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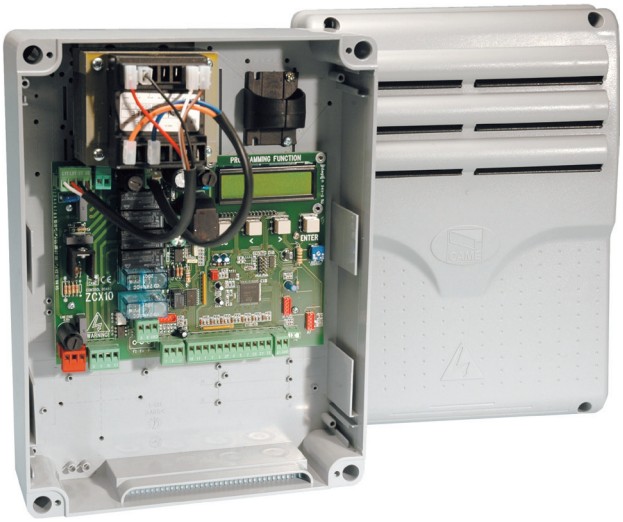
FA01315-EN

Control panel for 24 V gearmotors



ZLJ24
ZLJ24Z

INSTALLATION MANUAL

EN English

GENERAL PRECAUTIONS FOR INSTALLERS

⚠ Important safety instructions.

⚠ Please follow all of these instructions. Improper installation may cause serious bodily harm.

⚠ Before continuing, please also read the general precautions for users.

Only use this product for its intended purpose. Any other use is hazardous. • The manufacturer cannot be held liable for any damage caused by improper, unreasonable or erroneous use. • This product has been designed to be assembled to partly completed machinery and/or equipment so as to build machinery as regulated by the Machinery Directive 2006/42/EC. • The final installation must comply with the Machinery Directive (2006/42/EC) and the European reference standards in force. • The manufacturer declines any liability for using non-original products, which would also void the warranty. • All operations indicated in this manual must be carried out exclusively by skilled and qualified personnel and in full compliance with the regulations in force. • The device must be installed, wired, connected and tested according to good professional practice, in compliance with the standards and laws in force. • Make sure the mains power supply is disconnected during all installation procedures. • All the components (e.g. actuators, photocells and sensitive edges) needed for the final installation to comply with the Machinery Directive (2006/42/EC) and with the reference harmonised technical standards are specified in the general CAME product catalogue or on the website www.came.com. • Check that the temperature ranges given are suitable for the installation site. • Make sure that no direct jets of water can wet the product at the installation site (sprinklers, water cleaners, etc.). • Make sure you have set up a suitable dual-pole cut-off device along the power supply that is compliant with the installation rules. It should completely cut off the power supply according to category III surcharge conditions. • Demarcate the entire site properly to prevent unauthorised personnel from entering, especially minors. • Use suitable protection to prevent any mechanical hazards due to persons loitering within the operating range of the operator.

• The electrical cables must pass through special pipes, ducts and cable glands in order to guarantee adequate protection against mechanical damage. • The electrical cables must not touch any parts that may overheat during use (such as the motor and transformer). • Before installation, check that the guided part is in good mechanical condition, and that it opens and closes correctly. • The product cannot be used to automate any guided part that includes a pedestrian gate, unless it can only be enabled when the pedestrian gate is secured. • Make sure that nobody can become trapped between the guided and fixed parts, when the guided part is set in motion. • 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.

DISMANTLING AND DISPOSAL

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

DISPOSING OF THE PACKAGING

The packaging materials (cardboard, plastic, etc.) can be disposed of easily as solid urban waste, separated for recycling. Before dismantling and disposing of the product, please always check the local laws in force.

DISPOSE OF THE PRODUCT RESPONSIBLY

DISPOSING OF THE PRODUCT

Our products are made of various materials. Most of these materials (aluminium, plastic, iron and electrical cables) are classified as solid urban waste. They can be separated for recycling and disposed of at authorised waste treatment plants. Other components (electronic boards, transmitter batteries, etc.) may contain pollutants.

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

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

DISPOSE OF THE PRODUCT RESPONSIBLY

PRODUCT DATA AND INFORMATION

Key

This symbol shows which parts to read carefully.

⚠ This symbol shows which parts describe safety issues.

This symbol shows what to tell users.

The measurements, unless otherwise stated, are in millimetres.

Description

002ZLJ24

Multifunction control panel for swing gates with two leaves. Graphic programming display and signalling and self-diagnostics using safety devices.

002ZLJ24Z

Multifunction control panel for swing gates with two leaves. Graphic programming display and signalling and self-diagnostics using safety devices.

Technical data

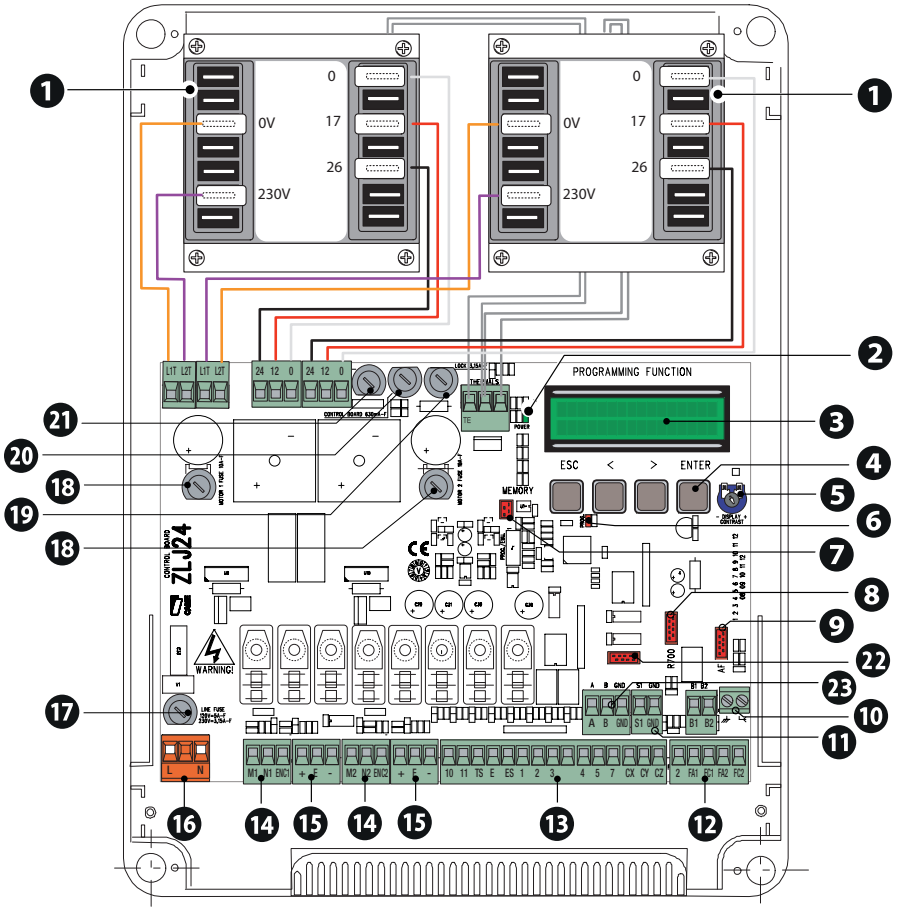
MODELS	ZLJ24
Motor power supply (V)	24 DC
Board power supply (V)	24 AC
Standby consumption (W)	10
Power (W)	500
Transformer thermal protection (°C)	120°
Colour	RAL 7040
Operating temperature (°C)	-20 ÷ +55
Operating time (s)	150
Duty cycle	HEAVY-DUTY SERVICE
Protection rating (IP)	54
Insulation class	II

Fuse table

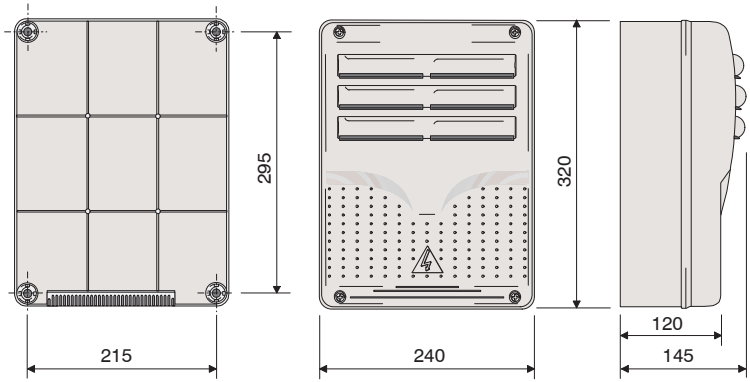
MODELS	ZLJ24
Line fuse	3.15 A F
Control-board fuse	600 mA F
Accessories fuse	2 A F

Description of parts

❶ Transformer
❷ Power LED
❸ Display
❹ Programming buttons
❺ Trimmer to adjust the display lighting
❻ Programming status warning LED
❼ Memory Roll card connector
❽ Connector for the R700 decoding card
❾ Connector for plug-in radio frequency card (AF)
❿ Terminal board for connecting the antenna
⓫ Terminal board for connecting the transponder selector switch
⓬ Terminal board for connecting the limit switches
⓭ Terminal board for connecting control and safety devices
⓮ Terminal board for connecting the gearmotor
⓯ Terminal board for connecting the encoder
⓰ Power supply terminal board
⓱ Line fuse
⓲ Motor fuse
⓳ Electric-lock fuse
⓴ Control board fuse
㉑ Accessories fuse
㉒ RSE card connector
㉓ CRP connection terminal board



Size



Cable types and minimum thicknesses

Cable length (m)	up to 20	from 20 to 30
Power supply 230 V AC	3G x 1.5 mm²	3G x 2.5 mm²
24 V AC/DC flashing beacon	2 x 0.5 mm²	2 x 0.5 mm²
TX Photocells	2 x 0.5 mm²	2 x 0.5 mm²
RX photocells	4 x 0.5 mm²	4 x 0.5 mm²
12 V DC electric lock	2 x 1 mm²	2 x 1.5 mm²
Command and control devices	*no. x 0.5 mm²	*no. x 0.5 mm²

*** 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).

To connect to the CRP, use a UTP CAT5 cable (up to 1,000 m long).

If the cable lengths differ from those specified in the table, define the cable cross-sections according to the actual power draw of the connected devices and in line with regulation CEI EN 60204-1.

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

To connect the encoder, use a FROR 300/500 V shielded cable (3 x 0.5 mm2).

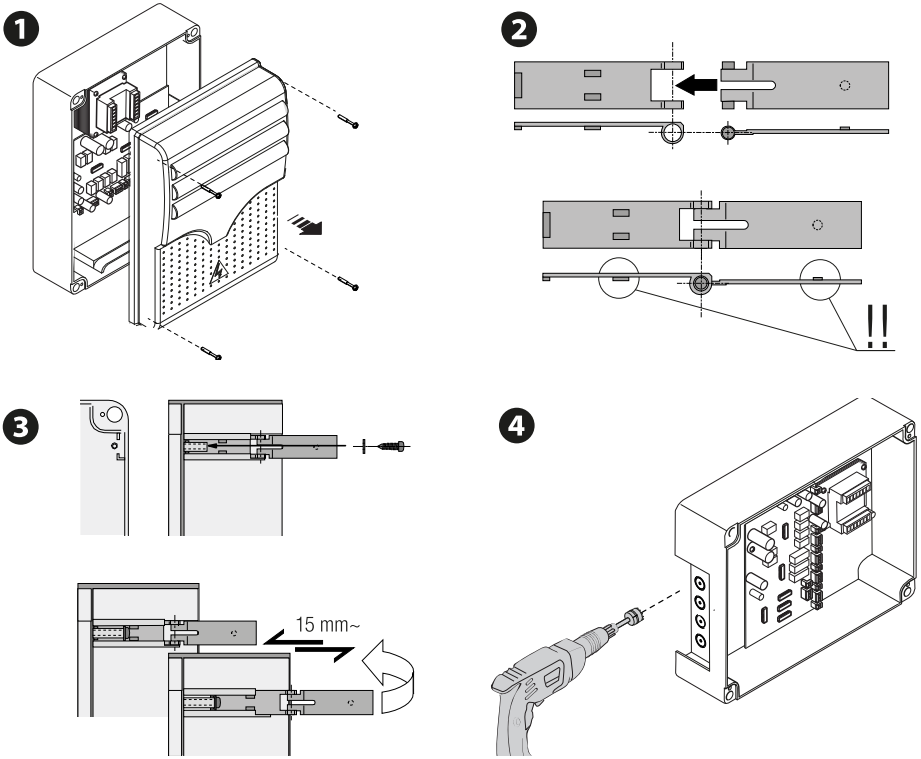
Preparing the control panel

❶ Separate the control-panel parts.

❷ Assemble the pressure hinges.

❸ Insert the hinges into the box (either on the left or the right) and fasten them using the screws and washers supplied. The hinges slide to rotate.

❹ Drill the pre-marked holes. The diameter of the holes is 20 mm.



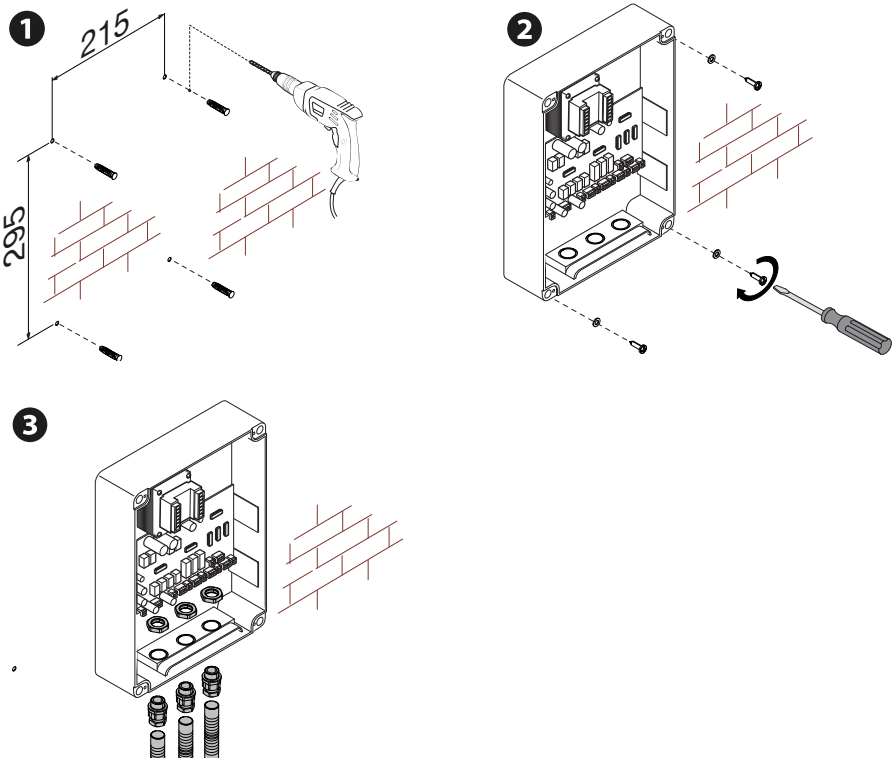
Fastening the control panel

❶ Drill the fixing points of the control panel in a protected area.

❷ Fasten the base using screws and plugs.

📖 **Use Phillips round head screws (maximum diameter 6 mm).**

❸ Insert the cable gland with the corrugated tubes for threading the electrical cables

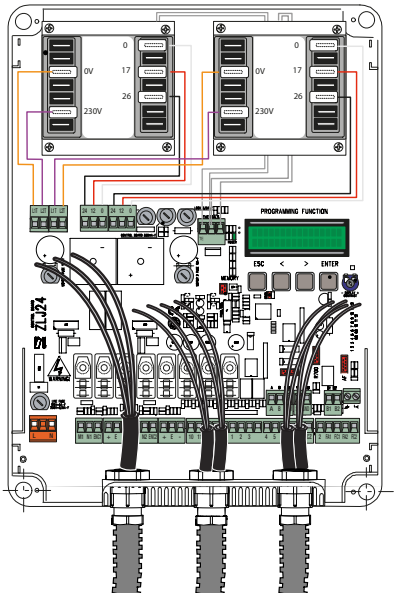


ELECTRICAL CONNECTIONS

Preparing the electrical cables

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

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



Power supply

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

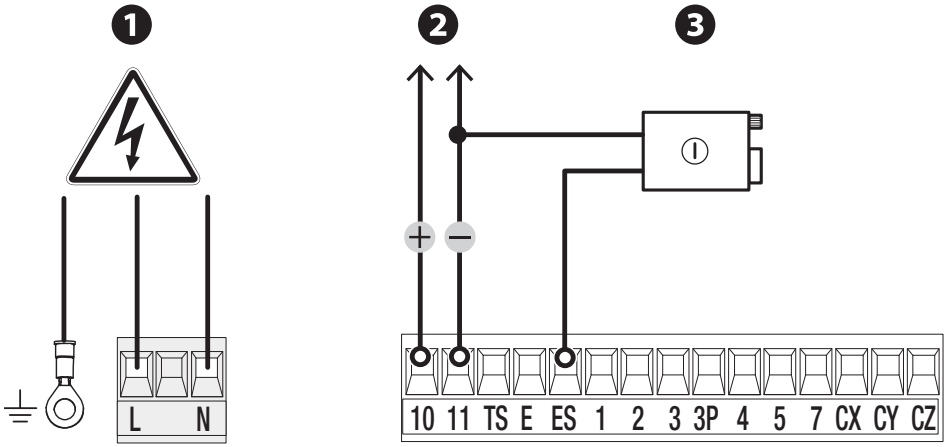
❷ Power supply output for accessories

The output normally delivers 24 V AC.

The output delivers 24 V DC when the batteries start operating, if they are installed.

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

❸ Connection for the 12 V AC electric lock - 15 W max.



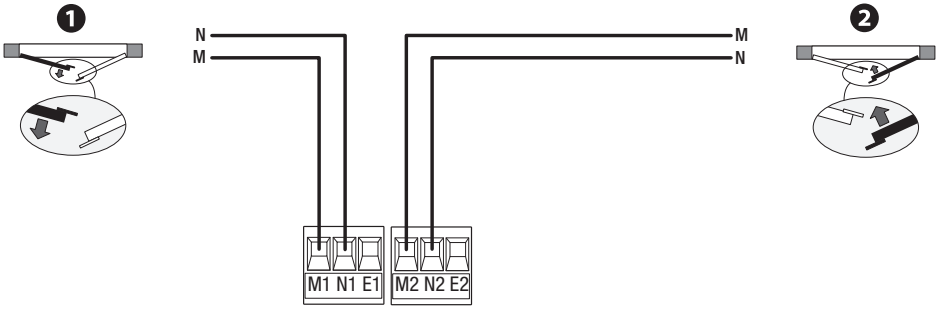
Maximum capacity of contacts

Device	Output	Power supply (V)	Power (W)
Accessories	10 - 11	24 AC/DC	50
Flashing beacon	10 - E	24 AC/DC	25
Operator status warning light	10 - 5	24 AC/DC	3

Gearmotor without limit switch

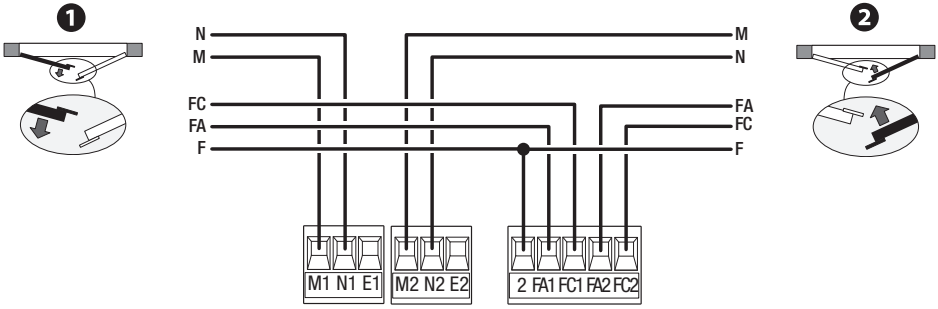
❶ Gearmotor delayed while opening

❷ Gearmotor delayed while closing



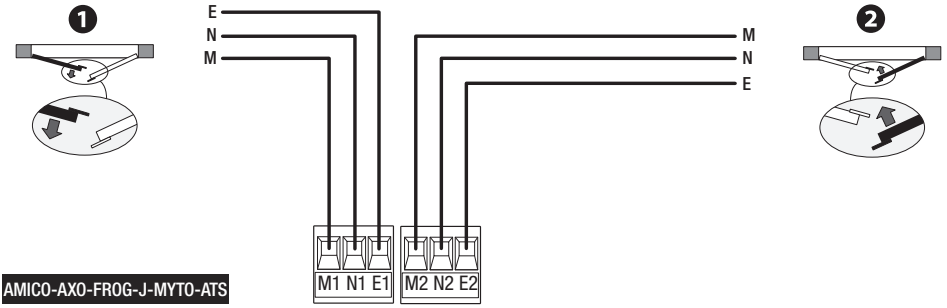
Gearmotor with limit switch

❶ Gearmotor delayed while opening
❷ Gearmotor delayed while closing

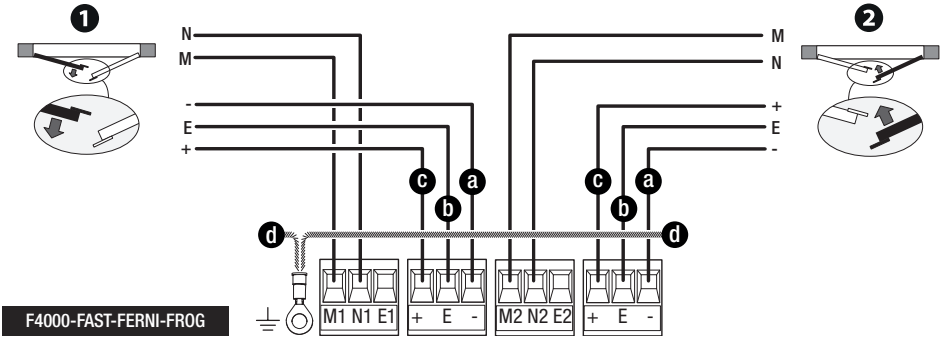


Gear motor with encoder

❶ Gearmotor delayed while opening
❷ Gearmotor delayed while closing



AMICO-AXO-FROG-J-MYTO-ATS



F4000-FAST-FERNI-FROG

❶ Green cable
❷ Brown cable
❸ White cable
❹ Earthing braid

Command and control devices

❶ 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.**

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 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)

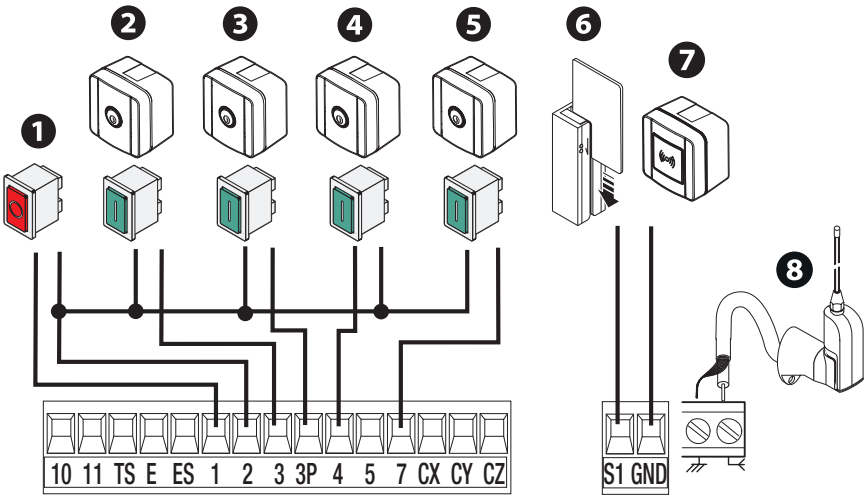
OPEN-CLOSE (step-by-step) or OPEN-STOP-CLOSE-STOP (sequential) function

📖 **See control function 2-7.**

❻ Card reader

❼ Transponder selector switch

❽ Antenna with RG58 cable



Signalling devices

❶ Flashing beacon

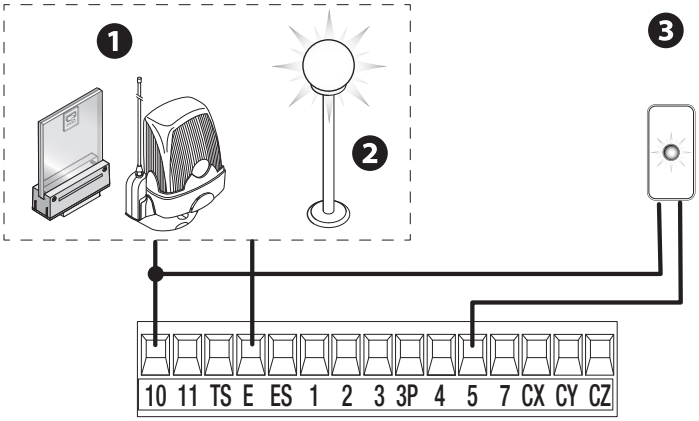
It flashes when the operator opens and closes.

❷ Additional light

It increases the light in the manoeuvring area.

❸ Operator status warning light

It notifies the user of the operator status.



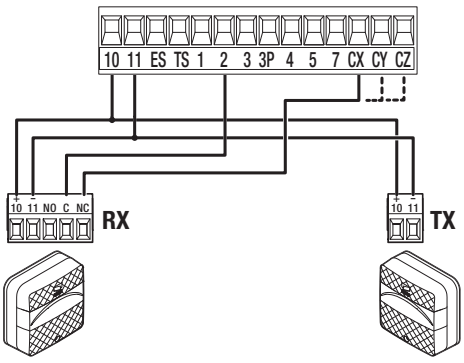
Safety devices

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, CY and/or CZ inputs (NC contacts).

📖 **If contacts CX, CY and CZ are not used, they must be deactivated during programming.**

DELTA photocells

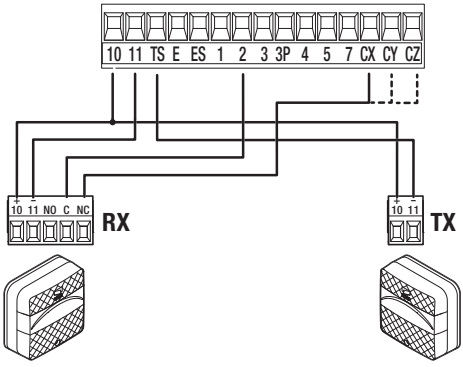
Standard connection



DELTA photocells

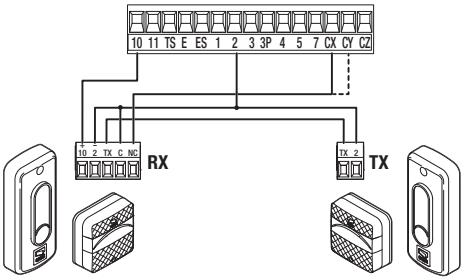
Connection with safety test

📖 **See safety test function.**



DIR / DELTA-S photocells

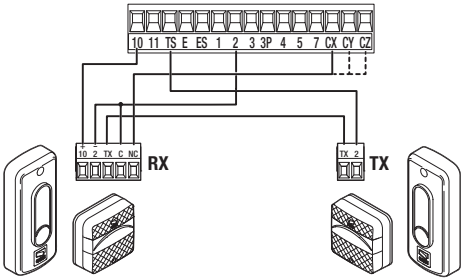
Standard connection



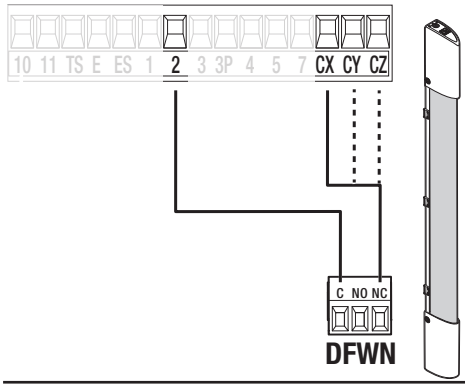
DIR / DELTA-S photocells

Connection with safety test

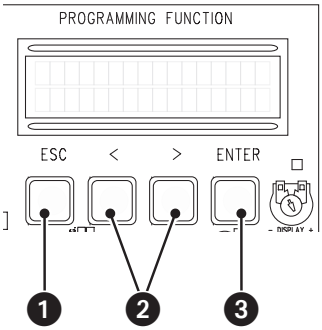
See safety test function.



DFWN sensitive edge



Programming button functions



❶ESC 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

❸ENTER 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 and proceed with the operations indicated below.

Motor type
Number of motors
Total stop
Travel calibration

📖 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.

At the end of commissioning, check the correct operation of the device using the buttons near the display. Check that the accessories also work correctly.

Functions menu

LANGUAGE
Choose the display language.

[LANGUAGE]		[Italian] (Default) [English] [Français] [Deutsch] [Español] [Português euro] [Português bras]

Automatic closure
Activate automatic closing.

[FUNCTIONS]	**[Automatic close]**	[Deactivated] [Activated] (Default)

Hold-to-run
With the function active, the operator opening movement (command 2-3) or closing movement (command 2-4) is interrupted when the control device is released.
📖 **When the function is active, it excludes all other control devices.**

[FUNCTIONS]	**[Hold-to-run]**	[Deactivated] (Default) [Activated] [Closing]

Detecting obstacles
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.

[FUNCTIONS]	**[Obstruction det.]**	[Deactivated] (Default) [Activated]

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

[FUNCTIONS]	**[Safety devices test]**	[Deactivated] (Default) [CX] [CY] [CZ] [CX+CY] [CX+CZ] [CY+CZ] [CX+CY+CZ]

Pre-flashing
The flashing beacon is activated before each manoeuvre.
📖 **The pre-flashing duration is set with the [Pre-flashing T.] function**

[FUNCTIONS]	**[Pre-flashing]**	[Deactivated] (Default) [Activated]

Thrust
Before every opening or closing manoeuvre, the leaves thrust inwards to release the electric lock.
📖 **The thrust time is set with the [Thrust T.] function**

[FUNCTIONS]	**[Thrust]**	[Deactivated] (Default) [Close] [Open] [Open-Close]

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

[FUNCTIONS]	**[Total stop]**	[Deactivated] [Activated] (Default)

CX input
Associate a function with the CX input.

[FUNCTIONS]	**[CX Input]**	[Deactivated] [C1] = Reopen while closing (Photocells) (Default) [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)

CY input
Associate a function with the CY input.

[FUNCTIONS]	**[CY input]**	[Deactivated] [C1] = Reopen while closing (Photocells) (Default) [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)

CZ input
Associate a function with the CZ input.

[FUNCTIONS]	**[CZ input]**	[Deactivated] [C1] = Reopen while closing (Photocells) (Default) [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)

Closing thrust
When the leaves reach the closing limit-switch, the operator performs a closing thrust for a few seconds.

[FUNCTIONS]	**[Cl. thrust]**	[Deactivated] (Default) [Activated]

Lock
Associate the electric lock release with a command.

[FUNCTIONS]	**[Lock]**	[Deactivated] (Default) [Close] [Open] [Open-Close]

Configurations
Configure slowdowns and limit switches.
📖 **[Slow.] and [Op.LS-Cl.Slow.] must be configured with the [Slow. T.].**

[FUNCTIONS]	**[Config]**	[Slow.] = Slowdown during opening and closing [Op.LS-Cl.Slow.] = Opening limit-switch and closing slowdown. [ENCODER] = Encoder [Time LS] = Time limit switch [Limit switch] = Opening and closing limit-switches

Limit switch
Configure the limit switch contacts as NO or NC.

[FUNCTIONS]	**[Limit switch]**	[N.C.] (Default) [N.O.]

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

[FUNCTIONS]	**[Command 2-7]**	[Open-Close](Default) [Op. Stop Cl.]

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

[FUNCTIONS]	**[Command 2-3P]**	[Partial] 📖 **The degree of opening of the leaf is set with the [Part. open] function in the [SET TIME] menu.** [Pedestrian] (Default)

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

[FUNCTIONS]	**[Light E]**	[Flashing light] (Default) [Courtesy] The lamp stays on for 5 minutes. [Cycle] The lamp stays on during the manoeuvre. 📖 **The light remains off if an automatic closing time is not set.**

B1-B2 output
Configure the contact.

[FUNCTIONS]	**[Output B1-B2]**	[Monostable] (Button) [Bistable] (Switch)

CRP address
Set the peripheral number. The function is necessary if there are more operators in the same system.

[FUNCTIONS]	**[CRP address]**	from [1] to [32]

CRP Baud rate
Set the communication speed of the remote connection system.

[FUNCTIONS]	**[CRP Baud rate]**	[1200] [2400] [4800] [9600] [19200] [38400] (Default) [57600] [115200]

Removing obstacles

If an obstacle is detected by the sensitive edge or by the amperometric sensor on the electronic board, movement is inverted to create a space sufficient to clear the obstacle.

If this function is off, the movement is inverted and until the limit-switch is reached.

[FUNCTIONS]	**[Remove obstacle]**	[Deactivated] (Default) [Activated]

Number of motors

Set the number of motors that control the gate.

[SET TRAVEL]	**[No. motors]**	[M1+M2] (Default) [M2]

Motor type

Set the type of gearmotor installed.

[SET TRAVEL]	**[Motor type]**	[FROG-F4024E] (Default) [FROG-J] [FROG-FL] [AMICO] [MYTO] [AXO-ATS] [FAST] [FERNI] [ATI]

Manoeuvring speed

Set the travel speed (percentage of maximum speed).

[SET TRAVEL]	**[Manoeuvre speed %]**	from [20%] to [100%] (Default 100%)

Slowdown speed

Set the slowdown speed (percentage of maximum speed).

[SET TRAVEL]	**[Slowing down speed %]**	from [5%] to [80%] (Default 80%)

Soft start

Set a slowdown of a few seconds after each opening and closing command.

[SET TRAVEL]	**[Soft Start]**	[Deactivated] (Default) [Activated]

Amperometric sensitivity

📖 **This function only appears if the [Encoder] function is deactivated.**

📖 **With the function deactivated, the leaves stop if an obstacle is detected.**

Manage the sensitivity of obstacle detection.

Depending on the parameter set in the [Config] function, there are different possible operations in the event of an obstacle.

[Time limit switch] - it stops the gate leaves during a manoeuvre.

[Limit-switch] - invert travel during a manoeuvre.

[Slow.] - invert travel during a manoeuvre and stop the leaves during slowdown.

[Op.LS-Cl.Slow.] - invert travel during a manoeuvre and stop the leaves during closing slowdown.

[SET TRAVEL]	**[Amperom. sens.]**	[Deactivated] (Default) [Activated]

Travel amperometrics

Adjust the amperometric sensitivity.

📖 **The function appears only if the [Amperom. sens.] function is activated.**

[SET TRAVEL]	**[Amperom. travel]**	

Slowdown time

Set the slowdown time before each limit switch.

📖 **This function appears only with the [Op.LS-Cl.Slow.] or [Slow.] parameters from the [Config] function.**

[SET TRAVEL]	**[Slow. time] function**	from [0 s] to [30 s] (Default 20 s)

Sensitivity

Activate the obstacle-detection sensitivity.

[ENCODER] 📖 **This function appears only if the [ENCODER] parameter is activated from the [Config] function**	**[Sensitivity]**	[Activated] (Default) [Deactivated]

Travel sensitivity

Adjust the obstruction detection sensitivity during boom travel.

📖 **This function appears only if the [Sensitivity] function is active.**

[ENCODER] 📖 **This function appears only if the [ENCODER] parameter is activated from the [Config] function**	**[Travel sens.]**	

Slowdown sensitivity

Adjust the obstruction detection sensitivity during slowdown.

📖 **This function appears only if the [Sensitivity] and [Enc. Slow.] functions are active.**

[ENCODER] 📖 **This function appears only if the [ENCODER] parameter is activated from the [Config] function**	**[Slow. sens.]**	

Opening slowdown point for M1

Set the opening slowdown starting point for M1 (percentage of the total travel).

📖 **This function appears only if the [Enc. Slow.] function is active.**

[ENCODER] 📖 **This function appears only if the [ENCODER] parameter is activated from the [Config] function**	**[M1 Slow. OP. %]**	From 1% to 60% (Default 10%)

Closing slowdown point for M1

Set the closing slowdown starting point for M1 (percentage of the total travel).

📖 **This function appears only if the [Enc. Slow.] function is active.**

[ENCODER] 📖 **This function appears only if the [ENCODER] parameter is activated from the [Config] function**	**[M1 Slow. CL %]**	From 1% to 60% (Default 10%)

Opening slowdown point for M2

Set the opening slowdown starting point for M2 (percentage of the total travel).

📖 **This function appears only if the [Enc. Slow.] function is active.**

[ENCODER] 📖 **This function appears only if the [ENCODER] parameter is activated from the [Config] function**	**[M2 Slow. OP.%]**	From 1% to 60% (Default 10%)

Closing slowdown point for M2

Set the closing slowdown starting point for M2 (percentage of the total travel).

📖 **This function appears only if the [Enc. Slow.] function is active.**

[ENCODER] 📖 **This function appears only if the [ENCODER] parameter is activated from the [Config] function**	**[M2 Slow. CL. %]**	From 1% to 60% (Default 10%)

Closing approach point for M1

Set the closing approach starting point for M1 (percentage of the total travel).

[ENCODER] 📖 **This function appears only if the [ENCODER] parameter is activated from the [Config] function**	**[M1 Appr. CL. %]**	From 1% to 15% (Default 15%)

Closing approach point for M2

Set the closing approach starting point for M2 (percentage of the total travel).

[ENCODER] 📖 **This function appears only if the [ENCODER] parameter is activated from the [Config] function**	**[M2 Appr. CL. %]**	From 1% to 15% (Default 15%)

Opening approach point for M1

Set the opening approach starting point for M1 (percentage of the total travel).

[ENCODER] 📖 **This function appears only if the [ENCODER] parameter is activated from the [Config] function**	**[M1 Appr. OP. %]**	From 1% to 15% (Default 15%)

Opening approach point for M2

Set the opening approach starting point for M2 (percentage of the total travel).

[ENCODER] 📖 **This function appears only if the [ENCODER] parameter is activated from the [Config] function**	**[M2 Appr. OP. %]**	From 1% to 15% (Default 15%)

Travel calibration

Start the travel self-learning.

[ENCODER] 📖 **This function appears only if the [ENCODER] parameter is activated from the [Config] function**	**[Calibrate travel]**	[Confirm? (no)] [Confirm? (Yes)]

Automatic closing time

Set the time before automatic closure is activated, once the opening limit-switch 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.**

[SET TIME]	**[ACT]**	from 0 to 300 seconds (Default 10 seconds)

Pedestrian automatic closing time

Set the time that must pass before automatic closing is activated, once the limit switch has been reached for a pedestrian opening (complete opening of only one of the two leaves) or partial opening (partial opening of only one of the two leaves).

[SET TIME]	**[Pedestrian ACT]**	from 0 to 300 seconds (Default 10 seconds)

Operating time

Set the gearmotor working time during opening and closing.

[SET TIME]	**[Working Time] function**	from 10 to 150 seconds (Default 90 seconds)

M1 opening delay

Adjust the delay in starting the opening manoeuvre for M1 with respect to M2.

[SET TIME]	**[Open delay M1]**	from 0 to 10 seconds (Default 2 seconds)

M2 closing delay

Adjust the delay in starting the closing manoeuvre for M2 with respect to M1.

[SET TIME]	**[Cl.delay M2]**	from 0 to 60 seconds (Default 2 seconds)

Pre-flashing time

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

[SET TIME]	**[Pre-flashing T.]**	from 1 to 60 seconds (Default 5 seconds)

Electric lock time

Adjust the electric lock release time after an opening or closing command.

[SET TIME]	**[Lock time]**	from 1 to 5 seconds (Default 2 seconds)

Thrust time

Adjust the gearmotor closing thrust time after an opening or closing command.

[SET TIME]	**[Thrust T.]**	from 1 to 10 seconds (Default 1 second)

New user

Register a maximum of 25 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.**

[USERS]	**[New user]**	[Deactivated] [2-7] (Step-by-step or sequential control) [Open] [B1-B2] [2-3P] (Pedestrian or partial opening) 1 -Choose the function to be assigned to the user. 2 -Press ENTER to confirm. You will be asked to enter your user code. 3 -Send the code from the control device. Repeat the procedure to add other users.

Edit name

Change the username or associated number.

[USERS]	**[Edit name]**	

Edit code
Modify the code of a command associated to a user.

[USERS]	**[Edit code]**	

Associated function
Associate a function with the user.

[USERS]	**[Associated Func.]**	[2-7] (Step-by-step or sequential control) [Open] [B1-B2] [2-3P] (Pedestrian or partial opening)

Remove user
Remove one of the registered users.

[USERS]	**[Delete user]**	

Remove all
Remove all registered users.

[USERS]	**[Delete all users]**	[Confirm? (no)] [Confirm? (Yes)]

Save memory
Save the system users and settings in the Memory Roll.

[USERS]	**[Save memory]**	[Confirm? (no)] [Confirm? (Yes)] Press ENTER to confirm.

Load the memory
Load the users and system settings from the Memory Roll.
📖 **The boards must have the same version, otherwise only the users can be loaded.**

[USERS]	**[Restore backup]**	[Confirm? (no)] [Confirm? (Yes)]

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.**

[USERS]	**[Radio decoding]**	[All decoding] [Rolling code] [TW Key block]

Self-Learning
Save a new transmitter by copying an existing one without following the add new user procedure [New User].

[USERS]	**[Self-Learning]**	[Deactivated] (Default) [Activated]

Version
Display the firmware version number.

[INFO]	**[Version]**	

Number of travels
Display the number of completed manoeuvres.

[INFO]	**[No. runs]**	

Initial message
Change the initial message.

[INFO]	**[Initial msg]**	[WWW.CAME.COM] (Default) Press ENTER to change the initial message. Use the ENTER key to move the cursor forwards. Use the ESC key to move the cursor backwards. Use the arrows to select a letter or a number. Press and hold ENTER for a few seconds to confirm.

Resetting the system
Restore factory settings.

[INFO]	**[System reset]**	[Confirm? (no)] [Confirm? (Yes)] Press ENTER to confirm.

Motor test
Check the gate leaves open in the right direction.

[MOT TEST]		[<=M1 M2=>] Press and hold the button < button. Check that M1 performs the opening. Press and hold the button > button. Check that M2 performs opening. 📖 **If the leaf does not move in the correct direction, invert the motor phases.**

Password
Set a 4-digit password to access the main menu.

[Password]		[Confirm? (no)] [Confirm? (Yes)] Use the arrows to select a number. Press ENTER to confirm. Enter the password again.

Change password
Change the password.

[Password]	**[Change PSW]**	[Confirm? (no)] [Confirm? (Yes)] Use the arrows to select a number. Press ENTER to confirm. Enter the password again.

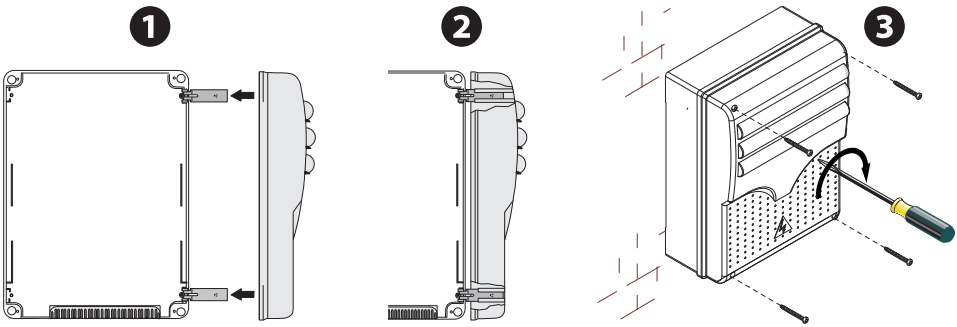
Remove password
Remove the password.

[Password]	**[Delete PSW]**	[Confirm? (no)] [Confirm? (Yes)]

ERROR MESSAGES

Encoder - ERROR	The Encoder is disconnected. The Encoder is broken.
Error!	The Encoder is disconnected. The Encoder is broken.
Safety test - ERROR	The photocells are not correctly connected or configured.
Limit-switch - ERROR	Malfunctioning limit-switch contacts.
Operating time - ERROR	Finished the maximum work time set.
Safety devices - STOP	Contact 1-2 (NC) is open.
C1	The (NC) contacts are open.
C3	The (NC) contacts are open.
C4	The (NC) contacts are open.
C7	The (NC) contacts are open.
C8	The (NC) contacts are open.

FINAL OPERATIONS



DICHIARAZIONE DI INCORPORAZIONE allegato / DECLARATION OF INCORPORATION annex / ERKLÄRUNG FÜR DEN EINBAU anhang / DÉCLARATION D'INCORPORATION annexe / DECLARACIÓN DE INCORPORACIÓN anexo / DECLARAÇÃO DE INCORPORAÇÃO anexo / DEKLARACJA WBUDOWANIA załączniku / INBOUWVERKLARING bijlage IIB - 2006/42/CE

Fabbricante / Manufacturer / Hersteller / Fabricant / Fabricante / Fabricante / Wytwórca / Fabrikant

Came S.p.a.

indirizzo / address / adresse / adresse / direcciòn / endereço / adres / adres

Via Martiri della Libertà 15 31030 - Dosson di Casier Treviso - Italy

DICHIARA CHE IL QUADRO COMANDO PER MOTORIDUTTORI A 24 V / DECLARES THAT THE CONTROL PANEL FOR 24 V GEARMOTORS / ERKLÄRT DASS DIE STEUERUNG FÜR 24 V ANTRIEBE / DECLARE QUE LE ARMOIRE DE COMMANDE POUR MOTOREDUCTEURS 24 V / DECLARA QUE LAS CUADRO DE MANDO PARA MOTORREDUCTORES DE 24 V / DECLARA QUE AS QUADRO DE COMANDO PARA MOTORREDUTORES A 24 V / OSWIADCZA ZE CENTRALA STERUJĄCA DO NAPĘDÓW ZASILANYCH NAPIĘCIEM 24 V / VERKLAART DAT DE STUURKAST VOOR 24 V-MOTOREN

ZLJ24
ZLJ24CP
ZLJ24Z

E' CONFORME ALLE DISPOSIZIONI DELLE SEGUENTI DIRETTIVE / IT COMPLIES WITH THE PROVISIONS OF THE FOLLOWING DIRECTIVES / DEN VORGABEN DER FOLGENDEN RICHTLINIEN ENTSPRECHEN / IL EST CONFORMES AUX DISPOSITIONS DES DIRECTIVES SUIVANTES / CUMPLEN CON LAS DISPOSICIONES DE LAS SIGUIENTES DIRECTIVAS / ESTÃO DE ACORDO COM AS DISPOSIÇÕES DAS SEGUINTES DIRECTIVAS / SĄ ZGODNE Z POSTANOWIENIAMI NASTĘPUJĄCYCH DYREKTYW EUROPEJSKICH / VOLDOEN AAN DE VOORSCHRIFTEN VAN DE VOLGENDE RICHTLIJNEN:

- COMPATIBILITA' ELETTROMAGNETICA / ELECTROMAGNETIC COMPATIBILITY / ELEKTROMAGNETISCHE VERTRÄGLICHKEIT / COMPATIBILITÉ ÉLECTROMAGNÉTIQUE / COMPATIBILIDAD ELECTROMAGNÉTICA / COMPATIBILIDADE ELETROMAGNÉTICA / KOMPATYBILNOŚCI ELEKTROMAGNETYCZNEJ / ELEKTROMAGNETISCHE COMPATIBILITEIT : 2014/30/UE.
- BASSA TENSIONE / LOW VOLTAGE / NIEDERSPANNUNG / BASSE TENSION / BAJA TENSIÓN / BAIXA TENSÃO / NISKIEGO NAPIĘCIA / LAAGSPANNING : 2014/35/UE.

Riferimento norme armonizzate ed altre norme tecniche / Refer to European regulations and other technical regulations / Harmonisierte Bezugsnormen und andere technische Vorgaben / Référence aux normes harmonisées et aux autres normes techniques / Referencia normas armonizadas y otras normas técnicas / Referência de normas harmonizadas e outras normas técnicas / Odnosne normy ujednolicone i inne normy techniczne / Geharmoniseerde en andere technische normen waarnaar is verwezen

EN 61000-6-2:2005
EN 61000-6-3:2007+A1:2011
EN 62233:2008
EN 60335-1:2012+A11:2014
EN 60335-2-103:2015

ASSEMBLATO CORRETTAMENTE CON I MOTORIDUTTORI INDICATI NEL MANUALE DI INSTALLAZIONE, RISPETTA I REQUISITI ESSENZIALI APPLICATI: / CORRECTLY ASSEMBLED WITH THE GEARMOTORS INDICATED IN THE INSTALLATION MANUAL, MEET THE APPLICABLE ESSENTIAL REQUIREMENTS: / KORREKT MONTIERT MIT DEN IN DER INSTALLATIONSANLEITUNG ANGEGEBENEN GETRIEBEMOTOREN, DEN WESENTLICHEN ANGEWANDTEN ANFORDERUNGEN ENTSPRECHEN: / CORRECTEMENT ASSEMBLÉ AVEC LES MOTORÉDUCTEURS INDIQUÉS DANS LE MANUEL D'INSTALLATION, RESPECTENT LES CONDITIONS REQUISES NÉCESSAIRES APPLIQUÉES: / MONTADO CORRECTAMENTE CON LOS MOTORREDUCTORES INDICADOS EN EL MANUAL DE INSTALACION, CUMPLEN CON LOS REQUISITOS ESENCIALES APLICADOS: / MONTADOS CORRETAMENTE COM OS MOTORREDUTORES INDICADOS NO MANUAL DE INSTALAÇÃO, RESPEITAM O REQUISITOS ESSENCIAIS APLICADOS: / PRAWIDŁOWO ZMONTOWANE Z MOTOREDUKTORAMI WSKAZANYMI W INSTRUKCJI MONTAZU, SPEŁNIAJA PODSTAWOWE WYMAGANE WYRUNKI: / CORRECT GEMONTEERD MET DE MOTORREDUCTOREN AANGEGEVEN IN DE INSTALLATIEHANDLEIDING, VOLDOEN AAN DE TOEPASBARE MINIMUM EISEN:

1.1.3; 1.1.5; 1.2.1; 1.2.2; 1.3.2; 1.3.7; 1.3.8.1; 1.4.1; 1.4.2; 1.5.1; 1.5.6; 1.5.8; 1.5.9; 1.5.10; 1.5.11; 1.5.13; 1.6.1; 1.6.3; 1.6.4; 1.7.1; 1.7.2; 1.7.4

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La documentazione tecnica pertinente è stata compilata in conformità all'allegato VIIB. / The pertinent technical documentation has been drawn up in compliance with attached document VIIB. / Die relevanta technische Dokumentation wurde entsprechend der Anlage VIIB ausgestellt. / La documentation technique spécifique a été remplie conformément à l'annexe IIB / La documentación técnica pertinente ha sido rellenada en cumplimiento con el anexo VIIB. / A documentação técnica pertinente foi preenchida de acordo com o anexo VIIB. / Odnosna dokumentacja techniczna zostala zredagowana zgodnie z zalacznikiem VIIB. / De technische documentatie terzake is opgesteld in overeenstemming met de bijlage VIIB.

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la messa in servizio finchè la macchina finale in cui deve essere incorporata non è stata dichiarata conforme, se del caso alla 2006/42/CE. / commissioning of the above mentioned until such moment when the final machine into which they must be incorporated, has been declared compliant, if pertinent, to 2006/42/CE / die Inbetriebnahme bevor die „Endmaschine" in die die unvollständige Maschine eingebaut wird, als konform erklärt wurde, gegebenenfalls gemäß der Richtlinie 2006/42/EU. / la mise en service tant que la machine finale dans laquelle elle doit être incorporée n'a pas été déclarée conforme, le cas échéant, à la norme 2006/42/CE. / la puesta en servicio hasta que la máquina final en la que será incorporada no haya sido declarada de conformidad de acuerdo a la 2006/42/CE / a colocação em funcionamento, até que a máquina final, onde devem ser incorporadas, não for declarada em conformidade, se de acordo com a 2006/42/CE. / Uruchomienia urzadzenia do czasu, kiedy maszyna, do której ma byc wbudowany, nie zostanie oceniona jako zgodna z wymogami dyrektywy 2006/42/WE, jesli taka procedura była konieczna. / deze in werking te stellen zolang de eindmachine waarin de niet voltooide machine moet worden ingebouwd in overeenstemming is verklaard, indien toepasselijk met de richtlijn 2006/42/EG.

Dosson di Casier (TV)
5 Novembre / November / November /
Novembre / Noviembre / Novembro /
Listopad / November 2018

Amministratore Delegato / Managing Director /
General Direktor / Directeur Général / Director General /
Administrador Delegado / Dyrektor Zarzadzajacy /
Algemeen Directeur

Andrea Menuzzo

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Came S.p.a.

Via Martiri della Libertà, 15 - 31030 Dosson di Casier - Treviso - Italy - Tel. (+39) 0422 4940 - Fax (+39) 0422 4941
info@came.it - www.came.com

Cap. Soc. 1.610.000,00 € - C.F. e P.I. 03481280265 - VAT IT 03481280265 - REA TV 275359 - Reg Imp. TV 03481280265

CAME

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CAME S.P.A.
Via Martiri della Libertà, 15
31030 Dosson di Casier
Treviso - Italy
Tel. (+39) 0422 4940
Fax (+39) 0422 4941