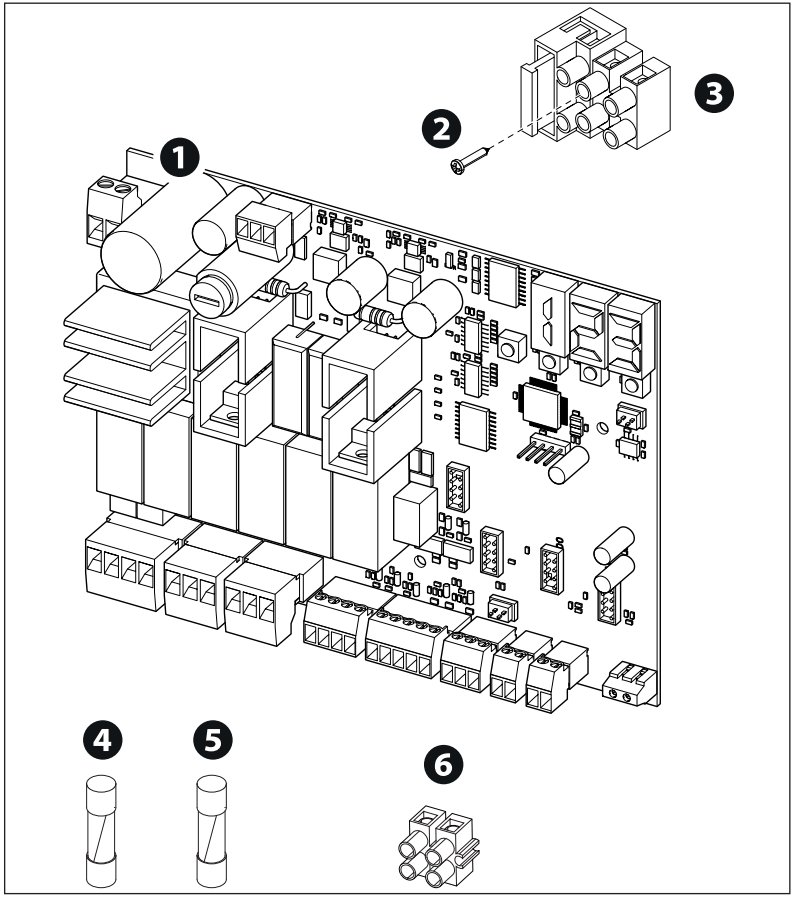
DESCRIPTION OF PARTS

KIT components



1. Control board ZL65 (002ZL65)
2. Fastening screw 2.9x16
3. Terminal block with fuse compartment
4. Fuse 2 A F (lien 230 V)
5. Fuse 5 A F (line 120 V)
6. 2-pole terminal block

EN English

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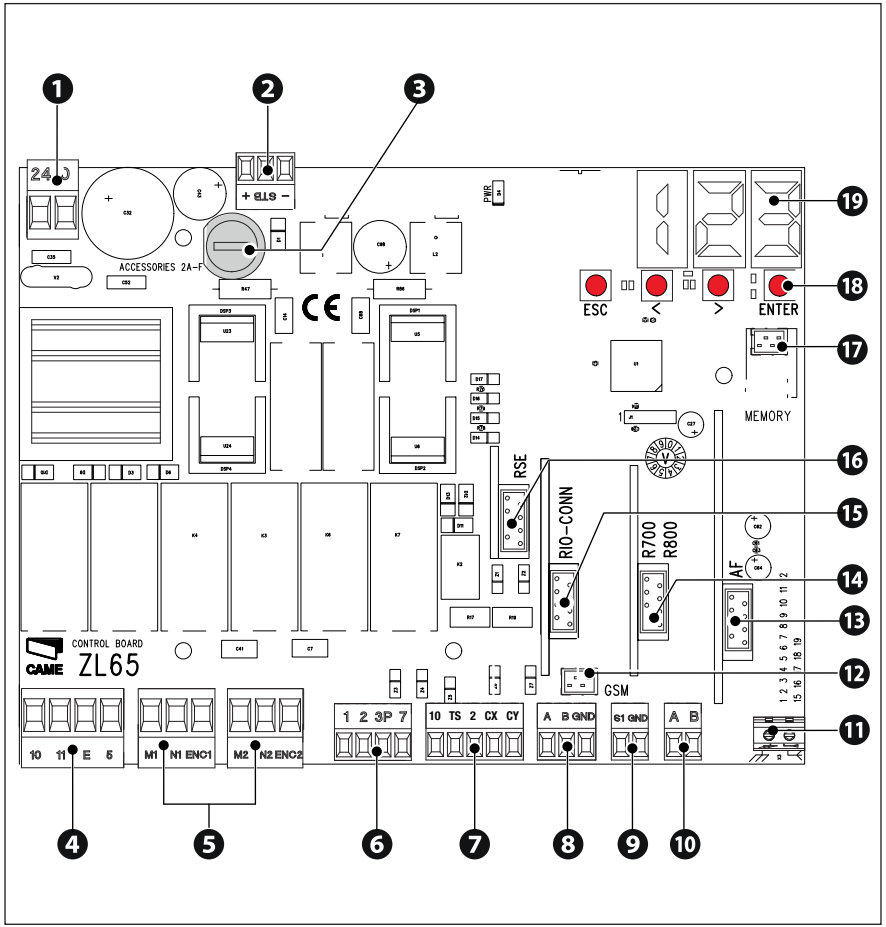
Description of control board components



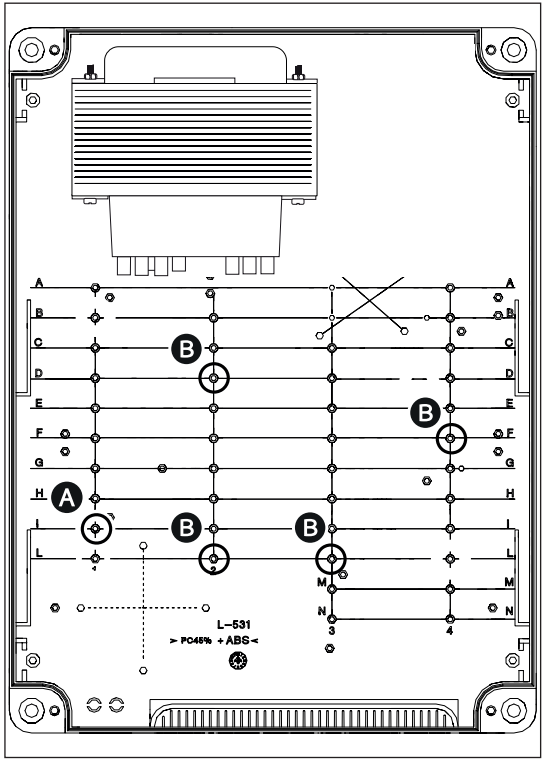
1. Terminal board for power supply to the control board
2. Terminal board for connecting the RGP1 module
3. Accessories fuse
4. Terminal board for connecting the signalling devices
5. Terminal boards for gearmotors with encoder
6. Terminal board for connecting control devices
7. Terminal board for connecting the safety devices
8. Terminal board for CRP connection
9. Terminal board for connecting the transponder selector switch
10. Terminal board for connecting the keypad selector
11. Terminal board for connecting the antenna
12. Connector for the UR042 module
13. Connector for plug-in radio frequency card (AF)
14. Connector for the R700 or R800 decoding card
15. RIO CONN card connector
16. RSE card connector
17. Memory Roll card connector
18. Programming buttons
19. Display

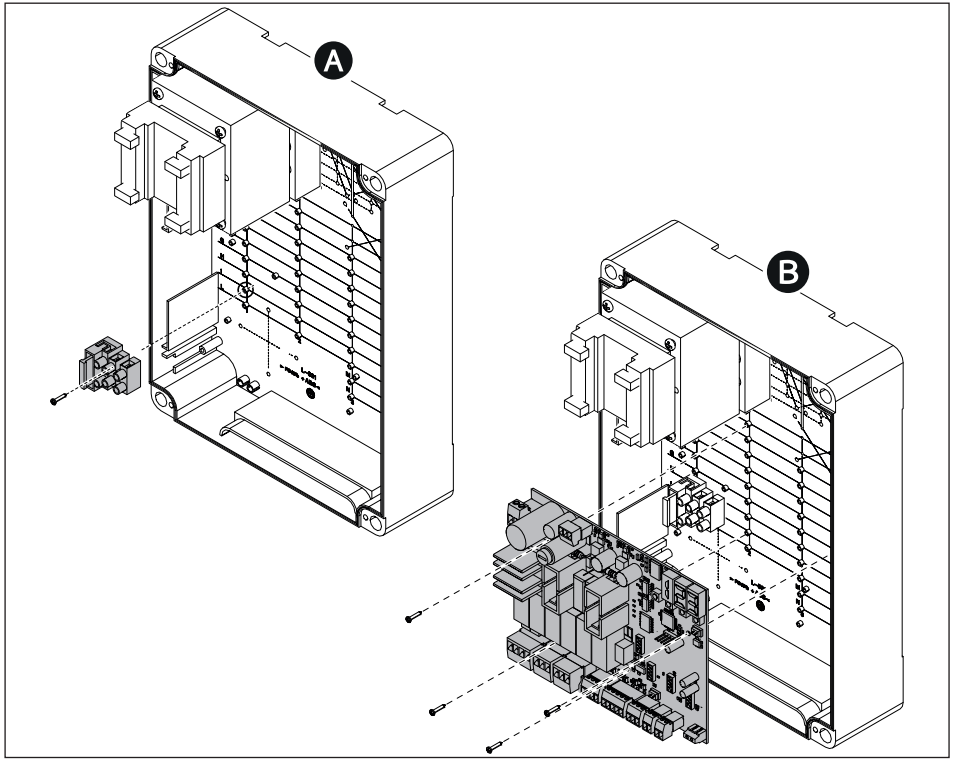
INSTALLATION

Ⓐ Fuse holder terminal block fixing point

Ⓑ Control board support fixing point

📖 **Screws not provided. To fix the ZL65, use the screws in the ZL180 control panel.**



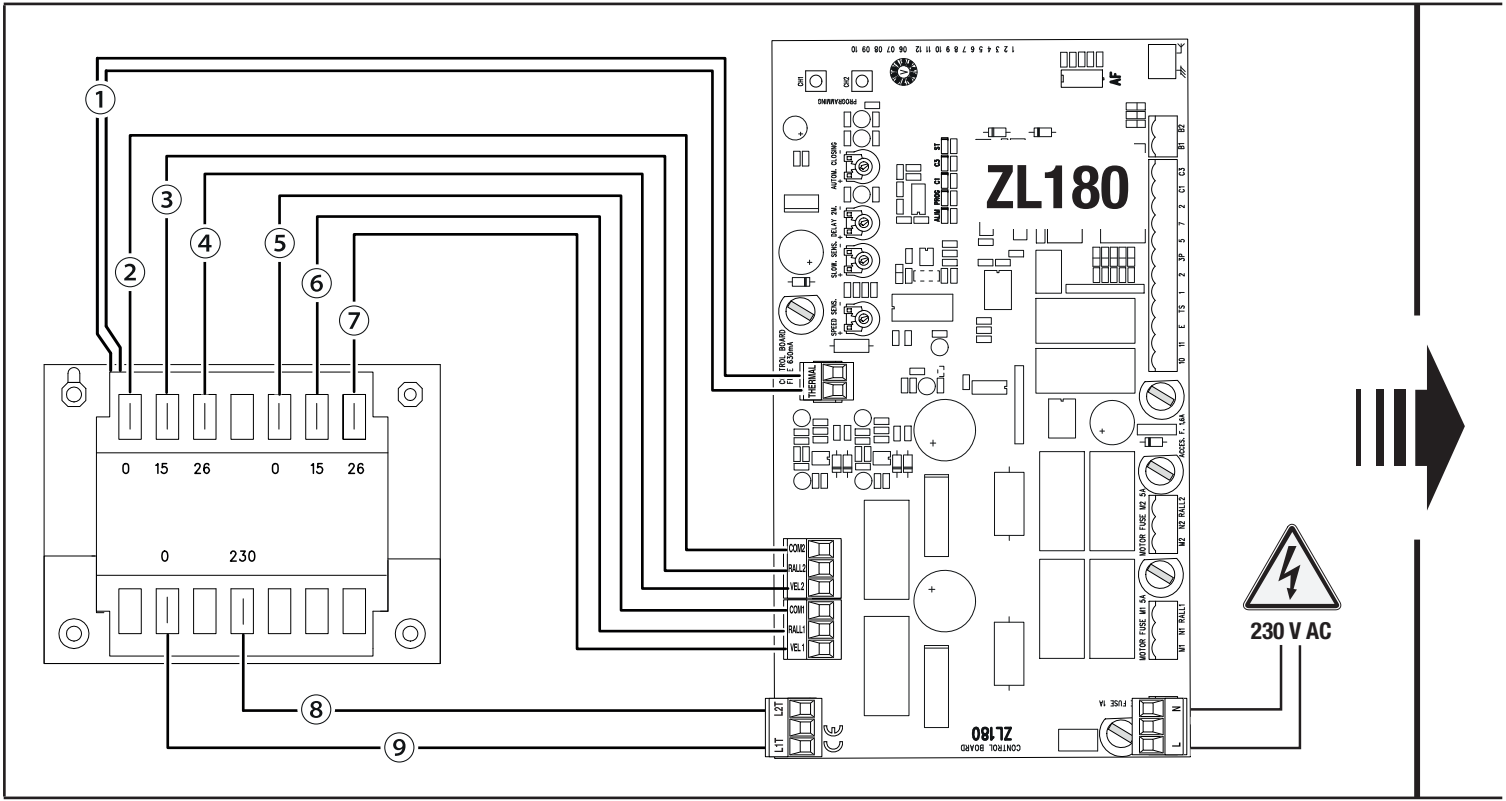


ELECTRICAL CONNECTIONS

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

⚠ **Always insert the line fuse in the terminal block.**

① Yellow cable
② Red cable
③ Blue cable
④ Brown cable
⑤ Purple cable
⑥ Grey cable
⑦ Orange cable
⑧ Black cable
⑨ White cable

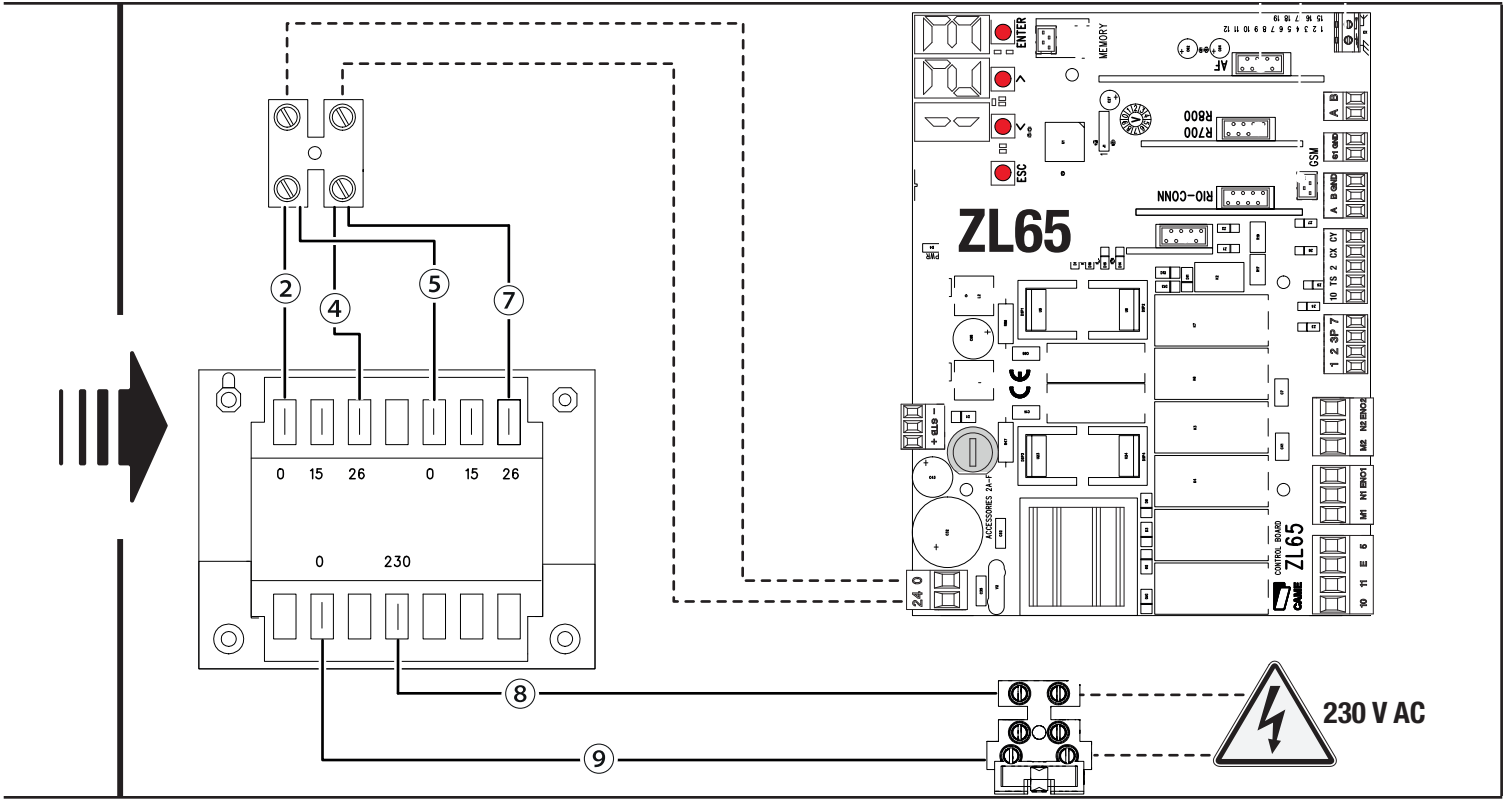


② Red cable
④ Brown cable

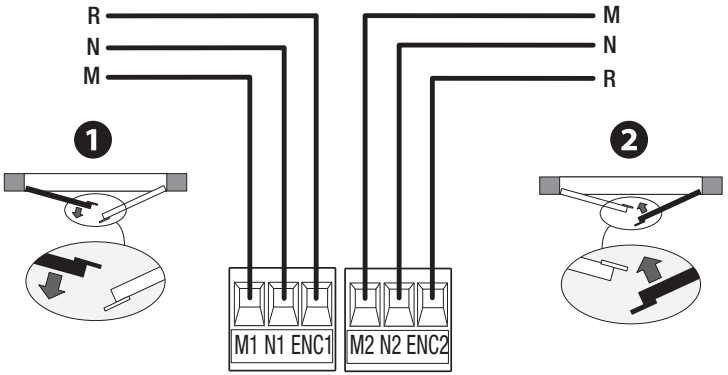
⑤ Purple cable
⑦ Orange cable

⑧ Black cable
⑨ White cable

▬▬ Cable not provided

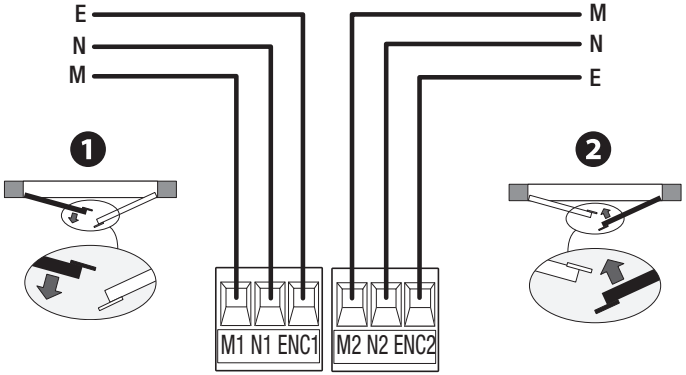


Gearmotor without encoder



❶ Gearmotor delayed while opening

Gear motor with encoder



❷ Gearmotor delayed while closing

Connecting accessories

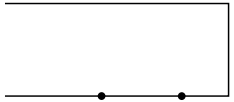
Maximum capacity of contacts

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	24 AC/DC	25
Flashing beacon	10 - E	24 AC/DC	25
Operator status warning light	10 - 5	24 AC/DC	3

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

1
2

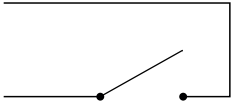


STOP button (NC contact)

See the [F1 – Total stop] function.

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

2
3P



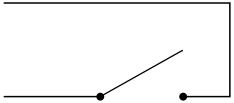
Control device (NO contact)

Open command

Partial Opening or Pedestrian command

See the [F8 – 2-3P command] function.

2
7



Control device (NO contact)

Step-by-step command

Sequential command

Open command

Close command

See function [F7 - 2-7 command].

S1
GND

Card reader • Transponder selector switch

Insert the R700 card into the corresponding connector.

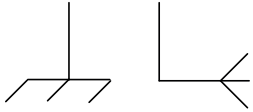
See function [F14 Sensor type].

A
B

Keypad selector

Insert the R800 card into the corresponding connector.

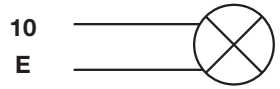
See function [F14 Sensor type].



Antenna with RG58 cable

If the chosen signalling device can be fitted with an antenna, use the terminal shown to connect it.

Signalling devices



Flashing beacon

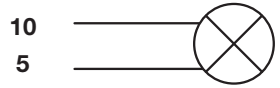
It flashes when the operator opens and closes.

See function [F18 - Additional light].

Additional light

It increases the light in the manoeuvring area.

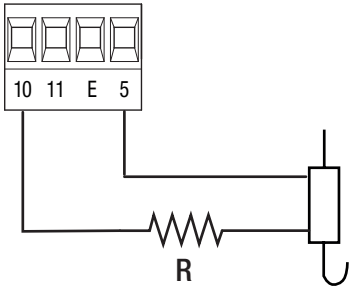
See function [F18 - Additional light].



Operator status warning light (Passage-open warning light)

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

Electric lock 12 V - 15 W max



R - Resistance 6.8 Ω - 7 W

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

See function [F10 - 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 inputs.

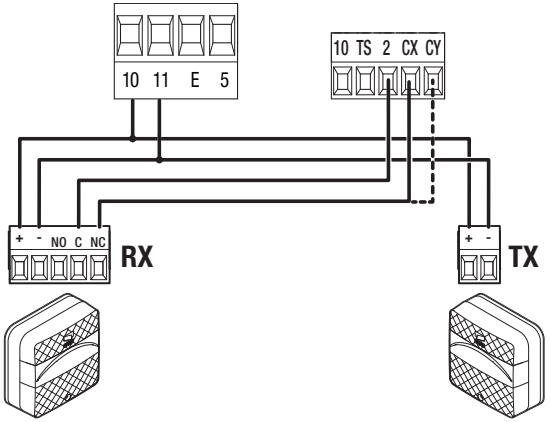
📖 **If used, the contacts C1 CX CK must be configured during programming.**

📖 **See functions: [F2 - CX input] [F3 - CY input].**

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

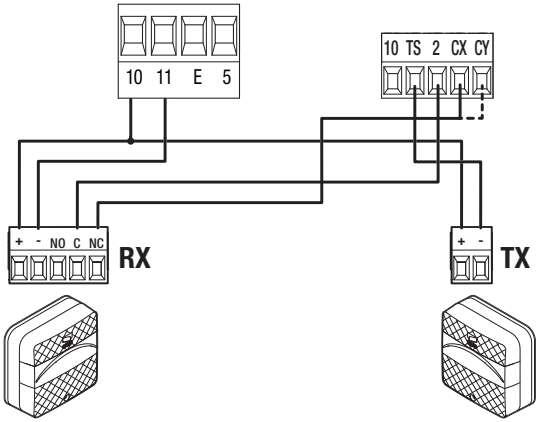
DELTA photocells

Standard connection



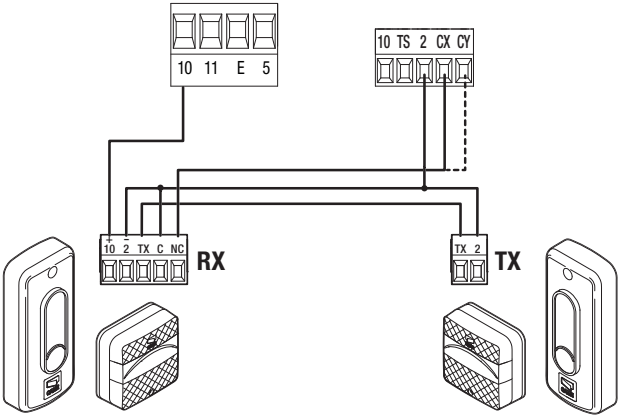
Connection with safety test

📖 **See function [F5 – Safety devices test].**



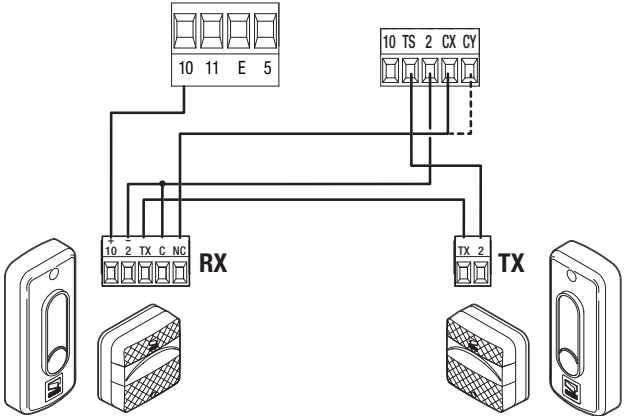
DIR / DELTA-S photocells

Standard connection



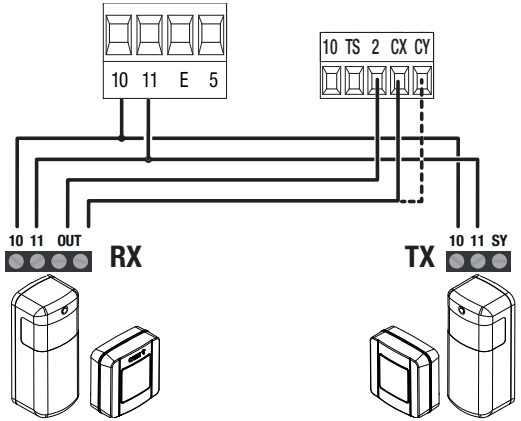
Connection with safety test

See function [F5 – Safety devices test].



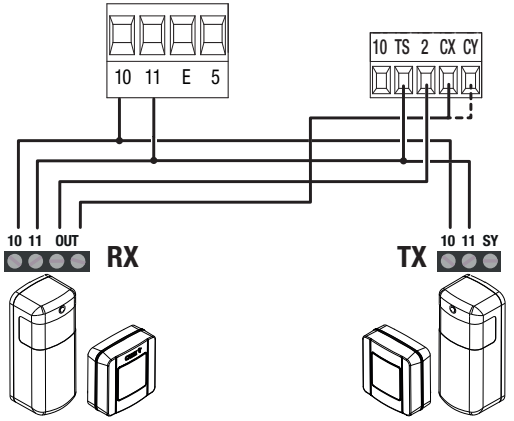
DXR/DLX photocells

Standard connection

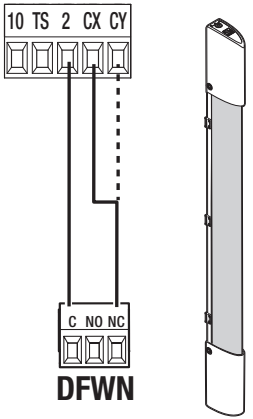


Connection with safety test

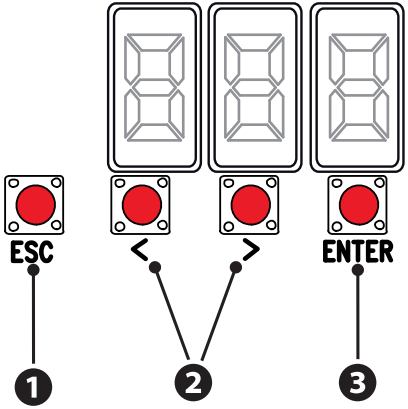
See function [F5 – Safety devices test].



DFWN sensitive edge



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

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

📖 **During movement, 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.

Make sure that there are no obstacles in the way.

Start programming with the functions indicated below.

A1 Motor type

F46 Number of motors

A3 Travel calibration

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

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

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

Functions menu

Function		Parameters	Function description
F1	**Total stop**	OFF (Default) ON	Activate or deactivate input 2-1. If it is activated, the input is used as a normally closed contact. **With the input open, this function excludes all commands, including any automatic closing.**
F2 **F3**	**CX input** **CY input**	OFF (Default) C1 = Reopen while closing (photocells) C2 = Reclose while opening (photocells) C3 = Partial stop Only with [F19 - Automatic close] activated. C4 = Obstacle standby (photocells) C7 = Reopen while closing (sensitive edges) C8 = Reclose while opening (sensitive edges)	Associate a function with the CX (F2) and CY (F3) input.

F5	**Safety devices test**	OFF (Default) 1 = CX 2 = CY 4 = CX+CY	Check that the photocells connected to the selected inputs are operating correctly, after each opening and closing command. 📖 **Run the test by connecting the photocells to the TS terminal [see paragraph on Safety devices].**
F6	**Hold-to-run**	OFF (Default) ON	With the function active, the operator stops moving (opening or closing) when the control device is released. 📖 **When the function is active, it excludes all other control devices.**
F7	**Command 2-7**	0 = Step-by-step (default) - The first command is to open and the second to close. 1 = Sequential - The first command is to open, the second to STOP, the third to close and the fourth to STOP. 2 = Open 3 = Close	Associate a command to the connected device on 2-7.
F8	**Command 2-3P**	0 = Pedestrian opening (Default) Complete opening of M2 only. 1 = Partial opening Partial opening of M2 only. 📖 **The M2 opening degree is set as a percentage, with the function [F36 Partial opening adjustment]** 2 = Open	Associate a command to the connected device on 2-3P.
F9	**Obstacle with motor stopped**	OFF (Default) ON	With the function active, the operator remains stopped if the safety devices detect an obstacle. The function is active when the gate is closed, open or after a complete stop.

F10	**Passage-open warning light**	0 = Warning light on (default) - The warning light stays on when the gate is moving or open. 1 = 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. 2 = The output enables an electric lock.	It signals the gate status or enables the electric lock.
F11	**Encoder**	ON (Default) OFF 📖 **If parameter [5 = ATI - F7204N] is selected under the function [A1 - Motor type], the encoder is set to OFF by default.**	Manage operator slowdowns, obstacle detection and sensitivity.
F12	**Soft start**	OFF (Default) ON	Set a slowdown of a few seconds after each opening and closing command.
F13	**Closing thrust**	OFF (Default) 1 = Minimum thrust 2 = Medium thrust 3 = Maximum thrust	When the leaves reach the closing limit-switch, the operator thrusts them towards the strike plate for a second.
F14	**Sensor type**	1 = Keypad selector (default) 0 = Transponder selector or magnetic card reader	Choose the type of control device.
F16	**Thrust**	OFF (Default) ON	Before every opening or closing manoeuvre, the leaves thrust inwards to release the electric lock.
F18	**Additional light**	0 =Flashing beacon (Default) 1 = Cycle light - The lamp stays on during the manoeuvre. 📖 **The parameter only appears if an automatic closing time is set [F19 - Automatic closing].**	Choose the operating mode of the lighting device connected to output 10-E.

F19	**Automatic closure**	OFF (Default) From 1 to 180 seconds	Set the time before automatic closure, once the opening travel end point has been reached or once the photocells have caused a partial stop [C3]. 📖 **The function does not work if any of the safety devices are triggered when an obstacle is detected, after a complete stop, during a power outage or if there is an error.**
F20	**Automatic closing after either partial or pedestrian opening**	OFF 1 to 180 seconds (Default 10)	Set the time before automatic closure after a partial opening command has been performed or after the photocells have caused a partial stop [C3]. 📖 **The function does not work if any of the safety devices are triggered when an obstacle is detected, after a complete stop, during a power outage or if there is an error.**
F21	**Pre-flashing time**	OFF (Default) 1 to 10 seconds	Adjust the time for which the beacon is activated before each manoeuvre.
F22	**Operating time**	5 to 180 seconds (Default 120)	Set the gearmotor working time during opening and closing.
F23	**M1 opening delay time**	OFF 1 to 10 seconds (Default 2)	Adjust the delayed opening of the first leaf compared to the second.
F24	**M2 closing delay time**	OFF 0 to 25 seconds (Default 5)	Adjust the delayed closing of the second leaf compared to the first.
F26	**Thrust time**	1 to 2 seconds (Default 1)	Adjust the gearmotor closing thrust after an opening and closing command.
F27	**Electric lock time**	1 to 4 seconds (Default 1)	Adjust the electric lock release time after an opening and closing command.
F28	**Gate travel speed**	40% to 100% (Default 100%)	Set the travel speed (percentage of maximum speed).
F30	**Slowdown speed**	15% to 60% (Default 50%)	Set the slowdown speed (percentage of maximum speed).
F33	**Calibration speed**	From 20% to 60% (Default 50%)	Set the speed during travel self-learning (percentage of maximum speed).

F34	**Travel sensitivity**	10% to 100% (Default 100%) 10% = minimum thrust and high obstruction sensitivity 100 % =maximum thrust and low obstruction sensitivity	Adjust the obstruction detection sensitivity during the gate travel in percentage terms.
F35	**Slowdown sensitivity**	10% to 100% (Default 100%) 10% = minimum thrust and high obstruction sensitivity 100 % =maximum thrust and low obstruction sensitivity	Adjust the obstruction detection sensitivity during slowdown in percentage terms.
F36	**Adjusting the partial opening**	10% to 80% (Default 40%)	In single-leaf gates, it determines the leaf partial opening percentage with respect to the total travel. In two-leaf gates, it determines the partial opening percentage of the leaf that moves first with respect to the total travel. 📖 **The function will not appear with ATI – F7204N motors [Function A1 set to 5].**
F37	**Opening slowdown point for M1**	1% to 60% (Default 25%)	Set the opening slowdown starting point for M1 (percentage of the total travel). 📖 **The function will not appear with ATI – F7204N motors [Function A1 set to 5].**
F38	**M1 closing slowdown point**	1% to 60% (Default 25%)	Set the closing slowdown starting point for M1 (percentage of the total travel). 📖 **The function will not appear with ATI – F7204N motors [Function A1 set to 5].**
F39	**M1 opening approach point**	1% to 10% (Default 10%)	Set the opening approach starting point for M1 (percentage of the total travel). 📖 **The function will not appear with ATI – F7204N motors [Function A1 set to 5].**
F40	**M1 closing approach point**	1% to 10% (Default 10%)	Set the closing approach starting point for M1 (percentage of the total travel). 📖 **The function will not appear with ATI – F7204N motors [Function A1 set to 5].**

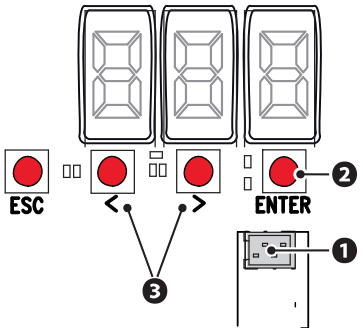
F41	**Opening slowdown point for M2**	1% to 60% (Default 25%)	Set the opening slowdown starting point for M2 (percentage of the total travel). 📖 **The function will not appear with ATI – F7204N motors [Function A1 set to 5].**
F42	**M2 closing slowdown point**	1% to 60% (Default 25%)	Set the closing slowdown starting point for M2 (percentage of the total travel). 📖 **The function will not appear with ATI – F7204N motors [Function A1 set to 5].**
F43	**Opening approach point for M2**	1% to 10% (Default 10%)	Set the opening approach starting point for M2 (percentage of the total travel). 📖 **The function will not appear with ATI – F7204N motors [Function A1 set to 5].**
F44	**Closing approach point for M2**	1% to 10% (Default 10%)	Set the closing approach starting point for M2 (percentage of the total travel). 📖 **The function will not appear with ATI – F7204N motors [Function A1 set to 5].**
F46	**Number of motors**	2 (Default) 1	Set the number of motors that control the gate. 📖 **Value 1 indicates that the M2 motor is being used**
F49	**RSE communication**	OFF 3 = CRP/CAME KEY (Default)	Enable CRP.
F50	**Save data**	OFF ON (Run operation)	Save user data, timings and configurations to the memory device (memory roll). 📖 **The function is displayed only when a memory roll card is inserted into the control board.**
F51	**Read data**	OFF ON (Run operation)	Upload user data, timings and configurations to the memory device (memory roll). 📖 **The function is displayed only when a memory roll card is inserted into the control board.**

F56	**CRP address**	from 1 to 255 (Default 1)	Assign a unique identification code (CRP address) to the control board. 📖 **The function is used where there are multiple operators connected to the same communication BUS using the CRP protocol.**
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	Set the communication speed of the remote connection system.
F65 **F66**	**RIO ED T1** **RIO ED T2**	OFF (Default) P0 = It stops the gate and excludes automatic closing. Use a control device to resume movement. P7 = Reopen while closing. P8 = Reclose while opening.	Associate one of the available functions with a wireless safety device. 📖 **The function only appears if the RIO CONN interface board is present.**
F67 **F68**	**RIO PH T1** **RIO PH T2**	OFF (Default) P1 = Reopen while closing. P2 = Reclose while opening. P3 = Partial stop. Only with [Automatic close] activated. P4 = Obstacle standby.	Associate one of the available functions with a wireless safety device. 📖 **The function only appears if the RIO CONN interface board is present.**
F72	**Limit-switch function**	OFF = Deactivated 2 = Slowdown 3 = Opening limit-switch, closing slowdown (default)	Set the operation of the inputs for slowdown/end-of-travel switches. 📖 **The function only appears for motors configured for this purpose.**

U1	**New user**	1 = Step-by-step - The first command is to open and the second to close. 2 = Sequential - The first command is to open, the second to STOP, the third to close and the fourth to STOP. 3 = Open 4 = Pedestrian/partial opening Choose the function to be assigned to the user. Press ENTER to confirm. The free position in the memory is shown intermittently for a maximum of 10 seconds. During this phase, send the code from the control device. Repeat the procedure to add other users.	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.**
U2	**Remove user**	Use the arrows to change the status from OFF to ON and press ENTER to confirm. Use the arrows to choose the number associated with the user you want to remove. No. 1 > 250 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.**	
U3	**Remove all**	OFF (Cancel operation) ON (Run operation)	Remove all registered users. 📖 **"CLr" will appear to confirm deletion.**
U4	**Radio decoding**	1 = All decoding (default) 2 = Rolling code 3 = TW key block	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.**
A1	**Motor type**	1 = AXI20 - AXI25 2 = FA7024CB 3 = FTX20DGC 4 = ATS 5 = ATI - F7204N	Set the type of gearmotor installed on M1 and M2.

A2	**Motor test**	OFF (Default) ON	Check the gate leaves open in the right direction. With the function active, the > key opens the gate leaf connected to M2, and the < key opens the gate leaf connected to M1. The movement continues while the key is pressed or until the end-of-travel limit switch is reached. When the key is released, the movement stops. 📖 **If the leaf does not move in the correct direction, invert the motor phases.**
A3	**Travel calibration**	OFF (Cancel operation) ON (Run operation)	Start the travel self-learning. 📖 **This function appears only if the [F11 - Encoder] function is active.**
A4	**Parameter reset**	OFF (Cancel operation) ON (Run operation)	Restore the factory configurations except for:[users], [motor type], [number of motors], [CRP address], [RSE speed], [Radio decoding], [limit switch input function].
A5	**Manoeuvre counter**	View the number of operator manoeuvres. 001 = 100 manoeuvres / 010 = 1000 manoeuvres /100 = 10000 manoeuvres / 999 = 99900 manoeuvres / CSt = maintenance job	
H1	**FW version**	Display the firmware 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 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.**

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.

F50 - Save data

F51 - Read data

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

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

ERROR AND WARNING MESSAGES

E1	The travel calibration was interrupted to activate the STOP button.
E2	Adjustment error
E3	Encoder failure error
E4	Service test failure error
E7	Operating time error
E9	Obstacle detected during closing
E10	Obstacle detected during opening
E11	Maximum number of obstacles
E14	Serial communication error
E15	Incompatible remote control
E17	Wireless system communication error
E18	Wireless system not configured error
C0	Wired contact 1-2 (NC) is open
C1, C2, C3, C4	The wired photocell contacts (NC) are open.
C7, C8	The wired sensitive-edge contacts (NC) are open.
P0	The wireless radio stop contact (NC) is open.

P1, P2, P3, P4	The wireless radio photocell contacts (NC) are open.
P7, P8	The wireless radio sensitive-edge contacts (NC) are open.
---	Control board has no travel auto-learning

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