



MAINTENANCE MANUAL

Rev. 03.02 Updated 09/27/2022

Per informazioni:

www.updinaric.com

E-mail: info@updinaric.com

Tel. + 39.0442.590.129

Fax +39.0442.599.091

Via Franco Modigliani, 22

37045 - Legnago (VR) Italy

One level ahead.

UPDINAMIC srl

Via Modigliani, 22
37045 LEGNAGO (VR)

MAINTENANCE MANUAL

Rev. 03.02 – 27/09/2022

DL4 / CM4 / DL4-MAG GOODS LIFT

SERIAL NUMBER:

THE FOLLOWING MANUAL IS INTENDED FOR THE INSTALLER AND MAINTENANCE PERSON OF THE MACHINE,
THIS MANUAL AND THE RELATED ATTACHMENTS LISTED MUST BE KEPT IN THE COMPARTMENT
TECHNICAL BY THE OWNER:

- ☒ MACHINE BOOKLET
- ☒ MACHINE USER MANUAL
- ☒ ELECTRICAL PART MANUAL
- ☒ MAINTENANCE MANUAL



MAINTENANCE MANUAL

Rev. 03.02 Updated 09/27/2022

Per informazioni:

www.updynamic.com

E-mail: info@updynamic.com

Tel. + 39.0442.590.129

Fax +39.0442.599.091

Via Franco Modigliani, 22
37045 - Legnago (VR) Italy

One level ahead.

OWNER'S OBLIGATION

For the maintenance and installation of elevators and hoists, art. 15 of Presidential Decree 162/99, amended by Presidential Decree 23/2017, provides that the owner of the system is required to make use of
of a person equipped with:

Certificate of qualification (LETTER "F") issued by the prefecture.

It should also be noted that in art. 12 of Presidential Decree 162/99, amended by Presidential Decree 23/2017, the commissioning in operation of elevators and freight elevators in private service must be communicated to the municipality competent for the territory; this communication must contain, among other things, the indication of the company, authorised pursuant to Law 5 March 1990, n. 46 [now Ministerial Decree 37/08], to which the
The owner has entrusted the maintenance of the system. Therefore, it must be concluded that the company that performs extraordinary maintenance of the lifting systems must
also possess the requirements set out in Ministerial Decree 37/08.

The CE certificate of the system will be delivered to the customer after the installer has sent to UpDinamic the Checklist filled out in all its parts.

MAINTENANCE MANUAL

Rev. 03.02 Updated 09/27/2022



Per informazioni:
www.updinaric.com
E-mail: info@updinaric.com

Tel. + 39.0442.590.129
Fax +39.0442.599.091

Via Franco Modigliani, 22
37045 - Legnago (VR) Italy

One level ahead.

SUMMARY

1. DEFINITIONS.....	5
2. INTRODUCTION	7
3. MAINTENANCE OPERATIONS:.....	11
4. BASIC SAFETY RULES.....	12
5. SAFETY CONDITIONS FOR MAINTENANCE.....	13
6. RISKS ARISING FROM FAILURE TO COMPLY WITH SAFETY REGULATIONS AND REGULATIONS....	14
7. MACHINE DIAGRAM	15
8. CHECKING THE POWER LINE	17
9. SAFETY STRUT:.....	19
10. SAFETY STOP IN THE PIT	21
11. VOLTAGE INSIDE THE PANEL:	21
12. CONTROL TABLE:.....	22
13. ELECTRICAL PARTS AND SAFETY COMPONENTS	27
DOOR INTERFACE	30
Pizzato Electric Lock Connection.....	30
Pizzato RFID Sensor Connection	31
PROGRAMMING THE HELPYVOX MODEL TELEASSISTANCE SYSTEM	34
EMERGENCY MANOEUVRE (FOR AUTHORIZED PERSONNEL ONLY)	35
VALID FOR 2-STOP SYSTEMS	35
VALID FOR 3/4/5-STOP SYSTEMS	36
PROGRAMMING THE HELPYVOX MODEL TELEASSISTANCE SYSTEM.....	37
MAXIMUM VALVE ADJUSTMENT	38
HYDRAULIC POWER PLANT DESCRIPTION.....	40
SYSTEM BLEEDING	41

MAINTENANCE MANUAL

Rev. 03.02 Updated 09/27/2022



Per informazioni:

www.updynamic.com

E-mail: info@updynamic.com

Tel. + 39.0442.590.129

Fax +39.0442.599.091

Via Franco Modigliani, 22

37045 - Legnago (VR) Italy

One level ahead.

PUNCHING CYCLE 42

14. ASSISTANCE.....44

15. REPAIRS AND SPARE PARTS 44

Appendix A - PERIODIC MAINTENANCE REPORT.....45

1. DEFINITIONS

Refer to the UNI EN ISO 12100:2010, UNI EN 81-3:2008, UNI EN 81-20:2014, UNI EN 81-28:2019, UNI EN 81-41:2011 and UNI EN 81-50:2014 standards for definitions of the terms used in this manual, as well as the following definitions:

Maintenance:

All operations necessary to ensure the safe and expected operation of the system and its components after installation and throughout its life cycle. Maintenance includes:

- lubrication, cleaning, etc. (except for the external parts of the lift shaft and the internal cleaning of the cabin).
- the controls;
- the operator's rescue operations (only in the case with the SPB system);
- calibration and adjustment operations;
- repairs or replacements of components that may be due to wear or tear and which do not alter the characteristics of the system.

The following are not considered maintenance operations:

- the replacement of main components such as the duct, roof, cabin, control panel, etc.,
- the replacement of the system,
- modernization of the system, including modification of any of the system's characteristics (e.g. speed, stroke, flow rate, dimensions, etc.)
- Rescue operations carried out by firefighters.

Maintenance Organization:

A company or part of a company having the technical and professional qualifications required by law, where members of the maintenance team carry out maintenance operations on behalf of the owner of the system.

Competent person in charge of maintenance:

A trained and instructed person (see EN ISO 9000), qualified by knowledge and practical experience, provided with the necessary instructions and supported in the maintenance organization to enable the required maintenance operations to be carried out safely.

Manufacturer:

Natural or legal person who takes responsibility for designing, manufacturing and marketing both the safety components for the lift and the machine itself.

Installer:

A natural or legal person who assumes responsibility for installing goods-only lifts and lifts with and without an operator on board.

Plant:

Fully installed goods lifts and goods lifts with or without operator on board.



MAINTENANCE MANUAL

Rev. 03.02 Updated 09/27/2022

Per informazioni:
www.updynamic.com
E-mail: info@updynamic.com

Tel. + 39.0442.590.129
Fax +39.0442.599.091

Via Franco Modigliani, 22
37045 - Legnago (VR) Italy

One level ahead.

Plant Owner:

Natural or legal person who has the power to dispose of the system and who is responsible for its use and operation.

Emergency:

This is an abnormal situation in which the person inside the elevator may require assistance from outside.

Broken down:

This is a situation where the safe use of the platform for its intended purpose is limited or impossible.

Repair:

Replacement or repair of defective and/or worn components.

Notified body:

This is a body recognized by one of the Member States, pursuant to the provisions of the Machinery Directive; they are notified bodies responsible for monitoring the procedures set out in the Machinery Directive for the commissioning and operation of systems.

MACHINE DEFINITIONS

Goods lift / freight elevator:

lifting system for cars/goods + one operator on board

Guides:

Metal structure anchored to a load-bearing wall, equipped with "C" shaped metal profiles for the sliding of the trolley.

Cart:

Metal frame equipped with bearings for sliding within the guides, to which the platform is attached. Lifted by hydraulic cylinders with chain transmission.

Platform / Platform:

Structure composed of a supporting platform in chequered sheet metal and a steel frame.

Technical compartment:

Department outside the lift shaft where the machine's electrical panel and hydraulic power unit are located.

SPB System:

System that allows the safe movement of the lift with the presence of the operator on board, provided with all the measures for emergency situations.

SDE System:

System for the descent of the freight elevator to the lower floor even in the event of a power failure electric.



MAINTENANCE MANUAL

Rev. 03.02 Updated 09/27/2022

Per informazioni:
www.updinamic.com
E-mail: info@updinamic.com

Tel. + 39.0442.590.129
Fax +39.0442.599.091

Via Franco Modigliani, 22
37045 - Legnago (VR) Italy

One level ahead.

2. INTRODUCTION

REGULATORY REFERENCES:

The machine has been manufactured in compliance with the following Directives:

- MACHINERY DIRECTIVE 2006/42/EC
- ELECTROMAGNETIC COMPATIBILITY DIRECTIVE 2014/30/EU

The partly completed machinery is therefore supplied complete with the documentation required by these Directives.

The manufacturer designed the partly completed machinery considering that it must not be put into service until the final machinery into which it is to be incorporated has been declared compliant with all the provisions of the Machinery Directive 2006/42/EC. This manual is therefore a guide to provide correct instructions for commissioning the final machinery, with the aim of ensuring safe conditions of use: bypassing electrical safety devices and dismantling the guards provided by the manufacturer seriously compromise the safety of the machinery. Correct use also requires compliance with the instructions relating to the installation, power supply, and maintenance of the machinery, which must be strictly adhered to.

The machine must be used in accordance with the use intended by the manufacturer and specified in this manual: we therefore recommend reading it carefully before reading this manual.

Maintenance involves a few simple operations that can be performed by the machine operator. To achieve maximum durability and the best operating economy, it is recommended to follow: scrupulously the rules contained in this document.

The manufacturer will not be held responsible for breakages, accidents, or other inconveniences resulting from failure to comply with (or otherwise fail to apply) the instructions contained in this manual. The same applies to the implementation of modifications, variations, or the installation of unauthorized accessories.

This installation manual is an integral part of the partly completed machine: It is essential to keep it intact and in a safe place throughout the life of the partly completed machine.

READ THIS MAINTENANCE MANUAL CAREFULLY AND KEEP IT.

GENERAL PROVISIONS:

The systems referred to in this manual must be subject to regular maintenance at the intervals indicated by the manufacturer, with the primary aim of ensuring the safety of the system and compliance with current laws and regulations.

Maintenance operations are carried out exclusively by the manufacturer or by personnel authorized by the latter or in any case having the legal qualifications required to carry out maintenance operations and capable of reading and understanding the diagrams and drawings.

All maintenance operations not reported in this manual must be carried out only by personnel sent by the manufacturer.



All maintenance work must be performed with the machine out of service, disconnecting the power supply using the main switch on the electrical panel, and displaying a clearly visible sign indicating the machine's shutdown and maintenance status. The maintenance technician must ensure that the machine can only be started up after their intervention and approval.



If it is necessary to move the machine for troubleshooting, the following instructions must be followed to ensure personnel safety:

- the operator at the controls of the machine and the maintenance technician must be within sight of each other, ensuring that communication between them is easy and unambiguous;
- the operator acts according to the orders transmitted to him by the maintenance technician, only after repeating them to confirm them;
- before moving any element from a standstill to a moving one, the maintenance technician must maintain a safe position, approaching the moving parts only after having obtained certainty that his instructions have been accurately understood by the operator;
- maintenance should always be carried out with adequate lighting

When reading this manual, pay attention to the symbols listed below.

**ATTENTION**

Standards and/or instructions marked with this symbol concern safety. This type of warning indicates hazards to which personnel operating the machine are exposed. Failure to follow instructions marked with this symbol could damage the machine, posing a risk to personnel.

**PROHIBITED**

The rules and/or instructions marked with this symbol concern actions that **THEY MUST NOT** must be strictly followed. Failure to comply with these rules could damage the machine and/or cause serious danger to the operating personnel.

IMPORT**IMPORTANT**

This type of warning indicates that special care must be taken during cleaning and/or maintenance operations. Failure to comply with these instructions could damage the machine and/or cause serious danger to the user or others.



All maintenance work must be performed with the machine out of service, disconnecting the power supply using the main switch on the electrical panel, and displaying a clearly visible sign indicating the machine's shutdown and maintenance status. The maintenance technician must ensure that the machine can only be started up after their intervention and approval.



If it is necessary to move the machine for troubleshooting, the following instructions must be followed to ensure personnel safety:



The operator at the controls of the machine and the maintenance technician must be within sight of each other, ensuring that communication between them is easy and unambiguous;



The operator acts according to the orders given to him by the maintenance technician, only after repeating them to confirm them;



Before moving any element from a standstill to a moving one, the maintenance technician should maintain a safe position, approaching the moving parts only after having obtained certainty that his instructions have been accurately understood by the operator;



Maintenance should always be carried out with adequate lighting

NOISE

The mechanical and electromechanical elements present on board the cabin and inside the lift shaft are developed with specific anti-noise provisions, therefore the noise level in the cabin is at a level $L_{pA} < 70$ dB (A).

The only source of noise is the hydraulic unit located in the technical room. In this area, the noise level one meter away from its source is $L_{pA} = 72.3$ dB.

3. MAINTENANCE OPERATIONS:

Maintenance personnel, when accessing the machine room, lift shaft, technical room, etc., must be equipped with all necessary protective equipment in compliance with current regulations regarding worker health and safety.

MAINTENANCE EQUIPMENT:

- Standard equipment
- Portable lamps for difficult-to-reach and poorly lit areas
- No. 04 Props, to support the mobile cabin (3000 kg) in case of interventions under the platform.
With load-unload support
- Thermometer for checking operating temperatures
- Stopwatch to check operating speed
- Ammeter clamp for checking electric motor absorption

MAINTENANCE PLAN:

For the customer's exclusive information, the expected maintenance plan is provided (recommended every six months).



Checks on the hydraulic system must be carried out only after the hydraulic pressure has been released and must be carried out with particular care, avoiding introducing foreign bodies or substances harmful to its operation into the circuit.

CHECK OF THE TECHNICAL COMPARTMENT

The technical compartment is the area designated for housing the hydraulic power unit and the machine's electrical panel. The technical compartment should preferably be located adjacent to the machine's lift shaft and must be clean and free of moisture.



Check that there is an opening for the passage of cables and hydraulic pipes between the lift shaft and the technical compartment; a minimum passage hole diameter of 100 mm is recommended;



Check the presence of an electrical line with adequate characteristics suitable for the system for power supply and wiring to the electrical panel;



Check that the space is adequate for maintenance operations as required by current regulations (a space of at least 1000x1000mm is recommended);

4. BASIC SAFETY RULES

Personnel responsible for installation (assembly and commissioning) must have the necessary qualifications. In Italy, the installation company must meet the required technical and professional qualifications, letter "f" in reference to Presidential Decree 30-4-1999 no. 162, and be authorized by the competent authority. The installer must therefore be able to read and understand the diagrams and drawings. The system must be assembled in accordance with the instructions in the relevant documentation, and all necessary safety measures must be in place to ensure the safety of the personnel involved.

The owner/operator of the machine must ensure that anyone who may have access to the installation devices has read this manual in its entirety and fully understands its contents. It is also important that the operator enforces all regulations and/or requirements for the prevention of accidents at work, also considering the specific circumstances of the installation site.

ATTENTION

The work environment must be kept clean and tidy. In particular, danger zones must be properly demarcated.

ATTENTION

Tools and materials for use must not be left on the machine (or in any case in positions where they could interfere with the mechanical movements of the lift) or where they could fall and cause damage to people and/or things.

ATTENTION

Each tool should be used only for its intended purpose and in the most suitable manner. Any damaged or poorly maintained tool is a potential source of danger.

state

ATTENTION

Wearing loose-fitting clothing (e.g., scarves, ties, etc.) can be dangerous. Always wear clothing that fits snugly.

ATTENTION

Oil or grease on the floor must be removed immediately to avoid any risk of slipping or falling.

5. SAFETY CONDITIONS FOR MAINTENANCE



All personnel involved in maintenance operations must use the necessary personal protective equipment and clothing as prescribed by current regulations for the prevention of accidents at work.

PPE: harnesses, helmets, shoes, gloves



To ensure construction site safety, access to the pit must be limited. If there is no permanent fence, the maintenance technician is responsible for installing a temporary perimeter fence around the pit. These fences may only be crossed by authorized personnel.

MAINTENANCE EQUIPMENT

- Scaffolding
- Electric construction site hoist
- Fall arrest systems, harnesses
- PPE
- Standard tools
- Portable welder
- Grinder
- Portable lamps for hard-to-reach and poorly lit areas
- No. 04 Props H=2000mm (approximately), to support the platform (500 kg) in case of interventions under the platform.
- Thermometer for monitoring operating temperatures
- Stopwatch to check operating speed
- Ammeter clamp for checking electric motor absorption

MAINTENANCE PLAN:

For the customer's exclusive information, the expected maintenance plan is provided (recommended every six months).



Checks on the hydraulic system must be carried out only after the hydraulic pressure has been released and must be carried out with particular care, avoiding introducing foreign bodies or substances harmful to its operation into the circuit.

CORRECT USE

Using the UP lifting system requires compliance with the following rules:

- must be used only for the purpose for which it was built;
- the electrical connection must be made to a protected power supply network in accordance with current safety regulations;
- Access to the pit is permitted only to maintenance personnel.

6. RISKS ARISING FROM NON-COMPLIANCE WITH SAFETY REGULATIONS AND REGULATIONS

Failure to comply with safety rules and regulations could damage the appliance, cause harm to operators and/or the environment, and void the machine warranty. Damage resulting from failure to comply with safety regulations may result in:

- Machine malfunction;
- Risks and/or dangers from electrical and mechanical voltage;

RESIDUAL RISKS



Any operation must take place near the lift shaft, taking maximum care to ensure that no people, animals or things are stationed or transiting within or near the perimeter of the machine.



Ensure that any fire extinguisher dedicated to the system is always efficient and serviced within the legal timeframes and procedures.



It is prohibited to store flammable substances or liquids of any kind inside the cargo area.



Do not abandon people and/or animals inside the loading platform. Take utmost care that it is empty before storage operations begin.



Impact caused by moving mechanical parts

MAINTENANCE MANUAL

Rev. 03.02 Updated 09/27/2022



Per informazioni:

www.updinamic.com

E-mail: info@updinamic.com

Tel. + 39.0442.590.129

Fax +39.0442.599.091

Via Franco Modigliani, 22

37045 - Legnago (VR) Italy

One level ahead.

7.



MAINTENANCE MANUAL

Rev. 03.02 Updated 09/27/2022

Per informazioni:

www.updynamic.com

E-mail: info@updynamic.com

Tel. + 39.0442.590.129

Fax +39.0442.599.091

**Via Franco Modigliani, 22
37045 - Legnago (VR) Italy**

One level ahead.

8. CHECK THE POWER LINE

It is necessary to verify the presence of a power line, socket, and power supply adequate for the system's characteristics. The system's electrical characteristics are shown on the wiring diagram inside the panel and on the motor's nameplate.

- On each floor, two 20 mm diameter corrugated pipes are provided to connect the push-button panel and electric lock to the utility room.
- The technical room is located on the lower floor on a wall adjacent to the lift shaft, for positioning the hydraulic power unit and electrical panel.
- A 100 mm diameter hole is provided inside the extra pit for the passage of hydraulic pipes.
- The technical compartment must be large enough to allow maintenance operations by authorized personnel (minimum 100x160x h200cm), positioned in a place accessible for maintenance, at the same time remote and protected from access by unauthorized persons, the technical compartment must be illuminated at 200 Lux.
- The technical compartment must be placed in a dry place and protected from water.
- It is recommended to protect the technical area with a masonry compartment, panels, or a specific technical cabinet.
- Standard length of hydraulic pipes and electrical cables 6m.
- Provide a suitably sized differential switch (see motor characteristics) upstream of the electrical system of the goods lift, positioning it inside the technical compartment.
- Provide lift shaft lighting: Provide an adequate 50 Lux lighting system in the lift shaft; 200 Lux in the technical shaft

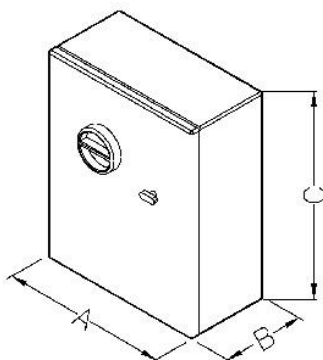
ELECTRICAL PART:

ELECTRICAL PANEL DIMENSIONS:

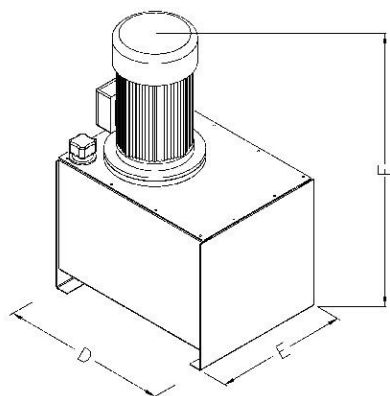
A= 50 cm

B= 25 cm

C= 70 cm



HYDRAULIC POWER UNIT DIMENSIONS



	5.5kW	7.5kW	9.2kW
F	80cm	85cm	90cm
D	60cm	60cm	60cm
AND	45cm	45cm	50cm
	220-380V three-phase	220-380V three-phase	220-380V three-phase

AVAILABLE THREE-PHASE MOTORS

Motor	Voltage operation	Start-up	Switch advised*	Current nominal	Current start-up
5.5kW	220 V - single phase	Direct	3x16A id=0.3A	22	60
	380 V - three-phase	Direct	4x16A id=0.3A	11	35
11 kW	220 V - single phase	Direct	3x40A id=0.3A	34	102
	380 V - three-phase	Direct	4x25A id=0.3A	20	60

* Automatic circuit breaker with differential, "C" curve. Provide a five-pole 3F+N+T power supply.

9. SAFETY STRUT:

Installing the strut is essential for safety purposes if you find yourself working underneath the lift during installation or maintenance.



It is strictly forbidden for unauthorized persons to stand underneath the lift for reasons other than those mentioned above.

The following items will be provided for each strut:

- Base plate
- Side plate (qty. 2)
- Tubular
- End of the line

To install the strut, follow the instructions below:

- Anchor the base plate to the pit floor
- Screw one end of the side plates to the base plate
- Screw the tube to the side plates
- Screw the end onto the dedicated bracket
- Check the correct contact between the central bolt and the limit switch
- Connect the limit switch to the electrical panel (see electrical manual)

When in use, the tube must be positioned vertically by screwing the other end of the side plates to the base plate. Ensure the correct position to ensure proper support for the platform.



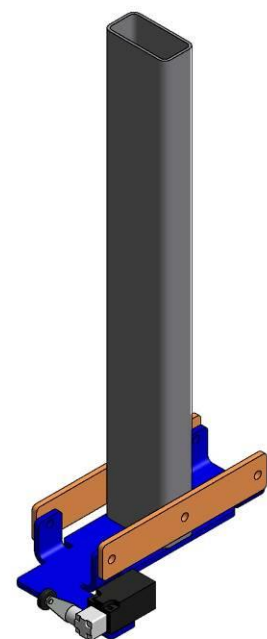
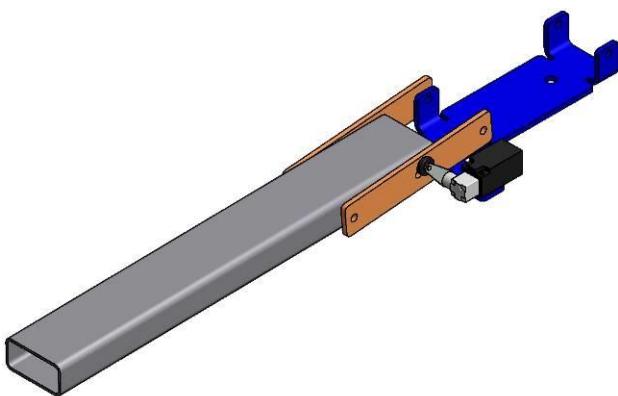
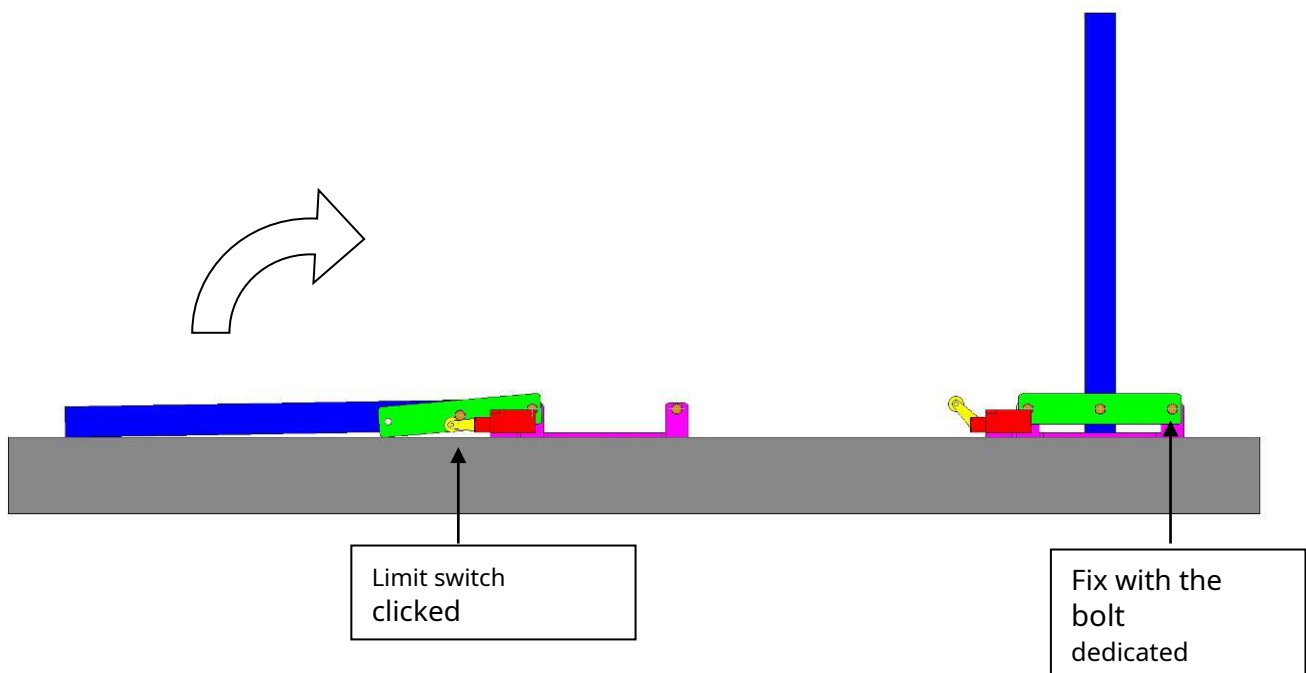
The strut guarantees a maximum load capacity of 2000 kg



Any maintenance operation must be carried out with the lift unloaded.

**Strut in progress
rest
The plant is
operating**

**Strut actuated
The plant is
blocked**



10. SAFETY STOP IN THE PIT



A stop contact is provided in the pit to be activated during maintenance, in order to disable any movement carried out from outside

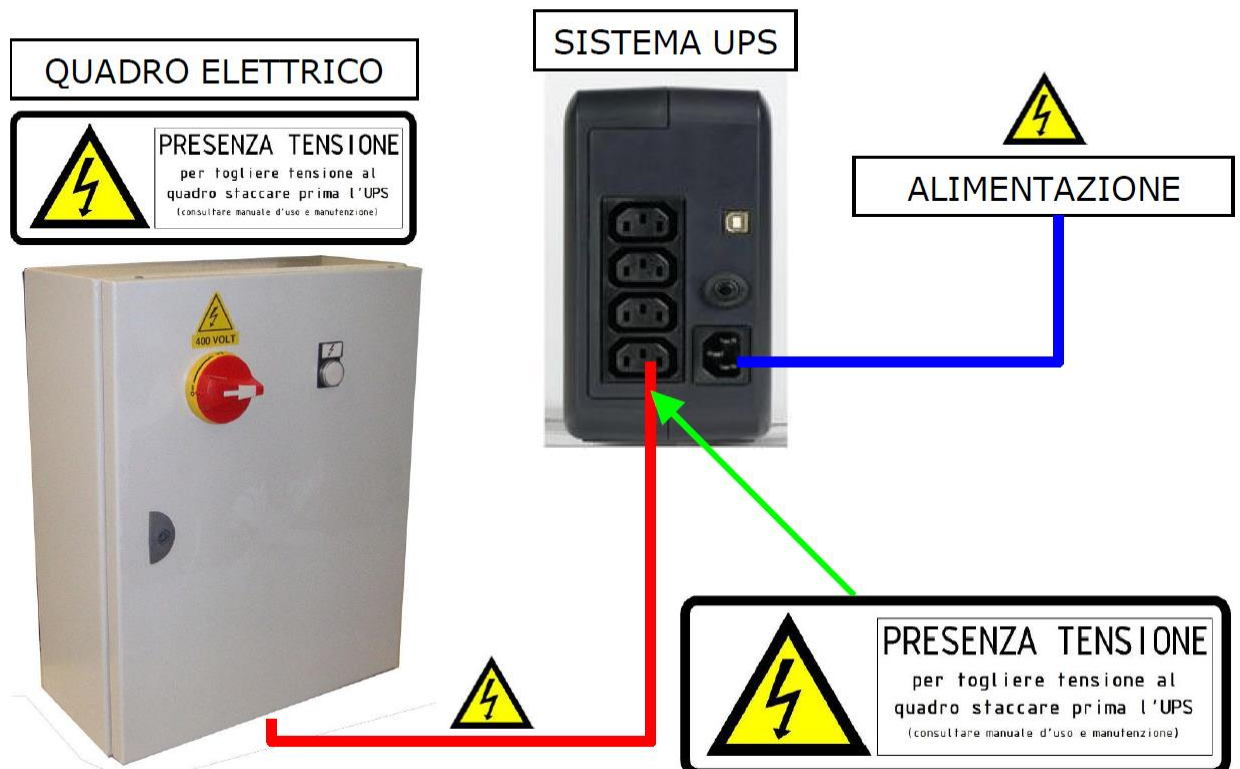


It is strictly forbidden for unauthorized persons to stand underneath the lift for reasons other than those mentioned above.

11.VOLTAGE INSIDE THE PANEL:



In the case of UPS systems, to remove voltage from the panel it is important to disconnect the power from the UPS before opening the electrical panel.



12. CONTROL TABLE:

ELEMENT FROM CHECK	DL4 CM4 DL4-MAG		EVERY 6 MONTHS	EVERY 12 MONTHS
RACE OF THE MACHINE	●	Perform at least one complete ascent and descent to verify the quality, measure the speed, and compare it with the data in the machine's manual. Consider any detectable anomalies: leveling at the floors, centering of the platform in the shaft, vibrations, noise, interference, etc., and take the necessary measures.		●
FLOOR LEVEL	●	Check that the level of the platform with the floor on each level is within 1.5 cm. Check the flatness of the platform.		●
LOADING AND UNLOADING OF THE PLATFORM	●	Check the behavior of the hydraulic system and the consequent movement of the platform during loading and unloading.		●
WEAR OF THE GUIDES	●	Check the condition of the sliding guides, grease if necessary.		●
STATE OF THE BEARINGS	●	Check the condition of the bearings, adjust the bearings that need it, grease if necessary,		●
ANCHORS TO WALL		Check the tightness of the heavy-duty anchors fixed to the wall, taking into account any building settlement. If necessary, tighten the anchor with a torque wrench. Remove any excess material that may interfere with the anchor's travel.		●

ELEMENT FROM CHECK	DL4-CM4		EVERY 6 MONTHS	EVERY 12 MONTHS
FLOOR FIXING	●	Check that the platform is correctly fixed to the trolley, considering possible loosening due to vibrations. If necessary, tighten the screws with a torque wrench.		●
FIXING PARAPETS	●	Check that the guardrails and covers are securely attached, taking into account any loosening due to vibration. Also check their verticality.		
MECHANICAL ORGANS	●	Check the condition of the mechanical parts, bearings, pulleys, pins, etc.		●
CHAINS, TIE RODS AND RETURN PULLEYS		Check the chains for wear and tear, including any wear on the pulley grooves. Lubricate the parts if necessary. Check for signs of deterioration, wear on the tie rods, and ensure the attachment's strength remains unchanged.	●	
GENERAL STATE OF THE MACHINE	●	Check for rust in critical areas of the machine: guides, mechanical parts, etc. Clean the machine from excess grease.		●
FALL PROTECTION HOOKS		Check the condition of the anti-fall gloves, their functioning, their safe support on the surface, lubricate if necessary,		●

MAINTENANCE MANUAL

Rev. 03.02 Updated 09/27/2022



Per informazioni:
www.updinaric.com
E-mail: info@updinaric.com

Tel. + 39.0442.590.129
Fax +39.0442.599.091

Via Franco Modigliani, 22
37045 - Legnago (VR) Italy

One level ahead.

ELEMENT FROM CHECK	DL4-CM4		EVERY 6 MONTHS	EVERY 12 MONTHS
CYLINDER HYDRAULIC	●	Check the piston seal for tightness, check the fittings, bleed if necessary.		●
VALVE OF BLOCK 	●	Check the correct functioning of the block valve and any coil ATTENTION: it is prohibited remove the block valve without having locked the floor and operated the strut safety. REMOVING THE VALVE CAUSES THE HYDRAULIC SYSTEM TO FALL INSTANTLY OF THE PLATFORM	●	
OIL SEAL IN GENERAL	●	Check for oil leaks due to leaks in the various components of the system (cylinder, drop valve, control unit, fittings, pipes, etc.)		●
PIPES AND CONNECTORS	●	Check the good state of preservation	●	
OIL LEVEL	●	Check that the oil level in the tank is above the minimum when the lift is stopped at the highest floor.		●
CHECK REGULATORS OF FLOW	●	Check that the flow regulators (throttles) are properly adjusted and locked.		●

MAINTENANCE MANUAL

Rev. 03.02 Updated 09/27/2022



Per informazioni:

www.updinaric.com

E-mail: info@updinaric.com

Tel. + 39.0442.590.129

Fax +39.0442.599.091

Via Franco Modigliani, 22

37045 - Legnago (VR) Italy

One level ahead.

ELEMENT FROM CHECK	DL4-CM4		EVERY 6 MONTHS	EVERY 12 MONTHS
PRESSURE OF OPERATION/ MAX VALVE PRESSURE	●	Check that the operating pressures have remained unchanged. Check the calibration of the maximum pressure valve.		●
ELECTRICAL SYSTEM EXTERIOR AND EDGE CABIN		<u>See the electrical part use and maintenance manual</u> Motor protection devices, limit switches, locks and proximity switches, electrical connections, insulation tests, earthing tests, cabin lighting, buttons, light signals, badges and key contacts, safety and non-safety electrical devices, power lines, alarm devices.	●	
UPS	●	Check the UPS seal without power; the system must guarantee a lowering cycle and the lock activation. Replace the batteries after 2 years  SOSTITUIRE LE BATTERIE DELL'UPS OGNI 2 ANNI		●

RESCUE OPERATIONS:

FOR MODELS EQUIPPED WITH PERSON ON BOARD (SPB) SYSTEM

Rescue operations are considered necessary when the operator becomes stuck on board the lift while ascending or descending to the floor.

The maintenance company must organize the rescue intervention as quickly as possible.

The owner must ensure that the organization within the building is such that rescue operations are carried out as quickly as possible.

The platform owner may authorize personnel properly trained by the maintenance company to assist the stranded operator, allowing them to exit only through the landing doors. If such personnel are unable to operate the lift using the assigned manual controls, the maintenance company must intervene immediately.

CHAIN CHECK MODE



Chains used: Flyer lifting chain AL622 / AL644 / AL666 / AL688 Pitch = 19.05mm – 3/4"

- The chain must be under tension.

- Carry out the check as close as possible to the idler pulley, on a straight section of chain.
- Check by measuring 8 chain pitches.
- Place appendages 1 and 2 on the protruding pins of the chain.

The notches will indicate:

- New chain with length close to the nominal value
- Chain with 1.5% elongation

Chain with elongation equal to 3% and must be replaced by law.

EXAMPLE:

- Nominal length 8 STEPS = $19.05 \times 8 = 152.4\text{mm}$
- Limit elongation 3% = 4.6mm
- Maximum length 8 STEPS = **157mm MAX!**

13. ELECTRICAL PART AND SAFETY COMPONENTS

VOLTAGE INSIDE THE PANEL:



In the case of UPS systems, to remove voltage from the panel it is important to disconnect the power from the UPS before opening the electrical panel.

QUADRO ELETTRICO



SISTEMA UPS



ALIMENTAZIONE





MAINTENANCE MANUAL

Rev. 03.02 Updated 09/27/2022

Per informazioni:
www.updinamic.com
E-mail: info@updinamic.com

Tel. + 39.0442.590.129
Fax +39.0442.599.091

Via Franco Modigliani, 22
37045 - Legnago (VR) Italy

One level ahead.

LOCKS PLANNED

Pizzato Elettrica srl:

Safety switches with separately operated solenoid: FD series, FG series, FP series, FS series

(Compliant with the requirements of: Low Voltage Directive 2014/35/EU, Machinery Directive 2006/42/EC and Electromagnetic Compatibility Directive 2014/30/EU)

For the following brands, check the current consumption and, if necessary, insert a support relay with a suitable power supply:

Tieffe srl:

TF2000 series locks

(EC Type Examination Certificate No. 50LR00104 in compliance with Directive 2014/33EU issued by IMQ Spa, notified body No. 0051)

Hans & Jos. Kronenberg GmbH:

DLF series locks, DL series

(Compliant with the requirements of: EN 81-1, EN 81-2, EN 60947-5-1; EU-DL 808/1 certificate issued by TÜV SÜD Industrie Service GmbH, notified body no. 0036)

Prudhomme Sa:

Mechanical locks: LR series, electric locks: LR series

(EC Type Examination Certificate No. 0060-IV-A-086P-08-2017 in compliance with Directive 2014/33EU and the requirements of standards EN 81-1, 81-2, 81-20 and 81-50 issued by Apave, notified body No. 0060)

UNLOCKING THE FLOOR DOORS

If, for unforeseen reasons, it is not possible to open the floor doors equipped with external electric locks with simple manual effort, you can proceed as follows:



NB: this operation must be performed only with the platform corresponding to the floor from which you wish to access!
IF THE LOCK IS UNLOCKED WITH THE PLATFORM NOT AT THE FLOOR, THERE IS A RISK OF FALLING.

- Unlocking the electric lock: You can manually unlock the non-powered electric lock by following these instructions:

Electric lock model FS

Unscrew
lives of



Rotate the cursor
in the position from
"blocked at

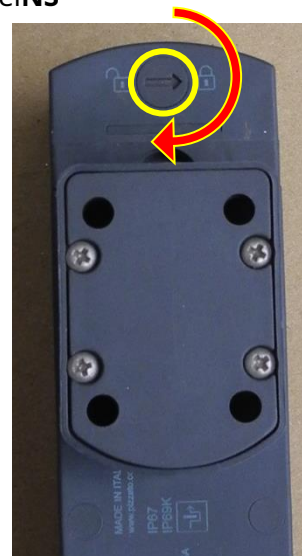


Electric lock model NS

Remove
the sticker of



Rotate the cursor
in the position from
"blocked at



- Opening the floor door following the automation unlocking instructions installed.



At the end of the operations, restore the contact of the electric lock

DOOR INTERFACE

(only with automatic doors)

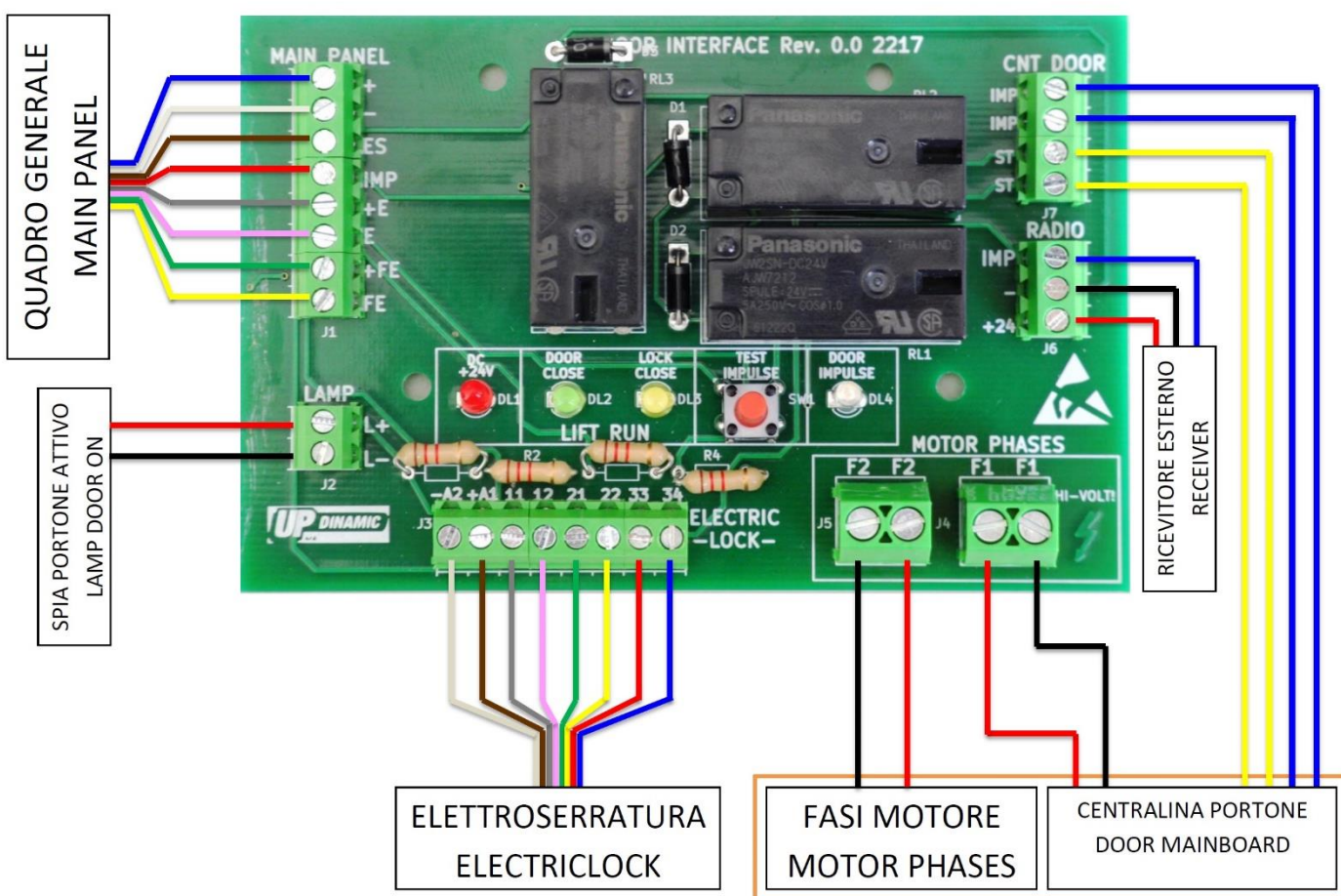
Connect the gates using the provided interface.

Interface card functions:

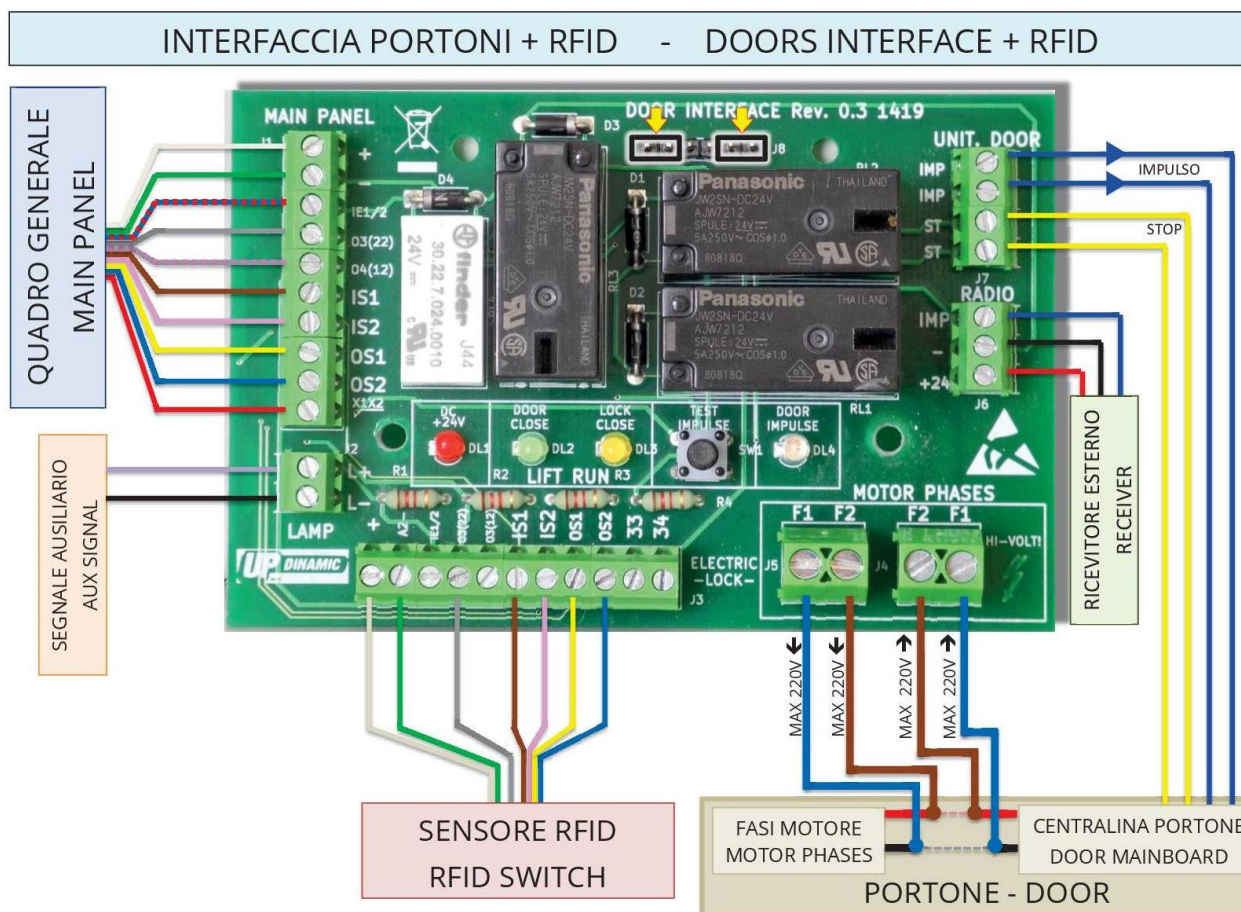
- Interlocking device connection (electric lock)
- Connecting the door motor phases to prevent it from being operated when the system is out of level
- Opening signal connection (IMP) to prevent the opening/closing signal from being sent when the system is out of plan
- Management of the door STOP contact (ST) to block the door with the system out of level
- Transmitter connection for managing the opening signal
- "Active door" lamp connection

Pizzato Electric Lock Connection

INTERFACCIA PORTONI / DOORS INTERFACE



Pizzato RFID Sensor Connection



RFID sensor application example



SAFETY PHOTOCELLS (SPB ONLY)



The open sides of the cabin are equipped with safety photocells. There are two photocell beams on each side.

It is enough to interrupt just one beam to stop the machine

By interrupting the photocells, the cabin light turns on and remains on while they are engaged.



Frequent cleaning of the photocells is recommended.



MAINTENANCE MANUAL

Rev. 03.02 Updated 09/27/2022

Per informazioni:

www.updynamic.com

E-mail: info@updynamic.com

Tel. + 39.0442.590.129

Fax +39.0442.599.091

**Via Franco Modigliani, 22
37045 - Legnago (VR) Italy**

One level ahead.

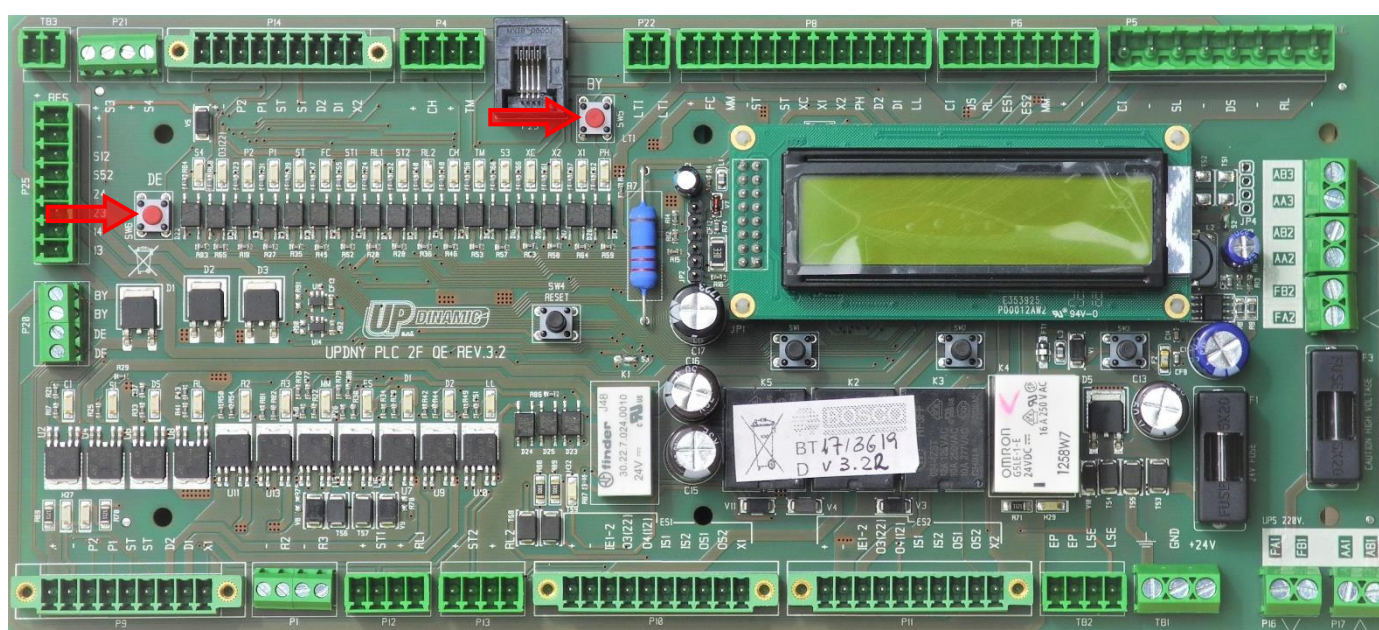
EMERGENCY MANOEUVRE (FOR AUTHORIZED PERSONNEL ONLY)

VALID FOR 2-STOP SYSTEMS

For the maintenance and installation of elevators and freight elevators, Article 15 of Presidential Decree 162/99 requires that the owner of the system be required to employ a person with a certificate of qualification.

(LETTER "F") issued by the prefecture.

To perform an emergency descent, press **at the same time** the two buttons indicated by the arrows



BYPASS BUTTON (BY)

What the BY button excludes:

- Closed door contact bypass
- Bypass stop
- Photocell bypass
- Emergency stop bypass

DESCENT BUTTON (DE)

Powers the hold-open control descent valve



WARNING: NO SAFETY DEVICES ARE ACTIVE DURING THE MANOEUVRE

Wait for the platform to arrive on the lower floor, the board display will indicate the arrival of the platform on the lower floor

VALID FOR 3/4/5-STOP SYSTEMS



For the maintenance and installation of elevators and freight elevators, Article 15 of Presidential Decree 162/99 requires that the owner of the system be required to employ a person with a certificate of qualification.

(LETTER "F") issued by the prefecture.



Press both buttons simultaneously to perform an emergency descent

BYPASS BUTTON (BY)

What the BY button excludes:

- Closed door contact bypass
- Bypass stop
- Photocell bypass
- Emergency stop bypass

DESCENT BUTTON (DE)

Powers the hold-open control descent valve



WARNING: NO SAFETY DEVICES ARE ACTIVE DURING THE MANOEUVRE

Wait for the platform to arrive on the lower floor, the board display will indicate the arrival of the platform on the lower floor

PROGRAMMING THE HELPYVOX MODEL TELEASSISTANCE SYSTEM

Dial the dialer number, wait for two rings and the subsequent connection tones, then proceed with the access codes.

ACCESS CODES:

ACCESS TO PROGRAMMING * 0#

EXIT FROM PROGRAMMING * 0#

PROGRAMMING CODES (Can be entered below after logging in):

TELEPHONE NUMBER	210112 TELEPHONE NUMBER#

DELETE TELEPHONE NUMBER 210112#

RECORD A MESSAGE	7101	Recording for 20 seconds until the beep
------------------	-------------	---

HANDS-FREE ACTIVATION	780	Hands-free activation via number "0"
-----------------------	------------	--------------------------------------

781 Automatic hands-free activation upon answering

AUTOMATIC RESET	770	Automatic reset when closing each call
-----------------	------------	--

771 Reset with end code, number "9"

FACTORY SETTINGS	99	Factory reset
------------------	----	---------------

RESPOND TO THE ALARM

- Reply and listen to the message
- Press "0" to talk to the trapped person
- Press "9" to reset the alarm

RELIEF VALVE ADJUSTMENT

Adjust the pressure relief valve by setting a maximum working pressure as per the following table:

Model	Load max cyl. (kg)	Flow rate max (kg)	Diameter stem (mm)	Max stroke platform (mm)	Pressure of work max (bar)
CM4	3600	3000	Ø60	7600	150
			Ø70	10440	110
			* Ø70 *	16000	
DL4-MAG	3600	4000	Ø60	7600	150
			Ø70	10440	110
			* Ø70 *	16000	



Loosen the lock nut and turn the Allen screw:

Clockwise = Raises blood pressure

Counterclockwise = Lowers blood pressure



Write the working pressure on the installation checklist

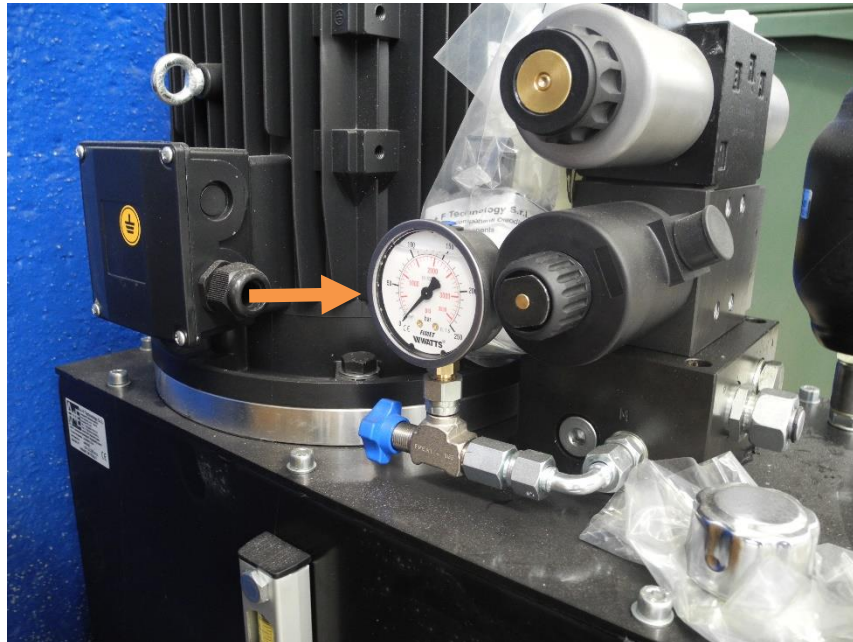
OVERLOAD CONTROL ADJUSTMENT PROCEDURE

- 1- Load the platform with the maximum transportable weight (see "maximum load" table).
- 2- Execute the lift command and check that the platform remains stationary (the pressure is not sufficient to lift the load)
- 3- Act on the adjustment screw by increasing the pressure until the floor begins to move
- 4- Check the working pressure and compare it with the maximum pressure indicated in the previous table based on the model of the lift

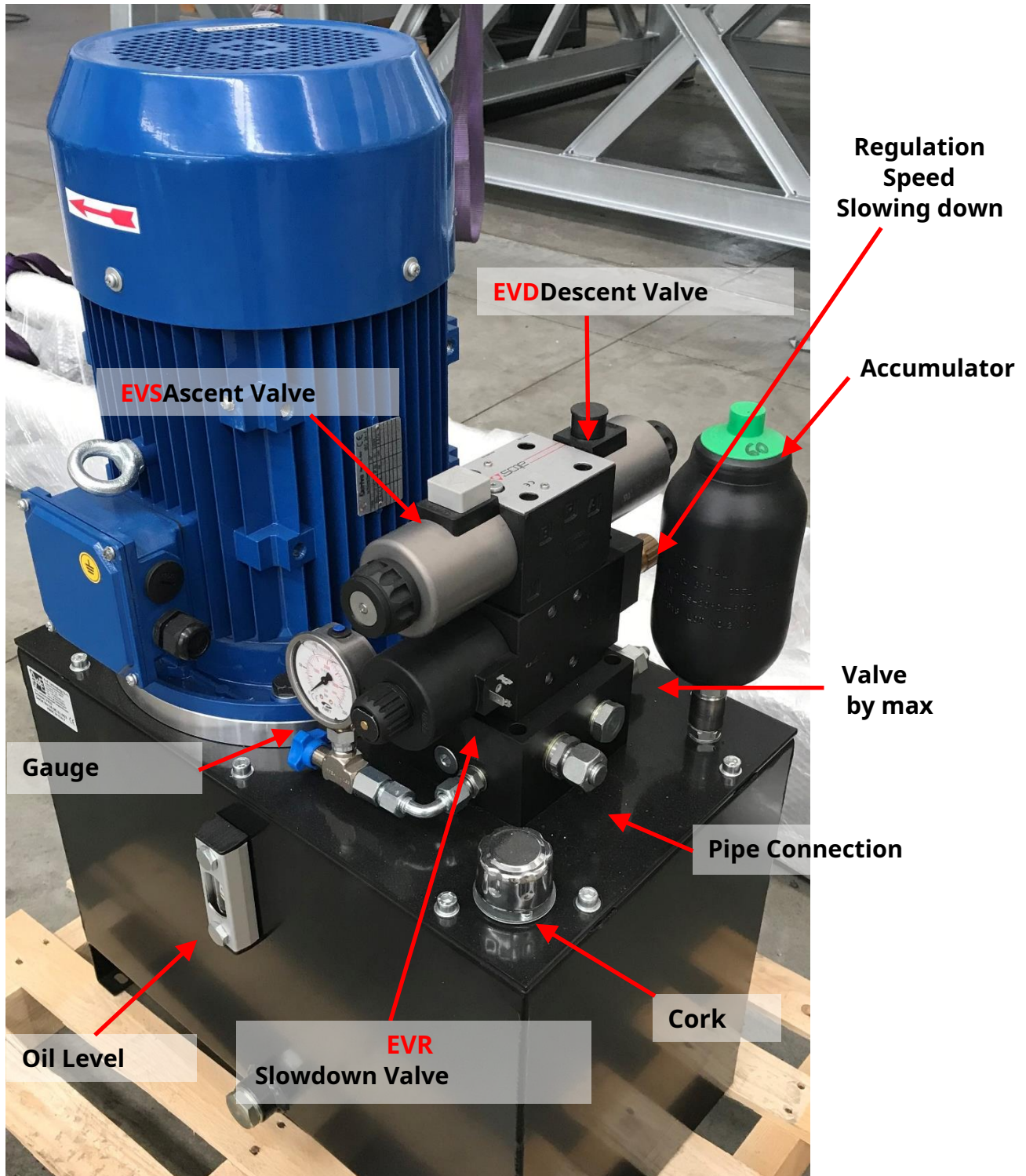
NB If the pressure is higher than that indicated in the table, consult Updinamic technical assistance

Perform an overload test of +20% to verify that the lift is able to lift the overload

Transcribe the LOAD used for calibration and the working PRESSURE on the checklist installation



HYDRAULIC POWER PLANT DESCRIPTION



TANK FILLING

The hydraulic unit's tank must be filled with Wladoil Engine HY SY hydraulic oil. It is important to use special filters that prevent the entry of polluting particles. To operate the system, the oil level must be above the minimum level indicated on the tank.

Wladoil Engine HY SY (approximate average characteristics)

- Density at 15°C:	0.852
- Viscosity cSt at 40°C:	32
- Engler viscosity at 50° C:	3.2
- Viscosity Index:	100
- Pour point °C:	- 33
- Flammability VA °C:	192
- Aniline point:	96
- DIN 51 524 HLP classification:	32

SYSTEM BLEEDING



To bleed the cylinders, act on the breather fixed on the upper part of the cylinders

The operation takes place while keeping the loading platform stable raised by about 10cm For at least half an hour so that the air inside the cylinders flows towards the top of the cylinders themselves.

Opening at the same time On both cylinders, the appropriate screw located at the top of the cylinder is used to bleed the air from the hydraulic cylinders. To avoid splashes, attach the supplied nylon tube to the bleed screw.

It is recommended to repeat the operation after another 30 minutes of break.

ATTENTION: the cylinders must be well bled of air to avoid bouncing during the stroke.



MAINTENANCE MANUAL

Rev. 03.02 Updated 09/27/2022

Per informazioni:

www.updynamic.com

E-mail: info@updynamic.com

Tel. + 39.0442.590.129

Fax +39.0442.599.091

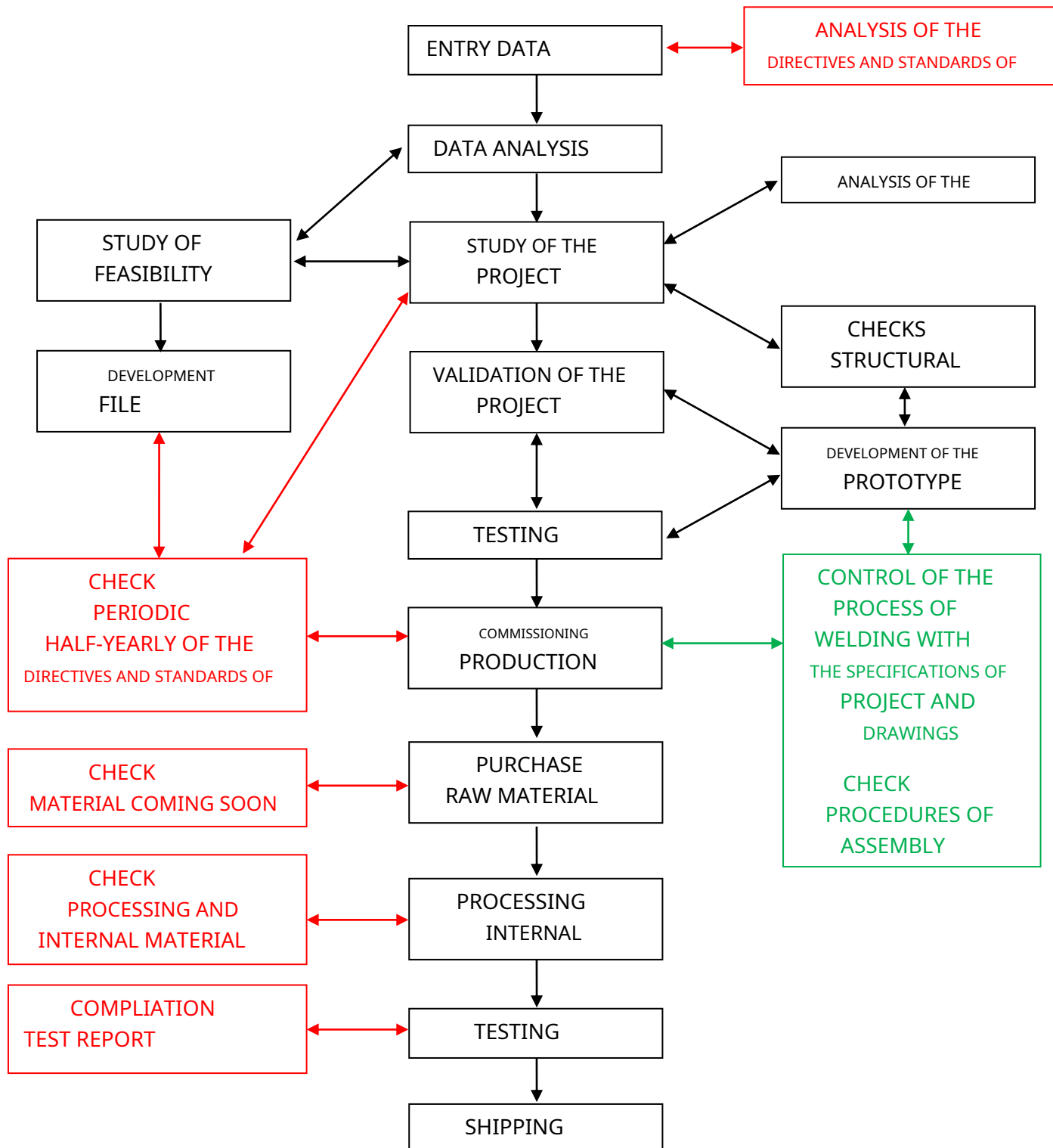
Via Franco Modigliani, 22
37045 - Legnago (VR) Italy

One level ahead.

PUNCHING CYCLE

DL4 / CM4 / DL4-MAG GOODS LIFT OPERATING CYCLE

DESIGN AND STANDARDS CONTROL PROCEDURE





MAINTENANCE MANUAL

Rev. 03.02 Updated 09/27/2022

Per informazioni:

www.updinamic.com

E-mail: info@updinamic.com

Tel. + 39.0442.590.129

Fax +39.0442.599.091

Via Franco Modigliani, 22

37045 - Legnago (VR) Italy

One level ahead.

14. ASSISTANCE

For any inquiries, please contact the system maintenance company or our Sales and Assistance Service.

TECHNICAL ASSISTANCE CENTER

UPDINAMIC Srl

Via Modigliani, 22

37045 Legnago (VR)

Tel. +39 0442 / 590129

Fax +39 0442 / 599091

info@updinamic.com

15. REPAIRS AND SPARE PARTS

Important

IMPORTANT: For repairs, contact qualified and authorized personnel.

If you need to request technical information or spare parts from our Sales and Assistance Service, always specify the data shown on the identification plate.

MAINTENANCE REGISTER

Rev. 03 .02 Updated 09/18/2019

Per informazioni:

www.updinamic.com

E-mail: info@updynamic.com

Tel. + 39.0442.590.129

Fax +39.0442.599.091

Via Franco Modigliani, 22

37045 - Legnago (VR) Italy

One level ahead.

Appendix A - PERIODIC MAINTENANCE REPORT

Model	-DL4 - CM4	<u>y/n</u> _ _ _ _ _	<u>Date</u> <u>installation</u> _ _ / _ _ / <u>20</u> _ _
-------	-------------------	----------------------	--

[illegible]

MAINTENANCE REGISTER

Rev. 03 .02 Updated 09/18/2019



Per informazioni:

www.updynamic.com

E-mail: info@updynamic.com

Tel. + 39.0442.590.129

Fax +39.0442.599.091

Via Franco Modigliani, 22

37045 - Legnago (VR) Italy

One level ahead.

Operations/checks to be performed in the presence of the user by of the technical assistance service		Functional part					Check done -- --=Yes --=No				
		Control unit of command	Platform	Column	Fixings	Civil works	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
19	OPERATING PRESSURE/MAX PRESSURE VALVE: Check that the operating pressures have remained unchanged. Check the calibration of the maximum pressure valve.	•									
20	EXTERNAL AND CABIN ELECTRICAL SYSTEM: Check the correct functioning of the motor protection devices, the lock and proximity limit switches, electrical connections, insulation tests, earthing tests, cabin lighting, buttons, light signals, badges and key contacts, safety and non-safety electrical devices, power lines, and alarm devices.	•									

Any notes/observations will be added to the technician's intervention certificate. The user must transfer them to the *Security Register*

	<u>YEAR 1</u>	<u>YEAR 2</u>	<u>YEAR 3</u>	<u>YEAR 4</u>	<u>YEAR 5</u>
Company name authorized manufacturer/ distributor					
Name and signature of the technician					
Date of inspection	-- / -- / ----	-- / -- / ----	-- / -- / ----	-- / -- / ----	-- / -- / ----