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SYMBOLS USED IN THIS MANUAL

This manual uses symbols to highlight specific texts. The functions of each symbol are explained below:

A Failure to respect the safety warnings could lead to accident or injury.

(!) Work sequences or procedures.

IMPORTANCE OF THIS MANUAL 2

A Read this manual in its entirety before carrying out the installation, and obey all instructions. Failure to do so may result in a defective installation, leading to accidents and failures.

- Important details which must be respected for correct assembly and operation.
- Additional information to help the installer.
- Information on care for the environment.
- **1** Moreover, this manual provides valuable information which will help you to carry out installation more efficiently.
- Rep This manual is an integral part of the product. Keep for future reference.

ENVISAGED USE З

This device has been designed for installation as part of an automatic opening and closing system for swing gates.

A This device is not suitable for installation in inflammable or explosive environments.

INSTALLER'S QUALIFICATIONS 4

- **A** The installation should be completed by a professional installer, complying with the following requirements:
 - He/she must be capable of carrying out mechanical assemblies in doors and gates, choosing and implementing attachment systems in line with the assembly surface

- A Failure to install or use as indicated in this manual is inappropriate and hazardous, and could lead to accidents or failures.
 - (metal, wood, brick, etc) and the weight and effort of the mechanism.
 - He/she must be capable of carrying out simple electrical installations in line with the low tension regulations and applicable standards.
- **A** The installation should be carried out bearing in mind standards EN 13241-1 and EN 12453.

AUTOMATIC GATE SAFETY ELEMENTS 5

This device complies with all current safety regulations. However, the complete system comprises, apart from the operator referred to in these instructions, other elements which should be acquired separately.

■ The safety of the complete installation depends on all the elements installed. Install only Erreka components in order to guarantee proper operation.

- A Respect the instructions for all the elements positioned in the installation.
- A We recommend installing safety elements.
- For further details, see "Elements of the complete installation" on page 35.

1

ELEMENTS OF THE COMPLETE INSTALLATION



25m

20m

5m

Fig. 1 Elements of the complete installation

D: Key selector

E: Operator F: Antenna

A The safe and correct operation of the installation is the responsibility of the installer.

2x0.5mm²

9x0.75mm²

Shielded cable

■ For greater safety, Erreka recommends installing the photocells (4) and (10).

2 GENERAL CHARACTERISTICS OF THE OPERATOR

The CLS210/CLS210F operator is constructed to form part of a swing gate automation system.

It comprises a metal body, which contains the motor and a planetary gears box. Model CLS210F also has a brake and unlocking key to operate the gate manually in the event of failure of the electricity supply. Allows a maximum opening of approximately 130°.

This operator, along with its corresponding Erreka control panel, allow the implementation of a soft stop.

system, with the speed slowing down at the end of the closing and opening operations.

With model CLS210 it is necessary to install an electrical lock, as is also the case with model CLS210F for leaf lengths of over 1.8m.

Operator CLS210/CLS210F can be installed with an articulated arm or with a sliding arm.

This operator allows us to fulfil the requirements of standard EN 12453 without the use of peripheral elements.



4 GENERAL CHARACTERISTICS OF THE OPERATOR

Model	CLS210	CLS210F
Power supply (V/Hz)	230/50	
Intensity (A)		1
Power consumed (W)	230	
Capacitor (µF)	5	
Protection grade (IP)	54	
Available torque (Nm)	220	
Output speed (rpm)	1,3	
Opening time 90° (s)	1	2
Self locking	No	Yes
Service temperature (°C)	-20/+60	
Duty cycles (%)	20	
Operator dimensions (mm)	88 x 88 x 470	
Weight (Kg).	13	
Gate size and weight	See chart	



5 MANUAL OPERATION

■ In the event of need, the gate may be operated manually. In model CLS210F it is necessary to first run the unlocking mechanism.



Unlock (only for model CLS210F)

- 1 Introduce the key in the unlocking system lock and turn the unlocking key (1) 90° anti-clockwise (A).
- 2 Move the gate manually.

chart.

Lock (only for model CLS210F)



6 DECLARATION OF CONFORMITY

Erreka Automatismos declares that the electromechanical operator CLS210/CLS210F has been drawn up for use in a machine or for assembly along with other elements in order to form a machine in line with Directive 89/392 EEC and successive modifications.

The CLS210/CLS210F electromechanical operator allows us to carry out installations which comply with standards EN 13241-1 and EN 12453.

- In order to restart automatic operation of the system, carry out the following operations:
- 1 Introduce the key in the unlocking system lock and turn the unlocking key (1) 90° clockwise (B).

The CLS210/CLS210F electromechanical operator complies with safety legislation in line with the following directives and standards:

- 73/23 EEC and successive modification 93/68 EEC
- 89/366 EEC and successive modifications 92/31 EEC and 93/68 EEC
- UNE-EN 60335-1

1 UNPACKING

1 Open the package and carefully remove the contents from within.

Eliminate the packaging in an environmentally friendly manner, using recycling containers.

A Do not leave the packaging within the reach of children or handicapped people, as it may cause injury.



■ Should it be noticed that a piece is missing or deteriorated, contact the closest technical service.



Fig. 3 Content and spare parts

1 NECESSARY TOOLS



2000

Set of fixed wrenches (17 mm and 13 mm)



Allen key 5mm

Marker pencil



Level







Wall support attachment screws



3 INITIAL CONDITIONS AND CHECKS

Initial conditions of the gate

- ▲ Check that the size of the gate is within the admissible range of the operator (see the technical characteristics of the operator).
- ▲ If the gate to be automated has a passage gate, use a safety device to prevent the operator from operating with the passage gate open.
- The gate must have an in-ground central stop. When installing with an articulated arm, it is necessary to use the opening and closing stopper.

Environmental conditions

A This device is not suitable for installation in inflammable or explosive environments.

Electrical power supply installation

The electrical connections shall be made in line with the instructions in the control panel manual. ■ The gate must be easy to manipulate manually, namely:

Lubrication grease (graphite or lithium grease).

- This must be balanced, in order to ensure the effort made by the motor is minimum.
- There should be no stiffness throughout its travel.
- ▲ Do not install the operator in a gate which does not work correctly in manual operation, as this may lead to accidents. Repair the gate before installing.
- A Check that the admissible environmental temperature range for the operator is suitable for the location.
- The electrical cable section is indicated in: "Fig. 1 Elements of the complete installation" on page 35.



Tape measure



Electric drill and broaches

A Use the electrical drill in line with the use instructions.

4 INSTALLING THE OPERATOR

Assembly positions and dimensions

This operator can be assembled on either of two types of arm:

- Sliding arm
- Articulated arm

The installation depends on the type of arm used.

A Assembly with sliding arm



Fig. 4 Example of assembly position for operator with sliding arm



Fig. 5 Example of assembly position for operator with articulated arm

Position the wall support and the operator



1 Choose screws which are suitable for the place of attachment (metal, brick, wood, etc) and the weight and effort of the operator.

A Use appropriate screws.

- **2** Mark the points to bore in the wall.
 - Before marking the position of the needles, ensure the assembly dimensions and positions are respected, see "Fig. 4 Example of assembly position for operator with sliding arm" and "Fig. 5 Example of assembly position for operator with articulated arm".
- **3** Bore the points (1) marked.
- **4** Attach the operator (2) to the fixing plate (3) using the screw-nut sets (4).
- **5** Mount the operator and support on the wall using appropriate screws.



Connect the motor to the control panel (AEP20PIL)

- A Before making any electrical connections, check the control panel instructions manual.
- A Before carrying out any gate movement, ensure there is no person or object in the radius of action of the gate and the operation mechanisms.
- 1 Connect the motor (M1, M2) and the capacitor (C1, C2) to the control panel.

A Connect the motor's earth cable to the earth terminal (T) on the control panel.

- **2** Connect the control panel to the power supply.
- **3** Activate the power supply switch.
- 4 Using the control panel mini push buttons (PUL1, PUL2, PUL3, PUL4), check the motor connections are correct (rotation direction).
 If the rotation direction is not correct, interchange the wires 12 and 13 of M1 or 7 and 8 of M2, as appropriate.
- A Ensure the earth cable of the motors is connected to the control panel earth terminal.



Attach the arm to the operator



- 1 Remove the plastic cover (3) by releasing the screw (1) and the nut (2).
- **2** Position the arm (4).
- **3** Replace the plastic cover (3).
- **4** Attach the arm (4) and the top (3) to the operator (1) and the nut (2).

Option A: Operator with articulated arm

Attach the arm to the gate



1 In model CLS210F, unlock the motor with the unlocking key, see section *"Manual operation"* on page 37.



- **2** Close the gate and mark the arm bearing position on the gate (A).
- **3** Open the gate to the required point and mark the arm bearing position on the gate (B).
- 4 Attach the rail (1) to the gate (2), aligned with regards to the two marks made.See the sliding arm instructions.

Position the mechanical opening and closing stopper



Option B: Operator with articulated arm



Attach the arm to the gate

- 1 Attach the in-ground stop in opening (1) to the support plate (2) with the nut (3)-screw set (4).
- **2** Attach the in-ground central stop (in the opposite direction to the opening stopper) to the support plate with the screw-nut set.

- 1 In model CLS210F, unlock the motor with the unlocking key, see section *"Manual operation"* on page 37.
- 2 Close the gate, extend the arm (1) to a maximum of 670 mm and mark the positions (A) and (B) of the attachment bracket orifices (2).

■ Ensure the indicated distance is not exceeded, see "Fig. 5 Example of assembly position for operator with articulated arm".

- **3** Make the orifices in the gate in the position marked.
- 4 Attach the support (2) to the gate.See the articulated arm instructions.

5 FINAL CHECKS

Connections and checks



User instruction



- Install an eletrolock to lock the gate in closing position. This is necessary for model CLS210 and for model CLS210F if the length of the leaf is over 1.8m.
 Image See the electrolock instructions.
- **2** Carry out the installation and the connections for all the elements of the facility, in line with the control panel instructions.
- **3** Check that the mechanism is correctly regulated.
- ▲ The torque regulator of the control panel must be adjusted in a manner which respects the values indicated in standard EN 12453:2000, as shown in the attached chart. The measurements must be made in line with the method described in standard EN 12445:2000.
- **4** Check the operation of all the installation elements, especially the protection systems and the manual operation unlocking system.
- 1 Instruct the user with regards to the use and maintenance of the facility and provide him/her with the use manual.
- **2** Point to the gate, showing that it opens automatically, and indicating how to operate it manually. Where appropriate, indicate that operation is using the remote control.



1 MAINTENANCE

- A Before carrying out any maintenance operation, disconnect the device from the power supply.
- 1 Frequently check installation in order to discover any imbalance all signs of deterioration or wear. Do not use the device if any repair or adjustment is necessary.

2 FAILURE DIAGNOSIS

- 2 Clean and lubricate the articulations and rails of the gate, so as not to increase the effort of the operator.
- **3** Check that the transmitters and photocells, as well as their installation, have not suffered any damage from the weather or external agents.

Problem	Cause	Solution
	Absence of system power voltage	Re-establish the power supply voltage
The operator does not make any movement when the opening or closing controls are activated	Defective electrical installation	Check that the installation does not present any short-circuits or cut-off points
	Defective control panel or control devices	Check these elements, seeing their respective manuals
By activating the opening or closing controls, the operator is enabled but the gate does not move	Gate obstructed or blocked	Unblock, adjust and lubricate the gate articulations
	The angle formed by the two sections of the articulated arm is too big or too small	Carry out installation again, respecting the dimensions indicated in the "Fig. 5 Example of assembly position for operator with articulated arm"
The gate moves in an irregular manner	Gate partially obstructed or blocked	Unblock, adjust and lubricate the gate articulations
The gate cannot completely close (or open)	The photocell detects an obstacle	Eliminate the obstacle and try again
	The resistance of the gate has increased when closing (or when opening)	Check the moving parts of the gate and eliminate the resistance
	The force of the operator during closing (or opening) is too low	Using the control panel programme, increase the closing or opening force
	The mechanical stoppers of the gate or the operator are maladjusted	Adjust the stoppers

SCRAP

3

- ▲ The operator, up until the end of its useful life, must be dismounted at its location by an installer who is as well qualified as the person who completed the assembly, observing the same precautions and safety measures. In this manner we will avoid possible accidents and damage to adjacent facilities.
- The operator must be deposited in the appropriate containers for subsequent recycling, separating and classifying the different materials in line with their nature. NEVER deposit it in domestic rubbish or in landfills which are not controlled, as this will cause environmental damage.

4. SPARE PARTS

- A If the operator needs repairing, go to an authorised assistance centre or manufacturer; never try to repair it yourself.
- ▲ Use only original spare parts. See the figure "Content and spare parts" on page 39.