TECHNICAL DOCUMENTATION

ARITCO PUBLICLIFT CABIN

User Manual

ARITCO™

Index

1. General information

1.1. Reading the manual

Vimec products are ideal solutions to make all public and private residential or institutional buildings accessible to people in wheelchairs, allowing them to live an adequate social life. Attentive to comfort and to high quality solutions, **Vimec** has always paid great attention to detail to guarantee safety and ease of use for its Customers.

Please follow these operating instructions very carefully, as they describe the possible uses and operation of your equipment.

The Manufacturer shall not be held responsible for any damage to people or property if the equipment is used incorrectly or improperly.

The Manufacturer reserves the right to make necessary changes to the various models in order to comply with current technical standards.

For any complaints, please contact your dealer's service centre.

1.1.1. Manufacturer's data

Manufacturer:	**VIMEC s.r.l.**
Address:	Via Parri, 7 - 42045 Luzzara - Reggio Emilia - Italy
Telephone/Fax:	+ 39 0522 970 666 / + 39 0522 970919
Email	amm@vimec.biz
Website	www.vimec.biz

1.1.2. Service centre

For any technical questions concerning your device, please contact your dealer's service centre.

Before calling the service centre, find the name of the model

Fig. 1.1

DEALER'S STAMP AND AUTHORISED TECHNICAL ASSISTANCE REFERENCE

1.1.3. Declaration of conformity

DICHIARAZIONE DI CONFORMITÀ "CE"

Il costruttore

vimec

Via Parri n.7, 42045 Luzzara (RE) ITALIA
Tel. 0522 . 970666 r.a. Fax 0522 . 970919

dichiara sotto la sua sola responsabilità che
la piattaforma elevatrice:

E10 – MATRICOLA XXXXXXX

Installato in:

- Indirizzo completo: Via Parri, 7 42045 Luzzara (R.E.)
- Nazione: Italia

è conforme alle seguenti Direttive Europee:

- Direttiva 2006/42/CE "Direttiva macchine"
- Direttiva 2014/30/UE "Compatibilità Elettromagnetica"

è stato progettato secondo le seguenti norme di riferimento:

- EN 81-41: 2011 Piattaforme elevatrici per persone con difficoltà motorie
- EN 12100: 2010 Sicurezza del macchinario - Principi generali
- IEC 60204-1: 2016 Equipaggiamento elettrico
- EN 13857: 2020 Sicurezza del macchinario - distanze di sicurezza
- IEC 60529: 2017 Grado di protezione IP

- Certificato n°: IMQ CM 374 DM
- Emesso da: IMQ S.p.A. Via Quintiliano 43 I Italia - 20138 Milano

Nome e indirizzo della persona autorizzata a compilare il File Tecnico:
Filippo Nicoli

Indirizzo: Via Parri n.7, 42045 Luzzara (R.E.) ITALIA - Tel. + 39.0522.970666

Luzzara, 20.05.2021

Fig. 1.2

1.1.4. Introduction and safety

Before using the equipment, read the instructions given in this manual carefully. This will help you become familiar with your new device.

The best prevention for injuries is care and caution when using the machine.

Observe the information given on all the plates attached to the machine. Replace any damaged plates immediately.

Work on the machine other than normal use is reserved for qualified operators. Observe the qualification level indicated for the different activities, with reference to the following symbols:

CP	**CP - Competent Person** (a person who has been suitably trained and is qualified as he/she has knowledge and practical experience, equipped with the necessary instructions to be able to carry out the required work safely)
SO	**ST - Specialised Technician** appointed by the Manufacturer

The machine must always be operated by an ADULT, trained and instructed on all the operational functions and precautions indicated in this manual.

Keep this document at hand so that it can be consulted at any time and give it to any new owners of the device.

Read the safety messages contained in the introduction of this manual and consider the safety notes, such as: "Attention", "Warning" and "Danger" contained in the text.

	This symbol means: **NOTE** This symbol indicates useful advice and draws attention to correct procedures and behaviour. Follow the instructions marked with this symbol to avoid problems. The purpose of the symbol is to point out special methods or procedures to be carried out for the correct use of the product.
	This symbol means: **WARNING** This symbol points out safety information. Failure to follow these instructions may result in minor injuries or damage to the equipment.
	This symbol means: **ATTENTION** This symbol points out safety information. Read it carefully. Failure to follow these instructions may result in death, serious injuries or damage to the equipment.
	This symbol means: **DANGER** This symbol points out a dangerous situation for yourself and others. Read it carefully. Failure to follow these instructions may result in serious injuries or death.
	This symbol means: **DISPOSAL** This symbol on the product or packaging indicates that the product must not be treated as normal household waste but it must be handed over to a suitable collection point for the recycling of electrical and electronic equipment. Efficient separate waste collection leading to the subsequent recycling of the equipment helps avoid possible adverse effects on the environment and on health and promotes the recycling of the materials of which the equipment is made. Illegal/abusive disposal of the product by the user will result in the application of the administrative sanctions provided for by national laws. It is possible to obtain further information on recycling this product from local authorities, waste disposal operators or from the point of sale where the product was purchased.

2. General information

2.1. General information

VIMEC S.r.l reserves the right to make changes to its product, within the scope of technological progress. Therefore, the figures, descriptions and data contained in this manual are not binding, but purely indicative. Nothing contained in this publication can be considered an explicit or implicit guarantee or condition of suitability for a particular purpose. Nothing contained in this publication can be interpreted as a modification or statement of the terms of any purchase contract.

VIMEC S.r.l. shall not be held responsible for any masonry work and/or the connection of electrical/electronic components to the mains, which must be carried out in accordance with current standards and the rules of good practice.

VIMEC S.r.l. is not responsible for any harmful consequences resulting from an improper use of the platform and/or for purposes other than those for which it has been designed, caused by failure to comply with the contents of this manual.

VIMEC S.r.l. shall not be held responsible for any damage resulting from tampering, interventions and/or modifications, both structural and non-structural, of the system carried out by anyone without prior permission.

VIMEC S.r.l. shall not be held responsible in the event that the owner of the system does not provide for its routine and extraordinary maintenance, as described below.

To prevent damage to people and/or property, all handling, installation, adjustment and maintenance operations must be performed by suitably trained staff wearing suitable clothing and using suitable equipment in accordance with current accident prevention and workplace safety regulations.

All metal parts, on which electrical/electronic components are installed, must be connected to the earthing system in accordance with the applicable Standards and good engineering practice.

Before making the electrical connection, check that the required voltage corresponds to the mains voltage.

Before performing operations on the electrical/electronic components, remember to disconnect the power supply system from the mains.

2.1.1. Warranty

The machine is supplied according to the warranty conditions in force on the date of purchase.

Should any manufacturing and/or conformity defects be found during this period, VIMEC will repair and/or replace the defective parts, after carrying out verifications at its sole discretion.

The warranty will be void in the following cases:

- improper use
- lack of or incorrect maintenance
- unauthorised modifications to the system
- use of different and/or non-compliant components
- tampering by unauthorised people
- tampering with the system’s nameplate

2.1.2. Definitions

This paragraph lists some terms, used within the manual, the exact meanings of which must be clear.

PLACING THE PLATFORM ON THE MARKET

This occurs when the Manufacturer makes the platform available to the owner, and therefore to the users, for the first time. It can only take place after the Manufacturer has drawn up the technical file, provided all necessary information and instructions, drawn up the CE declaration of conformity that accompanies the platform and affixed the CE marking. In this manual, the expression “current standards” means “standards in force at the time the platform was placed on the market”.

PLATFORM INSTALLER

The platform installer is the natural or legal person who is responsible for installing the system.

PLATFORM OWNER

The platform owner is the natural or legal person that has ownership of the platform and is responsible for its use and operation.

MAINTENANCE

Maintenance is the set of operations (cleaning, lubrication, checks, etc.) that guarantee the correct and safe operation of the platform and its components, after it has been put into service. Maintenance also includes fine-tuning and adjustment operations, repairs and replacements, due to wear or the accidental destruction of components that do not affect the essential characteristics of the platform.

Remember that the replacement of the main components of the platform (machinery, cabin, manoeuvring panel, etc.) are not to be considered as maintenance operations, even if identical components are used.

MAINTENANCE COMPANY

The maintenance company:

- Complies with current regulations on platform maintenance.
- Carries out a risk analysis for the maintenance operations to be performed on each platform, taking into account the instructions provided by the Manufacturer of the material installed and all information provided by the owner of the building and/or of the platform.
- Uses skilled staff (trained and informed) according to the work to be carried out, equipping them with all the necessary equipment and protective devices in accordance with current standards on the protection of workers' health.
- Is insured against possible accidents to the platform users and maintenance technicians, guaranteed by a recognised insurance company.

The maintenance company is responsible for continuously updating the skills of the maintenance staff.

SKILLED MAINTENANCE STAFF

Maintenance staff are considered skilled when they have received suitable theoretical and practical training, have experience in maintenance operations and are able to assess the actual condition of the platform for its correct and safe operation.

EMERGENCY

An abnormal situation in which people require assistance from outside.

FAULT

A situation in which the use of the platform in normal safety conditions is limited or impossible.

REPAIR

Replacement or restoration of worn and/or defective components.

OTHER TECHNICAL TERMS

- Shaft: free space in which the platform moves, also including the pit and headroom.
- Pit: part of the shaft below the level of the lowest floor served by the platform.
- Headroom: part of the shaft between the highest floor served by the platform and the top end of the shaft.
- Stroke: distance between the two end floors served by the platform.
- Load carrier: a part of the machine on or in which people and/or objects are supported to be lifted.
- Machinery: set of parts to move the load carrier.
- Capacity: operating load for which the platform is designed.
- Control push-button panel: service panel located both inside the load carrier and on each served floor. It is used to manoeuvre the platform.
- Rails: machined steel bars positioned and secured in the shaft. They ensure the mandatory path of the load carrier.
- Rail wall: area of the shaft where the sliding rails are positioned and rigidly secured.

2.1.3. Duties and responsibilities of the platform owner

Owner's duties:

In this manual, “platform owner” will be abbreviated to “owner”.

The owner must ensure that only platforms bearing the CE marking inside the load carrier and accompanied by the CE declaration of conformity are made available to the user, and thus commissioned.

The owner and the maintenance company of the platform must inform each other of the necessary elements and take appropriate measures to ensure the correct operation and safe use of the platform.

The owner must guarantee that the organisation in the building where the platform is installed answers emergency calls effectively and without undue delay.

The owner must take appropriate measures to make sure that the platform is not used improperly; for its correct use, always refer to the instructions given in this manual and in any of the documents supplied with it.

Before commissioning the system, the Manufacturer must make sure that the installer has carried out the checks and tests envisaged by the harmonised standards and by the supplier of the platform components, and must record these checks.

When the platform is commissioned, the owner must make sure that the installer hands over the relative documentation, including at least:

- This manual, supplemented, if necessary, by additional documents and/or drawings.
- A logbook in which the results of the maintenance visits, periodic checks, repairs and any extraordinary visits can be noted.
- Any other documentation required by specific national provisions.

As for the owner's duties in relation to maintenance activities, refer to the system maintenance chapter.

	**ATTENTION:** It must be strictly forbidden for unauthorised people to enter the shaft and the machinery.

	**ATTENTION:** Inform the maintenance company also if the system is stopped temporarily, due to the overheating of the temperature of the room in which the machinery is located (or an electrical appliance).

Owner's responsibilities:

The owner must make sure that all conditions verified when commissioning the platform are maintained over time by making sure that it undergoes regular maintenance by qualified staff.

The owner can authorise competent people to perform the following operations:

- clean the external parts of the shaft
- clean the internal parts of the load carrier
- take the platform out of service
- emergency manoeuvre (there must be written instructions by the installer).

Before the platform is commissioned, the owner must make sure that the maintenance company has defined a maintenance plan to ensure its correct and safe operation.

The owner must make sure that the maintenance company keeps a logbook with the results of any work carried out due to faults (indicating the type of fault).

The owner must make sure that the platform is taken out of service by maintenance staff in the event of a dangerous situation.

The owner must make sure that the maintenance staff have access to the building to rescue people in all circumstances.

The owner must provide the maintenance company with all necessary information regarding the access routes to the restricted areas, in particular:

- The access routes to be used and the evacuation procedures in place in the building in the event of a fire.
- The location of the keys to open restricted rooms.
- If necessary, the owner must accompany, or have accompanied, the maintenance staff to the platform or machinery room;

The owner must make sure that the keys to the machinery room, the pulley room (if present), the emergency doors (if present), the inspection doors and any emergency hatches are only available to authorised people.

The owner must make sure that a space of 500x700 mm is left clear at all times in front of the cabinet and control panel to allow maintenance staff and rescuers to access easily. The owner must take all appropriate measures for this purpose, in relation to the risks deriving from the normal use of the room in which the platform is located (e.g. yellow paint on the floor, yellow/red posts and chains or other equivalent systems).

The owner must check that the name and telephone number of the maintenance company is visible inside the load carrier.

The owner must inform the maintenance company of any possible risks or changes to the configuration of the premises and access routes.

In order to avoid extraordinary maintenance operations, the owner must make sure that appropriate measures are taken if the system is exposed to the elements (e.g. if installed on an outside wall of the building), and in other special cases (explosive atmosphere, extreme weather conditions, seismic conditions, etc.).

2.1.4. Storage, Handling and Unpacking

Storage

If the machine is not installed straight away, it is recommended to keep the components in their original packaging and to store them in a sheltered environment with the required degree of protection. Ensure that the environment has the following characteristics:

- Temperature: +5/+40°C.
- Relative humidity 45% Max (non-condensing).
- Closed environment, protected from the elements.

Temperature or humidity values that exceed those indicated above can seriously damage the components.

Make sure that the supporting surface can withstand the weight of the packaging; do not place boxes, crates or heavy equipment on top of the packaging.

Do not place the packaging near flammable material.

If some components are removed from the original packaging, always place wooden or other boards between the floor and the components to prevent direct contact with the floor, and cover the components with a plastic sheet to protect them from dust and moisture.

Handling

Unloading operations from the vehicle and handling operations must be performed by qualified staff. During unloading and handling operations, the presence of an assistant is required for any signals during transport.

Before handling the parts, check that they are secured, balanced and not at risk of falling.

The condition of the packaging is checked before shipping. **Any compromised parts in packaging that is damaged on the outside, will not be covered by the warranty.**

The lifting and transport equipment must be chosen according to the dimensions, weights and shape of the machine and its components. The capacity of the lifting equipment must be greater (with a safety margin) than the weight of the components to be transported. The machine must be lifted and handled carefully to prevent falls and overturning.

During handling, nobody must be in the manoeuvring area and the entire surrounding area should be considered as a danger zone. It is forbidden to walk and stand under suspended loads.

	**ATTENTION:** It is the responsibility of the installation company to carry out a load handling risk assessment in accordance with current national standards.

VIMEC S.r.l. shall not be held responsible for any damage caused by incorrect operations, unqualified staff or the use of unsuitable equipment.

VIMEC S.r.l. shall not be held responsible for any damage caused to third parties by third party carriers.

Weight of the machine and of its components

- Wooden crate containing the cabin components: 900 kg
- Bundled rails: 130 kg
- Hydraulic cylinder (when present): 100 kg
- Box with automatic doors on pallet (when present): 130 kg per pallet
- Metal structure crate (when present): 650 kg
- Crate containing the crossbeams and the structure frames (when present): 450 kg
- Wooden crate for glass (when present): 300 kg
- Wooden crate for glass (when present): 450 kg

	**NOTE:** The weights are average weights for all possible system variants.

Unpacking

The machine is supplied in packages consisting of a wooden crate, shrink-wrap nylon and metal straps.

The number of packages and their weight is communicated to the Customer when the material is ready to be collected.

Upon delivery, visually inspect the packaging to make sure that the components have not been damaged during transport and that the packaging has not been tampered with. If any kind of damage is found on the packaging, inform VIMEC S.r.l. immediately.

VIMEC S.r.l. shall not be held responsible for any damage caused to the supply by third party carriers.

Pay special attention to “fragile” components, the packaging of which is identified by a special symbol or a “Shock Watch” indicator (Fig.2.2).

Fig. 2.1

(a) - INTACT PACKAGING
(b) - DAMAGED PACKAGING

Fig. 2.2

2.1.5. Waste disposal

After completing the assembly operations, residues from the packaging used to transport the materials remain. This packaging must be disposed of in accordance with current standards.

If the system is demolished, dismantle the machine.

This operation must be performed in accordance with current standards; the dismantling operations must only be performed by qualified companies who are familiar with the type of system to be dismantled, possibly companies qualified to install/perform maintenance on such systems.

If the machine or part of it has been taken out of service, the parts likely to cause any danger must be made harmless.

3. Machine identification data

3.1. Identification plate and CE declaration of conformity

Identification plate

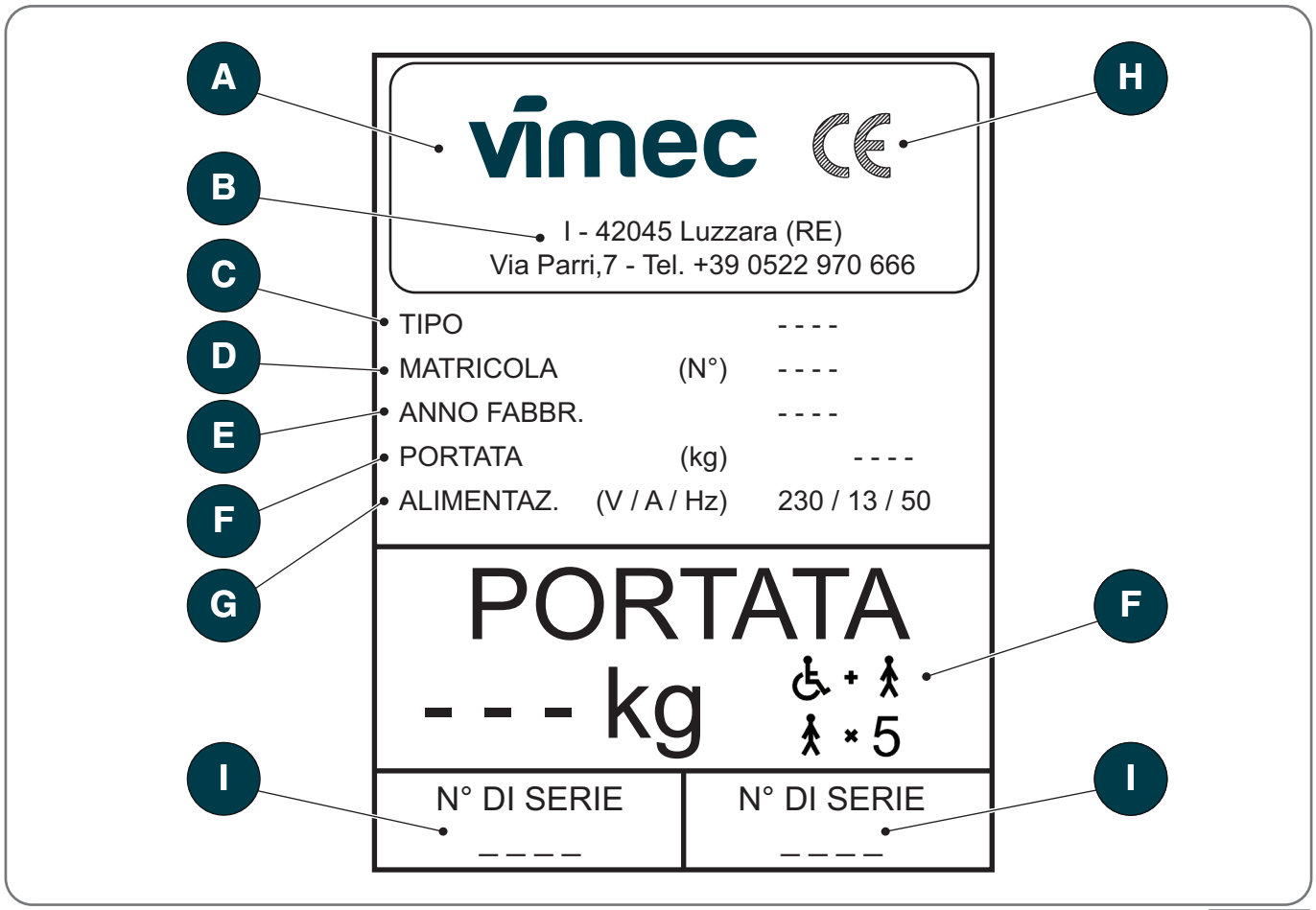


Fig. 3.1

The identification plate features the following data:

A - Manufacturer
B - Manufacturer's data
C - Equipment model (E10, E10 HL / HS)
D - Serial number
E - Year of manufacture
F - Capacity (300, 350, 400 or 500 kg)
G - Power supply (voltage, current, frequency)
H - CE marking
I - Identification number

	NOTE: It is advisable to take note of the product data and serial numbers so that this information is readily available in case of need.

	NOTE: When contacting the service centre and requesting spare parts, always quote the data on this plate.

CE declaration of conformity

The Manufacturer of the equipment described in this manual, to which this declaration refers, declares under his sole responsibility that the equipment complies with the basic safety, health and protection requirements of the relative existing EC directives and that the relative test reports, in particular the CE declaration of conformity, duly issued by the Manufacturer or by his authorised representative, are available for inspection by the relevant authorities and can be requested from the seller of the equipment.

Location of identification plates and safety stickers

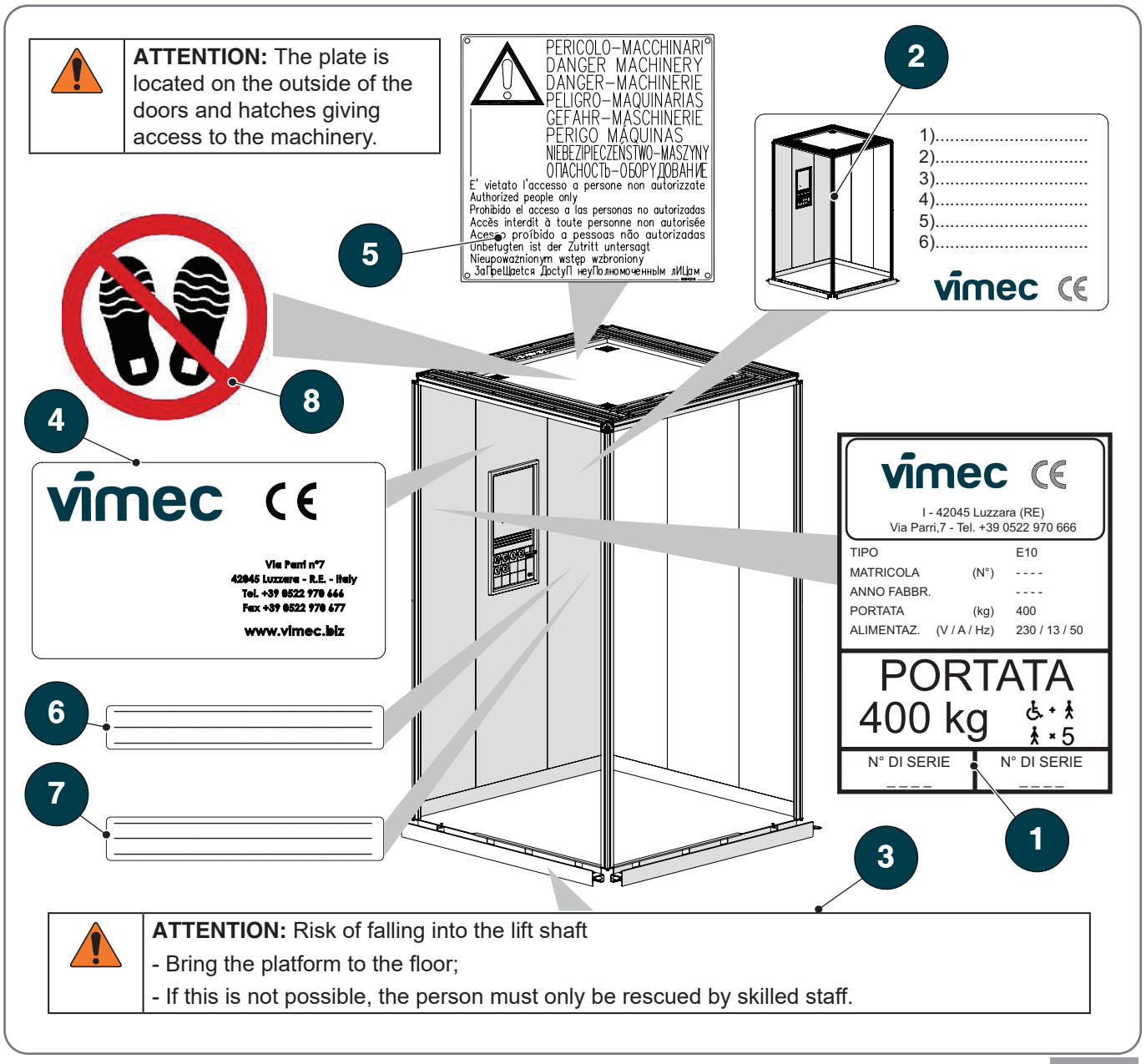


Fig. 3.2

In the load carrier (cabin):

- **1** - Identification plate
- **2** - Summary plate of the instructions for use (when present)
- **3** - Risk of falling into the lift shaft plate
- **4** - Vimec company data plate
- **5** - Non-authorised access forbidden plate
- **6** - Telephone dialler plate (when present)
- **7** - Instructions for use in case of blackout plate

On the load carrier roof:

- **8** - Plate indicating that it is forbidden to climb onto the roof

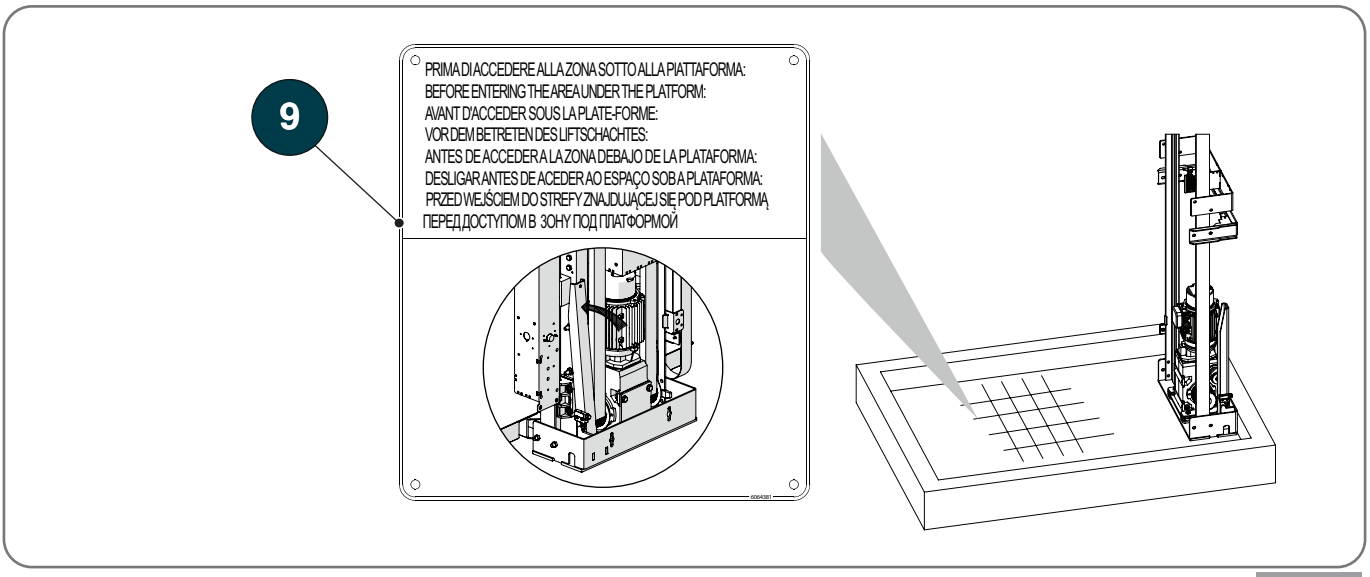


Fig. 3.3

In the shaft pit:

9 - Plate indicating the obligation to operate the mechanical lock in the pit for maintenance before entering the shaft

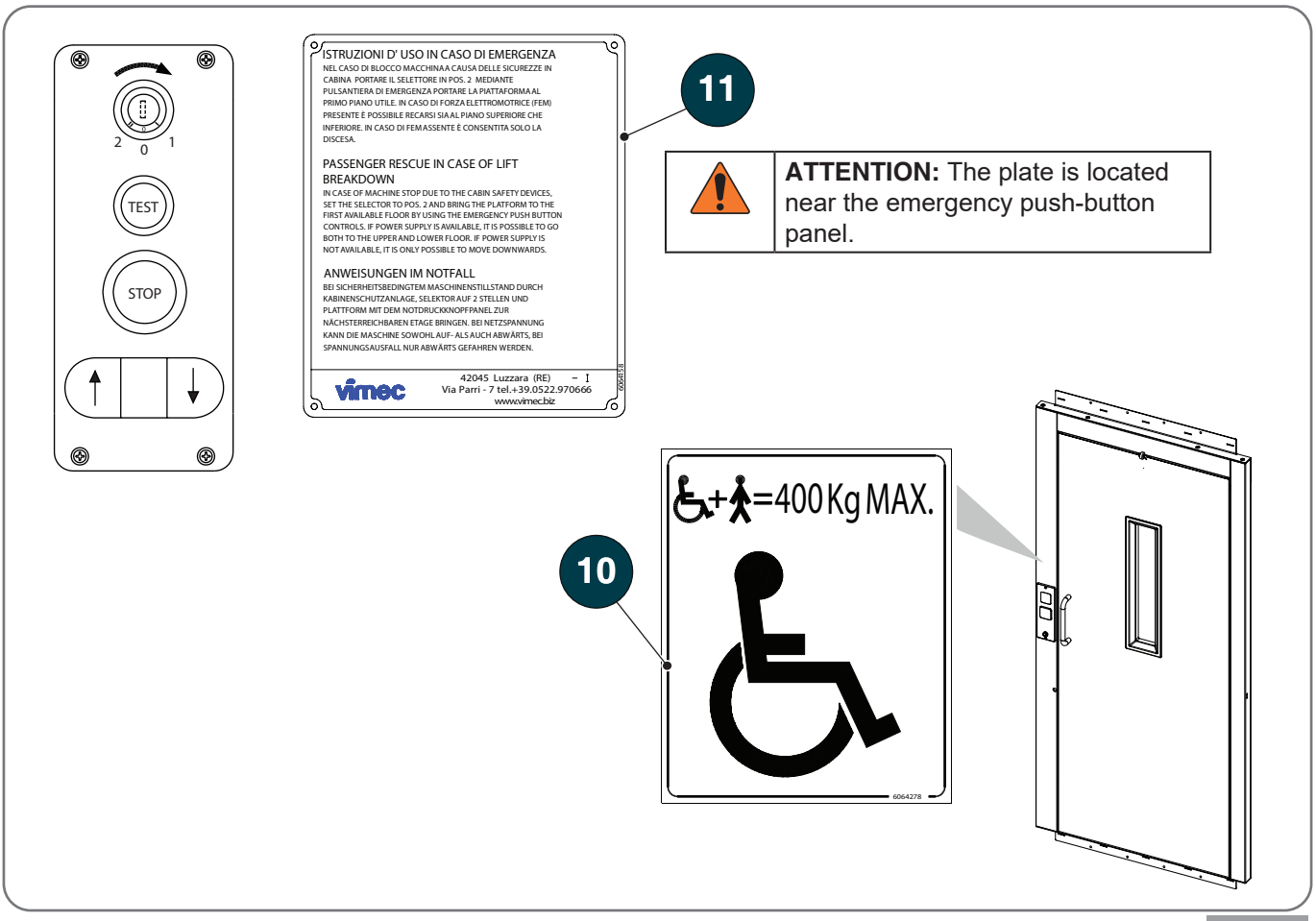


Fig. 3.4

Outside of the cabin:

10 - Plate indicating the permissible load capacity

11 - Emergency instructions plate

4. Description of the machine

4.1. General information, description of components and safety measures

4.1.1. General information

The **E10** lift is a lifting platform designed to carry people with reduced mobility and another person accompanying them, if any.

The lift consists of a moving part called platform (Fig.4.1), and a part that contains and protects the platform, called shaft (Fig.4.2). The shaft must ensure protection from the elements.

The platform features a non-slip floor (Fig.4.1/a), a roof (Fig.4.1/b), at least one vertical wall, on the push-button panel side (Fig.4.1/c), and side walls (Fig.4.1/d, if present). Inside there is a control push-button panel (Fig.4.1/e).

The shaft is a closed metal or masonry structure (Fig.4.2/a) which can be accessed through doors (Fig.4.2/b) located on the floors, which allow access to the platform. To guarantee people's safety, the landing doors are locked with a special safety lock. A door can be opened only when the platform is on that floor.

The landing doors can, on request, be equipped with a motorised opening and closing system.

Near each access door there is a control push-button panel (Fig.4.2/c).

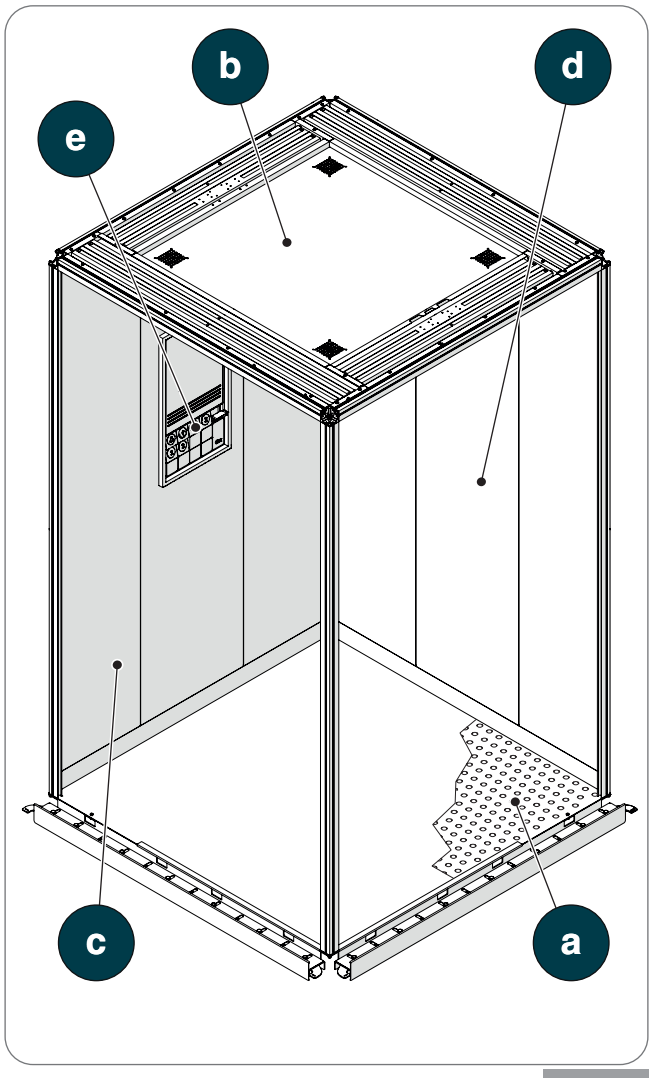


Fig. 4.1

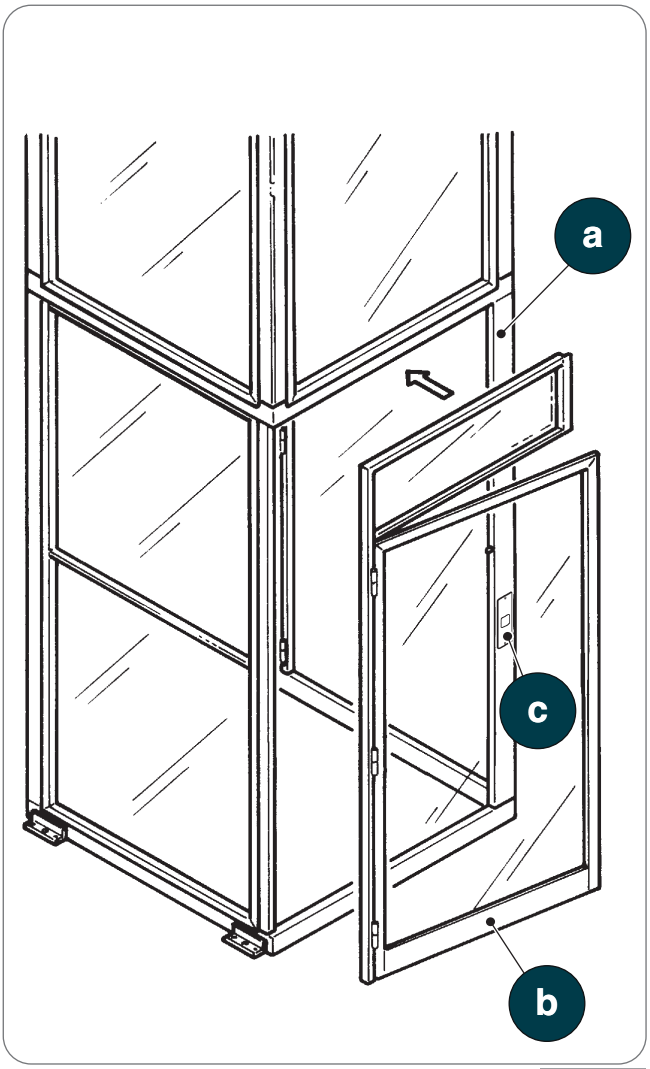


Fig. 4.2

4.1.2. Description

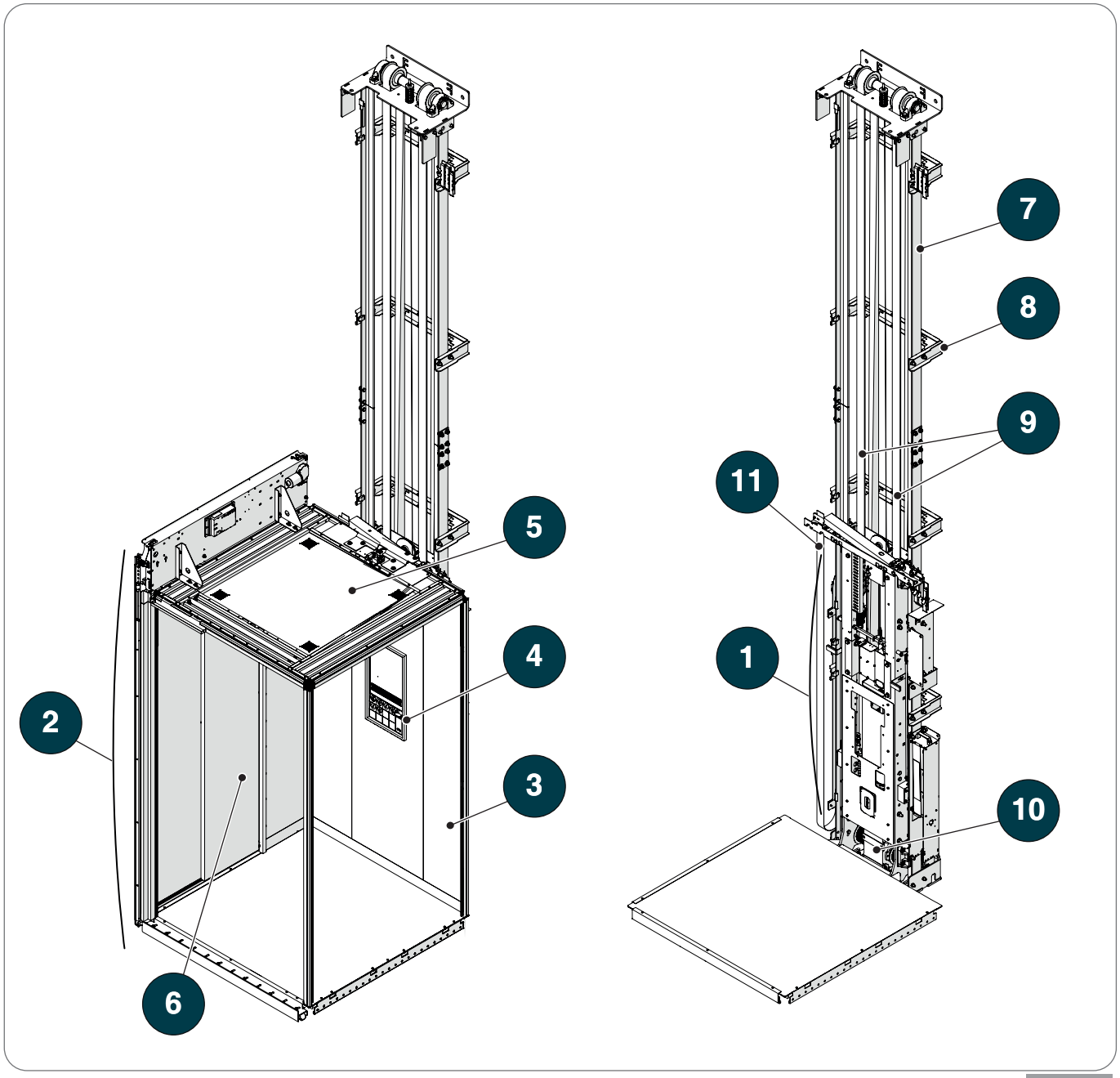


Fig. 4.3

Load carrier

It consists of:

1 - Frame
2 - Platform
3 - Side walls
4 - Control push-button panel
5 - Roof with lighting (the lighting in the uprights is optional)
6 - Doors

Rails and lifting system

It consists of:

7 - Rails
8 - Connections
9 - Lifting belts
10 - Gearbox
11 - Flat cable

Shaft

It consists of:

- Metal shaft structure (if required, Fig.4.2/a)
- Swing doors (Fig.4.2/b)
- Lock kit
- Automatic door kit (optional)
- Door motorisation kit (optional)

⚠	**WARNING:** The safety devices are described in the following paragraphs.

4.1.3. Main safety measures against mechanical risks

Motor brake

The motor that moves the platform features a parking brake which ensures that the platform remains stationary during loading and unloading operations.

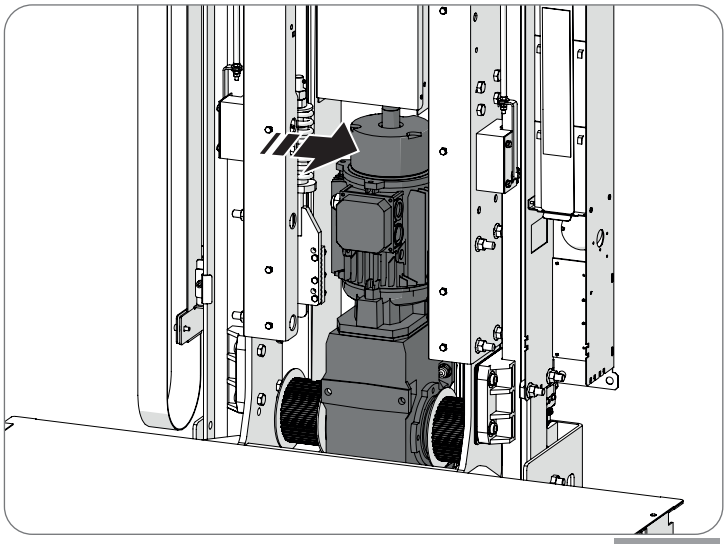


Fig. 4.4

Parachute

This is a mechanical device that stops and blocks the descending platform when the traction chains become loose or the speed limiter trips. At the same time, a safety microswitch disconnects the electrical power supply.

⚠	**WARNING:** To release it, a specialised technician is required.

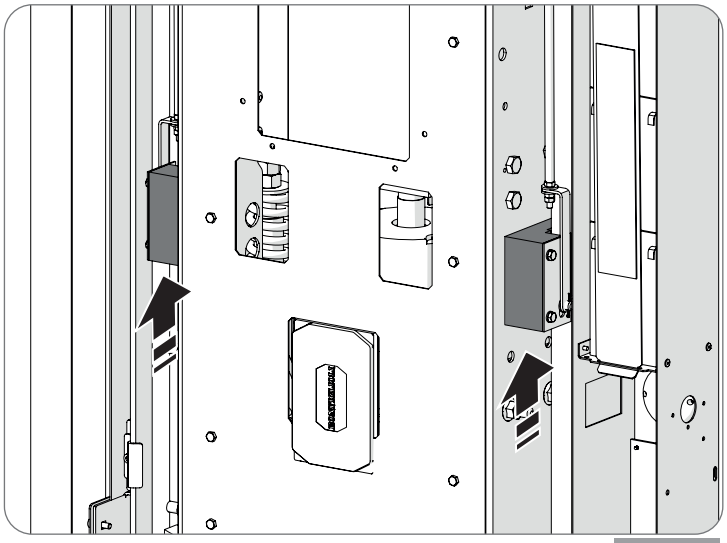


Fig. 4.5

Speed limiter

This is a mechanical device that intervenes in the event of an excessive increase in the platform descent speed. At the same time, a safety microswitch disconnects the electrical power supply.

It is connected to the parachute device.

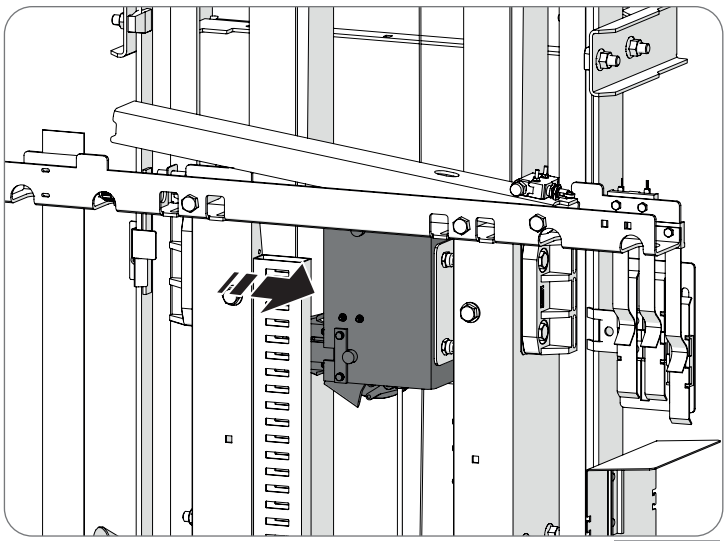


Fig. 4.6

Safety lock for maintenance

A mechanical post located in the pit (a) and one on the roof (b) of the platform allow for maintenance operations to be performed safely. Together with the actuation of a safety micro-switch, it stops machine operation.

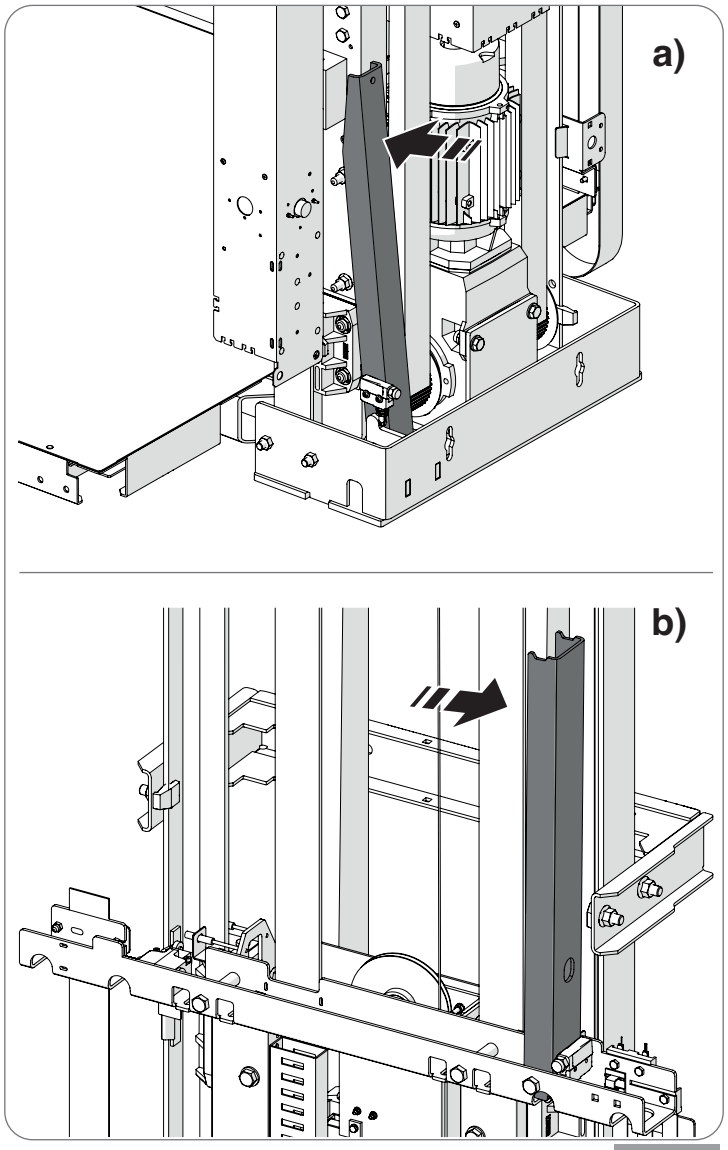


Fig. 4.7

Protection photocells on the accesses

They detect the presence of an obstacle on the sides of the platform; if there are no doors in the cabin, they stop machine movements; if there are sliding doors, they prevent them from closing. Each time the machine is started, an operating test is performed.

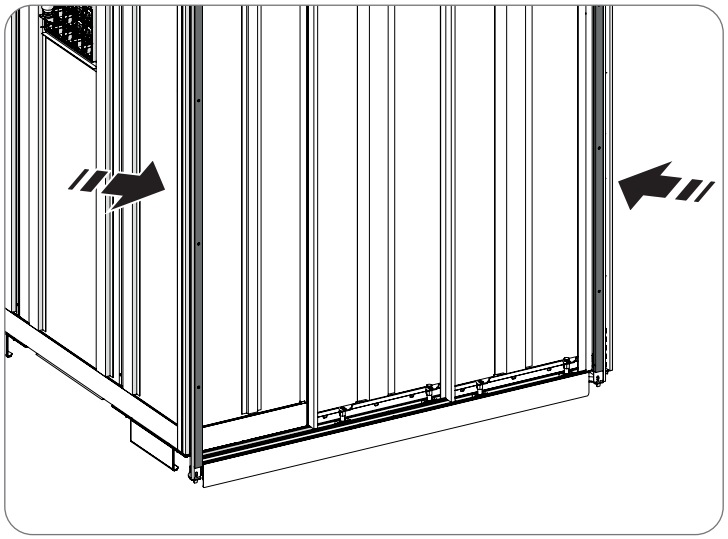


Fig. 4.8

Locks

The use of the lifting platform is linked to the operation of the locks. If the doors are open or the locks have been tampered with, the machine cannot be used.

⚠	**WARNING:** In the event of an emergency, the doors can be unlocked from the outside by a specialised technician.

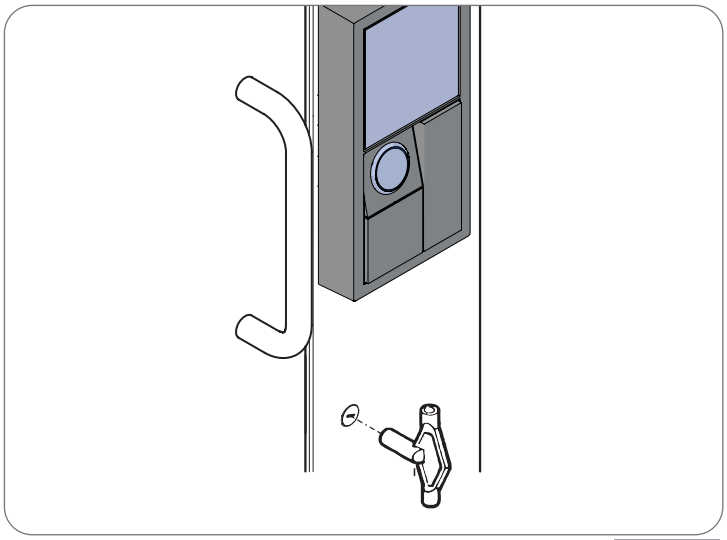


Fig. 4.9

Electrical and mechanical limit switches

The platform stops automatically at the floor thanks to the magnetic readers placed on the cabin and the magnets attached to the rails. If the floor is not detected correctly, an electrical-mechanical overtravel contact is activated when the last floor - going up or down - has been passed.

⚠	**WARNING:** In this case, the machine remains blocked and, to put it back into service, the intervention of the maintenance company is required.

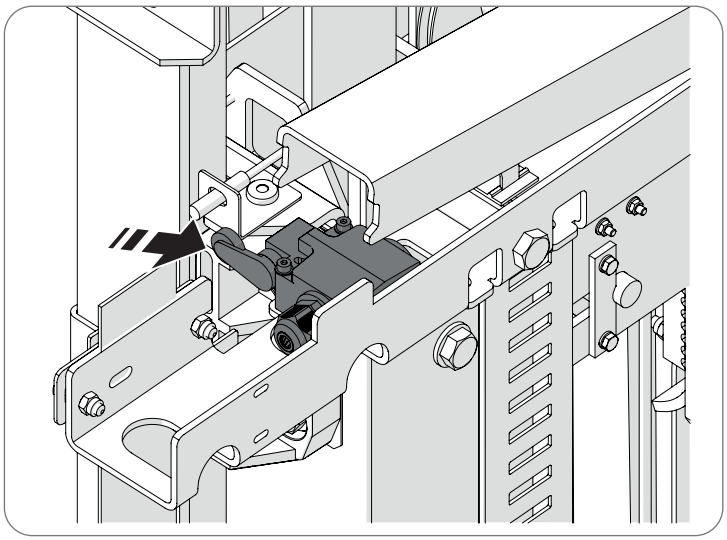


Fig. 4.10

4.1.4. Main safety measures against electrical risks

Power supply

The machine is powered with 230 Vac single-phase voltage, while the auxiliary circuit is powered with 24 Vdc.

Controls

In the presence of swing doors, the on-board controls are of the hold-to-run type (remove your finger from the button and the machine stops).

In the presence of sliding doors, the on-board controls are automatic (a single press of the button is required).

The floor controls are ALWAYS automatic.

There is an on-board alarm button (alarm bell).

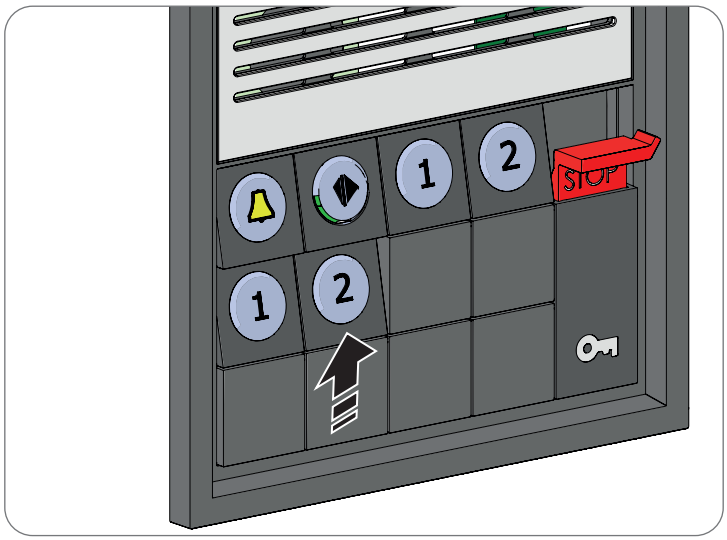


Fig. 4.11

Emergency stop button

⚠	**WARNING:** In the versions with sliding doors, there is no emergency stop button.

A red emergency STOP button is installed on the machine.

When lowered (or pressed in the case of a mushroom-head STOP button, b), the emergency STOP (a) stops all movement and activates an audible alarm.

Machine operation is restored by lifting the STOP button (a, or by pulling the button in the case of a mushroom-head STOP button, b).

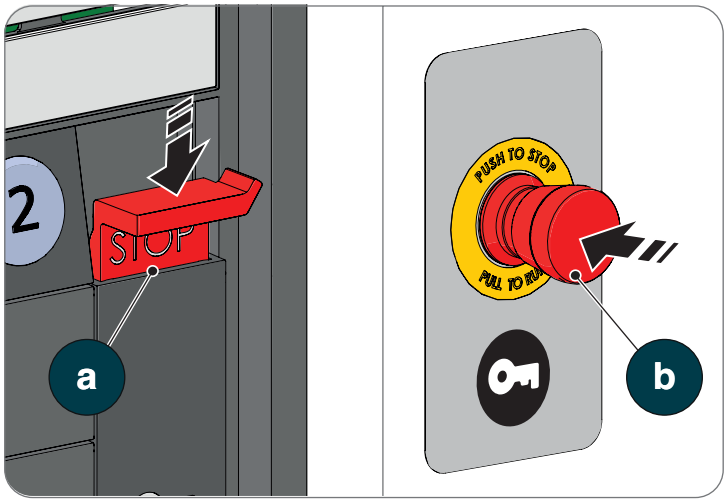


Fig. 4.12

Overload indicator

In the event of an overload, a load sensor inhibits movement. The red indicator light (a) “Kg” on the push-button panel in the cabin will light up until the overload has been removed from the platform.

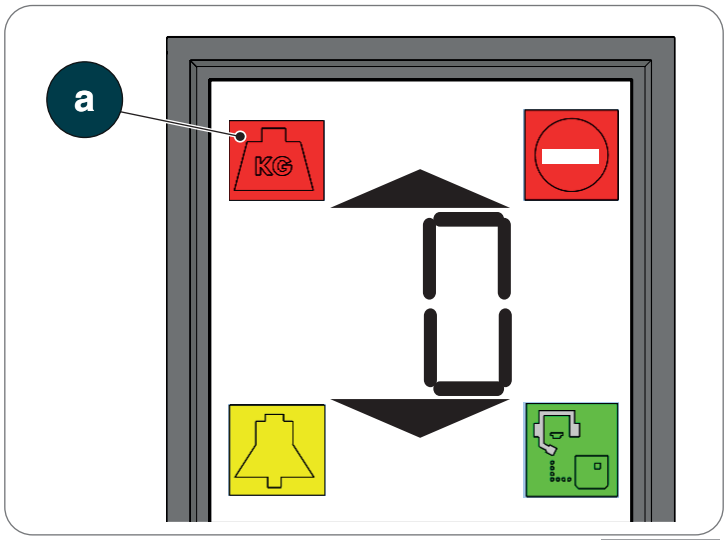


Fig. 4.13

Back-up batteries

A system of back-up batteries in the event of a power failure allows for the platform to be taken to the lowest floor so that the passengers can be evacuated.

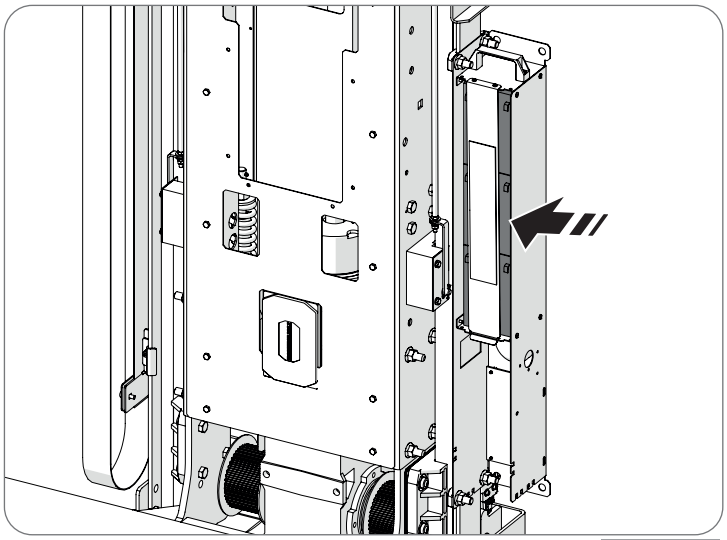


Fig. 4.14

4.1.5. Supply condition

- Rail sections complete with connection plates.
- Rail brackets complete with nuts and bolts.
- Belt upper return plate.
- Lifting belts.
- Gearmotor.
- Removable contacts and deceleration sensor.
- Flat cable with fastening accessories.
- Wiring assembly for the connection of electrical parts.
- Control panel.
- Landing doors complete with frame to be assembled.
- Lock kit.
- Frame to be assembled.
- Cabin to be assembled.
- Automatic door kit (if envisaged).
- On-board alarm.
- Electrical system protection cabinet with access key.
- Metal shaft protections (if required).
- Metal shaft structure (if required).

	ATTENTION: The system must be installed by specialised technicians.

4.2. Residual risks

	Risk of electrocution

All electrical panels, as well as any other compartment containing electrical equipment, are marked with a signal indicating the risk of electrocution if they are opened without following the safety procedures or if they are damaged.

ONLY qualified and authorised technical personnel may work on the electrical equipment, in particular during the internal control and maintenance phases, in accordance with the safety procedures in force.

Electrical hazards also exist in the case of inadequately insulated power cables that need to be replaced/repaired. In this case, the responsible personnel must be informed immediately.

5. Technical features

5.1. Technical features

Traction system	Gearmotor with lifting belts and pulleys
Performance	
Direction of travel	Up/down
Speed (up/down)	Max 0.15 m/s (0.10 m/s available only for Italy)
Max capacity	1 or more people with reduced mobility + 1 or more people accompanying them
Capacity	See identification plate on the on-board and floor push-button panel
Optimal operating temperature	from 5°C to 40°C
Installation	The system can be installed both indoors and outdoors; both in a masonry and in a metal structure shaft. For outdoor installation, the shaft must be closed with a roof.
Electrical System	
Motor	230 Vac three-phase 50 Hz,1.5 kW - 3 kW (HL/HS)
Max absorption	2.5 kW - 4 kW (HL/HS)
Controls	On-board with swing doors: hold-to-run manoeuvre buttons (up and down). On-board with automatic doors: automatic manoeuvre buttons (up and down). On the floors: automatic manoeuvre buttons. All manoeuvre controls only work with the doors closed and locked.
Work cycles	Every 10 min, 5 min work and 5 min rest.

Vibrations - Airborne noise produced by the machine

Vibrations	The machine induces vibrations on the body and limbs of the passengers with the following characteristics: - low frequency and very low acceleration; - short exposure cycles for the exposed person. **Therefore, this parameter is not relevant to safety.**
Airborne noise	less than 70 dBA

Wiring diagrams

The wiring diagrams can be found in the file attached to the machine.

6. Intended and unintended uses of the machine

6.1. Intended uses

Lifting platform **E10** is a lifting machine designed to carry:

- one or more people, also with reduced mobility;
- a person in a wheelchair with one or more people accompanying them, if they need assistance; informed about the operation of the machine itself.

When using the system, it is mandatory to follow the instructions given on the plates affixed to the machine.

6.2. Unintended uses

The user must follow the instructions given in this manual. When using the **E10** lifting platform, it is forbidden to:

- carry anything that is not envisaged in paragraph 6.1
- let unaccompanied children under the age of 12 use the platform;
- carry goods or liquids;
- exceed the capacity indicated on the identification plate located in the cabin;
- allow it to be used by a person not informed about the operation of the machine;
- allow it to be used by a person who is not autonomous;
- not follow the instructions given on the plates supplied with the machine;
- have maintenance and repair work carried out by staff lacking the required skills for the various operations.

	**DANGER:** Do not put foreign objects or liquids in holes or crevices. Do not spray liquids on the machine.
	**DANGER:** In the event of a fire, the machine cannot be used. Do not use the machine in conditions in which there is a high risk of explosions (e.g. in the event of a gas leak).
	**ATTENTION:** Do not carry out any modifications intended for any use: this will invalidate the declaration of conformity and the warranty.
	**ATTENTION:** Carrying pets on the platform is forbidden for safety reasons.

7. Normal use of the lifting platform

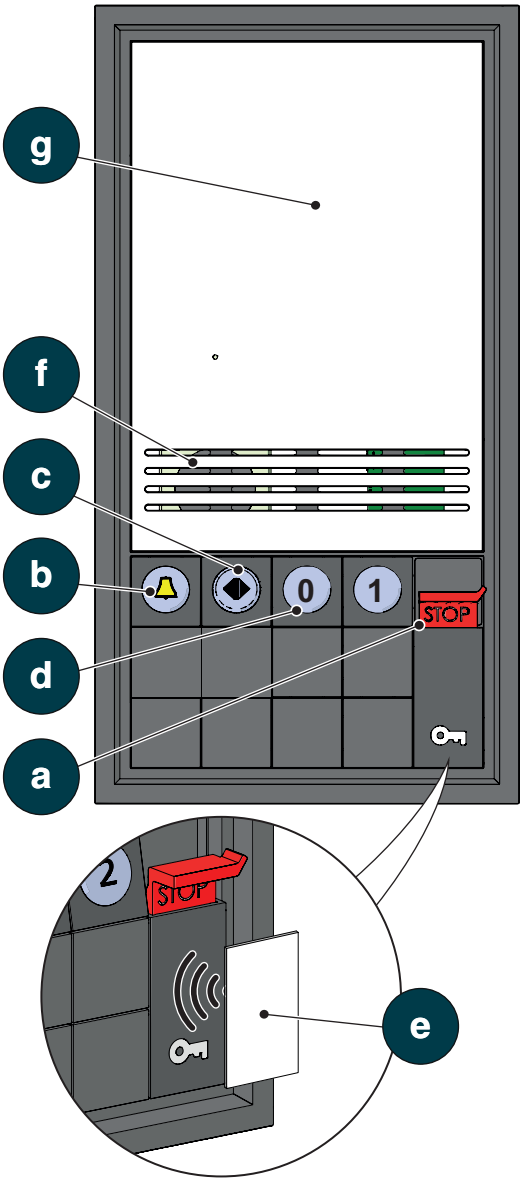
7.1. General description

	**ATTENTION:** Do not remove, cut, deform or forcibly handle any part of the machine.
	**ATTENTION:** The lift must not be used by unauthorised people. The RFID key to enable the use of the machine must always be kept safe and can only be accessible to authorised people.
	**ATTENTION:** The passenger must avoid swinging while the machine is moving.
	**ATTENTION:** Do not exert force during the normal door opening and closing operations, or while the lift is moving.
	**ATTENTION:** Any type of repairs to the machine by unqualified staff are strictly forbidden.
	**WARNING:** Do not remove any of the signs or safety stickers from the machine.
	**WARNING:** To remove any dirt in the cabin, use a damp cloth or a commercially available light lubrication cleaning spray. Do not use a water jet to clean the cabin.
	**WARNING:** Before using the platform, read this manual carefully.
	**NOTE:** After entering the cabin, it is always possible to exit by pressing and holding the lit button for at least 2 seconds ◀I▶ (c, Fig.7.1).

7.1.1. Controls on the platform

A control push-button panel is placed on the platform which contains the following devices:

Push-button panel with Ø 30 mm round buttons



Push-button panel with 50x50 mm square buttons

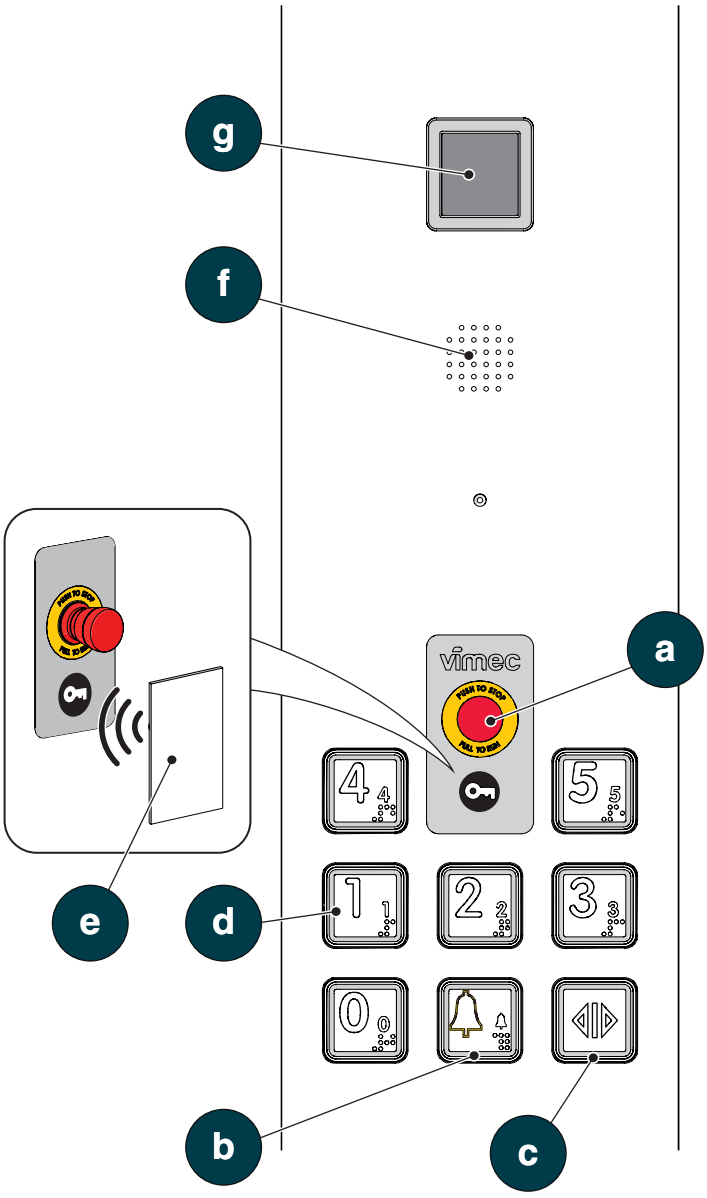


Fig. 7.1

NOTE: Both push-button panels perform the same function.

- Activation with **RFID key** (e, Fig.7.1)

  Enables the travel buttons. To use the platform, place the magnetic key near the base of the push-button panel (right-hand side) where the key-shaped icon is found.

  Based on programming, the magnetic key can be set in the following ways:

(1) - Standard ON/OFF function. Allows for the machine to be switched on or off after placing the key near the key-shaped icon on the push-button panel.

(2) - Free access. After using the machine normally, it switches off automatically after two minutes.

(3) - Restricted access. Only some manoeuvre buttons are enabled.

(4) - Passe-partout. All cabin and floor manoeuvre buttons are enabled**.**

- Red **emergency STOP button** (a, Fig.7.1).

	**WARNING:** In the versions with sliding doors, there is no emergency stop button.

The emergency STOP, when lowered (or pressed in the case of a mushroom-shaped STOP button), causes all movements to stop and activates an audible alarm; the display (if present) alternately shows “ST” and the current floor. Machine operation is restored by lifting the STOP button (or pulling the button in the case of a mushroom-shaped STOP button).

- **Alarm bell** button (b, Fig.7.1).

This button is normally associated with the function of activating the alarm siren as long as it is pressed, reopening the door used to enter, and calling the telephone dialler (when present). The button always remains active even without the use of the RFID key (see the next paragraph for further information).

- **Run buttons** (d, Fig.7.1).

These buttons are used to move the platform; there are always at least two of them and they are numbered in ascending order. The buttons feature a blue lit perimeter, which is active only when the button function is available (light off = function not available).

- **Door opening button** (c, Fig.7.1).

With the cabin on the floor, if it is necessary to open the doors after they have closed, press and hold this button ◀I▶ for at least 2 seconds, after which the doors will open.

- **Display** (g, Fig.7.1) (optional). It can be of the 2.8” LCD or 7” TFT type; the indicators and lights in the different display models have the same functions, which are described from (Fig.7.3).

- **Telephone dialler** (f, Fig.7.1) (as an alternative to the telephone)

It must be programmed with numbers chosen by the user, which ensure the intervention of rescuers in the event of a fault. It is operated by pressing and holding the “alarm bell” button for the time set during installation (b, Fig.7.1); it also works in the event of a power failure (blackout) for up to 2h.

- **Telephone** (as an alternative to the telephone dialler)

Bi-directional voice communication device between the platform and the outside. This device is used as an alternative solution to the telephone dialler; it must also be connected to a landline or a GSM telephone line.

In case of multiple doors on the floors

	NOTE: If there are 2 doors on the same floor, there might be a dedicated button for each door. This is only an example configuration, as the layout of the buttons on the push-button control panel changes depending on the type of installation.

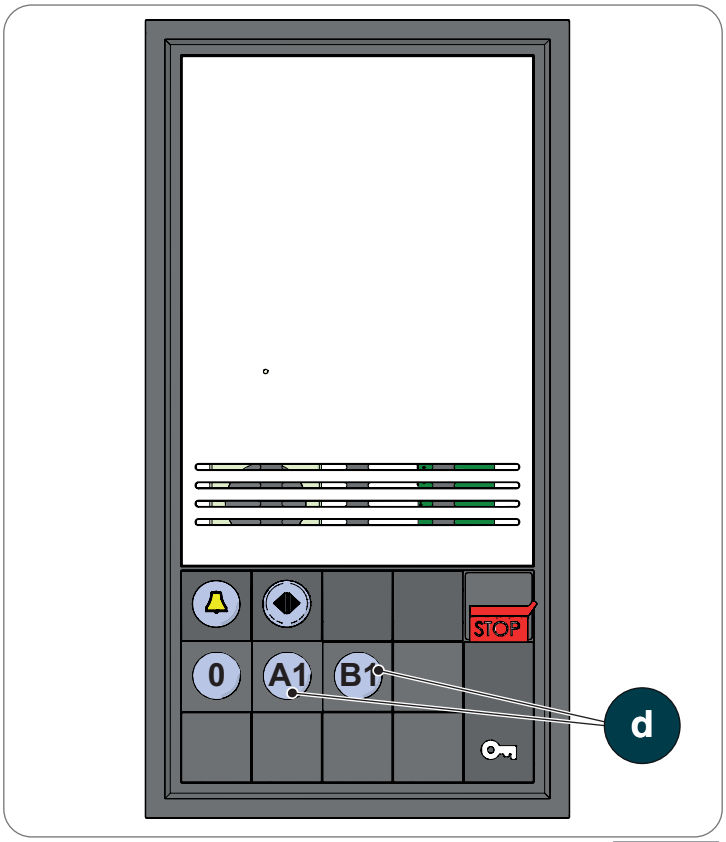


Fig. 7.2

7.1.2. Indicators and lights on the display

(1) - Direction arrow
(2) - Current floor
(3) - Overload (red light)
(4) - Out of service (red light)
(5) - Alarm (yellow light)
(6) - Alarm received (green light)

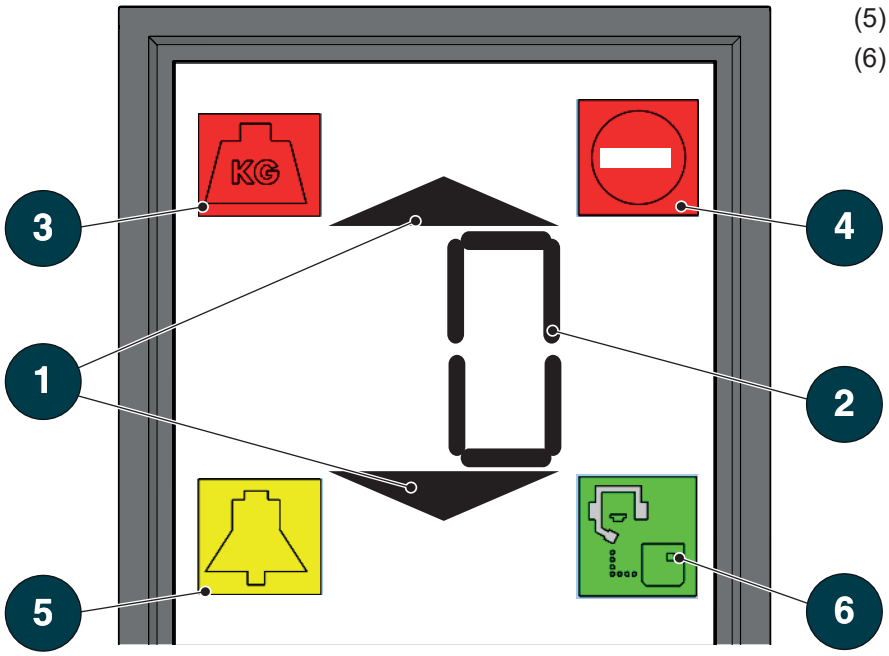
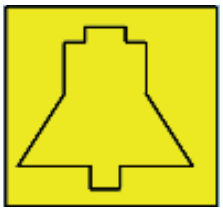
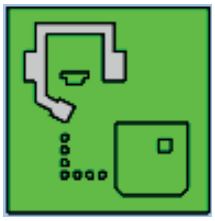


Fig. 7.3

Operation of the lights on the display (if present):

	**1) Direction arrow** Indicates the direction of the platform. The up arrow indicates that the platform is moving towards a higher floor; the down arrow indicates that the platform is moving towards a lower floor.
	**2) Current floor** Indicates the floor the platform is on; floor “0” is the ground floor. The number of floors varies depending on the type of installation.
	**3) Overload (red light)** It lights up when the load sensor in the cabin detects an excessive load. In normal conditions, the light is off. In alarm conditions, the light is steady red. An audible signal is emitted.
	**4) Out of service (red light)** It lights up when the machine goes into an emergency condition (power failure / voluntary activation of the “Out of service” function; e.g. it is possible to activate this function if the home alarm is activated). In normal conditions, the light is off. In alarm conditions, the light is steady red. An audible signal is emitted.
	**5) Alarm (yellow light)** It lights up when the “alarm bell” button is held down and the telephone dialler is present (b, Fig.7.1). After a sufficiently long time to activate the alarm, (set during installation), emergency calls are made via the telephone dialler. In normal conditions, the light is off. In alarm conditions, the light is steady yellow. An audible signal is emitted as long as the “alarm bell” button is pressed.
	**6) Alarm received (green light)** A few seconds after pressing the “alarm bell” button (b, Fig.7.1), emergency calls are made to the numbers set during installation, if the telephone dialler has been installed. When an operator is available and answers the call, the green light comes on. In normal conditions, the light is off. In alarm conditions, the light is steady green.

	**NOTE:** In telephone dialler malfunction conditions (if present), the alarm (yellow) and received alarm (green) lights are activated alternately.

7.1.3. Floor controls

Near each landing door there is a control push-button panel (Fig.7.4) which may contain the following devices (depending on how the machine was configured when purchased):

- Call button (a, Fig.7.4), found as standard in all versions.

  This button is used to make the platform reach that floor, allowing access.

- Display (c, Fig.7.4) (optional)

  Indicates the floor reached and the direction of movement.

- RFID key (b, Fig.7.4) (optional)

  Coded key that conditions the use of the run button. To activate the button, place the magnetic card near the icon and press the button of the chosen floor. The types of RFID keys are described at the start of "Sect. 8.1.1 Controls on the platform".

RFID key confirmation:

- If the floor call is not enabled with the machine free (light off) and the call button is pressed (a, Fig.7.4), the light flashes once every 0.5 seconds (unavailable call signal)
- If the right card is placed near the icon, the light flashes 3 times (correct card confirmation)
- If the wrong card is placed near the icon, nothing happens; when the call button is pressed, the unavailable call signal will be activated.

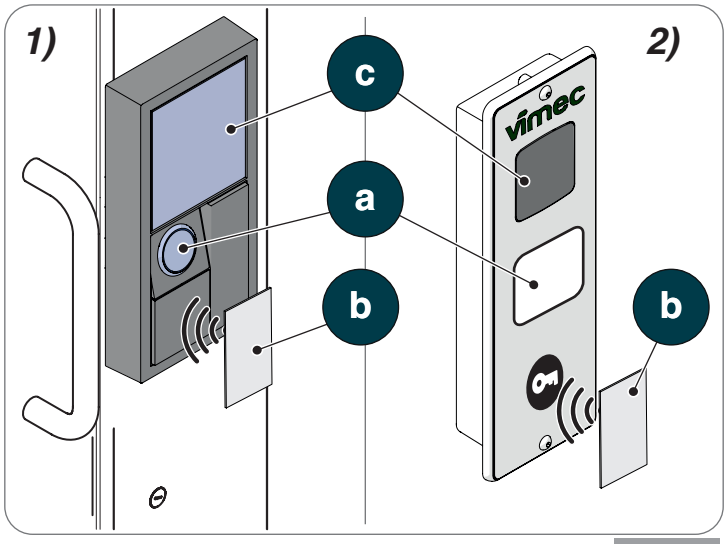


Fig. 7.4

1) - Push-button panel with Ø 30 mm round buttons

2) - Push-button panel with 50x50 mm square buttons

	NOTE: Both push-button panels perform the same function.

	NOTE: If the platform does not move it means that the landing door is not closed properly. With a swing door, close the landing door properly after exiting the platform. If the platform does not move, make sure that there are no obstacles within the range of action of the barrier photocells.

7.1.4. Normal use of the platform

Normal operation involves the platform moving up and down after pressing a manoeuvre button on the control panels on the floors or in the cabin. **The platform can be called only when the floor light indicates that it is free**, (see light signal table below). Press and hold the button (a, Fig.7.4) for 2 seconds to open the landing door; the floor light will switch to the busy status and it will not be possible to call the platform from another floor. If the platform is on the floor, the door is unlocked and it is possible to enter; if it is not on the floor, it is moving towards it. Having entered the cabin, press the run button for the desired floor; the corresponding button will light up. Having reached the destination floor, the platform automatically stops in the correct position, the landing door is unlocked and it is possible to exit the platform. The busy signal on the floor goes off and the platform is available for a new ride.

- **Version with swing doors:** To reach the desired floor, press and hold the run button for the entire ride; it is possible to change the destination floor at any time during the ride by simply releasing the button and pressing another button. Releasing the buttons brings the platform to a gentle stop.
- **Version with sliding doors:** To reach the desired floor, press the run button once; it is not possible to change the destination floor while the platform is moving.

Lights

When the platform is in use, the lights turn on automatically; they turn off automatically when the platform is at a floor and it remains unused for 2 minutes (default setting) or a different value set during installation.

Emergency light

The light in the cabin switches on automatically in case of blackout.

Alarm

Press and hold the "alarm bell" button (b, Fig.7.1) to activate two sirens; the one installed on the main electrical panel and the one inside the platform. The system is set up for the connection of another alarm (visual or audible) that can be placed in any other place as long as it has a voltage of 24 Vdc 300mA max.

Light signals

Floor lights:

- OFF with machine free
- ON with machine busy
- FLASHING only on the floor from which the platform was called

Door opening button light in the cabin:

- ON when active, OFF when inactive, with cabin light (programmable as required)

Cabin buttons light:

- ON if the call is enabled by the function
- OFF if the call is disabled by the function

NOTE: By means of a parameter, which can be set by a specialised technician, it is possible to make the buttons in the cabin switch off after the ride (except for the alarm bell) without disabling the machine; they will turn back on when the platform is called.

7.1.5. Optional

NOTE: The optional devices are provided only if they are ordered when the platform is purchased.

a) Motorised landing doors

With optional motorised doors, the landing doors do not have to be opened and closed manually.

This optional accessory can be provided both for indoor and outdoor use.

The doors open automatically when, with the platform on the floor, the button of the same floor (carried on board) or the call button (carried outside) is pressed.

The doors close again after a settable open time or by pressing the button corresponding to a different floor in the cabin.

The optional accessory consists of an assembly, installed at the top of the door (Fig. 7.5) containing an electric motor and its automatic mechanisms.

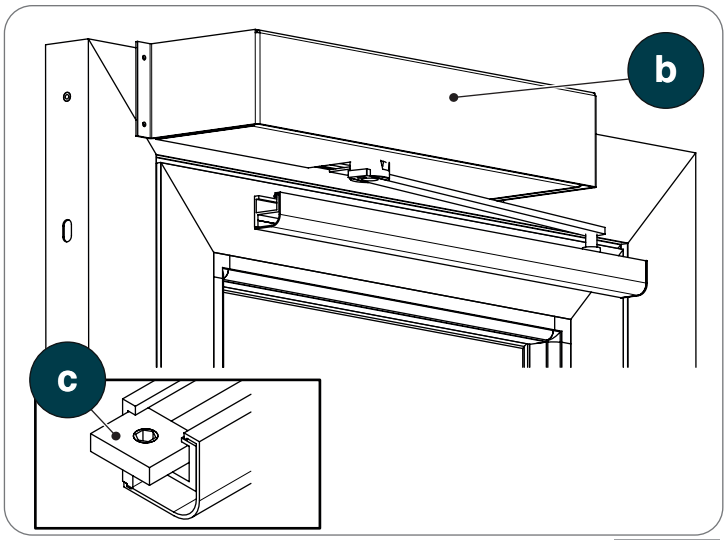


Fig. 7.5

In the event of a power failure, the door will work all the same thanks to the back-up batteries.

During the motorised movement, the automatic door features safety devices that prevent crushing and collisions if people or objects are within the range of action.

The opening angle of the door is limited to 90° max, by means of the stop (c, Fig.7.5) inserted in the rail.

b) Audible warning device

The audible floor arrival warning device (gong) is built into the speech synthesis (if present).

c) Auxiliary alarm siren

Press the "alarm bell" button (b, Fig.7.1) to activate the buzzers installed in the cabin and on the floors.

The system is set up for the connection of another alarm (visual or audible) that can be placed in any other place as long as it has a voltage of 24 Vdc 5W max.

7.1.6. Requirements for use

- The platform must be activated and deactivated by following the procedures described in this manual.

	**ATTENTION:** It is mandatory to always close the landing doors when leaving the platform.

- Before deactivating the platform for a long time, make sure that it is on the lowest floor. This operation must be performed by a specialised technician.
- Always keep the documents supplied with the machine - manual, wiring diagrams, warranty - in a safe place.
- The key to unlock the doors in an emergency (a, Fig.7.6) can only be used by a specialised technician.

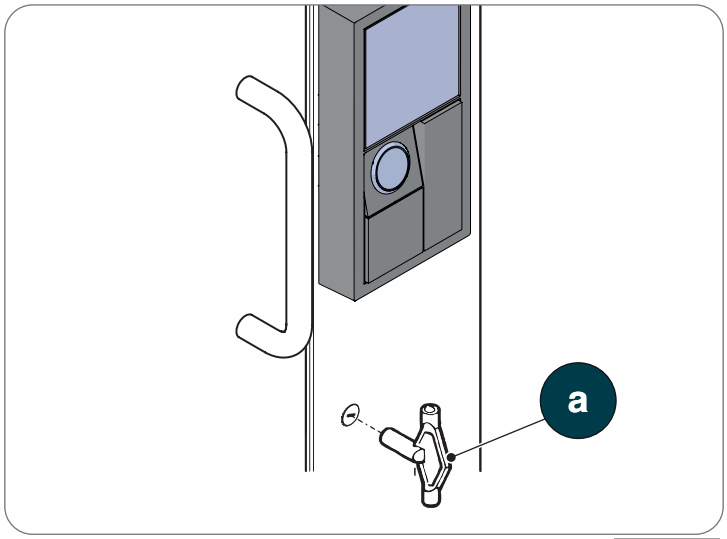


Fig. 7.6

7.1.7. Emergency manoeuvre (manual manoeuvre)

	**WARNING:** The operations described below must be performed by a Competent Person only (Competence: CP).

This is the set of operations to be performed to rescue passenger trapped in the cabin. It is necessary to use the EMO emergency push-button panel (Fig.7.7), following these steps:

- Disconnect the system from the power supply by turning the main switch (Fig.7.8) to the OFF position.
- Check that all doors are closed and locked and place “system under maintenance” signs on each one.
- Communicate with the passengers to make sure that the load carrier doors (if present) are closed and tell them to stand away from the doors.
- Move the selector switch (a) to POS. 2.
- Press and hold the DOWN button (b) until the platform stops at a floor and opens the doors (if of the motorised automatic type).
- Move the selector switch (a) to POS. 1.
- Let the passengers exit from the load carrier; after the set time, the doors will close again. If the door does not close by itself, press and hold the TEST button (c) for 5 seconds to disconnect the machine, then close the door manually and make sure that it is locked.
- Call the maintenance company and do not use the machine until it has been checked by a technician.

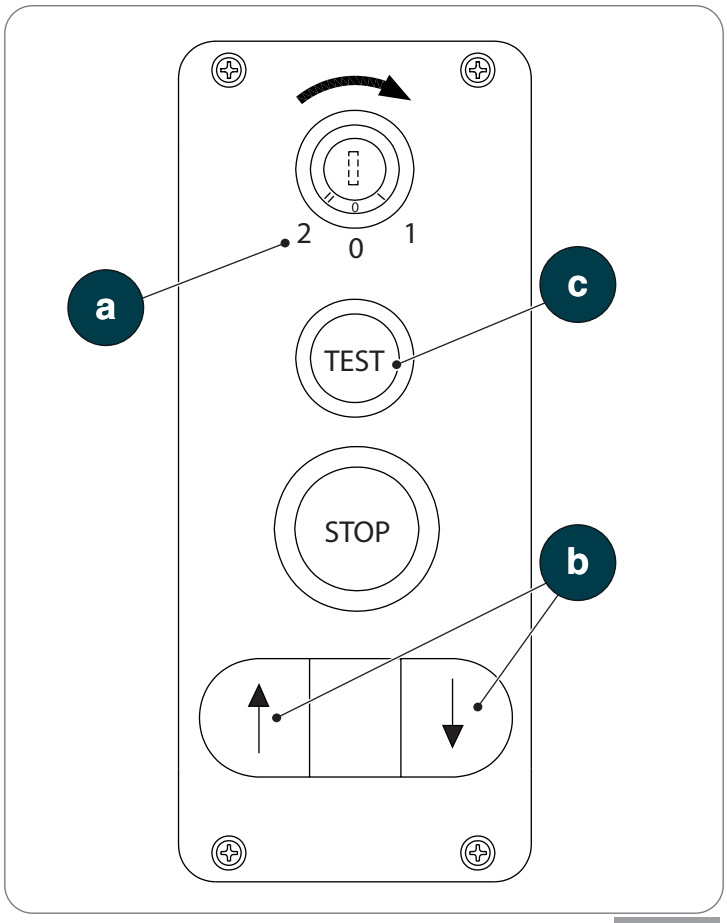


Fig. 7.7

⚠	**ATTENTION:** If it is not possible to rescue the passengers trapped inside the load carrier, contact the maintenance company.

⚠	**ATTENTION:** Never open a landing door to try to rescue a passenger if the load carrier is not aligned with the floor.

7.1.8. Use in the event of a power failure (black out)

In the event of a power failure while using the platform, or if the main inverter is blocked, it is possible to reach one of the landing floors designated by the installer.

This situation is immediately recognisable by the fact that the machine stops, the push-button panel turns off, it restarts and only the buttons of the floors that can be used remain active.

The operation takes place at reduced speed and, when the floor has been reached, the door opens normally.

If the display is present, EM is shown.

7.1.9. Taking the system out of service (temporary)

⚠	**WARNING:** The operations described below must be performed by a competent person or a specialised technician.

To take the system out of service until the maintenance company arrives:

- Take the platform to the lowest floor.
- Make sure that there are no people stuck in the cabin.
- Check that all landing doors are closed and locked.
- Place the “out of service” sign on each landing door.
- Disconnect the system from the power supply by turning the main switch to the OFF position.
- Call the maintenance company.

Fig. 7.8

7.1.10. Use in case of evacuation manoeuvre (save exit floor)

An additional emergency system can be connected to the machine (e.g. fire, flood, smoke detector, etc.). If this system is activated, the machine will stop working: the floor buttons will go into "busy" mode and the display in the cabin will show the "do not use" symbol and the characters "--"; all the buttons will be disabled, except for the evacuation plan button (to be selected during installation), which remains the only one that can be used by the passenger (if any). Depending on when the system is activated, three things can happen:

- If the cabin is stationary on a floor, it will automatically move to the designated floor.
- if the machine is moving in response to a call from a floor, it will stop and restart by moving to the designated floor.
- if the machine is moving in response to a call from the cabin, it will stop; the passenger will see the above alarms on the display and they can get to the designated floor by pressing the only button that remains lit.

In any case, once on the designated floor, the doors are opened for 5 minutes and then closed: it is now impossible to access the cabin from the outside. The machine will remain out of operation for the duration of the external signal, after which it will return to normal operation.

8. Maintenance

8.1. General information

VIMEC systems are built in accordance with the current Machinery Directive, which points out the integration of safety into the design and construction of the machines, as well as correct installation and maintenance over time. Therefore, the system's warranty depends on the regular and timely maintenance of all the safety systems and protections of the machine supplied. Maintenance must be carried out by specialised technicians suitably trained for the purpose, who will perform all the operations described below.

For lifts and lifting platforms for the disabled, the use and validity of the warranty provided by VIMEC S.r.l. are subject to compliance with the following provisions:

1 - issue of the test certificate by VIMEC and consequent issue of the CE declaration of conformity.

2 - communication of commissioning to the mayor by the owner of the building where the platform is installed.

3 - appointment of a qualified company to carry out maintenance.

4 - acceptance of the responsibility to carry out periodic checks on the system by a certification body.

Consequently, the warranty is void or does not apply if the above instructions are not complied with. In this regard, the Customer must send VIMEC S.r.l. a copy of the communication submitted to the mayor of the town where the lift or lifting platform will be installed, as soon as possible.

MONTHLY CHECKS

	**ATTENTION:** Check the operation of the emergency STOP (a) once a month. **If the STOP does not stop the machine movements, DO NOT USE the machine**. Request the intervention of the maintenance company immediately.
	**ATTENTION:** Check the operation of the emergency call button (b) once a month. **If it does not work, DO NOT USE the machine**. Call the maintenance company.
	**WARNING:** Check the operation of the machine's run (d) and door opening (c) buttons. If they are not working, **DO NOT USE the machine**. Request the intervention of the maintenance company immediately.

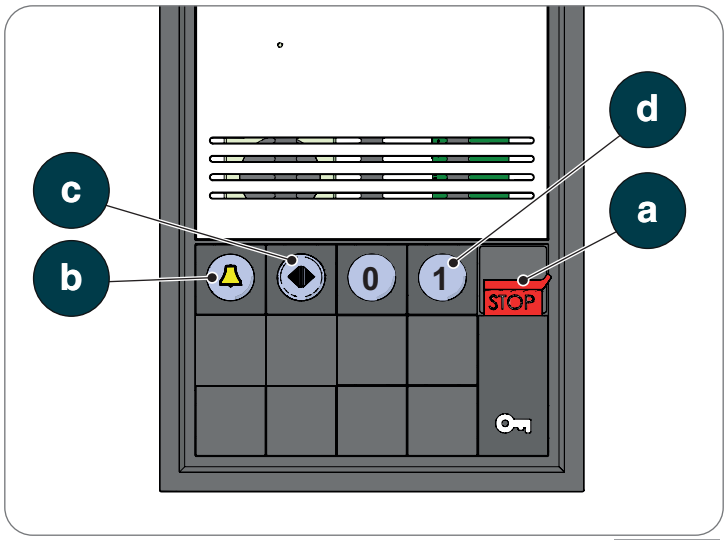


Fig. 8.1

SIX-MONTHLY CHECKS

Safety devices

Make sure that the photocells installed on the cabin entrances detect the presence of an obstacle and stop the machine movements.

	**ATTENTION:** If the machine photocells are not working properly, **DO NOT USE the machine**. Request the intervention of the maintenance company immediately.

Cabin stability

	**ATTENTION:** If the cabin is noisy, moves and/or swings abnormally, DO NOT USE the machine. Request the intervention of the maintenance company immediately.

General checks

	**WARNING:** Check the operation of the cabin lights; if they are not working, call the maintenance company. Check the condition of the safety labels and/or stickers and, if necessary, replace them by contacting the maintenance company.

Cleaning the cabin and the landing doors

Thoroughly clean the cabin and the landing doors using a damp cloth.

	**ATTENTION:** Do not pour any liquid on the platform and on the machine in general.

Taking the system out of service

	**ATTENTION:** Should you wish to deactivate the machine for any reason, it is necessary to contact the maintenance company.

8.2. Specific periodic inspections table

ATTENTION: The following inspection and maintenance operations are the exclusive responsibility of a specialised operator appointed by the manufacturer (SO).

ASSEMBLY	Component	Description	EVERY 6 MONTHS	EVERY 12 MONTHS
SAFETY DEVICES	Position of the magnets for floor stops	Check that the stopping positions on the floors by means of the sensors, are the desired ones.	•	
	Locks and interlocking	Check the interlocking of the doors with their locks.	•	
	Headroom and pit overtravel microswitches	Refer to the operating instructions	•	
	Photocells and the anti-crushing device	Check the operation of the barrier photocells and the anti-crushing device if present.	•	
	Headroom and pit struts	Check the operation of the pit and headroom struts and their safety contacts	•	
	Cabin push-button panel microswitch	Check that it is correctly adjusted, aligned with the drive cam, properly secured and free to move.	•	
	Emergency stop	Check the emergency stops in the pit and cabin.		•
	Emergency push-button panel	The Emo emergency push-button panel must be in good working order; refer to the specific instructions.		
	Roof microswitch	Check the safety contact on the hatch.	•	
TRACTION MECHANISMS	Belt attachments	Check that the belt attachments are properly secured: the nuts must be tightened.	•	
	Belt wear	Inspect the entire length for deformation, broken teeth, damaged lining, broken, unsheathed or corroded wires. If either condition A or B is found, both belts must be replaced: A-One or more strands along the belt are unsheathed and at least 50% of the unsheathed wires are broken B-When at least one tooth is broken on 22 consecutive teeth	•	
	Wear and tear of the sliding guides and rollers	Check the wear and tear of the sliding guides and rollers on the frame: if wear exceeds 1 mm, replace them.		•
	Belt tensioning	Refer to the instructions to check the tension of the belt	•	
	Gearmotor pulleys	Check the gearmotor pulleys for wear: the teeth must not be cracked or broken. Make sure that the bolts are tight	•	
	Bolts	Make sure that the bolts are tight	•	

Specific periodic inspections table

ASSEMBLY	Component	Description	EVERY 6 MONTHS	EVERY 12 MONTHS
PARACHUTE DEVICES	Rollers stroke	The connecting rod of the rollers must run freely by 10-15 mm.	•	
	Rollers wear	Check that the rollers are undamaged and move freely without friction. The surface must be smooth or free of dents	•	
	Parachute microswitch	Check that it is correctly adjusted, aligned with the drive cam, properly secured and free to move.	•	
	Cleaning and friction	Check that all parachute blocks are clean, free from friction and rust	•	
	Lever mechanism synchronisation, microswitch activation	Check that the bar moves smoothly and that the parachute blocks and safety microswitches are activated synchronously	•	
RAIL STABILITY	Fixing	Check all the fixing screws of the connections and check any expansion plugs.		•
	Connection plates	Check the tightness of any connection plates. The path of the guides must be free of steps.		•
	Lubrication	Lubricate the rails with a mixture of oil and grease over their entire length.		•
SHAFT	General condition of the shaft	Inspect the inner surfaces, distance, surfaces and sharp edges.		•
	Lights	Check that the lights are working properly and, if necessary, replace any faulty components.		•
	Electrical cables and flat cable	Check the integrity of cables and flat cable, which must have no cracks, bare wires or bends other than those intended for installation		•
	Pit cleaning	Check the state of cleaning of the pit and remove any foreign matter.		•
	Presence of leaks	Check the pit floor for oil or water leaks and clean if necessary.		•
DOORS	Mechanical stops and locks	Check the correct operation of the locks and closing mechanisms: if an anomaly is found, check the adjustments. The machine must only be operated with the doors properly closed and locked	•	
	Door panel alignment	Check the correct alignment of the panels or hinges and adjust if necessary		•
	Sliding guides, rollers and hinges	Check the sliding guides, rollers and hinges for wear: all movements must be smooth and effortless		•
	Floor push-button panels	All floor push-button panels must be in good working order, undamaged and not tampered with; replace them if necessary.		•

Specific periodic inspections table

ASSEMBLY	Component	Description	EVERY 6 MONTHS	EVERY 12 MONTHS
MOTOR	Oil	Check for the presence of oil by means of the dedicated indicator.	•	
	Gearbox wear and tear	Ride up and down: check for abnormal noises, knocks or buzzes		•
	Brake	Check that the motor brake is in good working order by referring to the relevant operating instructions		•
SPEED LIMITER	Cleaning and friction	Keep the component clean, free from dust, rust and oil.	•	
	Safety microswitch	Check that the device can be easily operated, without friction or excessive play, without dust and without signs of rust and that it controls the safety microswitch correctly.	•	
	Rope wear and tear	Check that there are no more than 12 broken wires in a 120 mm section (30 times the rope diameter) or that the rope diameter is not less than 3.76 mm (6% less than the nominal value)	•	
	Rope tension	Check the tension of the rope and adjust it if necessary. The tension is correct when the springs in the head and in the pit are compressed to about 75 mm.	•	
	Pulley groove wear and tear	Check that there are no signs of wear in the pulley groove, such as cable indentation or loss of the V-section.	•	
CAB	Communication systems	Check two-way communication systems, telephone handset or telephone dialer.	•	
	Buttons, lights and displays.	All buttons, lights and displays on the push-button panel must be in good working order; replace any components if necessary.	•	
	Plates	All the plates inside the cabin must be legible and in the correct position.		•
	Cabin elements	The cabin components (walls, mirrors, handrails, etc.) must be securely fixed; if necessary, the fixings must be checked.		•
INSULATION TESTS	Electrical circuit	Test the insulation of the electrical system; see the relevant manual.		•
BATTERIES	Charge level	Check that they are charged and in good working order. Carry out a test without mains power, with the cabin making a full run	•	
	General condition	Visually inspect the batteries for leaks, signs of oxidation or deformation.	•	

9. Troubleshooting

9.1. Troubleshooting

Type A1 code list

⚠	**WARNING:** The list of the following error codes is the sole responsibility of the technical assistance service.

Acronym viewed on the display by the user	Full description	Solution
"A0" ... "A7" "B0" ... "B7"	The system stops immediately and indicates RI	Contact Technical Assistance
"BE"	Battery voltage below 30V	Contact Technical Assistance
"CB"	Headroom protection lever contact open (SQ44) or Cabin roof contact open (SQT)	Contact Technical Assistance
"CI"	Safety contact on EMO push-button panel open	Contact Technical Assistance
"CK"	CAN communication failed between CPU and CABIN.	Contact Technical Assistance
"CX"	Cabin door did not open completely 15 seconds after the opening command. Door operator Alarm (see operator manual)	Contact Technical Assistance
"ED/EB"	The lift is stuck and does not move in any direction The lift has not completed the ride within the set time	Contact Technical Assistance
"ER"	Power factor correction does not take place within 5 minutes of movement	Contact Technical Assistance
"EX"	Open microswitch (Parachute, Overspeed or Overtravel) interrupting the safety chain	Contact Technical Assistance
"FB"	Backup system blocked in alarm condition or Inverter overcurrent or overvoltage due to an excessive load in the cabin.	Contact Technical Assistance
"FI"	The inverter is blocked in an alarm condition, the machine goes into EMERGENCY mode where only descent at reduced speed is possible	Contact Technical Assistance
"FS"	The loose overspeed rope opens the safety microswitch	Contact Technical Assistance
"IS"	The power supply to the safety devices has failed.	Contact Technical Assistance
"MF"	The CPU has detected a pit access. The CPU has detected a repositioning of the safety lever in the pit	Contact Technical Assistance

"P0" "P1" "P2" "P3" "P4" "P5" "P6" "P7"	CAN communication failed between FLOOR board and CPU.	Contact Technical Assistance
"PL"	Pit lever in protection position, SQ45 open.	Contact Technical Assistance
"SE"	After the lock was energised, the lock contact remained closed.	Contact Technical Assistance
"ZA"	The count indicates the last floor but the Zero High ZA sensor is not detected	Contact Technical Assistance
"ZB"	The count indicates the 0 but the Zero Low ZB sensor is not detected	Contact Technical Assistance
"ZK"	Sensors ZA and ZB are active at the same time	Contact Technical Assistance

Type A2 code list

NOTE: The list of the following error codes includes all the problems that can be solved by the user.

Acronym viewed on the display by the user	Full description	Solution
"CO"	Photocell interruption with machine moving Operation test failed with machine stopped on the floor and cabin control activated (alarm active only for 3 seconds).	Remove any obstacles and check the photocell signalling LEDs; if the problem persists, contact Technical Assistance.
"EM"	Machine in EMERGENCY mode The main supply voltage has failed The system switches off after 2h or when the battery voltage is < 30Vdc.	Wait for the mains power supply to be restored
"FR"	Traction system (Motor/Inverter) overtemperature. If the machine is moving, it completes the movement and stops until the thermal input closes again	Wait for the system to cool down and check again every 10 minutes; if the problem persists for more than 60 minutes, contact Technical Assistance
"OL"	Excessive load in the cabin. The machine does not move in any direction and opens the door.	Decrease the load in the cabin
"PA"	The signal is activated if the door remains open for more than 2 minutes.	Remove any mechanical obstructions preventing the door from closing; if the problem persists, contact Technical Assistance
"PB"	The alarm is activated if the lock and approach contacts have not opened 1 minute after a cabin button has been released.	Press a cabin button of another floor and check that the doors of the other floor open; if the problem persists, contact Technical Assistance

"RI"	Active when the machine is switched on, when exiting maintenance or EMO. Active with floor signal sequence error.	Press one of the call buttons to activate the machine movements; if the machine does not restore its correct operation when it has reached the lowest floor, or if the problem repeats for each ride, contact Technical Assistance
"ST"	The emergency stop has been pressed.	Reset the mushroom-shaped emergency button
"MN"	The machine has worked for more hours or cycles than those set for maintenance.	Contact Technical Assistance to have maintenance carried out