

# UFE

VERTICAL ELEVATOR PLATFORM



## MAINTENANCE MANUAL



CONTROL OF EDITIONS		
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## 1 AIM AND SCOPE

This manual offers the necessary information to perform a safe and adequate maintenance of the lifting platform which will be carried out by the qualified personnel of the installation company.

This document is a part of the complete instruction manual.

## 2 IMPORTANT INFORMATION

### 2.1. OBLIGATIONS OF THE OWNER

The owner is responsible for the use of the elevator. It is their obligation to abide by the following:

- ☐ Maintain elevator safety conditions.
- ☐ Safely prevent the operation of the platform when it is not used for its intended application or purpose.
- ☐ Ensure that maintenance is carried out by qualified trained personnel from an authorized company.
- ☐ Notify the maintenance provider of any suspected hazards witnessed with the platform installation or during operation.

### 2.2. LOCATION OF THE MAINTENANCE MANUAL

To ensure that the information contained in this document is always available, keep this manual in a fixed and secure location such as the control panel or filed, along with the rest of the documentation of the lifting platform. It is also available through QR code located on the inside of the controller cabinet door.

### 2.3. OBLIGATIONS OF THE MAINTENANCE PERSONNEL

- ☐ REGULATION, MAINTENANCE, REPARATION, CLEANING AND CONSERVATION, WILL BE CARRIED OUT BY QUALIFIED PERSONNEL FROM THE AUTHORIZED COMPANY.
- ☐ READ AND FULLY COMPREHEND THIS MANUAL BEFORE PERFORMING THE MAINTENANCE OF THE LIFTING PLATFORM.
- ☐ Follow the instructions described in this Maintenance Manual for the correct functioning of the platform.
- ☐ Before starting any maintenance or repair work, it is necessary to place a warning sign indicating, according to the current work safety standards, that maintenance work is being carried out.
- ☐ Have access to the appropriate equipment and tools to perform the operations described in this manual.

- Follow to the current work safety standards
- Leave the lift out of order in the case of noticing a dangerous situation which cannot be solved immediately and inform the owner of the need to keep the machine out of service until it is repaired.
- Inform the owner of any necessary action to avoid a risk.
- It is recommended that all maintenance procedures or repairs are accurately recorded and dated in a Log card which can be referred to at a later date by the owner or current maintenance provider.

#### 2.4. SPARE PARTS

For any maintenance, repair or maintenance operation of the lifting platform, use only original spare parts. Only in this way is it guaranteed that the lifting platform can continue to be used safely and efficiently, maintaining the same operating conditions as at the time of delivery.

#### 2.5. IMPROPER MAINTENANCE

The maintenance of the lifting platform must adhere to the application for which it has been designed and built. Any damage caused by improper maintenance of the lifting platform, not in accordance with what is described in this document or in others that are specifically provided with the platform, cannot be considered the manufacturer's responsibility.

#### 2.6. PLATFORM MODIFICATIONS

Modifications of any kind on the lifting platform are not allowed without the prior written authorization of COMPONENTES DE TRÁFICO VERTICAL S.L.

The manufacturer is not responsible for auxiliary equipment or accessories retro-fitted after the delivery date of the supplied lifting platform, which are not part of the original lifting platform or that have not been expressly authorized.

The manufacturer reserves the right to add or modify the safety measures of the lifting platform which considers appropriate (it deems appropriate), to ensure the safety of the user & maintenance engineers.

#### 2.7. INDICATIONS IN RELATION TO THE ENVIRONMENT

During maintenance operations, waste may be produced that should be disposed of properly. Improper disposal of waste generates serious environmental problems that, directly or indirectly, affect human life.

The waste generated in maintenance operations is recyclable. Take them to an (the) appropriate collection centre, according to current legislation.

Always avoid spillage of waste during maintenance operations.

Use suitable containers for the collection and storage of oils, greases, used parts, etc.

### 3 SAFETY MEASURES

#### 3.1. SAFETY MEASURES TO AVOID ACCIDENTS DUE TO FALLS FROM DIFFERENT LEVELS.

For installations exceeding heights of 1,5 m or higher, the following instructions for health and safety must be followed:

- ☐ In corridors or elevated levels, always walk straight ahead and never backwards or sideways. Remove.
- ☐ To travel up or down, holding firmly with both hands on the handrails provided.
- ☐ Ensure that the work area is stable before working on elevated areas.
- ☐ Wear a (safety harness fixed to a lifeline in connection with solid and firm constructions. Do not loosen the safety harness until you are located in a safe area.
- ☐ Ladders will be placed in a safe position before being used with a rubber supports if they are on a smooth or vibrating surface. Ladders are to be used for inspection purposes only not for working.
- ☐ Safely clean & dispose of any spillage of grease, oil or other hazardous substances that are present.
- ☐ Ensure that the work area is free from obstructions that could potentially cause trips or falls.
- ☐ Floors must be clean of slippery substances, without hollow or bumps. In case of working on platforms / scaffolds, these must be properly and must have safety car top barriers that prevent free fall.

#### 3.2. SAFETY MEASURES TO AVOID ACCIDENTS DUE TO FALLS FROM DIFFERENT LEVELS.

- ☐ Keep your workplace clean, organized and free of obstacles.
- ☐ Keep the floor of your work area free of grease, lubricants or any other slippery substance.
- ☐ Do not walk in a hurry, do it at a normal pace and pay attention to what you do.
- ☐ Wear appropriate, safety and non-slip shoes.
- ☐ Remove gaps and promontories on such floors, as well as steel or other metal plates that protrude or slide.

### 3.3. SAFETY MEASURES TO AVOID ELECTROCUTION ACCIDENTS

- ☐ FOR THE INSTALLATION, MAINTENANCE OR INSPECTION OF THE ELECTRICAL PANEL, FOLLOW THE MANUFACTURER'S INSTRUCTIONS.
- ☐ WORKS WITH ELECTRICITY 'ONLY' WILL BE CARRIED OUT BY QUALIFIED PERSONNEL.
- ☐ The work will be carried out under the direction and supervision of a person in charge of the activity with sufficient qualification.
- ☐ The controller cabinet should never be left open in the absence of the maintenance technician.
- ☐ Work areas must be properly marked and delimited to prevent the passage of people not associated with the occurring work.
- ☐ A warning signal will be placed in the place where the equipment controls, control panel, electrical distribution board, etc. are located indicating: DANGER DO NOT CONNECT. This signal will be removed when the work is finished.
- ☐ Electrical equipment or devices must have indicated the input voltage or the voltage generated in them.
- ☐ The ground conductors in the different switches must have a conductor with a cross section greater than 2,5 mm<sup>2</sup>.
- ☐ Turn off the electric supply before starting the repair or maintenance of electrical equipment or installation.
- ☐ Do not wear conductive objects such as bracelets, watches, chains or metal zippers.
- ☐ Use homologated personal protection equipment.
- ☐ Before carrying out any work on normally live elements, ensure that they are disconnected using a multimeter.
- ☐ Before checking the repaired electrical equipment or installations, make sure that they are grounded and insulated in good condition.
- ☐ Before starting any work, verify that your work tools have the insulating protector in good condition.
- ☐ Do not allow improvised or unprotected electrical installations in your work area.
- ☐ Do not drag electrical cables from portable tools or equipment on hot or damp surfaces, sharp edges, corrosive products or other agents that may damage it.
- ☐ Stand in a safe position for working to avoid falling over due to involuntary reactions to sparks or short circuits.

- Do not work hot lines with voltage higher than 32 volts of alternating current except in cases of imperative need and always using the appropriate personal protection and taking the necessary safety measures.
- Before handling identify the unprotected elements to reduce the risk of direct contact.
- Protect against hazards that may arise from contact with the active parts of electrical devices:
  - Insulating coating of active parts.
  - Protection through barriers or enclosures.
  - Interposition of obstacles.
  - Removal of active parts.
  - Complementary protection through residual-differential current devices.

## 4 GENERAL PROCEDURES

### 4.1. ACCESS AND EXIT THE PIT

#### GENERAL PRECAUTIONS

- Do not access the shaft before you have carried out the sequence of operations below described.

- Keep the pit clean and tidy.

- Work with adequate lighting.

#### PERSONAL PROTECTION EQUIPMENT

- Safety boots.

- Gloves.

- Safety helmet.

#### PERSONAL PROTECTION EQUIPMENT

##### ACCESS:

1. Properly signal that maintenance is being carried out in the pit.
2. Position & isolate the platform so that access can be gained to the pit area safely and easily. Send the platform to the upper landing.
3. Open the lowest level landing door via the Euro / Triangle lock release.





4. To prevent the door from closing accidentally:

- With swing doors, lift the shock absorber located at the top of the door.
- In case of automatic doors, block the door panels by means of a stop on the sill or in the mechanism.

5. Press the emergency stop button positioned in the shaft near door.

6. Put the mechanical stop under the car sling in the operating position. The position is controlled by an electric safety device.

RESTING POSITION



ACTIVE POSITION



7. Go into the pit carefully.

CARRY OUT THE MAINTENANCE IN THE PIT.

EXIT:

1. Return the mechanical stop under the car sling to the rest position. Access the interior of the car.

2. Deactivate the pit stop.

3. Reset the electric safety device in the lower door if it is a bistable switch with manual reset.

4. Close the landing door.

5. Reset from the control panel (push-button) or through the main switch (OFF/ON)

#### 4.2. ACCESS AND EXIT THE SHAFT




##### GENERAL PRECAUTIONS

- ☐ The maintenance in the shaft shall under no circumstances be carried out from the car top area.
- ☐ It will be done from inside the cabin by folding a hinged trapdoor electrically controlled by through an electric safety device.
- ☐ Maintenance will be carried out by an operator in inspection mode. For this, the platform is supplied with a control keypad or inspection box equipped with an emergency stop button, a power socket (depending on the option) and common, up and down buttons.
- ☐ Follow the sequence of steps described below, the same steps will have to be followed in each landing if appropriate.
- ☐ Work with adequate lighting.
- ☐ It is recommended that the maintenance work is always carried out by two qualified personnel of the maintenance company.
- ☐ Always position a safety barrier where maintenance or repair operations are being undertaken.
- ☐ Before one of the operators begins to perform one of the mentioned steps, we must ensure that the other operator knows all of the jobs that are to be carried out.
- ☐ Maintain an adequate communication between both operators and give clear instructions before carrying out any action.
- ☐ Remain at all time next to the landing door to avoid that any other person is close to the entry and could get hurt or fall into the shaft.
- ☐ Ensure that all doors are not obstructed and are both electrically & mechanically locked before leaving the work area.

##### PERSONAL PROTECTION EQUIPMENT

- ☐ Safety boots
- ☐ Gloves
- ☐ Safety helmet

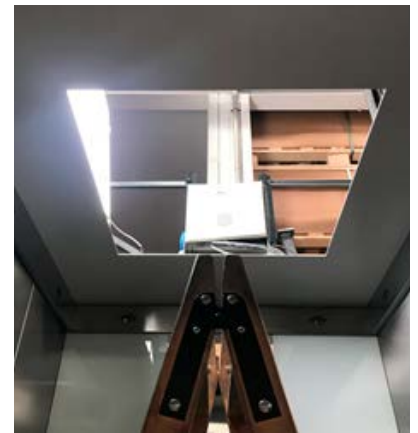
## SHAFT ACCESS AND EXIT PROCEDURE

ACCESS:	
1. IF A MECHANICAL STOP UNDER THE COUNTERWEIGHT IS NOT INSTALLED GO TO STEP 10.	
2. Position & isolate the platform so that accessed can be gained to the pit area safely and easily.	
3. Open the lowest level landing door via the Euro / Triangle lock release.	
	
4. To prevent the door from closing accidentally:	
<ul style="list-style-type: none"> <li>- With swing doors, lift the shock absorber located at the top of the door.</li> <li>- In case of automatic doors, block the door panels by means of a stop on the sill or in the mechanism.</li> </ul>	
5. Press the emergency stop button positioned in the shaft near the door.	
6. Put the mechanical stop under the counterweight sling in the operating position. The position is controlled by an electric safety device.	
RESTING POSITION	ACTIVE POSITION
	
7. Deactivate the pit stop	
8. Reset the electric safety device in the lower door if it is a bistable switch with manual reset.	
9. Close the landing door.	
10. Access the interior of the car.	

11. To prevent the door from closing accidentally:

- With swing doors, lift the shock absorber located at the top of the door.
- In case of automatic doors, block the door panels by means of a stop on the sill or in the mechanism.

12. Fold down the trapdoor that gives access to the visual inspection of the shaft. When activated, the safety contact cuts the main controller. The operator must use a step ladder that accomplishes the health and safety requirements.



13. Using the inspection box, press the emergency stop button and then place the switch in "Inspection" mode.

14. Deactivate the emergency stop button making sure that the switch is in "Inspection" mode.

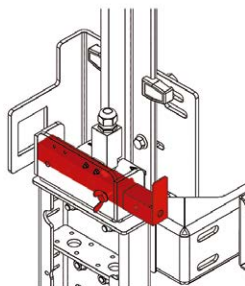
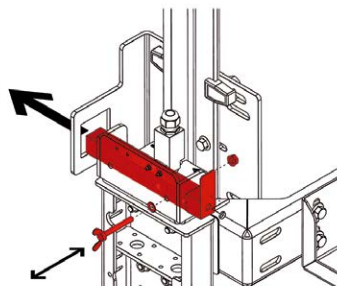
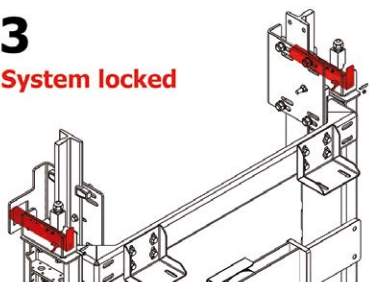
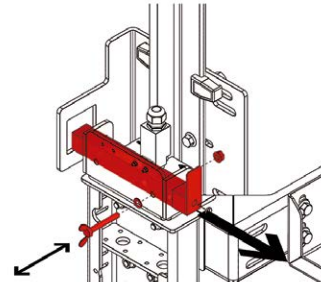
15. Remove the door stop that prevented it from closing.

**16. IF A SLING LOCKING DEVICE IS INSTALLED:**

- Drive the car to the locking area.
- Activate the sling locking device.

**CARRY OUT THE MAINTENANCE OPERATIONS FOR THE MOTOR.**

- Deactivate the sling locking device.
- Drive the car out of the locking area.

**1**
**System  
unlocked**

**2**
**On**

**3**
**System locked**

**4**
**Off**

**CARRY OUT ALL OTHER MAINTENANCE OPERATIONS IN THE SHAFT  
EXIT**

17. Position the cabin at to the landing level to allow the operator to exit the shaft safely.

18. Open the door(s) by placing a stop that prevents it from closing.

19. Activate the stop emergency button and place the switch in "Normal" mode.

20. Deactivate the stop emergency button.

21. Close the trapdoor in its original or "closed" position.

22. Exit the car.

23. Remove the door stop (s) to allow closing.

24. IF A MECHANICAL STOP UNDER THE COUNTERWEIGHT IS NOT INSTALLED GO TO STEP 30.

25. Open the lowest level landing door via the Euro / Triangle lock release.



26. To prevent the door from closing accidentally:

- With swing doors, lift the shock absorber located at the top of the door.
- In case of automatic doors, block the door panels by means of a stop on the sill or in the mechanism.

27. Return the mechanical stop under the counterweight sling to the rest position.

28. Deactivate the pit stop.

29. Reset the electric safety device in the lower door if it is a bistable switch with manual reset.



30. Close the landing door.



31. Reset from the control panel (push-button) or through the main switch (OFF/ON)

## 5. MAINTENANCE OPERATIONS



The tables below show the manufacturers recommended maintenance intervals and procedures which should be properly adhered to.



### 5.1. MAINTENANCE OPERATIONS IN THE PIT

		 MONTHS	 OPERATION
CLEANING	P1	4	Check that the pit is completely clean, without the presence of water leaks and/or oil stains. Integrity and soil stability, check the presence of rodent activity.

		 MONTHS	 OPERATION
EMERGENCY BUTTON	P2	4	Check the correct functioning of the pit stop (emergency button).
WARNING SIGNAL	P3	4	Check the risk warning signage which shows the steps to follow when accessing the pit.
MECHANICAL PIT STOP	P4	4	Check the correct functioning the electrical contact of the mechanical pit stop.
	P5	4	Check the mechanical stop fixings and correct alignment.
SHAFT LIGHTING	P6	4	Verification of the correct functioning of the lighting of the shaft.
ELECTRICAL EARTHING	P7	4	Check of the correct electrical earthing of guide rails.
GUIDES, FLANGES, GUIDE BRACKETS AND FIXTURES	P8	4	Check the guide rails are fixed securely and are plumb.
	P9	4	Cleaning and lubrication of guides (see 5.6), damage check, fixings to the building structure.
NORMAL WORKING	P10	4	Visual inspection. Verification of the correct displacement of the platform, absence of abnormal functioning noises.
SLING	P11	8	Lubrication of moving or wearing parts. Liners revision.

## 5.2. MAINTENANCE OPERATIONS IN THE SHAFT

		 MONTHS	 OPERATION
TRACTION CABLES	S1	4	Check the traction cables for: integrity, degrading, splintering, stretching or signs of oxidation.
EMERGENCY BUTTON	S2	4	Check the correct functioning of the stop (emergency button), of the inspection box in the roof.
WARNING SIGNAL	S3	4	Check the risk warning signage which shows the steps to follow when accessing the shaft.
SHAFT LIGHTING	S4	4	Verification of the correct functioning of the lighting of the shaft.
GUIDES, FLANGES, GUIDE BRACKETS AND FIXTURES	S5	4	Check the guide rails are fixed securely and are plumb.
	S6	4	Cleaning and lubrication of guides (see 5.7), damage check, fixings to the building structure, mechanical stop fixings and correct alignment.



		 MONTHS	 OPERATION
NORMAL WORKING	S7	4	Visual inspection. Verification of the correct displacement of the platform, absence of abnormal functioning noises.
SLING	S8	8	Check the car sling bolts are fastened securely.
	S9	8	Lubrication of moving or wearing parts. Liners revision.
	S10	8	Check the condition of pulleys and pulley bearings
CAR	S11	8	Check car bolts.
	S12	8	Check condition of car roof hatch contact.
DOOR LOCKS	S13	4	The locks should be visually, mechanically and electrically checked to ensure there safe and correct operation.
CAR DOOR CONTROLLER	S14	4	(If there is any car door controller not accessible from the landings and it has been installed accessible from the hatch) Check the correct functioning and make the necessary adjustments.
TRACTION ROPES	S15	4	Check the traction ropes for: integrity, degrading, splintering, stretching or signs of oxidation.
OVERSPEED GOVERNOR	S16	4	Check if there is a corrosion process that may affect any mobile part and may prevent its natural movement.
OVER TRAVEL LIMIT	S17	4	Check the over travel limit system in both up & down directions, to ensure the correct & safe operation.
FINAL LIMIT	S18	8	Check final limit switches.
ELECTRICAL INSTALLATION	S19	8	Verification of electrical continuity: check that all metal elements are grounded.
	S20	12	Check the condition of the pre-assembled electrical installation in the shaft.
	S21	8	Check electrical hazard warning signalling: presence of the label.
DRIVE PULLEY	S22	8	The drive pulley should be inspected with the platform stationary & safely isolated. The sheave should be checked for signs or wear or cracks in the casting, with all mounting bolts fixed securely. The sheave grooves should not be worn excessively or show signs of the rope lay cut into the casting. Each suspension rope should sit equally parallel and horizontally to each other. If any ropes are positioned too deeply into the grooves, tension has been exceeded and the ropes and sheave must be replaced with OEM parts.
MOTOR	S23	12	Check of the power supply to motor.
	S24	4	General condition of motor, presence of oxidation, oil leaks, etc. Clean if required.
	S25	8	Motor is "Oiled for life" and requires no maintenance.
	S26	4	Check alignment, insulation and absence of abnormal noise and vibration.





### 5.3. MAINTENANCE OPERATIONS IN THE CAR



		 MONTHS	 OPERATION
NORMAL WORKING	C1	4	Carry out a full travel run in both up & down directions to ensure no anomalies or hazards are present.
LEVELLING	C2	4	Check that floor levelling between car and landing is not greater than $\pm 10\text{mm}$ .
CAR DOORS	C3	4	Car doors (if available). Photocell, status and performance.
PHOTOELECTRIC BARRIER	C4	4	Photoelectric barrier (if there is one): check correct working with and without car doors according to the instructions described in this manual in "5.6.1".
GENERAL CONDITION	C5	4	State of decoration and car elements handrail, mirrors, trims, car operating panel and fixtures, etc.
LIGHTING	C6	4	Check functionality of the lighting inside the cabin.
EMERGENCY LIGHTING	C7	4	Emergency lighting: check that after a power failure, the emergency light in the cabin is illuminated.
EMERGENCY TELEPHONE	C8	4	Emergency telephone: check operation.
EMERGENCY OPERATION	C9	4	Emergency: in case of power failure, if this option has been chosen, the platform must automatically go to the nearest floor.
COP	C10	4	Alarm Bell button: correct operation, sound and adequate volume.
	C11	4	Key switch (if exists): check operation.
	C12	4	Correct operation of the continuous push buttons (if exist).
	C13	4	Emergency stop button (if exists): correct working.



### 5.4. MAINTENANCE OPERATIONS AT LANDINGS

		 MONTHS	 OPERATION
LANDING DOORS	L1	4	Check for damages and corrosion. Clean mechanism, tracks, guiding shoes and landing sills. Check the gaps.

		 MONTHS	 OPERATION
LANDING DOORS	L2	4	Open and close the doors verifying that there is no friction. Check the alignment of door panels and adjust if necessary.
	L3	4	Check the correct and complete opening. Check the rollers, contacts and sills.
	L4	4	Check the correct tension of the transmission cable (if exists).
EMERGENCY UNLOCKING	L5	4	Check the correct functioning with the emergency unlocking key to ensure the safe and correct operation. Check the electrical contacts if exists.
CAR DOOR CONTROLLER	L6	4	(If exists) Check the correct functioning and make the necessary adjustments.

## 5.5. MAINTENANCE OPERATIONS IN CONTROL CABINET

		 MONTHS	 OPERATION
WARNING SIGNAL	CC1	8	Check electrical hazard warning signalling: presence of the label.
LOCK	CC2	8	Check the cabinet lock: presence and correct operation.
GENERAL CONDITION	CC3	8	General condition of control panel: presence of rust, humidity, breakage of the panel due to impacts, etc. Clean if necessary.
	CC4	8	Interior installation of the control panel: check the condition and absence of electrical hazards (gnawed cables, overheated, burned, etc).
LIGHTING	CC5	8	Check the control panel illumination (if applicable)
ELECTRICAL PROTECTIONS	CC6	8	Differential switch and circuit breaker: Correct operation.
POWER SUPPLY	CC7	8	Check the power supply to control panel.

		 MONTHS	 OPERATION
NORMAL WORKING	CC8	8	Components of the control panel: correct operation. Presence of abnormal noises during operation, etc. Correct connection and disconnection.
BATTERIES / UPS	CC9	8	Batteries/UPS: correct condition, packaging with no damage, no bulges, absence of leaks and rust on batteries.
BRAKE TESTING	CC10	4	Check the brakes according to the instructions described in this manual in "5.6.2".

## 5.6. MAINTENANCE DETAILS

### ■ 5.6.1 Maintenance instructions for photoelectric barrier

If the platform does not have cabin doors, it will always carry photoelectric bands. Although these bands do not require periodic maintenance, a functional check is recommended each time machine maintenance is performed.

#### PROCEDURE

- ☐ Check that the slats are mounted and firmly attached.
- ☐ Check the functional capacity throughout all the door space. The machine must stop if an object is placed anywhere within the photo transmitter field.
- ☐ Clean the front surface of the optical strips with a soft cloth (or cloth) to remove any dust residue.

#### GENERAL PRECAUTIONS

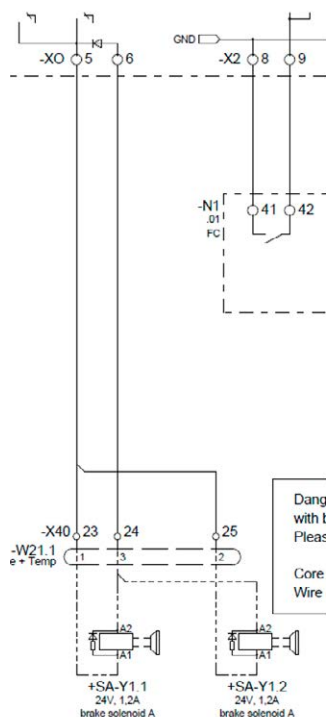
- ☐ Never use solvents, cleaning agents or abrasive cloths to clean the barrier, it can cause damage to the lens.
- ☐ Although bands are resistant to water and weather conditions, never use too much water or any other liquid to clean them.
- ☐ Do not scratch the surface when cleaning.
- ☐ Not taking these points into account may cause failure of the photoelectric barrier.

### ■ 5.6.2 Brake testing

#### NEW LIFT MAIN CONTROLLER

According to the instructions of the Newlift main controller, the brakes are connected to the terminal group -X40, located in the DIN rail at the bottom of the main controller cabinet. In group -X40 we will focus on terminals 23, 24 and 25. Terminal 24 is the common one since this terminal leaves a wire to each coil and terminal 23 or 25 will close the circuit of each brake independently:

- The technician must give an order to raise or lower the elevator.
- While the car is moving, the cable from terminal 23 must be released and check that the car stops.
- Once you have verified that the cabin has stopped, you will connect the cable to terminal 23 again.
- If the elevator does not start moving again, it is possible that it has been registered an error due to excessive time. You must turn the controller off and on again to reset the error.
- Carry out the same procedure as before but with terminal 25 cable. If the lift stops, it would mean that this system has passed this test. Otherwise, you should consult the machine instructions or contact the manufacturer.

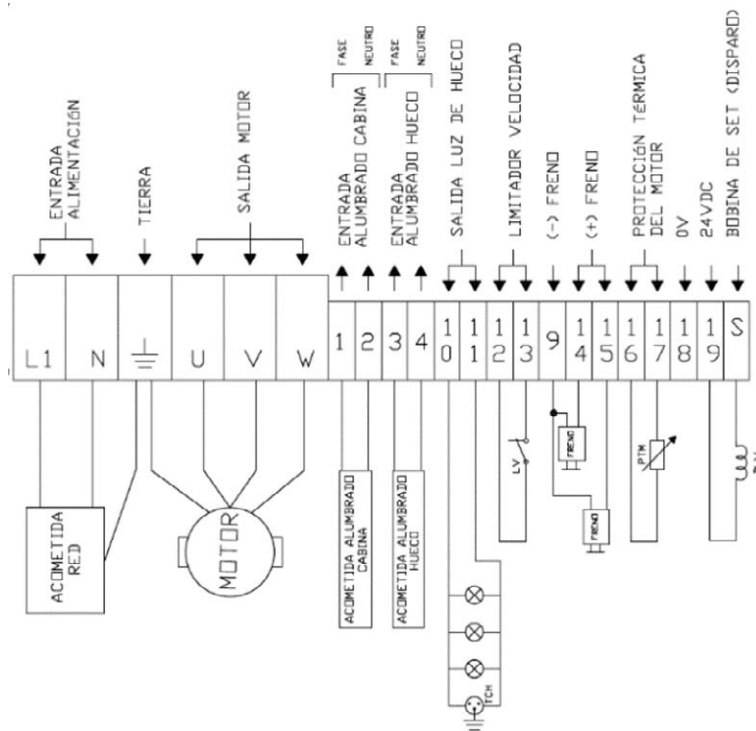


### INELCA MAIN CONTROLLER

According to the Inelca main controller scheme, the brakes are connected to terminals 9, 14 and 15 located on the DIN rail at the bottom of the main controller cabinet.

Terminal 9 is the common one since this terminal leaves a thread to each coil and terminal 14 or 15 will close the circuit of each brake independently.

- The technician must give an order to raise or lower the elevator.
- While the car is moving, you must release the cable from terminal 14 and check that the car stops.
- Once you have verified that the cabin has stopped, connect the cable to terminal 14 again.
- If the elevator does not start moving again, it is possible that you have registered an error due to excessive time. You must enter the motherboard diagnostic menu and reset the errors.
- Perform the same procedure as before but with terminal 15 cable. If the lift stops it would mean that this system has passed this test. Otherwise, you should consult the machine instructions or contact the manufacturer.



## **5.7 MAINTENANCE PRODUCTS. GREASE FOR THE GUIDES**

Recommended products recommended to carry out the platform maintenance:

GREASE FOR OILING THE GUIDES: "STANDARD SLIP 150".

Quality level:

ISO 6743/4 - Category L-HG .

DIN 51524 - HLP.

DIN 51517 - CLP

## 5.8 SUMMARY OF THE MAINTENANCE OPERATIONS

	OPERATION		4 Months	8 Months	12 Months
PIT	CLEANING	P1	X	X	X
	EMERGENCY BUTTON	P2	X	X	X
	WARNING SIGNAL	P3	X	X	X
	MECHANICAL PIT STOP	P4	X	X	X
	MECHANICAL PIT STOP	P5	X	X	X
	SHAFT LIGHTING	P6	X	X	X
	ELECTRICAL EARTHING	P7	X	X	X
	GUIDES, FLANGES, GUIDE BRACKETS AND FIXTURES	P8	X	X	X
		P9	X	X	X
	NORMAL WORKING	P10	X	X	X
	SLING	P11		X	X
SHAFT	TRACTION CABLES	S1	X	X	X
	EMERGENCY BUTTON	S2	X	X	X
	WARNING SIGNAL	S3	X	X	X
	SHAFT LIGHTING	S4	X	X	X
	GUIDES, FLANGES, GUIDE BRACKETS AND FIXTURES	S5	X	X	X
		S6	X	X	X
	NORMAL WORKING	S7	X	X	X
	SLING	S8		X	X
		S9		X	X
		S10		X	X
	CAR	S11		X	X
		S12		X	X
	DOOR LOCKS	S13	X	X	X
	CAR DOOR CONTROLLER	S14	X	X	X
	TRACTION CABLES	S15	X	X	X
	DRIVE PULLEY	S16		X	X
	OVER TRAVEL LIMIT	S17	X	X	X
	FINAL LIMIT	S18		X	X
	ELECTRICAL INSTALLATION	S19			X
		S20			X
		S21			X
	MOTOR	S22	X	X	X
		S23	X	X	X
		S24		X	X

CAR	NORMAL WORKING	C1	X	X	X
	LEVELLING	C2	X	X	X
	CAR DOORS	C3	X	X	X
	PHOTOELECTRIC BARRIER	C4	X	X	X
	GENERAL CONDITION	C5	X	X	X
	LIGHTING	C6	X	X	X
	EMERGENCY LIGHTING	C7	X	X	X
	EMERGENCY TELEPHONE	C8	X	X	X
	EMERGENCY OPERATION	C9	X	X	X
	COP	C10	X	X	X
		C11	X	X	X
		C12	X	X	X
		C13	X	X	X
LANDINGS	LANDING DOORS	L1	X	X	X
	EMERGENCY UNLOCKING	L2	X	X	X
	CAR DOOR CONTROLLER	L3	X	X	X
CONTROL CABINET	WARNING SIGNAL	CC1		X	X
	LOCK	CC2		X	X
	GENERAL CONDITION	CC3		X	X
		CC4		X	X
	LIGHTING	CC5		X	X
	ELECTRICAL PROTECTIONS	CC6		X	X
	POWER SUPPLY	CC7		X	X
	NORMAL WORKING	CC8		X	X
	BATTERIES / UPS	CC9		X	X
	BRAKES	CC10	X	X	X



6 RECORD OF MAINTENANCE

RECORD OF MAINTENANCE		
DATE	WORK DONE BY	WORK CARRIED OUT



# CTV

## COMPONENTES DE TRÁFICO VERTICAL

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