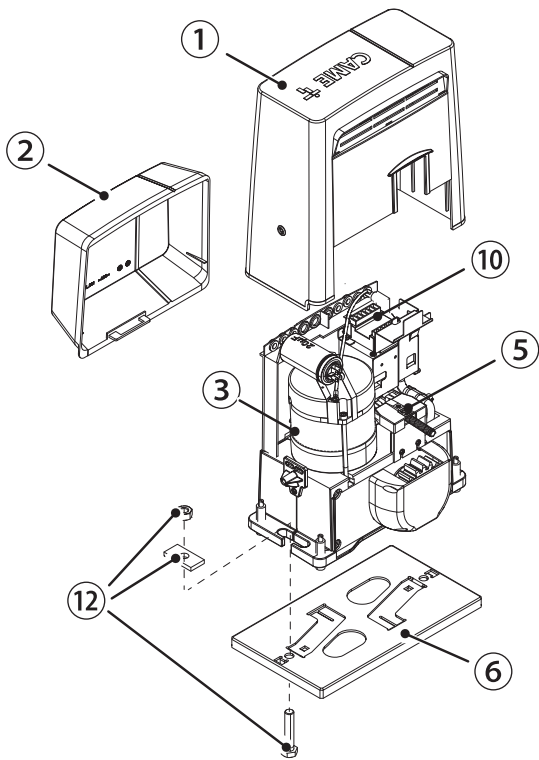
Sliding gate solution for residential buildings

-  Any installation and/or use other than that specified in this manual is forbidden.

Description of parts

Operator

- ❶ Cover
- ❷ Front cover
- ❸ Gearmotor
- ❹ Capacitor
- ❺ Mechanical limit switch
- ❻ Anchoring plate
- ❼ Control board holder
- ❽ Control board
- ❾ Limit-switch tabs
- ❿ Transformer
- ⓫ Release hatch
- ⓬ Fixtures and fittings
- ⓭ Assembly brackets for housing accessories (optional)



Control board

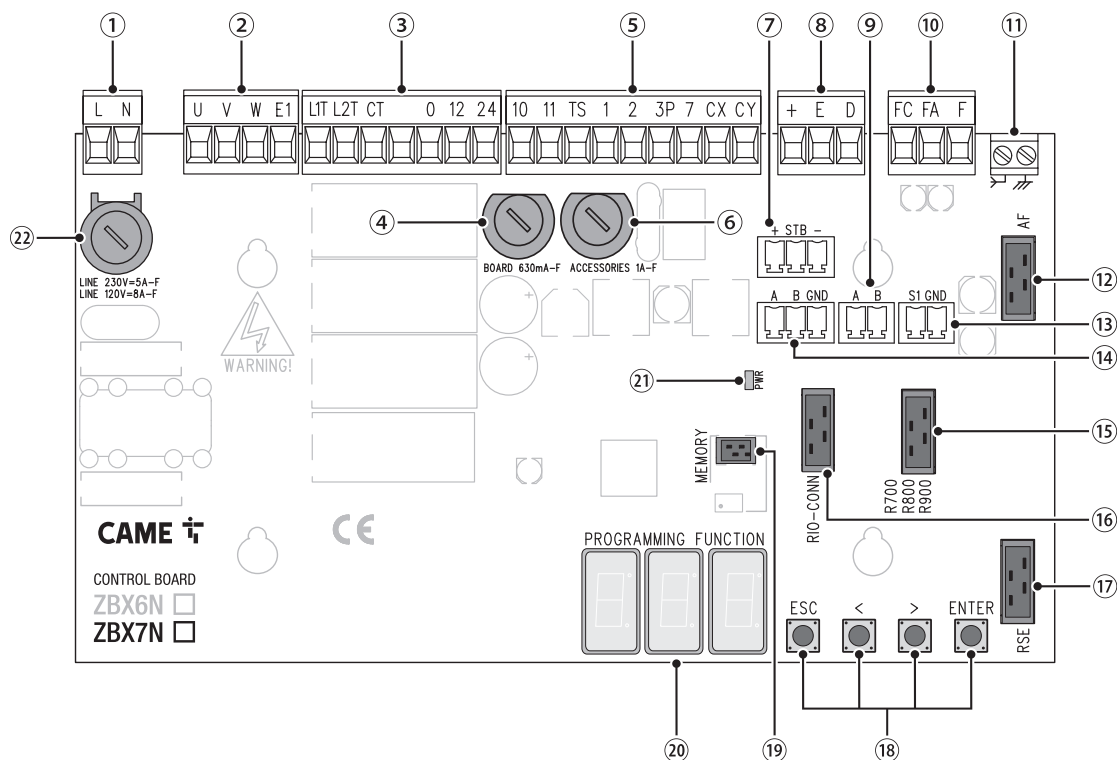
The functions on the input and output contacts, the time settings and user management are set and viewed on the display.

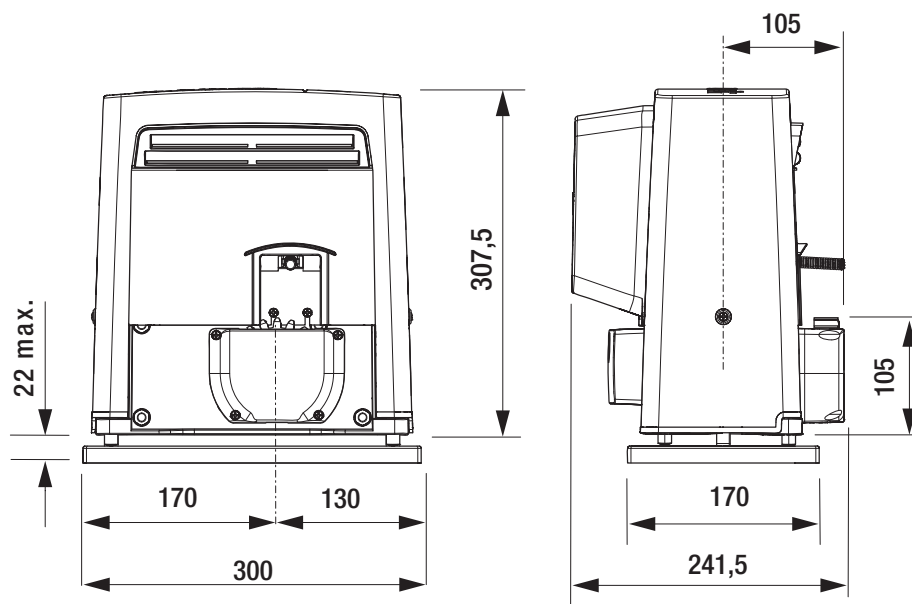
All connections are protected by quick fuses.

For the system to work properly, before fitting any plug-in card, DISCONNECT THE MAIN POWER SUPPLY and remove any batteries.

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

- | | |
|---|---|
| <ul style="list-style-type: none"> ❶ Power supply terminal board ❷ Terminal board for connecting the gearmotor ❸ Terminal board for connecting the transformer ❹ Control board fuse ❺ Terminal board for connecting control and safety devices ❻ Accessories fuse ❼ Terminal board for connecting the RGP1 module ❽ Terminal board for connecting the encoder ❾ Terminal board for connecting the keypad selector ❿ Terminal board for connecting the limit switches ⓫ Terminal board for connecting the antenna | <ul style="list-style-type: none"> ❿ Connector for plug-in radio frequency card (AF) ⓬ Terminal board for connecting the transponder selector switch ⓭ Terminal board for connecting the paired function or the CRP ⓮ Connector for the R700 or R800 decoding card ⓯ Connector for the RIOCN8WS module ⓰ RSE card connector ⓱ Programming buttons ⓲ Memory Roll card connector ⓳ Display ⓴ Power LED ⓵ Line fuse |
|---|---|





Usage limitations

MODELS	BX704AGS	BX708AGS	BX704ALS	BX708ALS	BX708RGS
Pinion module	4	4	4	4	4
Maximum gate-leaf length (m)	14	14	14	14	14
Maximum gate-leaf weight (kg)	400	800	400	800	800

Technical data

MODELS	BX704AGS	BX708AGS	BX704ALS	BX708ALS	BX708RGS
Power supply (V - 50/60 Hz)	230 AC	230 AC	230 AC	230 AC	120 AC
Motor power supply (V)	230 AC	230 AC	230 AC	230 AC	120 AC
Standby consumption (W)	5	5	5	5	5
Standby consumption with the RGP1 (W) module	0,8	0,8	0,8	0,8	0,8
Power (W)	560	520	560	520	530
Capacitor (μ F)	12	20	12	20	80
Current draw (mA)	2,7	2,5	2,7	2,5	4,5
Colour	RAL 7024	RAL 7024	RAL 7040	RAL 7040	RAL 7024
Operating temperature ($^{\circ}$ C)	-20 \div +55	-20 \div +55	-20 \div +55	-20 \div +55	-20 \div +55
Thrust (N)	600	800	600	800	800
Maximum operating speed (m/min)	10,5	10,5	10,5	10,5	10,5
Cycles/hour	17	17	17	17	17
Consecutive cycles	6	6	6	6	6
Duty cycle	30	30	30	30	30
Motor thermal protection ($^{\circ}$ C)	150	150	150	150	150
Sound pressure level (dB A)	\leq 70	\leq 70	\leq 70	\leq 70	\leq 70
Protection rating (IP)	44	44	44	44	44
Insulation class	I	I	I	I	I
Weight (kg)	15	15	15	15	15


Fuse table

MODELS	BX704AGS	BX708AGS	BX704ALS	BX708ALS	BX708RGS
Line fuse	5 A-F	5 A-F	5 A-F	5 A-F	8 A-F
Control-board fuse	630 mA-F	630 mA-F	630 mA-F	630 mA-F	630 mA-F
Accessories fuse	1 A-F	1 A-F	1 A-F	1 A-F	1 A-F

Operating cycles

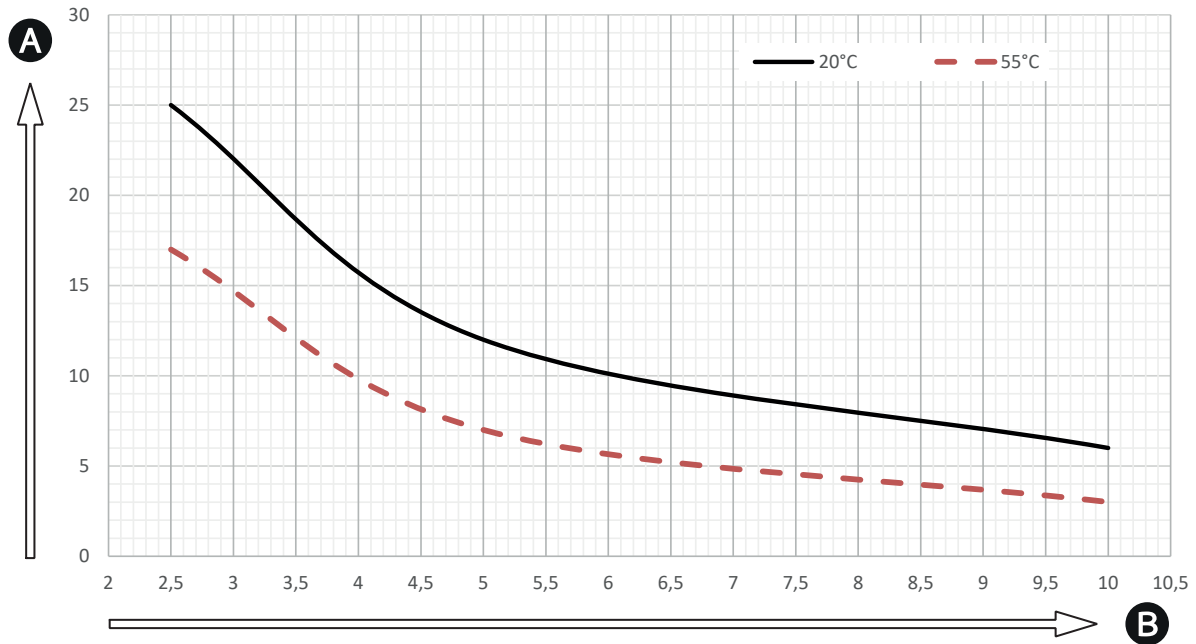
The operating cycle calculation considers a gate that is of standard length (the sliding part), professionally installed, free of any mechanical issues and/or accidental friction points, and measured at an ambient temperature of 20°C, as stated in EN standard 60335-2-103.

MODELS	BX704AGS	BX708AGS	BX704ALS	BX708ALS	BX708RGS
Cycles/hour (no.)	17	17	17	17	17
Consecutive cycles (no.)	6	6	6	6	6
Standard reference length of the sliding part (m)	4	4	4	4	4

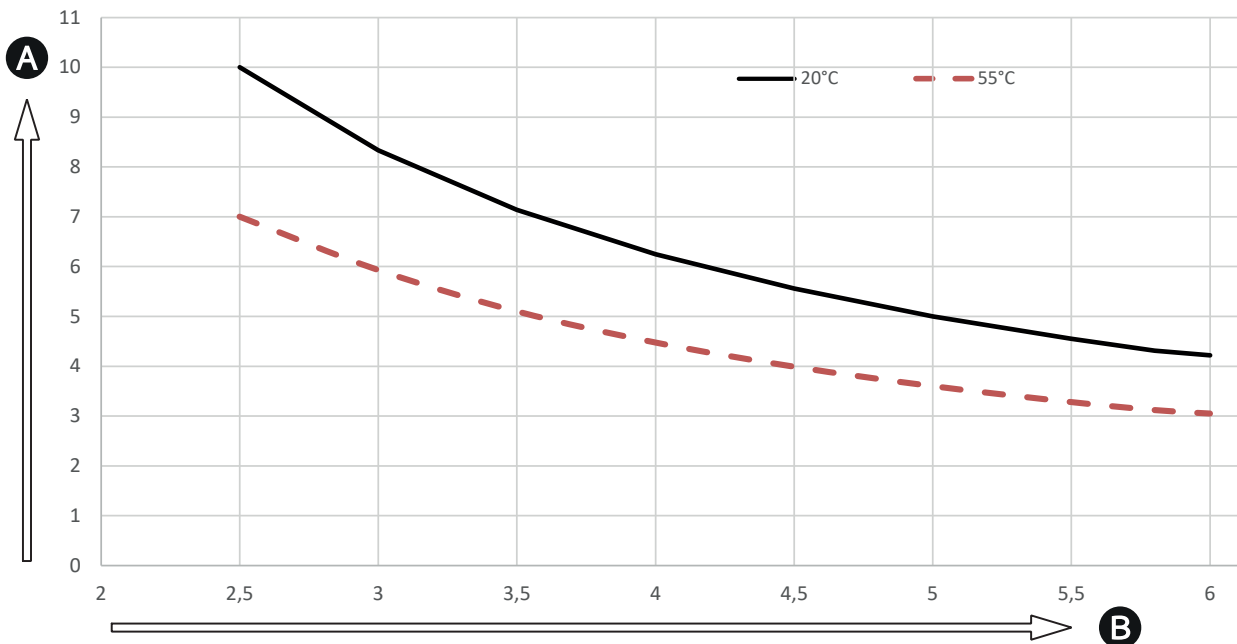
 For gates where the sliding part is of a different length to the standard measurement, please see the graphs.

Cycles/hour graph

- A** Number of cycles
- B** Gate length




Consecutive cycles graph




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 1.5 mm ²	2 x 1.5 mm ²
TX Photocells	2 x 0.5 mm ²	2 x 0.5 mm ²
RX photocells	4 x 0.5 mm ²	4 x 0.5 mm ²
Command and control devices	* no. x 0.5 mm ²	* no. x 0.5 mm ²

* no. = see product assembly instructions - Warning: the cable cross-section is indicative and varies according to the motor power and cable length.

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


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


 For paired connection and CRP, use UTP CAT5 cable (up to 1,000 m).

 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.

INSTALLATION


 The following illustrations are examples only. The space available for fitting the operator and accessories varies depending on the area where it is installed. It is up to the installer to find the most suitable solution.

 The drawings show an operator fitted on the left.

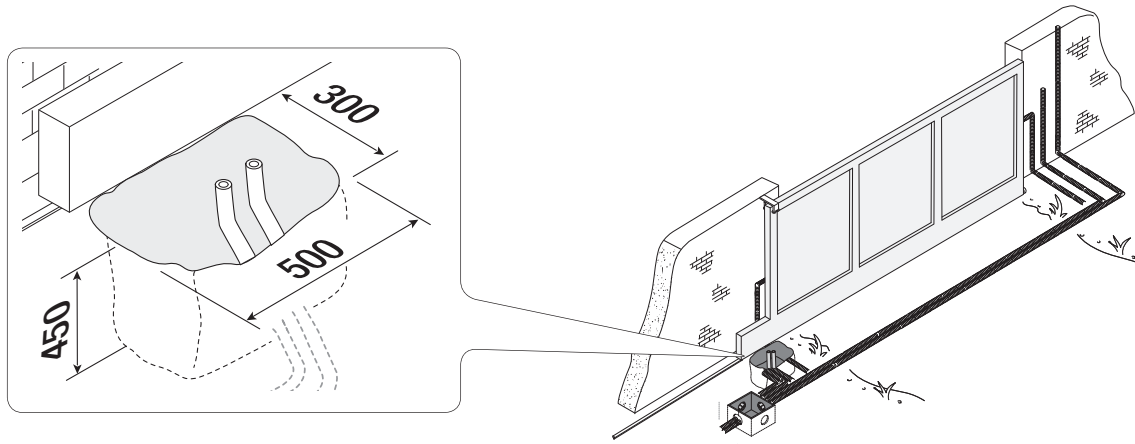
Preliminary operations

Dig a hole for the foundation frame.

Set up the corrugated tubes needed for the wiring coming out of the junction pit.

 Use $\varnothing 40$ mm corrugated tubes to connect the gearmotor to the accessories.

 The number of tubes depends on the type of system and the accessories that are going to be fitted.



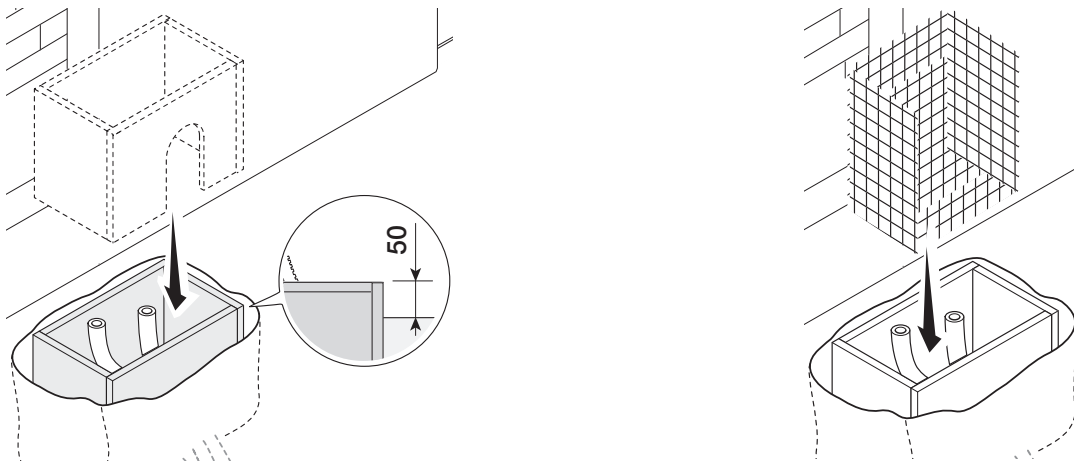
Laying the anchoring plate

Set up a foundation frame that is larger than the anchoring plate.

Insert the foundation frame into the dug hole.

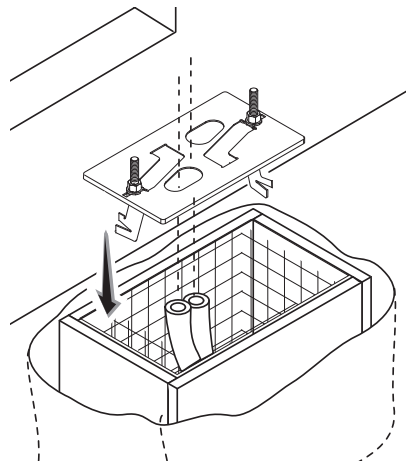
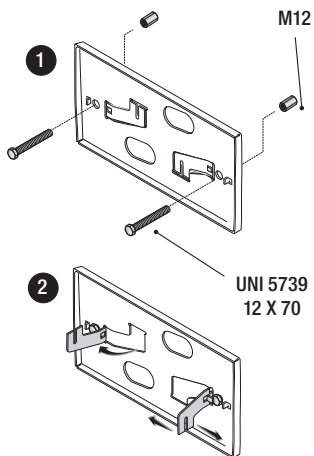
 The foundation frame must protrude by 50 mm, above ground level.

Fit an iron cage in the foundation frame to reinforce the concrete.



Insert the screws supplied in the anchoring plate.
 Lock the screws in place with the nuts supplied.
 Remove the pre-shaped clamps using a screwdriver.
 Fit the anchoring plate in the iron cage.

The tubes must pass through the existing holes.



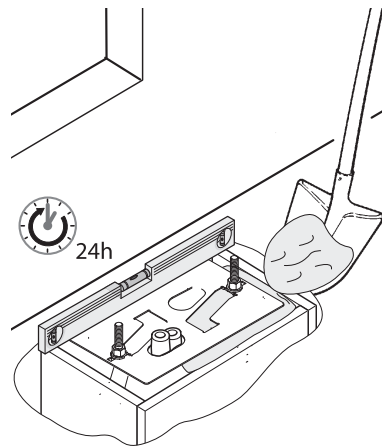
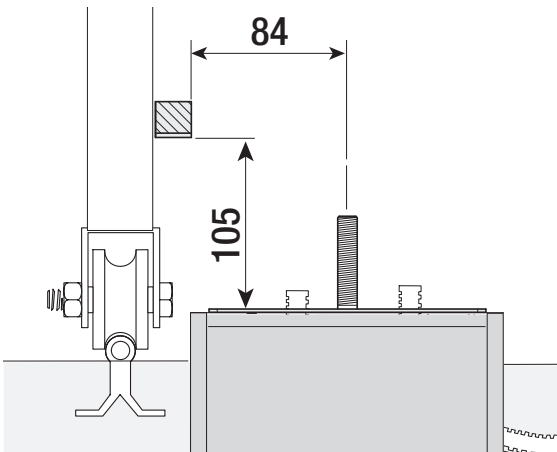
Position the anchoring plate, taking note of the measurements shown in the drawing.

If the gate does not have a rack, proceed with the installation.

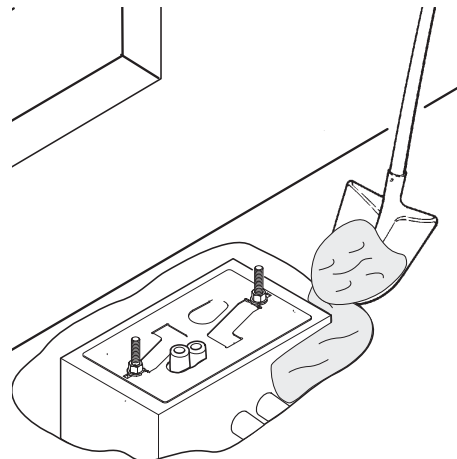
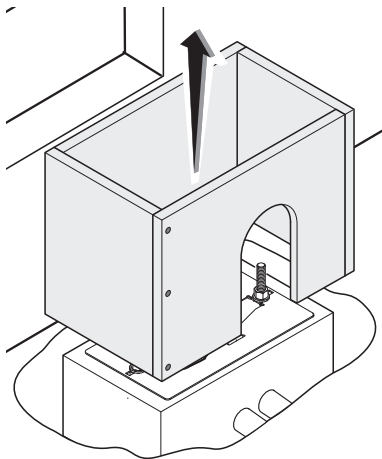
See the section "FASTENING THE RACK".

Cast cement into the foundation frame.

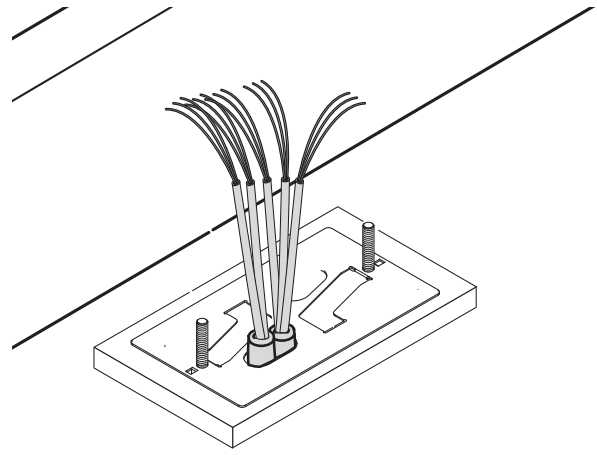
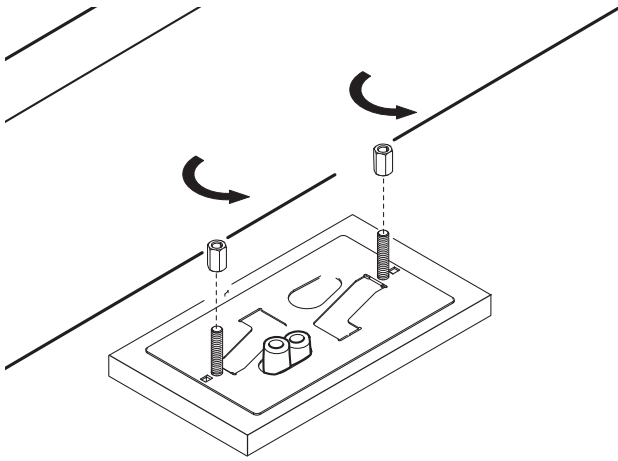
The plate must be perfectly level and the screw threads completely above surface.
 Wait at least 24 hours for the cement to dry.



Remove the foundation frame.
 Fill the hole with soil around the concrete block.



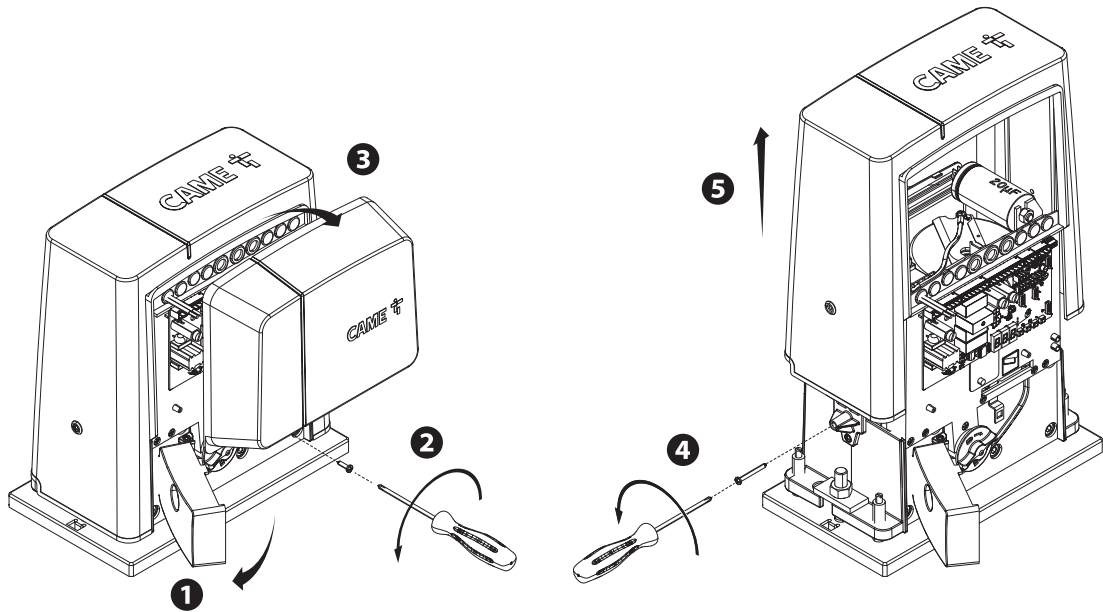
Remove the nuts from the screws.
Insert the electrical cables into the tubes until they protrude by about 600 mm.




Setting up the operator

Remove the front cover. ① ② ③

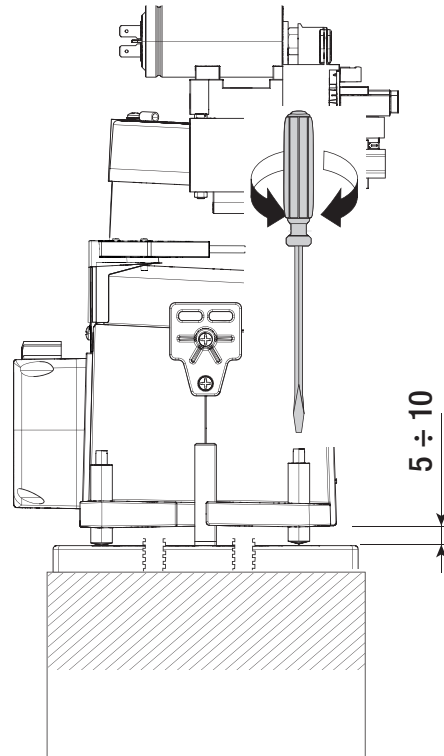
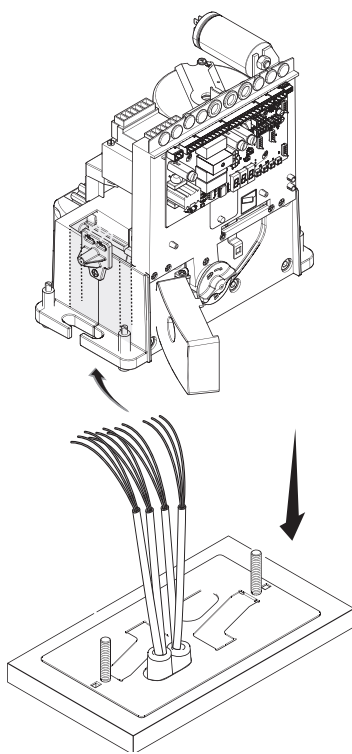
Remove the operator cover. ④ ⑤



Place the operator on top of the anchoring plate.

 The electrical cables must pass under the operator foundation frame

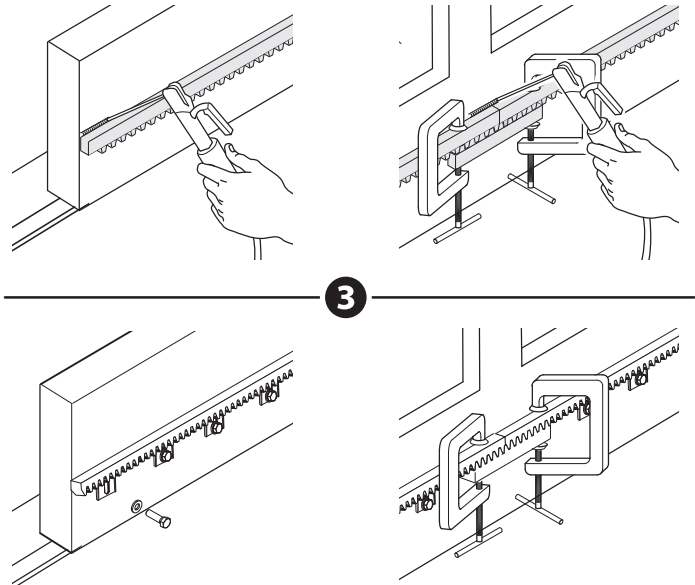
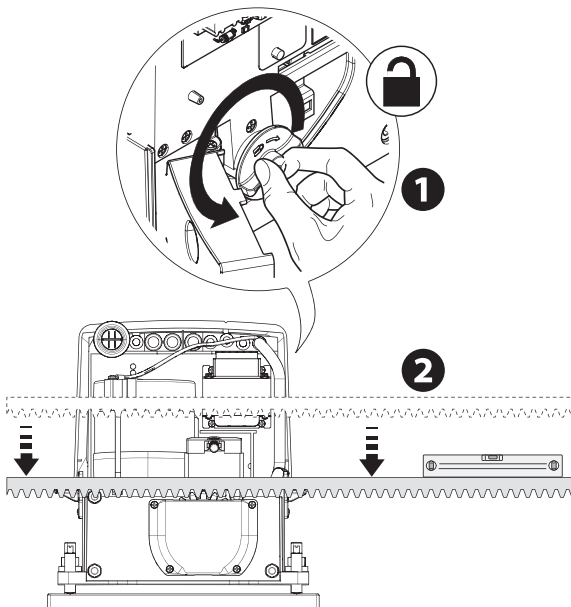
Lift the operator by 5-10 mm from the plate by adjusting the threaded feet, to allow for any adjustments that may need to be made between the rack and pinion.



Fastening the rack

- 1 Release the operator.
- 2 Rest the rack on the pinion.
- 3 Weld or fasten the rack to the gate along its entire length.

 To assemble the rack modules, use an extra piece and rest it under the joint, then fasten it in place using two clamps.

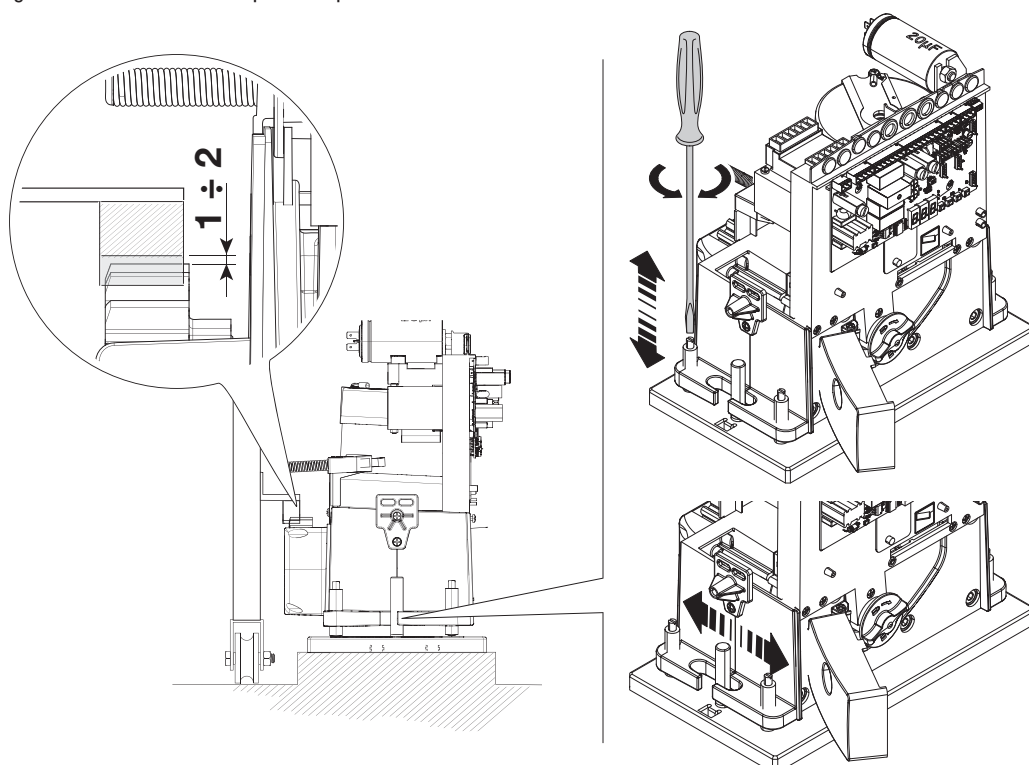


Adjusting the pinion-rack coupling


Open and close the gate manually.

Adjust the pinion-rack coupling distance using the threaded feet (vertical adjustment) and the holes (horizontal adjustment).

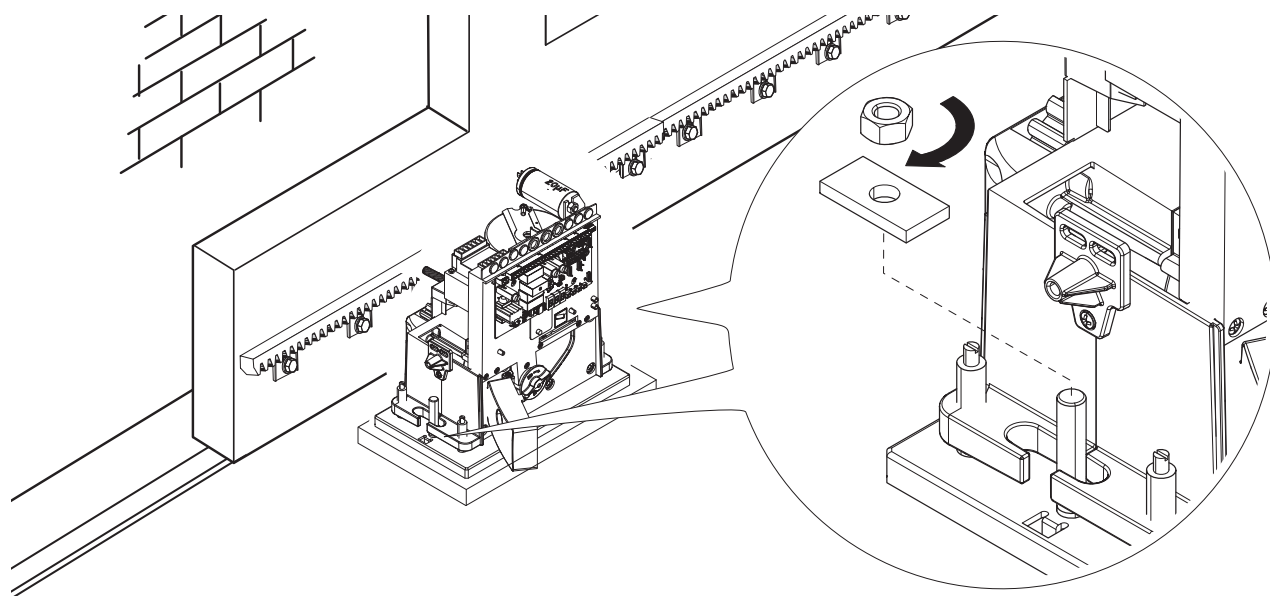
 The weight of the gate must not bear down upon the operator.



Fastening the operator in place

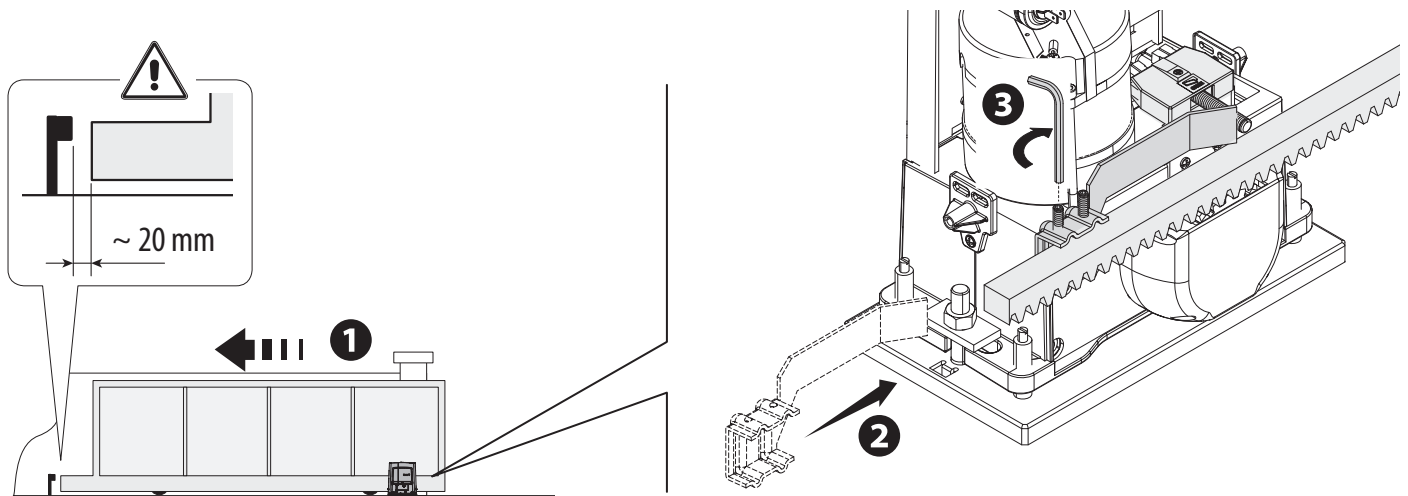
 Only fasten the operator after adjusting the pinion-rack coupling.

Fasten the operator to the anchoring plate using stoppers and nuts.

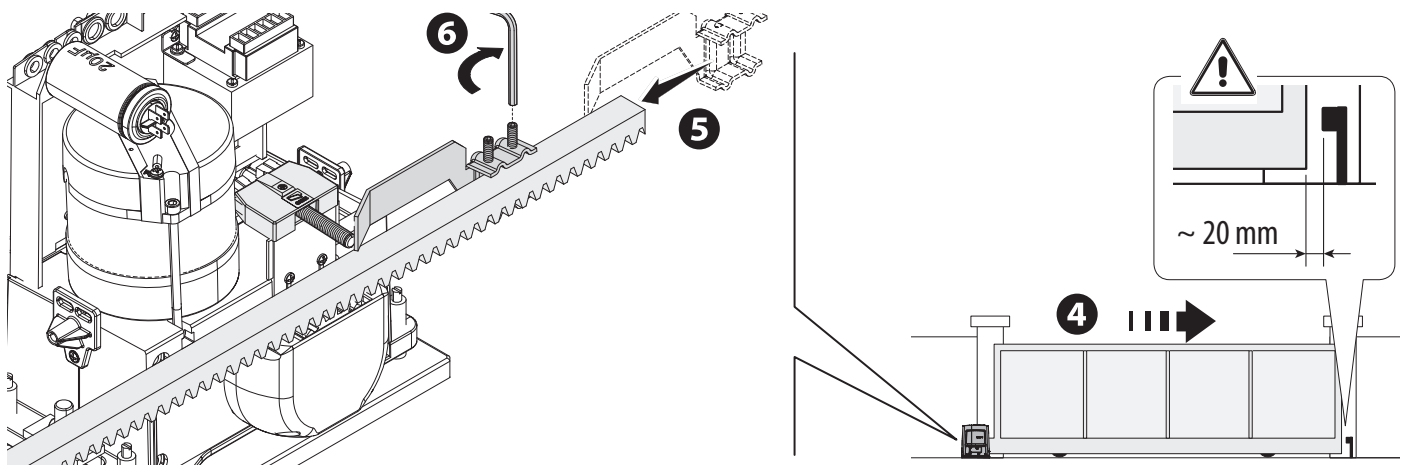


Determining the travel end points with mechanical limit switches

- 1 Open the gate.
- 2 Insert the opening limit-switch tab in the rack.
The spring must trigger the microswitch.
- 3 Fasten the opening limit-switch tab using the grub screws supplied.



- 4 Close the gate.
- 5 Insert the closing limit-switch tab in the rack.
The spring must trigger the microswitch.
- 6 Fasten the closing limit-switch tab using the grub screws supplied.



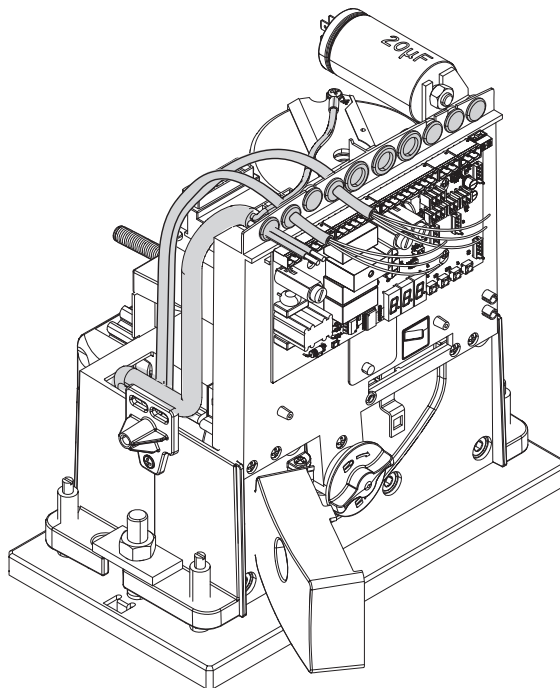
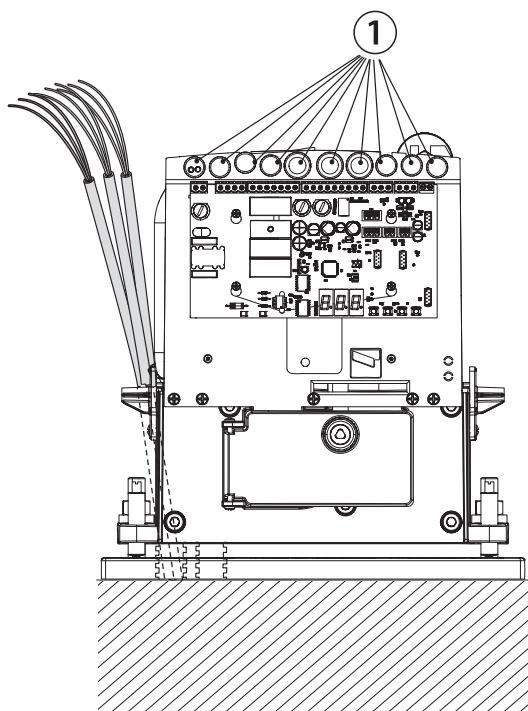
Passing the electrical cables

 Connect all wires and cables in compliance with the law.

The electrical cables must not touch any parts that may overheat during use (such as the motor and transformer).


 Use cable glands to connect the devices to the control panel. One of these must be used exclusively for the power supply cable.

1 Cable glands on the board holder

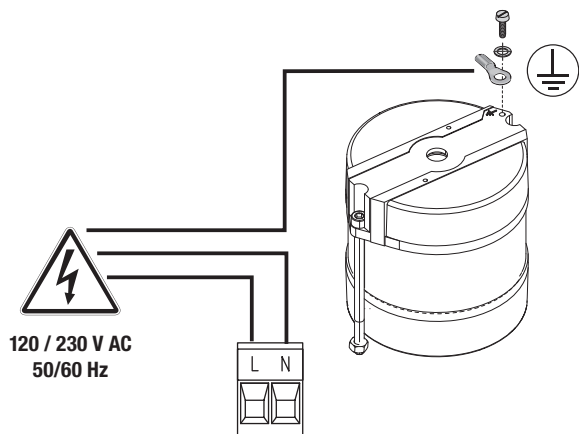


Power supply

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

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

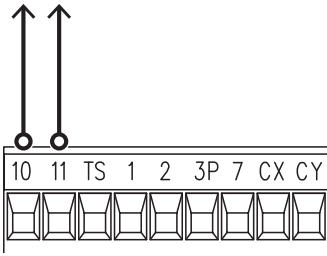
Connecting to the mains (120/230 V AC - 50/60 Hz)



Maximum capacity of contacts

Device	Output	Power supply (V)	Power (W)
Accessories	10 - 11	24 AC	20
Additional light	W - E1	230 AC	60
Flashing beacon	W - E1	230 AC	25

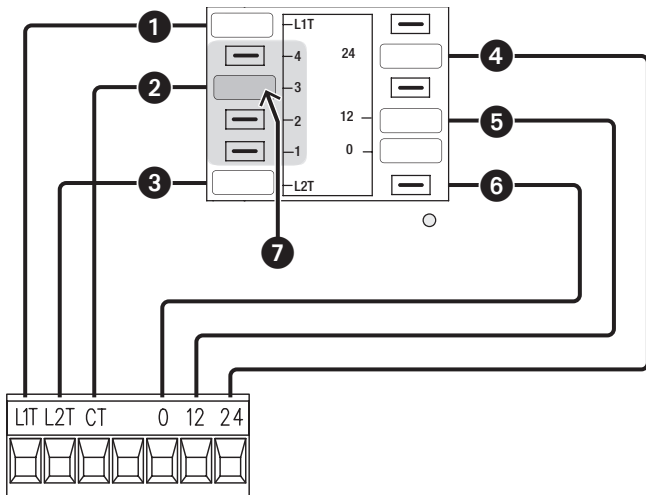
Power supply output for accessories



The output normally delivers 24 V AC.

The sum of the power draw for the connected accessories must not exceed 20 W.

Torque limiter



- 1 White cable
- 2 Black cable
- 3 Red cable
- 4 Blue cable
- 5 Purple cable
- 6 Orange cable
- 7 To vary the motor torque, move the corresponding Faston terminal to one of the four positions; from 1 (minimum) to 4 (maximum).

Signalling devices

1 Flashing beacon

It flashes when the operator opens and closes.

2 Additional light

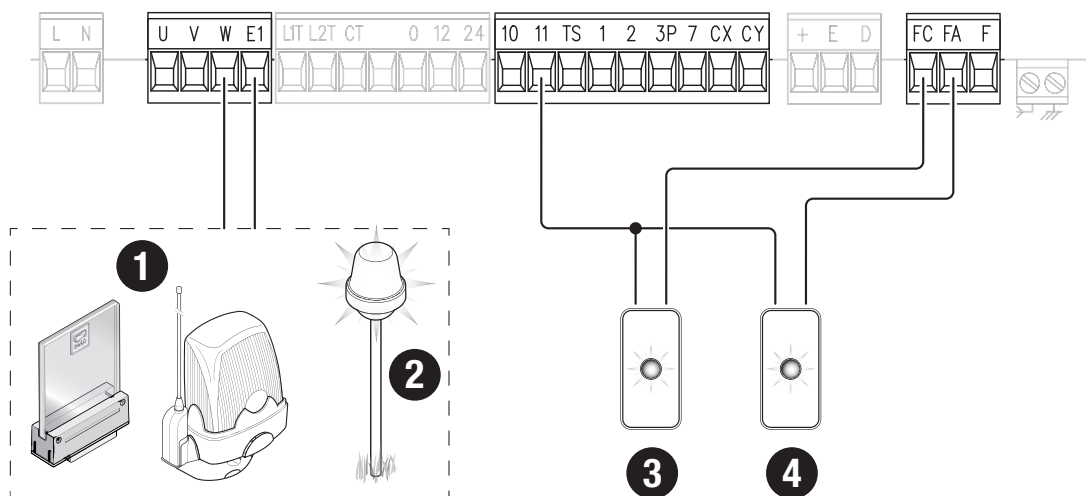
It increases the light in the manoeuvring area.

3 Operator status warning light

It indicates that the operator is in the open position.

4 Operator status warning light

It indicates that the operator is in the closed position.



Command and control devices

- 1 Keypad selector
- 2 Card reader
- 3 Transponder selector switch

4 STOP button (NC contact)

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

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

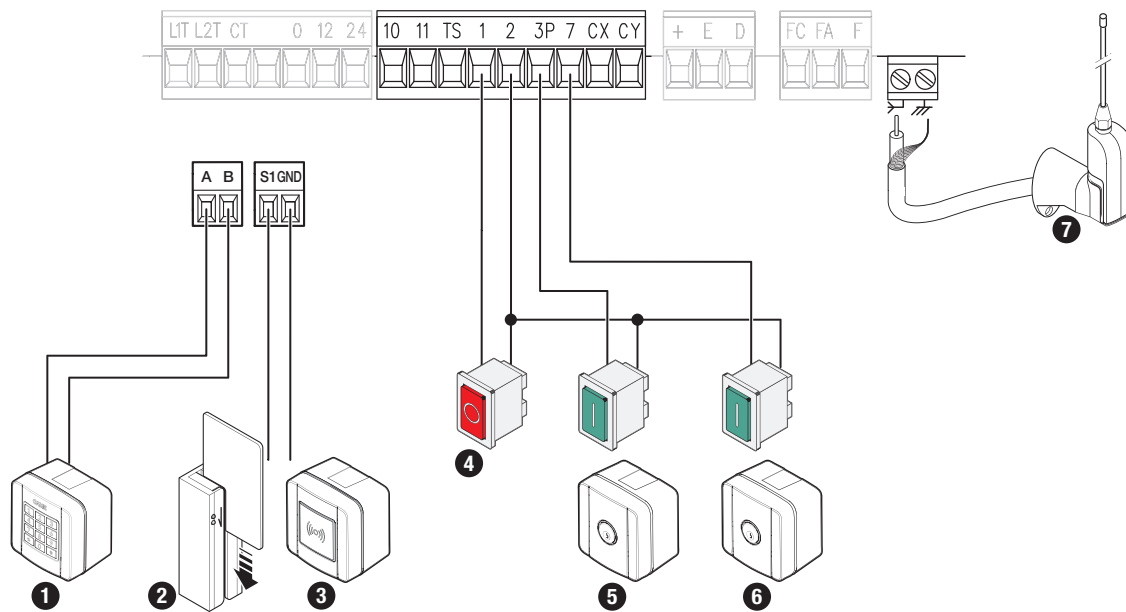
5 Control device (NO contact)

PARTIAL OPENING function

6 Control device (NO contact)

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

7 Antenna with RG58 cable



Safety devices

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

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

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

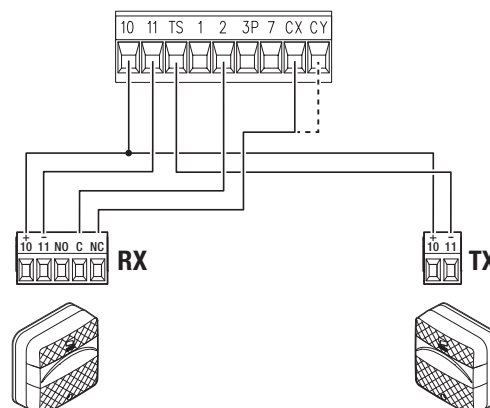
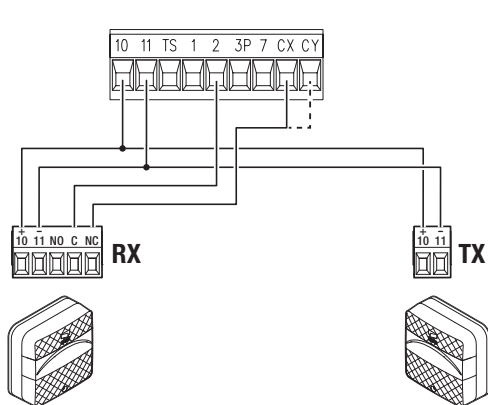
DELTA photocells

Standard connection

DELTA photocells

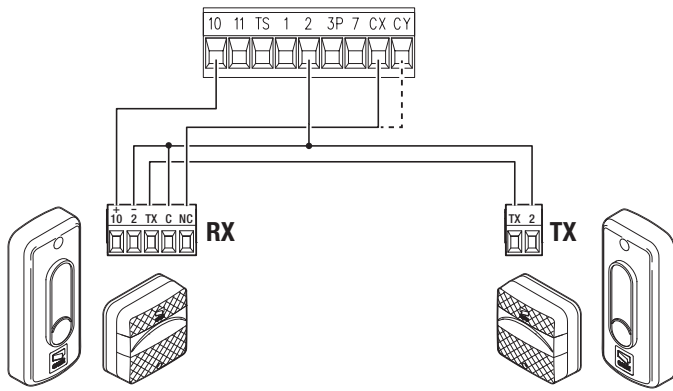
Connection with safety test

See function F5, safety devices test.



DIR / DELTA-S photocells

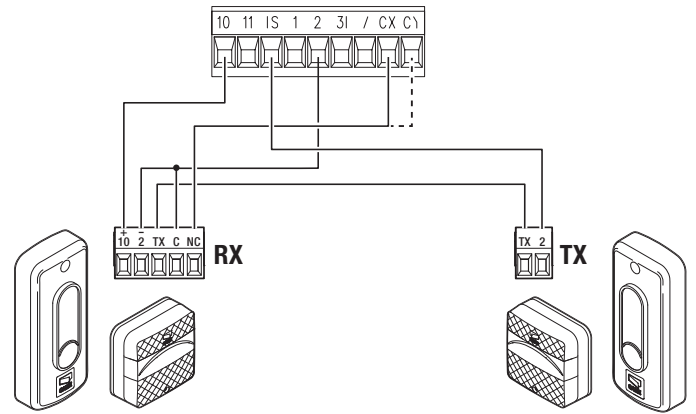
Standard connection



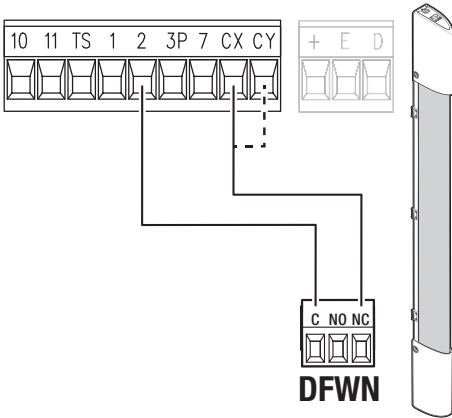
DIR / DELTA-S photocells

Connection with safety test

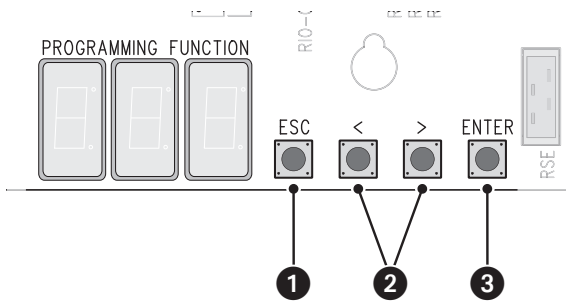
See function F5, safety devices test.



DFWN sensitive edge



Programming button functions



1 ESC button

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

2 < > buttons

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

3 ENTER button

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

Getting started

Once the electrical connections have been made, proceed with commissioning. Only skilled and qualified staff may perform this operation. Make sure that there are no obstacles in the way. Power up the device and begin programming. Start programming with the functions indicated below.

F54	Opening direction	Set the gate opening direction.
F1	Total stop	Stop the gate and exclude automatic closing. Use a control device to resume movement.
A3	Travel calibration	Start the travel self-learning.

- After powering up the system, the first manoeuvre is always to open the gate; Wait for the manoeuvre to be completed.
- Press the STOP button immediately in the event of any faults, malfunctions, strange noises or vibrations, or unexpected behaviour in the system.
- If the three display segments are flashing, calibrate the travel.

Total stop

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

F1	Total stop	OFF (Default) ON
-----------	-------------------	---------------------

CX input

Associate a function with the CX input.

F2	CX input	OFF (Default) C1 = Reopen while closing (photocells) C2 = Reclose while opening (photocells) C3 = Partial stop Only with [Automatic close] activated. C4 = Obstacle standby (photocells) C7 = Reopening during closure (sensitive edges) C8 = Reclose while opening (sensitive edges) R7 = Reopen while closing (sensitive edges with 8K2 resistor) R8 = Reclose while opening (sensitive edges with 8K2 resistor)
-----------	-----------------	--

CY input

Associate a function with the CY input.

F3	CY input	OFF (Default) C1 = Reopen while closing (photocells) C2 = Reclose while opening (photocells) C3 = Partial stop Only with [Automatic close] activated. C4 = Obstacle standby (photocells) C7 = Reopening during closure (sensitive edges) C8 = Reclose while opening (sensitive edges) R7 = Reopen while closing (sensitive edges with 8K2 resistor) R8 = Reclose while opening (sensitive edges with 8K2 resistor)
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Safety devices test

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

F5	Safety devices test	OFF (Default) 1 = CX 2 = CY 4 = CX+CY
----	---------------------	--

Hold-to-run

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.

F6	Hold-to-run	OFF (Default) ON
----	-------------	---------------------

Command 2-7

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

F7	Command 2-7	0 = Step-by-step (default) 1 = Sequential 2 = Open 3 = Close
----	-------------	---

Command 2-3P

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

F8	Command 2-3P	0 = Partial opening (Default) 1 = Open
----	--------------	---

Obstacle with motor stopped

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

F9	Obst. with motor stopped	OFF (Default) ON
----	--------------------------	---------------------

Encoder

Manage operator slowdowns, obstacle detection and sensitivity.

F11	Encoder	OFF ON (Default)
-----	---------	---------------------


Sensor type

Set the type of control device.

F14	Sensor type	0 = Transponder selector switch 1 = Keypad selector (default)
------------	--------------------	--

Additional light

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

F18	Additional light	0 =Flashing beacon (Default) 1 = Cycle light.  The light remains off if an automatic closing time is not set.
------------	-------------------------	--

Automatic closure


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


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

F19	Automatic close	OFF (Default) From 1 to 180 seconds
------------	------------------------	--

Automatic closing after partial opening

Set the time before automatic closure is activated, after a partial opening command has been performed.

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

 Do not deactivate the function [Automatic close].

F20	Automatic partial close	OFF From 1 to 180 seconds (default: 10 seconds)
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Pre-flashing time

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

F21	Pre-flashing time	OFF (Default) From 1 to 10 seconds
------------	--------------------------	---------------------------------------

Opening slowdown speed

Set the slowdown speed during opening (as a percentage of the maximum speed).

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

F30	Opening slowdown speed	OFF (Default) 1 = High 2 = Medium 3 = Low
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Travel sensitivity

Adjust the obstruction detection sensitivity during boom travel.

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

F34	Travel sensitivity	10% to 100% (Default 100%) - 10% = maximum sensitivity - 100% = minimum sensitivity
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Slowdown sensitivity

Adjust the obstacle-detection sensitivity level during slowdown.

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

F35	Slowdown sensitivity	10% to 100% (Default 100%) - 10% = maximum sensitivity - 100% = minimum sensitivity
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Partial opening point

Determine the gate partial opening point, as a percentage of total travel.

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

F36	Part. open point	10% to 80% (Default 80%)
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Opening slowdown point

Set the opening slowdown start point, as a percentage of total travel.

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

F37	Opening slowdown point	5% to 30% (Default 15%)
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Closing slowdown point

Set the closing slowdown start point, as a percentage of total travel.

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

F38	Closing slowdown point	5% to 30% (Default 15%)
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Manoeuvre thrust activation

Increase the thrust torque during opening and closing.

F48	Manoeuvre thrust activation	OFF (Default) ON
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RSE

Configure the function to be performed by the card inserted in the RSE connector.

F49	RSE	OFF (Default) 1 = Paired 3 = CRP
------------	------------	--

Save data

Save user data, timings and configurations to the memory device (memory roll or USB key).

 The function is displayed only when a USB stick is inserted into the USB port or when a memory roll card is inserted into the control board.

F50	Save data	OFF (Default) ON
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Read data


Upload user data, timings and configurations from the memory device (memory roll or USB key).

 The function is displayed only when a USB stick is inserted into the USB port or when a memory roll card is inserted into the control board.

F51	Read data	OFF (Default) ON
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Transferring MASTER-SLAVE parameters

Enable sharing for the parameters programmed on the master gate with the slave gate.

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

F52	Transferring MASTER-SLAVE parameters	OFF (Default) ON
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Opening direction

Set the gate opening direction.

F54	Opening direction	0 = To the left (default) 1 = To the right
------------	--------------------------	---

CRP address

Assign a unique identification code (CRP address) to the control board. It is used where there are multiple operators connected via CRP.

F56	CRP address	from 1 to 255
------------	--------------------	---------------


RSE speed

Set the remote connection system communication speed on the RSE port.

F63	RSE speed	0 = 1200 bps 1 = 2400 bps 2 = 4800 bps 3 = 9600 bps 4 = 14400 bps 5 = 19200 bps 6 = 38400 bps (default) 7 = 57600 bps 8 = 115200 bps
------------	------------------	--

RIO ED T1


Associate one of the available functions to a wireless safety device.

 The function only appears if there is an interface board for wireless devices.

F65	RIO ED T1	OFF (Default) P0 = It stops the gate and excludes automatic closing. Use a control device to resume movement. P7 = Reopen while closing. P8 = Reclose while opening.
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RIO ED T2


Associate one of the available functions to a wireless safety device.

 The function only appears if there is an interface board for wireless devices.

F66	RIO ED T2	OFF (Default) P0 = It stops the gate and excludes automatic closing. Use a control device to resume movement. P7 = Reopen while closing. P8 = Reclose while opening.
------------	------------------	---

RIO PH T1


Associate one of the available functions to a wireless safety device.

 The function only appears if there is an interface board for wireless devices.

F67	RIO PH T1	OFF (Default) P1 = Reopen while closing. P2 = Reclose while opening. P3 = Partial stop. P4 = Obstacle standby.
------------	------------------	--

RIO PH T2

Associate one of the available functions to a wireless safety device.

 The function only appears if there is an interface board for wireless devices.

F68	RIO PH T2	OFF (Default) P1 = Reopen while closing. P2 = Reclose while opening. P3 = Partial stop. P4 = Obstacle standby.
------------	------------------	--

Partial opening time

Adjust the gate opening time.

F71	Partial opening time	From 5 to 40 seconds (default: 5 seconds)
------------	-----------------------------	---

New user

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

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

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

U1	New user	1 = Step-by-step 2 = Sequential 3 = Open 4 = Partial opening Choose the function to be assigned to the user. Press ENTER to confirm. You will be asked to enter your user code. Send the code from the control device. Repeat the procedure to add other users.
-----------	-----------------	---

Remove user

Remove one of the registered users.

U2	Remove user	Use the arrows to choose the number associated with the user you want to remove. Alternatively, the control device associated with the user you want to remove can be activated. Press ENTER to confirm. "CLr" will appear to confirm deletion.
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Remove all

Remove all registered users.

U3	Remove all	OFF (Default) ON
-----------	-------------------	---------------------

Radio decoding

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

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

U4	Radio decoding	1 = All decoding (default) 2 = Rolling code 3 = TW key block
----	----------------	--

Motor type

Set the type of gearmotor installed.

A1	Motor type	1 = BX704 2 = BX708
----	------------	------------------------

Travel calibration

Start the travel self-learning.

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

A3	Travel calibration	OFF (Default) ON
----	--------------------	---------------------

Parameter reset

Restore factory settings except for the functions: [Radio decoding], [Motor type] and the settings related to travel calibration.

A4	Parameter reset	OFF (Default) ON
----	-----------------	---------------------

Manoeuvre counter

View the number of operator manoeuvres.

A5	Manoeuvre counter	001 = 100 manoeuvres 010 = 1000 manoeuvres 100 = 10000 manoeuvres 999 = 99900 manoeuvres CSI = Maintenance work
----	-------------------	---

FW version

Display the firmware version number and the GUI installed.

H1	FW version	
----	------------	--

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 to configure another system in the same way.

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

1 Insert the MEMORY ROLL card into the corresponding connector on the control board.

2 Press the "Enter" button to access programming.

3 Use the arrows to choose the desired function.

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

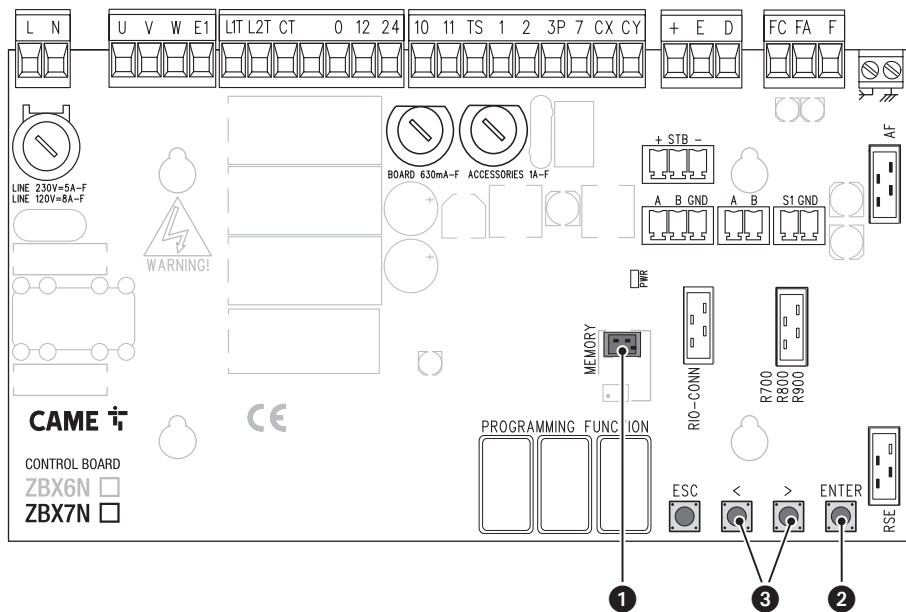
- Save data

Save user data, timings and configurations to the memory device (memory roll or USB key).

- Read data

Upload user data, timings and configurations from the memory device (memory roll or USB key).

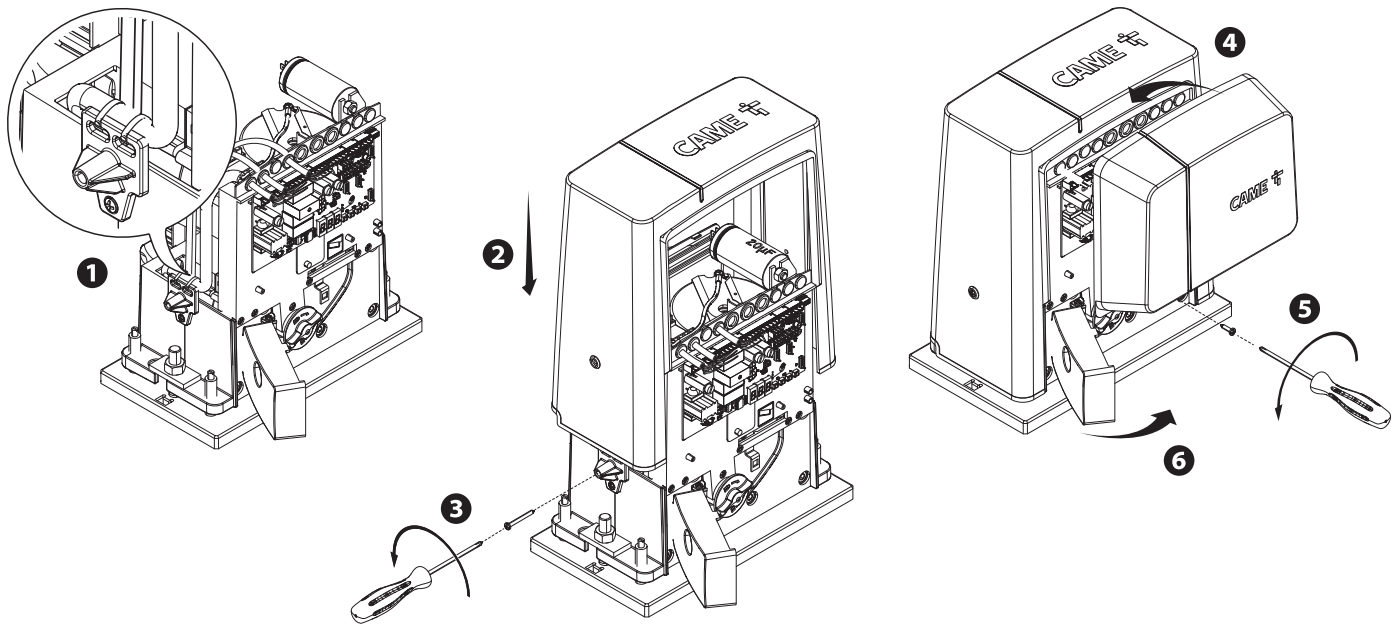
 Once the data have been saved and loaded, remove the MEMORY ROLL card.



ERROR MESSAGES

E1	Calibration error
E2	Adjustment error
E3	Encoder failure error
E4	Service test failure error
E7	Operating time error
E8	Open release-hatch error Check that the accessories fuse is not blown.
E9	Obstacle detected during closing
E10	Obstacle 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

FINAL OPERATIONS



PAIRED OPERATION

Two connected operators are controlled with one command.


Electrical connections

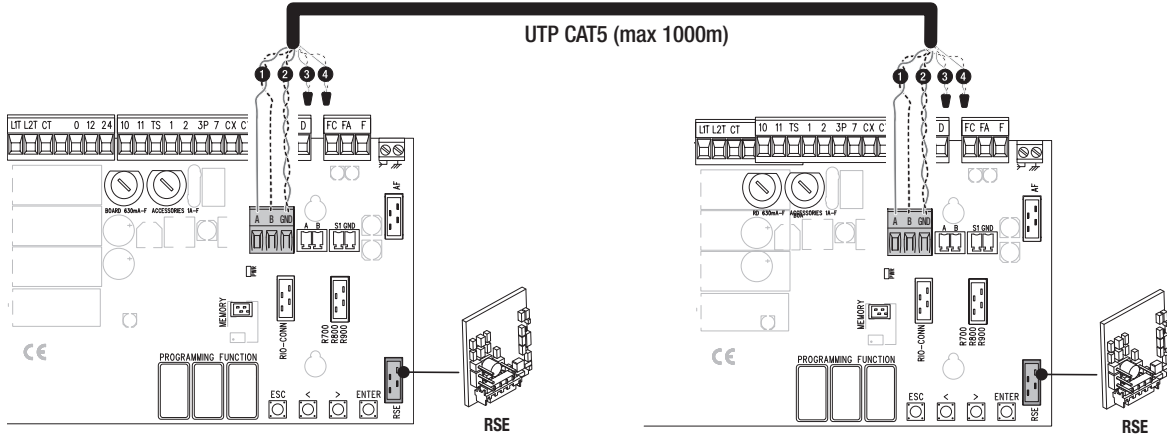
Connect the two electronic boards with a UTP CAT 5 cable.

Insert an RSE card into both control boards.


Connect up the electrics for the devices and accessories.

 The devices and accessories must be connected to the control board which will be set as the MASTER.

 For information on connecting the electrics for the devices and accessories, please see the "ELECTRICAL CONNECTIONS" section.



Programming

 All programming operations described below must be performed only on the control board set as the MASTER.

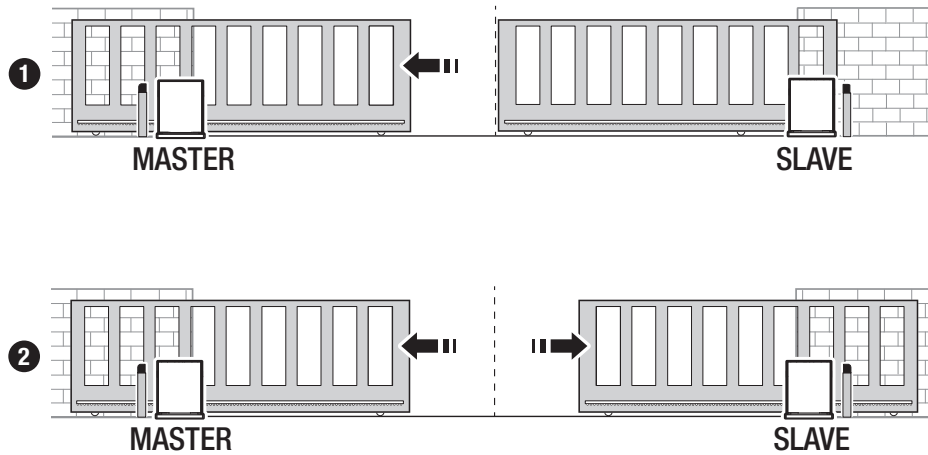
F49	RSE	Configure the function to be performed by the card inserted in the RSE connector.
F54	Opening direction	Set the gate opening direction.
F52	Transferring MASTER-SLAVE parameters	Enable sharing for the parameters programmed on the master gate with the slave gate.
A3	Travel calibration	Start the travel self-learning.

Saving users

 All save user operations must be performed only on the control board set as the MASTER.

Operating modes

- ❶ PARTIAL OPENING command
- ❷ STEP-BY-STEP or OPEN ONLY command




MCBF		
Models	BX704	BX708
14 m - 400 kg	150000	-
14 m - 800 kg	-	150000
Installation in windy area	-15%	-15%


 The percentages indicate how much the number of cycles should be reduced in relation to the type and number of accessories installed.

 Before carrying out any cleaning or maintenance, or replacing any parts, disconnect the device from the power supply.

 This document informs the installer of the checks that must be carried out during maintenance.

 If the system is not used for long periods of time, e.g. for installations at sites with seasonal closures, disconnect the power supply. When the power supply is reconnected, check the system is working correctly.

 For information on correct installation and adjustments, please see the product installation manual.

 For information on choosing products and accessories, please see our product catalogue.

 Every 10,000 cycles and, in any case, every 6 months of operation, you must perform the maintenance work indicated below.

Perform a general and complete check of the tightness of the nuts and bolts.

Grease all of the moving mechanical parts.

Check the warning and safety devices are working properly.

Check for any wear on the moving mechanical parts and check that they are working properly.

Check the release mechanism is working efficiently by performing a manoeuvre with the leaf free. The gate leaf must not be obstructed.

Check the cables are intact and connected correctly.

Check and clean the slide guide and rack.

