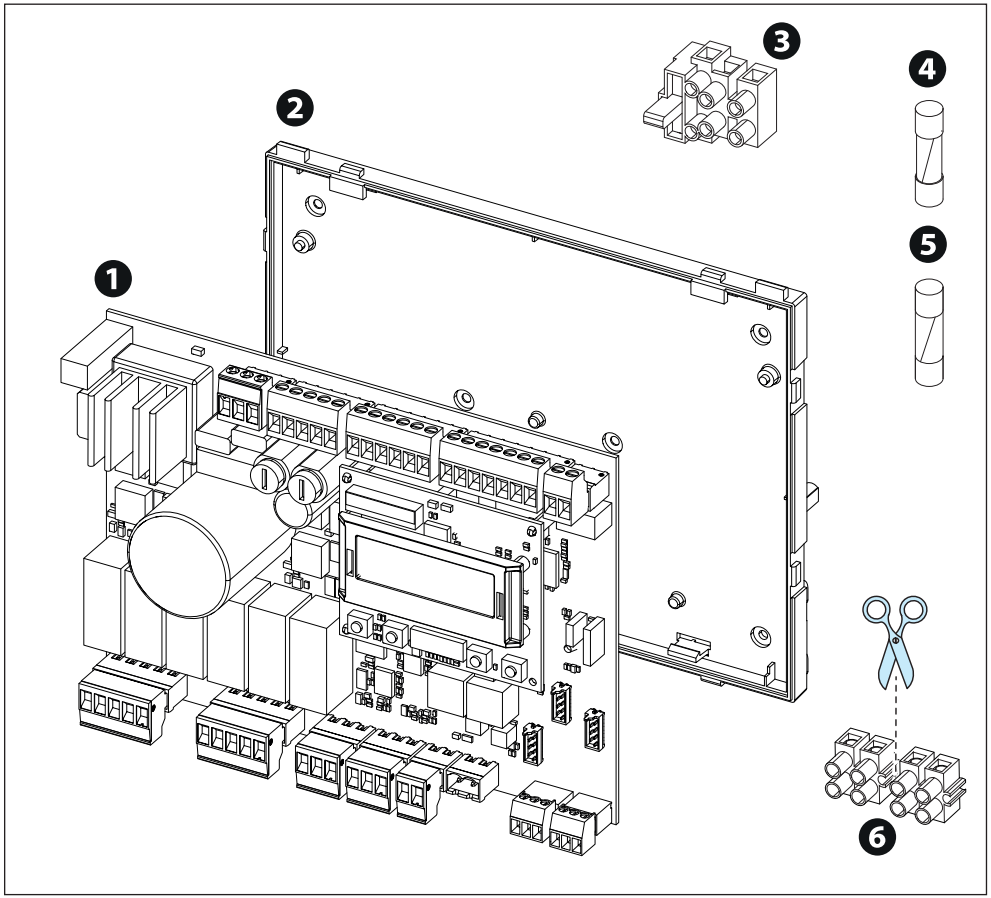
DESCRIPTION OF PARTS

KIT components



1. Control board ZLX24S (801QA-0060 / 801QA-0080)
2. Control board holder
3. Terminal block with fuse compartment
4. Fuse 4 A (line 120 V)
5. Fuse 3.15 A (line 230 V)
6. Two 2-pole terminal blocks

EN English

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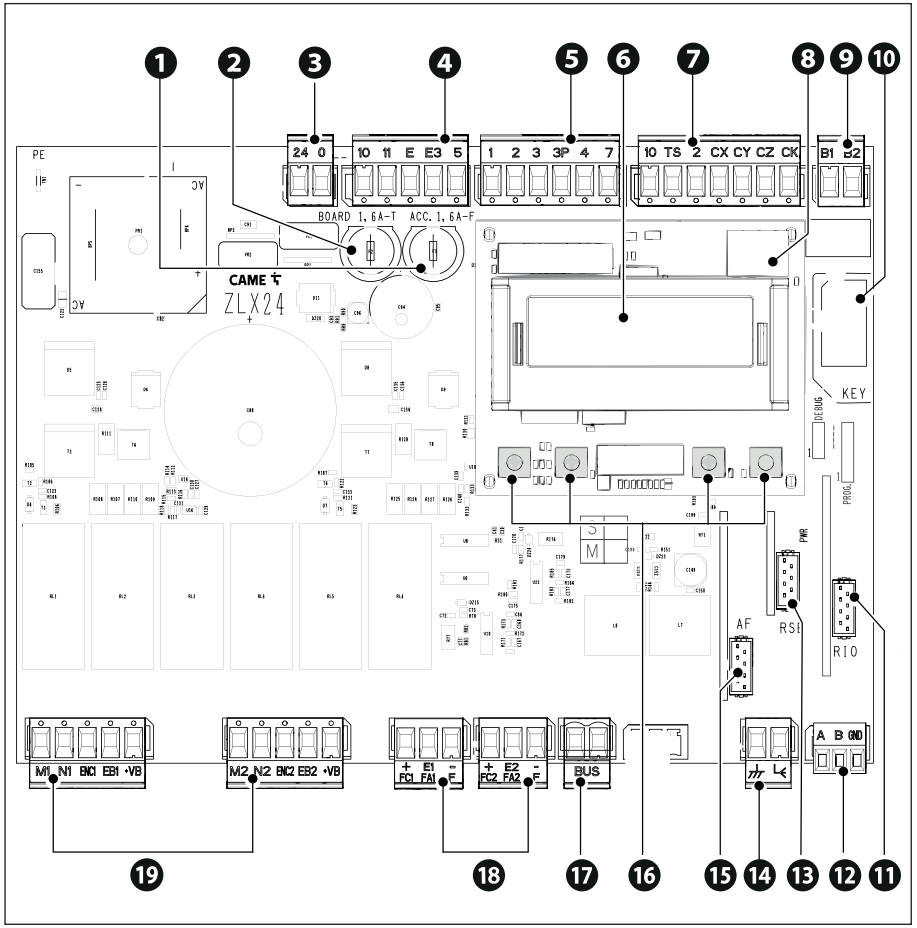
Description of control board components



1. Accessories fuse
2. Control board fuse
3. Terminal board for power supply to the control board
4. Terminal board for connecting the signalling devices
5. Terminal board for connecting control devices
6. Display
7. Terminal board for connecting the safety devices
8. Memory Roll card connector
9. Terminal board for B1-B2 output
10. Connector for CAME KEY*
11. RIO CONN card connector*
12. Terminal board for CRP connection**
13. RSE card connector**
14. Terminal board for connecting the antenna
15. Connector for plug-in radio frequency card (AF)

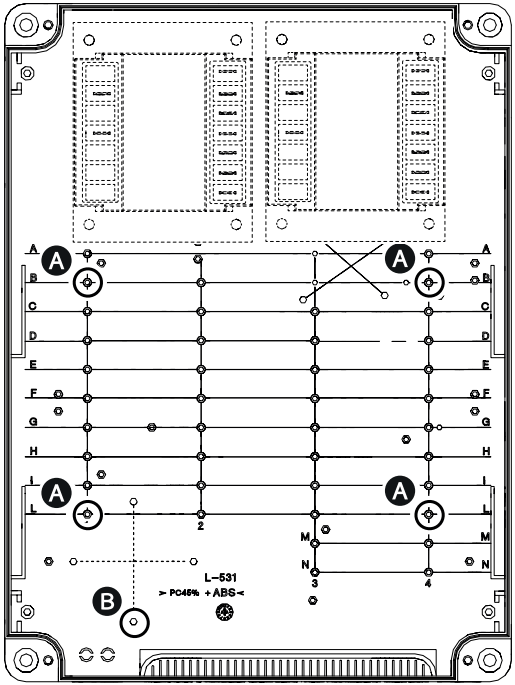
⚠ **Use only AF43S or AF868 with diagram number DIS29101 or above.**

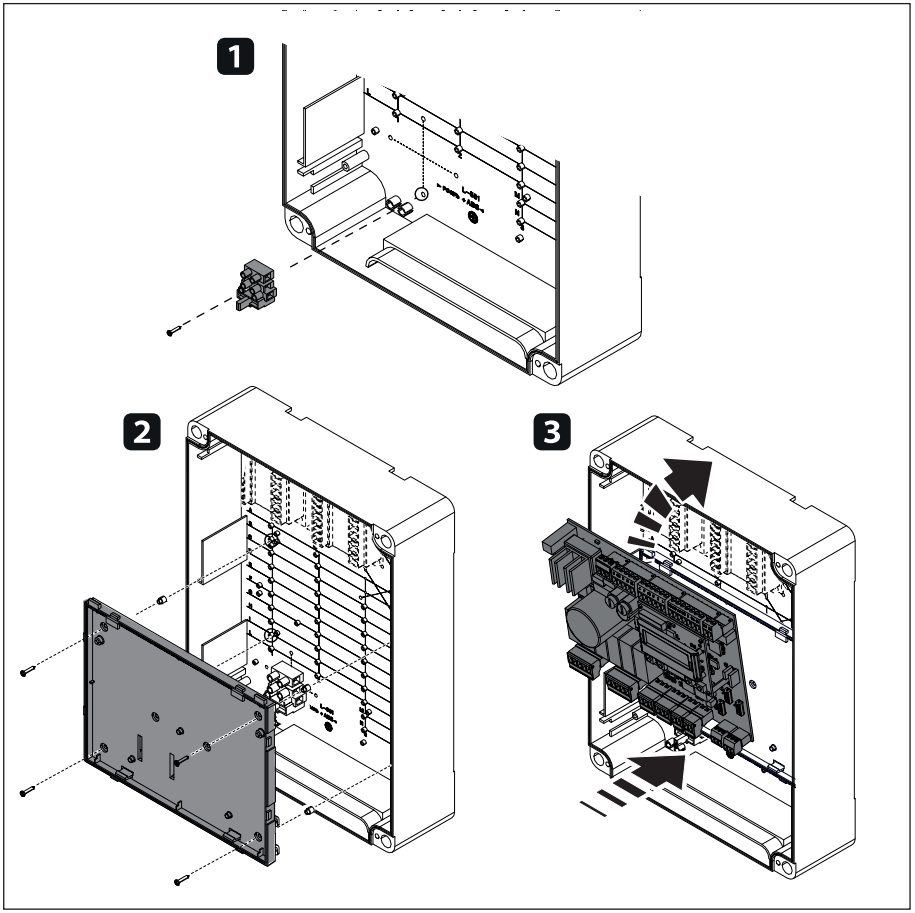
16. Programming buttons
17. Terminal board for BUS devices*
18. Terminal boards for connecting micro limit switches and/or encoders
19. Terminal board for connecting the gearmotor with encoder or with slowdown switch and electric lock

(*) Cannot be used

(**) Not suitable for spare part ZL19N

A Control board support fixing point
B Fuse holder terminal block fixing point
Screws not provided. Reuse the screws in the ZL19N or ZLJ24 control panel.





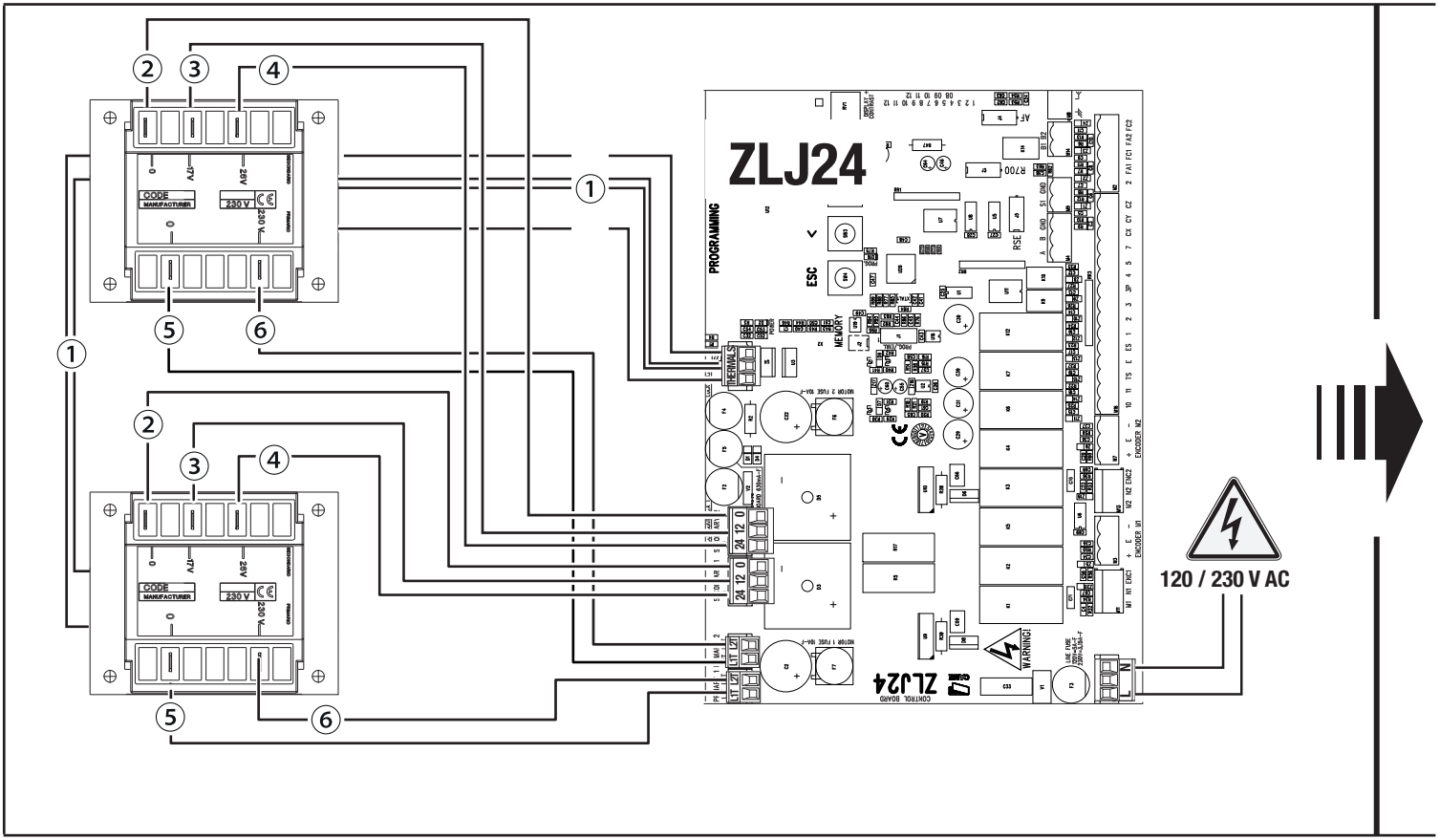
ELECTRICAL CONNECTIONS

⚠ Before working on the control panel, cut off the mains power supply.

⚠ Always insert the line fuse in the terminal block.

ZLJ24 control panel

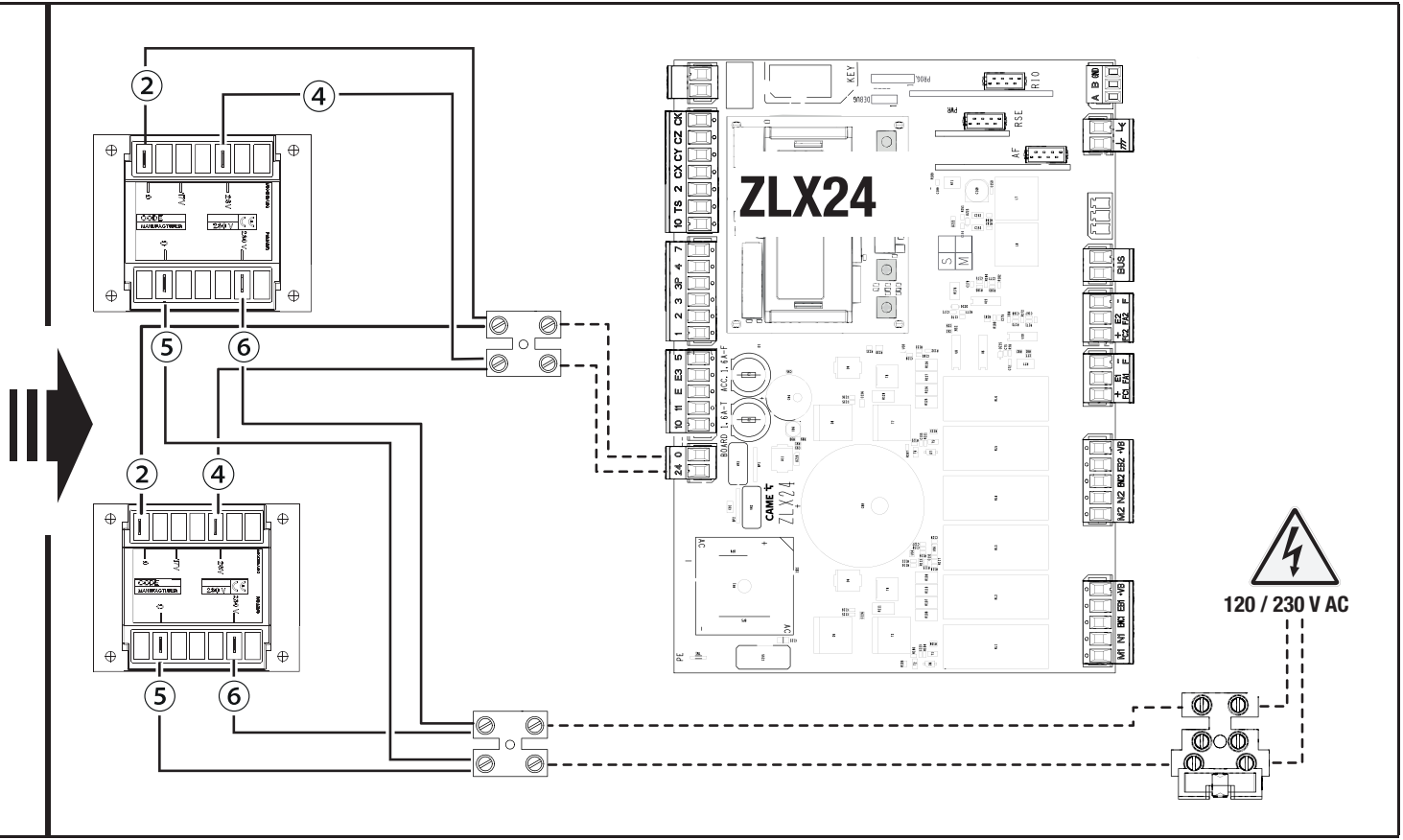
① Blue cable
② White cable
③ Red cable
④ Black cable
⑤ Orange cable
⑥ Purple cable



② White cable
④ Black cable

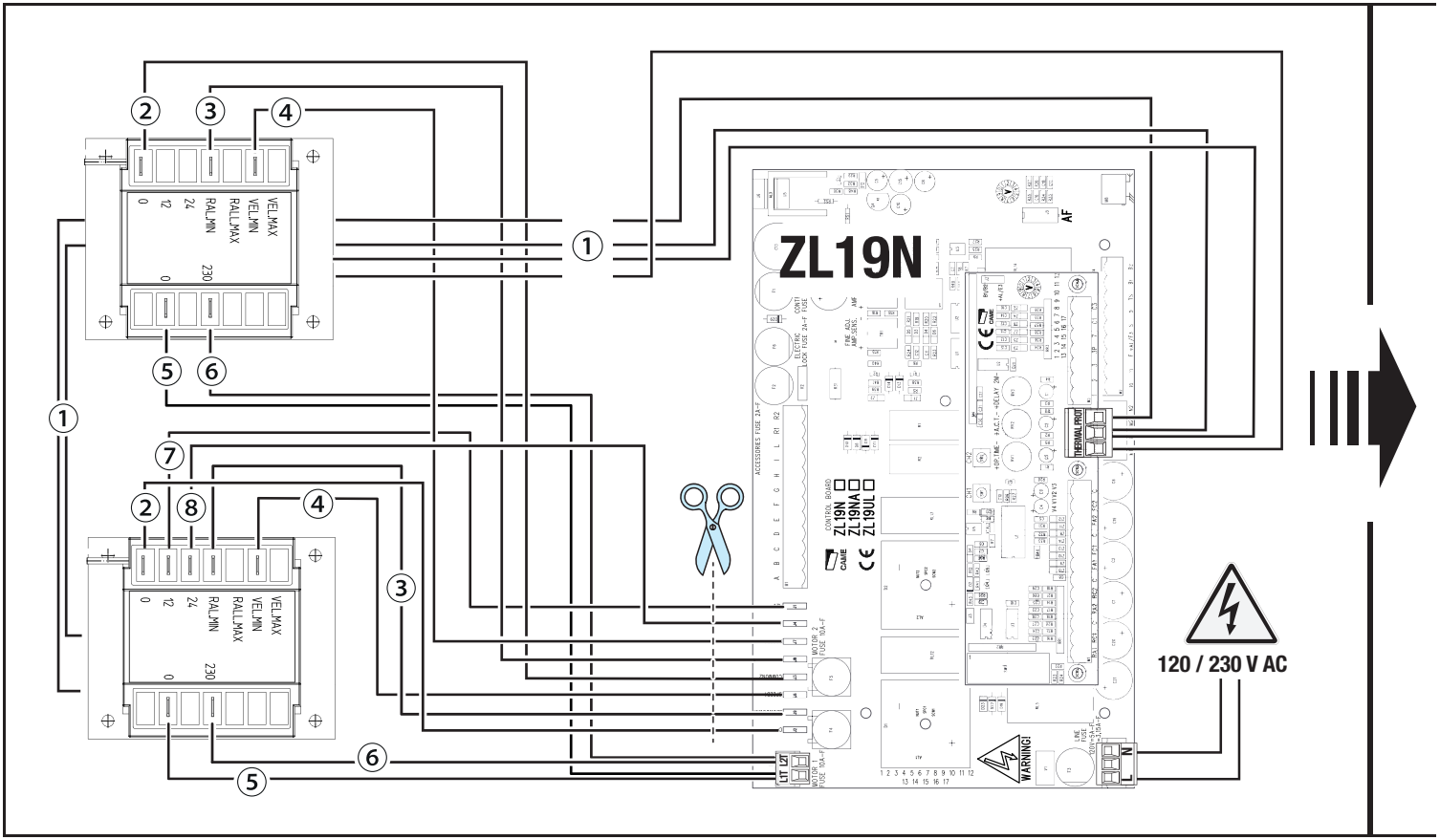
⑤ Orange cable
⑥ Purple cable

▪▪▪▪ Cable not provided



ZL19N control panel

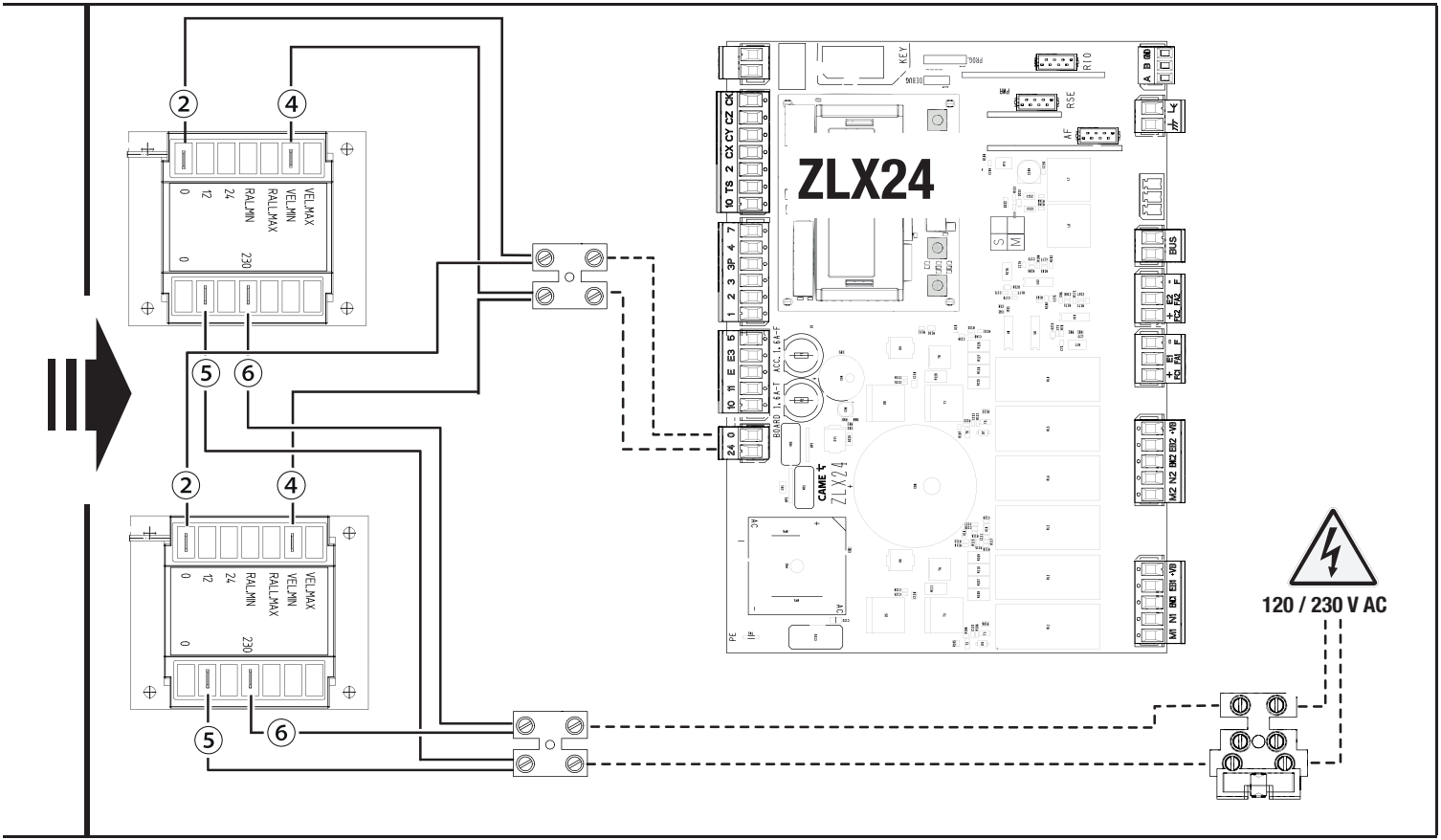
① Blue cable
② White cable
③ Red cable
④ Black cable
⑤ Orange cable
⑥ Purple cable
⑦ Brown cable
⑧ Blue cable



② White cable
④ Black cable

⑤ Orange cable
⑥ Purple cable

▪▪▪▪ Cable not provided



Maximum capacity of contacts

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

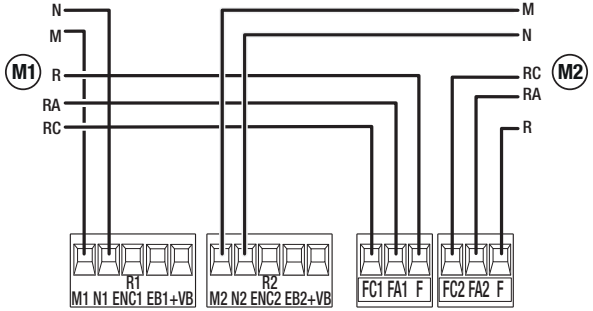
Device	Output	Power supply (V)	Maximum power (W)
Accessories	10 - 11	26 AC	20
Additional light	10 - E3	26 AC	10
Flashing beacon	10 - E	26 AC	10
Operator status warning light	10 - 5	26 AC	3

The outputs deliver 24 V DC when the batteries start operating, if they are installed.

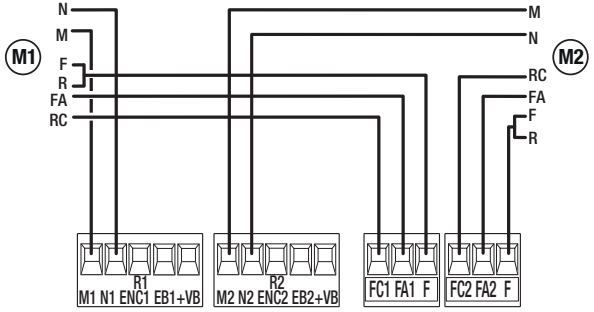
Device	Output	Power supply (V)	Power (W)
Auxiliary contact	B1 - B2	-	24 (24V AC/DC)

Connecting gearmotors without R interface (control board 119RIR267)

Connection with slowdown microswitch



Connection with limit-switch/slowdown microswitch



Set the function [F72 - Limit-switch function] taking into account the chosen connection.

Command and control devices

❶ STOP button (NC contact)

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

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

❷ Control device (NO contact)

OPEN ONLY function

When the [HOLD-TO-RUN] function is active, the control device must be connected during OPENING.

❸ Control device (NO contact)

PARTIAL OPENING or PEDESTRIAN OPENING function

See [Adjusting partial opening] function.

❹ Control device (NO contact)

CLOSE ONLY function

When the [HOLD-TO-RUN] function is active, the control device must be connected during CLOSING.

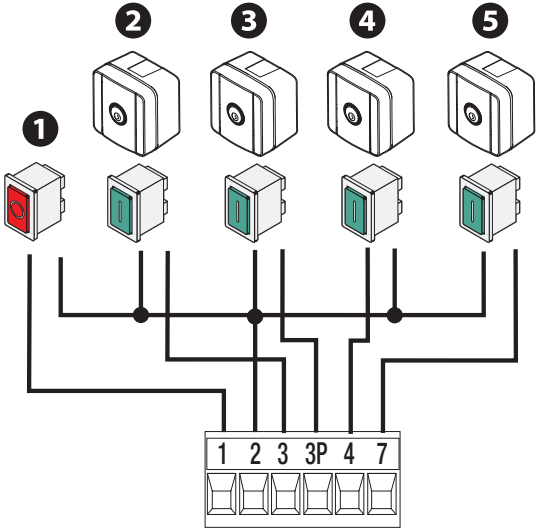
❺ Control device (NO contact)

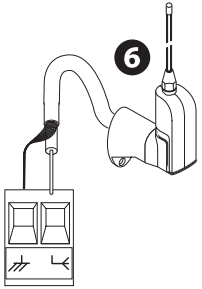
OPEN-CLOSE function

OPEN-STOP-CLOSE-STOP function

See control function 2-7.

❻ Antenna with RG58 cable





Signalling devices

❶ Flashing beacon

It flashes when the operator opens and closes.

❷ Additional light

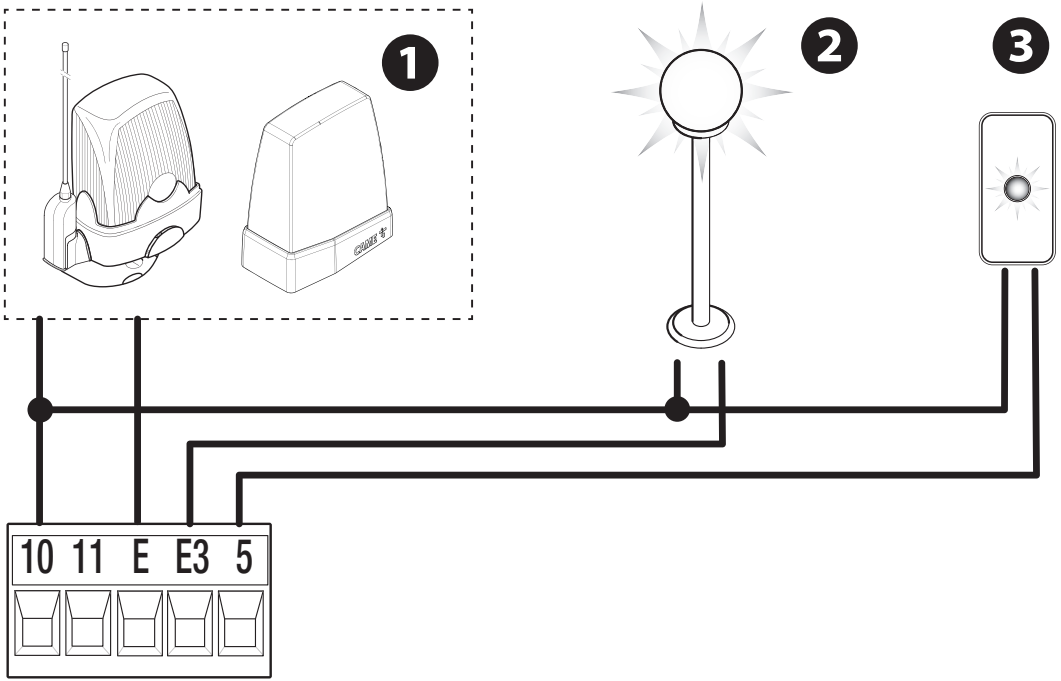
It increases the light in the manoeuvring area.

See [Additional light] function.

❸ Operator status warning light

It notifies the user of the operator status.

See function [Passage-open warning light].



Safety devices

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

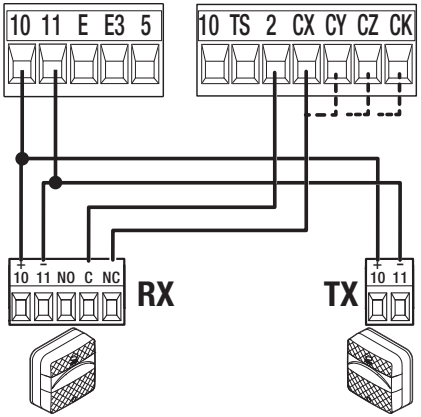
Connect the safety devices to the CX and/or CY and/or CZ and/or CK inputs.

If used, the contacts CX CY CZ CK must be configured during programming.

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

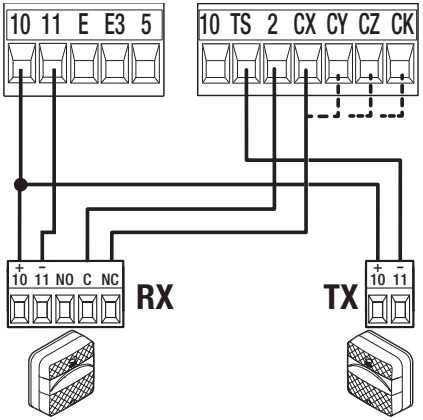
DELTA photocells

Standard connection



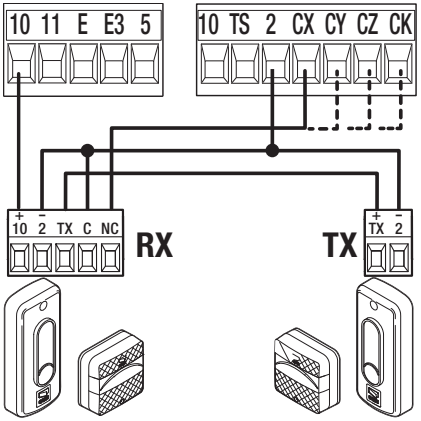
Connection with safety test

See [Safety devices test] function.



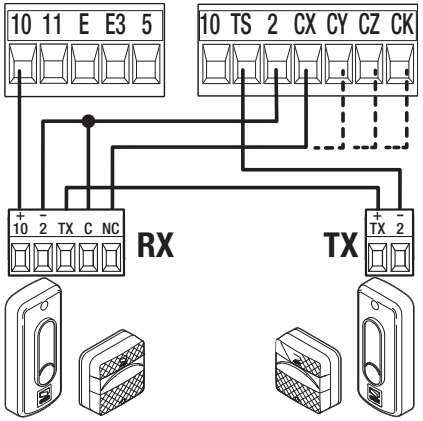
DIR / DELTA-S photocells

Standard connection



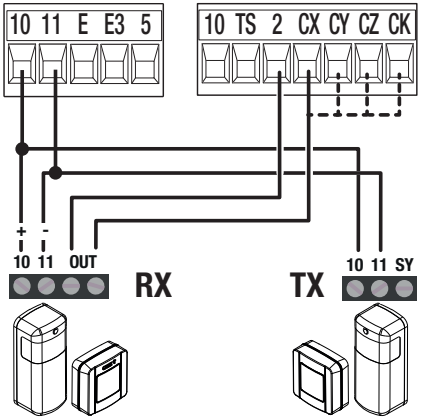
Connection with safety test

See [Safety devices test] function.



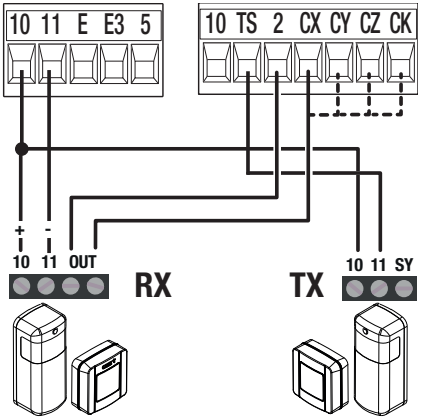
DXR/DLX photocells

Standard connection

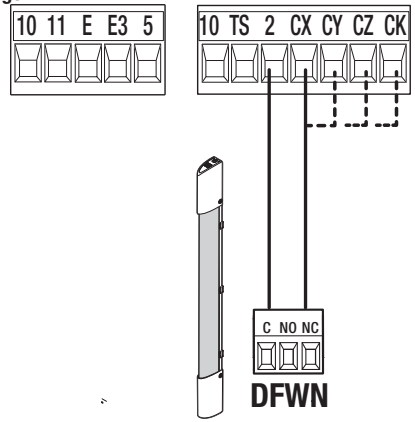


Connection with safety test

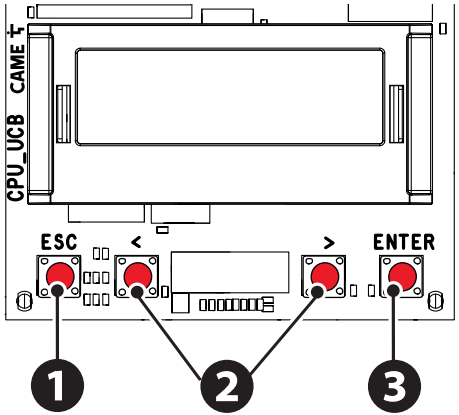
See [Safety devices test] function.



DFWN sensitive edge



Programming button functions



❶ 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

❷ < > buttons

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

❸ ENTER button

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

📖 **Outside the menu, the ESC key stops the gate and the < > keys open and close the gate.**

Getting started

📖 **Once the electrical connections have been made, proceed with commissioning. Only skilled and qualified staff may perform this operation.**
📖 **Please see the full control panel manual for information on the additional functions relating to the encoder, limit switch and slowdown switches.**

Make sure that there are no obstacles in the way.
Power up the device and begin programming.
With mechanical and electronic stops, follow the configuration below.

GENERIC MOTOR

Configuration> Motor settings>

Motor type
Generic

Number of motors

Motor test
The > button opens gate leaf M2
The < button opens gate leaf M1
📖 **Check that both leaves open. If they do not, invert M and N on the relevant terminal.**

Configuration> Wired safety devices>

CX input
CY input
CZ input
CK input

Configuration> Motor settings>

Limit-switch function*
Off
📖 **With the limit switches deactivated, the stop point is defined by mechanical stops on the ground.**
Stop in FA, stop in FC
Slowdown in FA/FC (Default)
Stop in FA, slowdown in FC

Input type FC/FA*
N.O. (Default)
N.C.
N.C. for FA input, N.O. for FC input

Motor power
Minimum power [up to 120W]
Medium power (Default) [up to 200W]
Maximum power [more than 200W]

Travel calibration

*Only with end-of-travel microswitches used.

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

📖 **Complete programming and check the warning and safety devices are working properly.**

📖 **After powering up the system, the first manoeuvre is always to open the gate Wait for the manoeuvre to be completed.**

📖 Press the ESC button or STOP button immediately in the event of any faults, malfunctions, strange noises or vibrations, or unexpected behaviour in the system.

GEARMOTORS WITHOUT R INTERFACE (control board 119RIR267)

Configuration> Motor settings>

Motor type
Generic

Number of motors

Motor test

Configuration> Wired safety devices>

CX input

CY input

CZ input

CK input

Configuration> Motor settings>

Limit-switch function
Slowdown in FA/FC (Default)
📖 Select the parameter if both microswitches are used for slowdown.
Stop in FA, slowdown in FC
📖 Select the parameter if the opening microswitch is used as a limit switch.

Input type FC/FA
N.O. (Default)
📖 Select the parameter if both microswitches are normally open.
N.C. for FA input, N.O. for FC input
Select the parameter if the closing microswitch is normally open and the opening microswitch is normally closed.

Motor power
Minimum power [up to 120W]
Medium power (Default) [up to 200W]
Maximum power [more than 200W]

Configuration> Gate travel settings>

Opening approach space
Closing approach space
Set a value below 5%

Slowdown AST control
Deactivated (Default)

Configuration> Motor settings>

Travel calibration

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

📖 Complete programming and check the warning and safety devices are working properly.

📖 After powering up the system, the first manoeuvre is always to open the gate Wait for the manoeuvre to be completed.

📖 Press the ESC button or STOP button immediately in the event of any faults, malfunctions, strange noises or vibrations, or unexpected behaviour in the system.

Functions menu

Configuration >	Motor settings	**Number of motors**	M1+M2 (Default) M2
Configuration >	Motor settings	**Motor type**	Generic STYLO-ME STYLO-RME FTX FAST-70 AXI AMICO FERNI FERNI-V AXO A3024N/A5024N FROG-A24 FROG-A24E (Default) ATS F1024 F4024E F4024EP
Configuration >	Motor settings	**Encoder**	Activated (Default) Off
Configuration >	Motor settings	**Reduce speed**	Deactivated (Default) 1% to 50%
Configuration >	Motor settings	**Limit-switch function**	Off Stop in FA, stop in FC Slowdown in FA/FC (Default) Stop in FA, slowdown in FC
Configuration >		**Input type FC/FA**	N.O. (Default) N.C. N.C. for FA input, N.O. for FC input
Configuration >	Motor settings	**Motor test**	The > button opens gate leaf M2 The < button opens gate leaf M1
Configuration >	Motor settings	**Travel calibration**	

Configuration >	Motor settings	**Motor power**	Minimum power [up to 120W] Medium power (Default) [up to 200W] Maximum power [more than 200W]	
Configuration >	Motor settings	**Configure motor M1**	Motor type Encoder Limit-switch function Input type FC/FA Motor power	**See the specific parameters for each function.**
Configuration >	Motor settings	**Configure motor M2**	Motor type Encoder Limit-switch function Input type FC/FA Motor power	**See the specific parameters for each function.**
Configuration >	Gate travel settings	**Opening speed**	40% to 100% (Default 70%)	
Configuration >	Gate travel settings	**Closing speed**	40% to 100% (Default 70%)	
Configuration >	Gate travel settings	**Travel AST control**	Deactivated (Default) **Maximum thrust and low obstruction sensitivity.** Minimum Average Maximum* **(*) Minimum thrust and high obstruction sensitivity.**	Customised Customised closing Customised opening
Configuration >	Gate travel settings	**Adjusting the partial opening**	10% to 100% (Default 100%)	
Configuration >	Gate travel settings	**Opening approach space**	0.5% to 25.0% (Default 8.0%)	
Configuration >	Gate travel settings	**Closing approach space**	0.5% to 25.0% (Default 8.0%)	

Configuration >	Gate travel settings	**Opening slowdown point**	Deactivated (Default) 1% to 50%	
Configuration >	Gate travel settings	**Closing slowdown point**	Deactivated (Default) 1% to 50%	
Configuration >	Gate travel settings	**Opening slowdown speed**	10% to 50% (Default 40%)	
Configuration >	Gate travel settings	**Closing slowdown speed**	10% to 50% (Default 40%)	
Configuration >	Gate travel settings	**Slowdown AST control**	Deactivated (Default) 📖 **Maximum thrust and low obstruction sensitivity.** Minimum Average Maximum* **(*) Minimum thrust and high obstruction sensitivity.**	Customised Customised closing Customised opening
Configuration >	Gate travel settings	**Impact test**	Activate test mode Deactivate test mode	
Configuration >	Gate travel settings	**Configure travel M1**	Opening speed Closing speed Opening approach space Closing approach space Opening slowdown point Closing slowdown point Opening slowdown speed Closing slowdown speed	📖 **See the specific parameters for each function.**

Configuration >	Gate travel settings	**Configure travel M2**	Opening speed Closing speed Opening approach space Closing approach space Opening slowdown point Closing slowdown point Opening slowdown speed Closing slowdown speed	🕮 **See the specific parameters for each function.**

Configuration >	Wired safety devices	**Total stop**	Deactivated (Default) On

Configuration >	Wired safety devices	**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 stop 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) = Reopen while closing (pair of sensitive edges with 8K2 resistor)

Configuration >	Wired safety devices	**Safety devices test**	Deactivated (Default) CX _ _ _ _ CY _ _ CX CY _ _ _ _ CZ _ CX _ CZ _ _ CY CZ _ CX CY CZ _ _ _ _ CK	CX CY CZ _ _ _ _ CK CX _ _ CK _ CY _ CK CX CY _ CK _ _ CZ CK CX _ CZ CK _ CY CZ CK CX CY CZ CK

Configuration >	Command inputs	**Command 2-7**	Step-by-step (Default) Sequential	
Configuration >	Functions	**Electric lock**	Deactivated (Default) From open From closed	From open and closed Continue
Configuration >	Functions	**Closing thrust**	Deactivated (Default) Minimum Medium Maximum	
Configuration >	Functions	**Thrust**	Deactivated (Default) On	
Configuration >	Functions	**Removing obstacles**	Deactivated (Default) On	
Configuration >	Functions	**B1-B2 output**	Bistable Monostable: on from 1 to 180 seconds (Default 1)	
Configuration >	Functions	**Hold-to-run**	Deactivated (Default) On	
Configuration >	Times	**Automatic closure**	Deactivated (Default) From 1 to 180 seconds	
Configuration >	Times	**Automatic closing after either partial or pedestrian opening**	Off 1 to 180 seconds (Default 10)	
Configuration >	Times	**M1 opening delay time**	Off 1 to 10 seconds (Default 2)	
Configuration >	Times	**M2 closing delay time**	Off 1 to 25 seconds (Default 2)	

Configuration >	Manage lights	**Passage-open warning light**	Warning light on (Default) - The warning light stays on when the gate is moving or open. Warning light flashing - The warning light flashes every half second when the gate is opening and stays on when the gate is open. The light flashes every second when the gate is closing, and remains off when the gate is closed.	
Configuration >	Manage lights	**Additional light**	Disabled (Default) 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 function [Courtesy time].	
Configuration >	Manage lights	**Courtesy time**	60 to 180 seconds (Default 60 seconds)	
Configuration >	Manage lights	**Pre-flashing time**	Deactivated (Default) 1 to 10 seconds	
Configuration >	RSE communication	**CRP address**	1 to 254 (Default 1)	
Configuration >	RSE communication	**RSE speed**	4800 bps 9600 bps 14400 bps 19200 bps	38400 bps (Default) 57600 bps 115200 bps
Configuration >	External memory	**Save data**		
Configuration >	External memory	**Read data**		
Configuration		**Parameter reset**	Confirm? NO Confirm? YES	
Configuration		**Guided procedure (Wizard)**		
Manage users		**New user**	Step-by-step Sequential Open	Partial opening B1-B2 output

Manage users	**Remove user**	Use the arrows to choose the number associated with the user you want to remove. Confirm? NO Confirm? YES	
Manage users	**Remove all**	Confirm? NO Confirm? YES	
Manage users	**Radio decoding**	All decoding (Default) Rolling code TW Key block	Confirm? NO Confirm? YES
Manage users	**Self-Learning Rolling**	Deactivated (Default) On	
Manage users	**Change mode**	Step-by-step Sequential Open Partial opening B1-B2 output	Confirm? NO Confirm? YES
Information	**FW version**	FW MC.x.x.xx (motor board firmware version) FW UI.x.x.xx (display board firmware version) GUI x.x (graphics)	
Information	**Manoeuvre counter**	Total manoeuvres Manoeuvres performed since the operator was installed. Partial manoeuvres Manoeuvres carried out after the last maintenance.	
Information	**Configure maintenance**	Deactivated (Default) 1X100 to 500X100	
Information	**Maintenance reset**	Confirm? NO Confirm? YES	

Information	**Errors list**	Confirm? NO Confirm? YES		
Timer management	**Show clock**			
Timer management	**Set the clock**	Use the arrows and the Enter button to enter the desired values.		
Timer management	**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).		
Timer management	**Time format**	24-hour 12-hour		
Timer management	**Create new timer**	Open Partial opening B1-B2 output	Start time End time	Days of the week Select days All week
Timer management	**Remove timer**	0 = [Opening] P = [Partial opening] B = [Output B1-B2]		
	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)
Password	**Enable password**	Use the arrows and the Enter button to dial the desired code.		
Password	**Remove password**	Confirm? NO Confirm? YES		

Password	**Change password**	Use the arrows and the Enter button to dial the desired code.

Forgotten password

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

Factory reset

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.

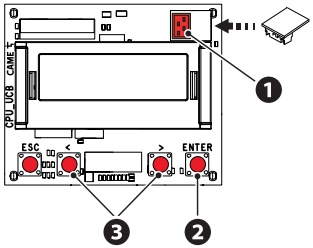
Continue to press and hold the < > buttons until [Factory reset] is displayed.

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.**

Import/export data



Save user data and system configuration data on a MEMORY ROLL card.

The stored data can be reused for another control board of the same type to carry across the same configuration.

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

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

❷ Press the "Enter" button to access programming.

❸ Use the arrows to choose the desired function.

Configuration > External memory > **Save data**

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

Configuration > External memory > **Read data**

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

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

ERROR MESSAGES

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

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