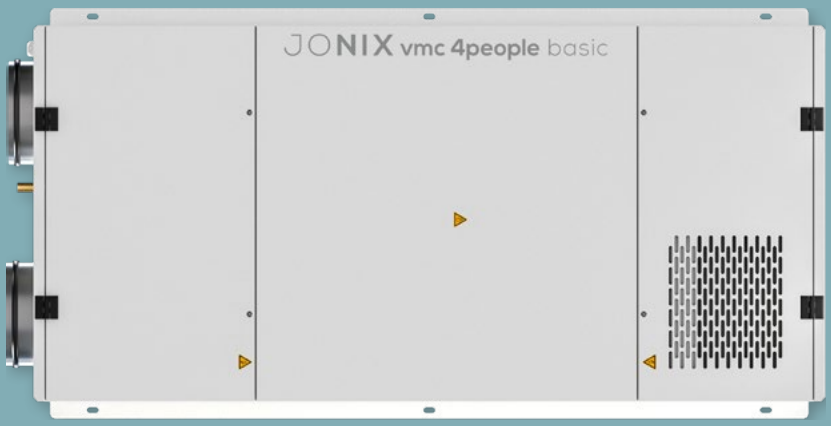
JONIX
pure living

JONIX vmc 4people basic

USE AND MAINTENANCE MANUAL



SANITIZING AND AIR PURIFICATION DEVICE ACTIVE WITH ADVANCED COLD PLASMA TECHNOLOGY

Thank you purchasing the JO**NIX vmc 4people** basic device.
This manual contains the information and anything deemed necessary for the transport, installation, use and maintenance of the active sanitizing and air purification device JO**NIX vmc 4people** basic.
Improper installation of the device and/or failure to comply with the instructions in this manual, may void the warranty that the Manufacturer issues for its products.
The Manufacturer is not liable for any direct and/or indirect damage caused by incorrect installation or damage caused by units installed by inexperienced and/or unauthorised staff. At the time of purchase, check that the device is intact and complete.
The Manufacturer declines any liability in case of personal injury or property damage resulting from any improper use of the device or from the failure to observe the use and safety instructions specified in this manual. In any such case, any warranty claim will be void.
Any complaints must be submitted in writing within **8 days** of receiving the goods.
For more information, manual downloads or video tutorials please visit www.jonixair.com.

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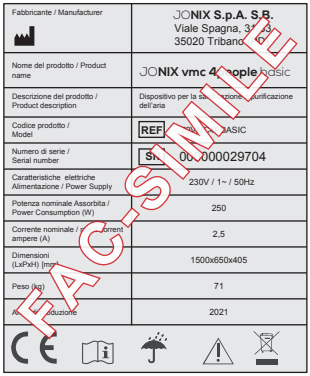
1 - GENERAL INFORMATION

1.1 CE PLATE AND SERIAL NUMBER

The device described in this manual is provided with a nameplate identifying it and the Manufacturer.



IMPORTANT WARNING

The JONIX vmc 4people basic device is designed and made to sanitise the air in residential and industrial processing environments that are incompatible with toxic and flammable gases. It is therefore strictly forbidden to use the device in environments where the air is mixed with and/or altered by other gaseous compounds and/or solid particles. Using the device for purposes other than those intended and that do not comply with those described in this manual will immediately relieve Manufacturer and its distributors from any direct and/or indirect liability.

1.2 RESPONSIBILITY

Failure to comply with the instructions contained in this Use and Maintenance Manual releases JONIX S.p.A. from any liability. For any data not included or not deducible from the following pages it is recommended to consult JONIX S.p.A. directly.

JONIX S.p.A. Benefit Corporation
Viale Spagna 31/33
35020 Tribano - PD - Italy
http://www.jonixair.com

In particular, if the maintenance of the device is carried out in a manner that does not comply with the instructions provided, or in any case in such a way as to compromise its integrity or modify its characteristics, JONIX S.p.A. will be relieved of any responsibility regarding the safety of persons, property, animals and the faulty operation of the devices.

1.3 GENERAL SAFETY INSTRUCTIONS, SYMBOLS AND DEFINITIONS

1.3.1 General safety instructions

Any intervention, of whatever nature, on the device must be carried out by prior and careful reading of this manual in all its parts, with particular reference to SAFETY.
It is essential, therefore, that the device is used in accordance with its intended use and with this manual. This manual has been drawn up to provide the necessary information for personnel dedicated to the use and maintenance of the device, until its sale or disposal. It must therefore always be available to the staff who, before carrying out any operation on the device, must read and assimilate all the information contained therein.

1.3.2 Symbols

Please pay utmost attention to the following symbols and their meaning. They emphasise specific information, such as:

OBLIGATION: This symbol draws attention to a specific obligation or action to be implemented with obligation.

WARNING: It refers to integrations or suggestions concerning the proper use of the device.

HAZARD: It refers to dangerous situations that may result from the use of the device, in order to ensure personal safety.

FORBIDDEN: This symbol refers to operations that must be avoided under any circumstances, and hence forbidden.

HIGH VOLTAGE HAZARD!
Do not open or remove any doors or protections before disconnecting the voltage supply.

OBLIGATION TO USE PROTECTIVE GLOVES
Use adequate hand protection in addition to other personal protective equipment suitable for the place and the operations to be carried out.

WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT.
The crossed-out bin symbol on the label on the appliance indicates that this product complies with the regulations on waste electrical and electronic equipment. The abandonment of the equipment in the environment or its unauthorised disposal is punishable by law.

1.3.3 Definitions

Below are the definitions of the main terms used in the user manual.

MANUFACTURER
Individual or juridical person who designs and/or manufactures the device and is responsible for its conformity for the purpose of placing it on the market under his own name or trademark.

SUPPLIER
Any professional operator in the marketing chain.

USER
Person, organisation or company who or which has purchased or rented the device and is going to use it for the intended purposes.

USER/OPERATOR
Individual who has been authorised by the user to operate the device.

QUALIFIED STAFF
Individuals who, on the basis of their professional training, experience, knowledge of relevant regulations and accident prevention regulations, are able to assess the work entrusted to them and recognize and avoid any hazards.

AUTHORIZED PERSONNEL
Specialised personnel, assigned by the user to carry out certain tasks.

HAZARD
Source of possible injury or damage to health and safety.

RISK
Combination of probability and severity of possible injury or damage to health and safety in a hazardous situation.

DANGEROUS ZONE
Any area within and/or close to a machine in which a person is exposed to a risk.

PROTECTIONS
Safety measures consisting of the use of specific technical means (guards and safety devices) to protect users, users and operators from hazards.

REPAIR
Element of a machine used specifically to provide protection by means of a physical barrier; depending on its construction, it may be called a headphone, cover, screen, door, fence, casing, segregation, etc.

PROTECTIVE DEVICE
Device (other than a guard) that eliminates or reduces the risk; it can be used alone or associated with a guard.

ROUTINE MAINTENANCE
Type of maintenance interventions during the life cycle, suitable for:
- maintain the original integrity of the goods;
- maintain or restore the efficiency of the goods;
- contain the normal degradation of use;
- ensure the useful life of the goods;
- cope with accidental events.

SPECIAL MAINTENANCE
Type of non-recurring and high cost interventions, compared to the replacement value of the goods and the annual cost of routine maintenance of the same.

NON THERMAL PLASMA GENERATOR NTP (Non Thermal Plasma) or IONIZING TUBE
Electric field generator that transforms gas into plasma with high chemical oxidation power able to oxidize and break down pollutants, bacteria, moulds, viruses and odours.

CROSS-FLOW RECOVERY UNIT or HEAT EXCHANGER
It is the component that allows heat recovery thanks to numerous plates which, placed together, allow the outgoing and incoming air flows to exchange heat without coming into contact. This means that the stale air comes out, leaving room for new external air, limiting the dispersion of heat. This system prevents the two air flows from mixing, guaranteeing a supply of new and oxygenated external air.

THERMAL BY PASS (BP)
JONIX vmc 4people is equipped with a thermal by-pass device, as required by EU Regulation no. 1253/2016. With the opening of the by-pass, the air does not pass through the heat exchanger and therefore there is no heat exchange between the external air flow introduced into the rooms and the internal air flow extracted. The purpose of the BP is to exploit the outside air temperature conditions when they are energetically favorable with respect to the indoor air, benefiting from free-cooling or free-heating (refer to paragraph 6.8.10 for the details of the BP programming).

2 - WARNINGS AND GENERAL PROHIBITIONS

READ THE INSTRUCTIONS BEFORE ANY OPERATION
Before starting any operation, it is mandatory to read this manual and apply all its instructions. The competent person in charge is obliged, according to the regulations in force, to carefully read ALL the contents of this User and Maintenance Manual and to have it read by the maintenance technicians in charge, for the parts that are their responsibility.

This Use and Maintenance Manual is an integral part of the device and must therefore be kept with care and must ALWAYS accompany the device even if it is transferred to another owner or user or transferred to another facility. In case of damage or loss, request another copy from JONIX S.p.A. or download the document from www.jonixair.com.

It is the user's responsibility to ensure that, if this document is modified by the Manufacturer, only the updated versions of the Manual are actually present at the points of use.

Repair or maintenance work must be carried out by personnel authorised by JONIX S.p.A. or by qualified personnel in accordance with this user and maintenance manual. Do not alter or tamper with the device as it can lead to hazards and the manufacturer shall not be liable for any damage caused.

The transport, handling, installation, commissioning and decommissioning of this product must only be performed in accordance with the requirements and instructions specified in this manual.

Any liability of JONIX S.p.A. is excluded for damage caused to persons, animals or property, whether due to transport, installation, adjustment, maintenance, decommissioning or misuse.

Please note that the use of products that require electricity involves the observance of some crucial safety rules such as:

This device is not intended for use by people with reduced physical, mental or sensory abilities or lack of experience and knowledge.

This device is not a toy, make sure it is placed out of the reach of children and take precautions so that children do not play with the device.

Do not touch the device if you are barefoot and with parts of the body that are wet or damp.

Any maintenance or cleaning operation before disconnecting the device from the power supply is prohibited.

It is forbidden to modify the safety and/or adjustment devices.

Do not pull, detach or twist the electrical wires coming out of the device, even when it is disconnected from the mains.

It is forbidden to get on and/or sit on the device. It is forbidden to place objects, animals or people on the device.

It is forbidden to spray or throw water or other liquids directly inside the device, even in case of fire.

It is forbidden to open the access panels to the internal parts of the unit without removing the power supply and making sure that the unit cannot be accidentally powered.

Do not dispose of or leave the packaging material within reach of children because it can be potentially dangerous.

It is forbidden to use the device outdoors or on wet surfaces. Do not expose to water, rain or weathering.

It is forbidden to use the device if it does not work properly, has received a strong blow, has been accidentally dropped, has been damaged or left outdoors or has fallen into water.

It is forbidden to insert objects into the openings of the device.

For the maintenance and cleaning operations (see chapter 7 "Maintenance") of the device we remind you that:

ATTENTION!
BEFORE CARRYING OUT ANY MAINTENANCE OPERATION MAKE SURE THAT THE DEVICE IS NOT AND CANNOT ACCIDENTALLY BE POWERED ELECTRICALLY. YOU MUST THEREFORE UNPLUG THE DEVICE BEFORE CARRYING OUT ANY MAINTENANCE.

- It is the duty of the user to perform all the maintenance operations on the device reported in this manual.
- If a malfunction not indicated in this manual occurs, disconnect the power supply to the device and consult your dealer and/or JONIX S.p.A..
- Only trained and qualified personnel can perform maintenance operations other than those specified in this manual.
- Any maintenance that does not fall within the operations described as routine maintenance must only be carried out by specialised personnel expressly authorised and trained by the Manufacturer.

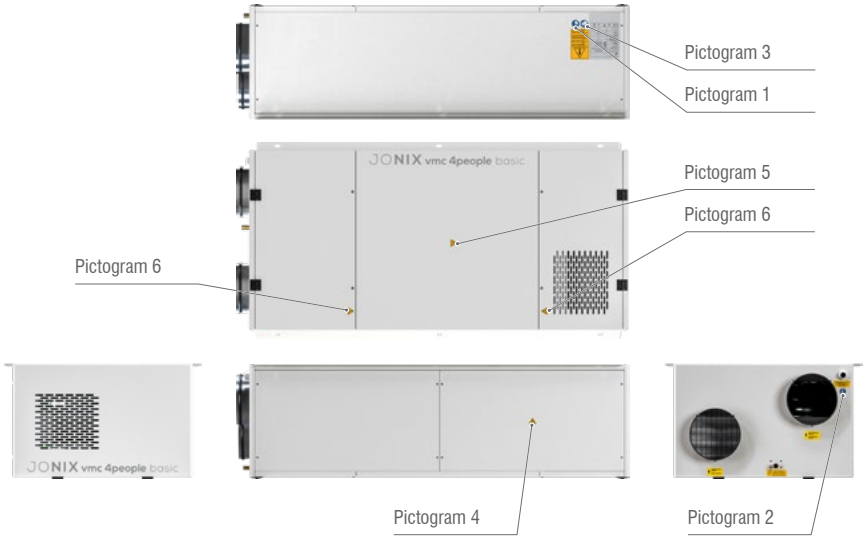
For all maintenance operations it is good practice to use work gloves to protect your hands.

- When servicing the filters, pay particular attention to your fingers to avoid the risk of pinching.
- Clean the ionising tubes every time it is shown on the display.
- Do not put back the mesh on the ionising tube if it is even partially wet.
- Check that the earthing spring is in contact with the outer mesh once the ionising tube have been screwed back into place. Otherwise contact the manufacturer.
- Do not use liquid cleaners, sprays, soap or other products directly on the device.
- Pay particular attention to the air passage grilles: check that they are clean to ensure the passage of air.

2.1 SAFETY SIGNS

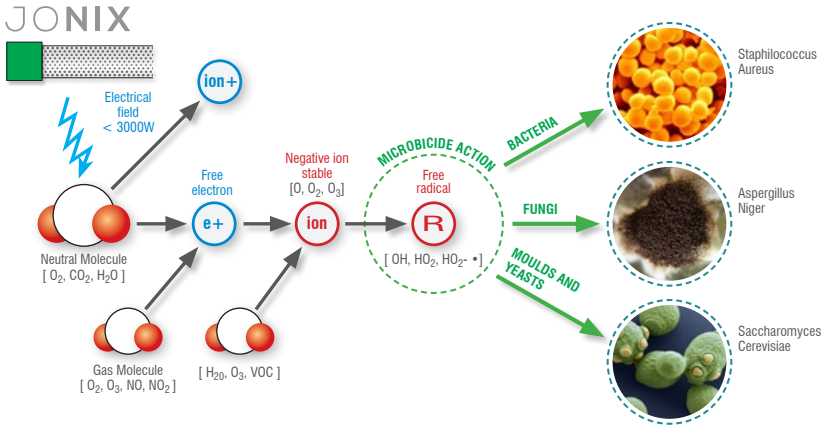
Check the condition of the safety pictograms periodically and replace them if necessary. The safety signs on the machine are as follows:

Pictogram 1	Pictogram 2	Pictogram 3	Pictogram 4	Pictogram 5	Pictogram 6
					
OBLIGATION TO READ THE INSTRUCTION MANUAL	**OBLIGATION TO DISCONNECT VOLTAGE BEFORE MAINTENANCE**	**OBLIGATORY USE OF PROTECTIVE GLOVES**	**ELECTRICAL VOLTAGE HAZARD**	**MOVING PARTS HAZARD**	**DANGER FALLING OF OBJECTS**



3 - THE OPERATING SYSTEM

JONIX **vmc 4people** basic is a controlled mechanical ventilation system for the continuous exchange of ambient air without the need to open windows which, thanks to the integration with cold plasma technology, eliminates bacteria, moulds, viruses, chemical pollutants, VOCs and odours, guaranteeing bacterial decontamination of the internal surfaces of the ducts and of the air in the environment. The filters retain dust and allergens from the external air, the special heat recovery unit allows considerable energy savings and the high efficiency fans guarantee low energy consumption. Management via microprocessor with remote control is used to optimise operation in all environmental conditions.
The particularity of JONIX **vmc 4people** basic is related to the operation of cold plasma technology, which allows to decontaminate the surfaces and internal components of the device by exploiting the physical phenomenon of ionisation.
It promotes the controlled formation of particular electrically charged species in the air through an electrostatic field. The latter simulates a natural process that normally occurs through solar radiations, mechanically or through other physical phenomena.
The particular ionic species produced are proven to be particularly effective as sanitizing agents in air and on surfaces, moreover they are scientifically and historically proven to be beneficial on people, especially the negatively electrically charged species (i.e. those derived from single or small groups of molecules receiving an electron).



The JONIX vmc 4people basic device:
- promotes healthy ventilation inside the rooms, allowing the correct air exchange;
- allows considerable energy savings thanks to the heat recovery unit;
- constantly filters the external renewal air, preventing the entry of dust and pollen;
- constantly reduces and eliminates bacterial loads in the air and on indoor surfaces;
- constantly decomposes volatile organic compounds (VOCs);
- it eliminates odours;
- is suitable for environments that need to reduce air contamination.

JONIX vmc 4people basic is equipped with two filtration stages. The G4 filter combined with the F7 filter reduces fine dust and airborne pollen ensuring a good degree of filtration of the outside air.
JONIX vmc 4people basic has a motorised free-cooling/free-heating damper that is automatically activated in order to take advantage of the favorable external temperature conditions, for maximum energy saving and the best possible environmental comfort.
The sanitization activity of JONIX vmc 4people basic is compatible with the presence of persons and animals. No chemicals are used and no harmful residual substances are generated.

It is possible to have as an optional component on request the electric heating element for integration in the winter phase for preheating of the air, useful in the case of particularly harsh external conditions. The component is supplied assembled inside the device.

4 - TECHNICAL DATA JONIX vmc 4people basic

Fig. 1

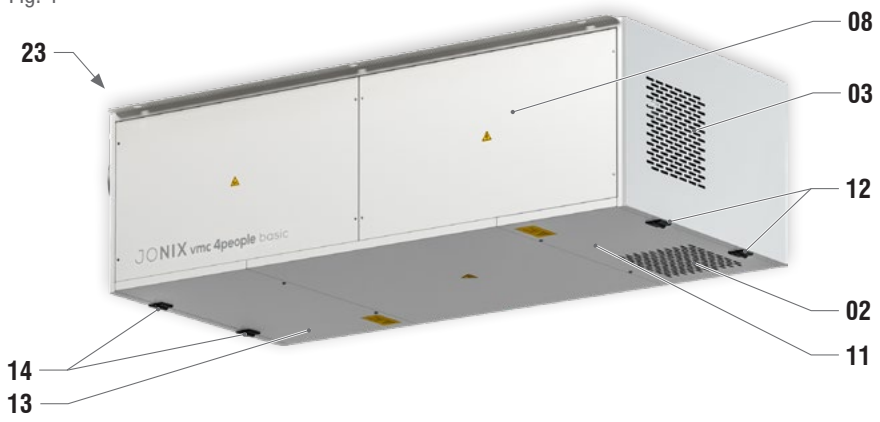
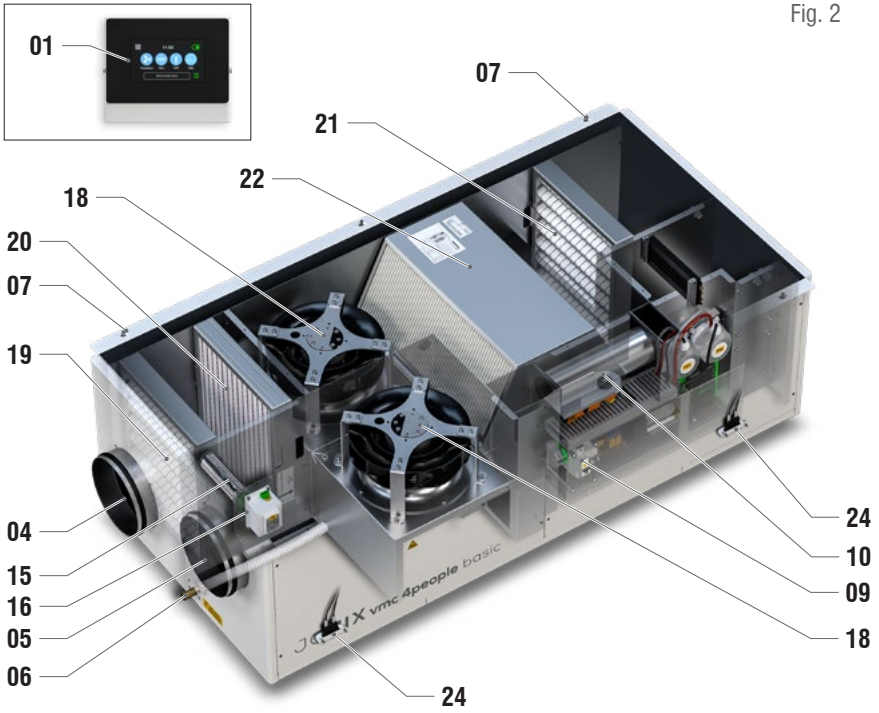


Fig. 2



4.1 COMPONENTS DESCRIPTION JONIX vmc 4people basic

1 Remote display
2 Extraction of exhaust air from the environment
3 Fresh air delivery
4 Fresh external air inlet
5 Exhaust air expulsion
6 Condensate drain
7 Ceiling or wall fixing slots (no. 6)
8 Electrical panel access panel
9 Magnetothermic switch for disconnecting of the power supply
10 Free-cooling with regulation damper
11 Internal side inspection panel
12 Internal side panel closures
13 External side inspection panel
14 External side panel closures
15 no.1 ionising pipe for sanitisation of the elements inside the device
16 no.1 ionising pipe ground securing bracket
17 air supply pipe
18 Air intake fan
19 Air delivery G4 filter
20 Air delivery F7 filter
21 Air intake G4 filter
22 Heat recovery unit
23 Power feedthrough cable
24 Safety microswitch

4.1.1 Technical features JONIX vmc 4people basic

Dimensions (L x D x H)	mm	1500 x 650 x 405
Nominal air flow	m^3/h	500
Efficiency	%	88
Thermal power recovered in winter	W	3730
Thermal power recovered in summer	W	1280
Nominal absorbed power	W	61
Nominal absorbed current	A	0,3
Maximum absorbed current (*)	A	2,5
Power supply	V / ph / hz	230/1/50
Useful static head max speed	Pa	160
Weight	kg	71

(*): Maximum current absorbed by the device without optional electrical resistance on request.
The optional electrical heating element on request has a power of 1500 W.

The heat recovery of the device is of the high efficiency type. The performances, however, are not fixed but depend on the air flow rates, the external and internal temperatures and on the humidity of the environment.

4.1.2 Spare parts available on order

The technical characteristics and relevant data are shown on the nameplate together with the serial number identifying the device.

Code	Description	Notes
JX70000005	G4 Filter	Ordinary no.2 G4 filters
JX70000006	F7 Filter	-
70CONDTIPO175	175 IONISING PIPE REPLACEMENT (*)	No. 1 175 ionising pipe

(*): To be ordered only in the case of the presence of the optional ionising pipe for air sanitisation.

4.1.3 Technical data for the purposes of EU 1253/2014 and EU 1254/2014 regulations

Manufacturer	JONIX S.p.A. Benefit Company
Model	JONIX vmc 4people
Type of ventilation unit	two-way
Type of drive installed	Speed variator
Type of heat recovery system	recovery unit
Thermal efficiency of the heat recovery unit (%)	86,3
Maximum flow rate (m^3/h)	700
Absorbed electrical power at maximum flow rate (w)	158
Sound power level lwa [db (a)] (*)	49
Reference flow rate (m^3/s)	0,139
Reference pressure difference (Pa)	50
Specific power input (spi), w/(m^3/h)	0,12
Maximum percentage of internal leakage	1,00%
Maximum percentage of external leakage	1,90%

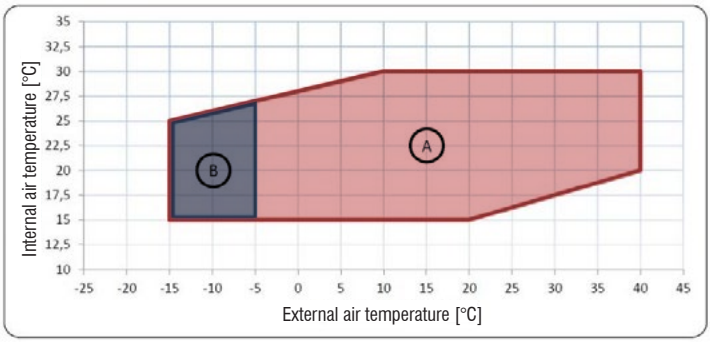
(*): Sound power with ducted unit.

SPECIFIC ENERGY CONSUMPTION (SEC), kWh/(m^2 year)	F	-80.0
	T	-42.1
	C	-17.7
SEC CLASS		A+
CONTROL FACTOR		0,85
CONTROL TYPE		Centralized environmental control
YEARLY ELECTRICITY CONSUMPTION (AEC), kWh ELECTRICITY/a	F	693
	T	156
	C	111
ANNUAL HEATING SAVINGS (AHS), kWh PRIMARY ENERGY/a	F	8861
	T	4530
	C	2048

To access class A+, the devices must be equipped with remote displays.

4.1.4 Operating temperature limits

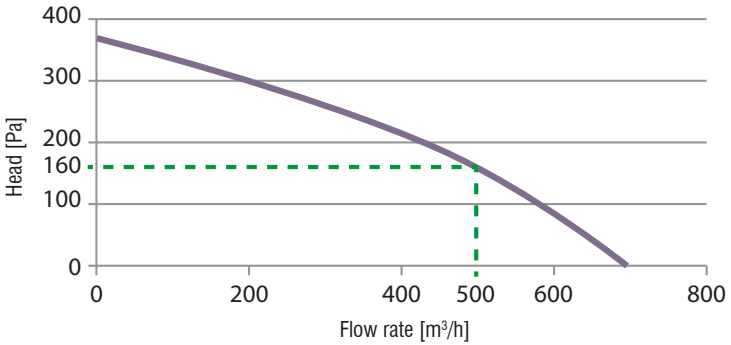
The device must operate within the indicated temperature limits. Outside these limits, the normal operation, reliability and integrity of the device are not guaranteed.



ZONE A: operating temperature limits.
ZONE B: installation of the optional electric battery is recommended.

For particular applications, contact the Manufacturer's technical office.

4.1.5 Fan curve (flow rate/head)



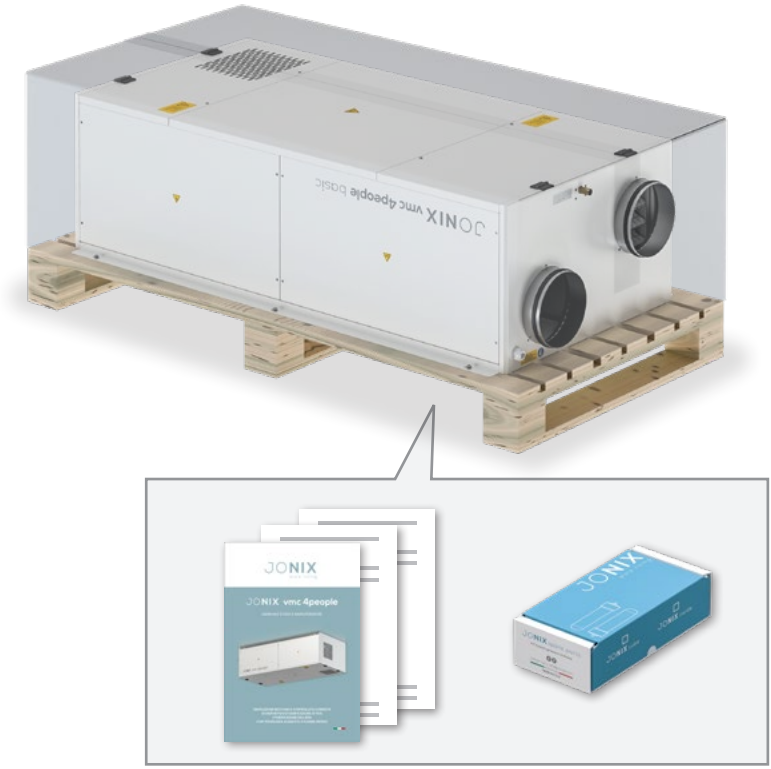
Useful static head of the **vmc 4people** basic 160Pa, at the nominal flow rate of 500 m³/ h.

5 - RECEPTION, TRANSPORT AND STORAGE

5.1 PACKAGING

The JONIX vmc 4people basic is shipped in special protective packaging that must be kept intact until installation. The materials that were not installed for technical requirements are supplied with suitable enclosure secured to the inside or outside of the device itself.
The package includes:

- JONIX vmc 4people basic.
- no. 1 ionising pipe for sanitisation of the internal elements and no. 1 ionising pipe (or 2, in this case, to be requested when ordering the machine) for air sanitization.
- Operating and maintenance manual.
- Declaration of CE Conformity.
- Warranty conditions.



5.2 HANDLING AND TRANSPORT

Unless otherwise agreed in writing in advance, no other material or goods shall be placed on top of the devices.

The carrier is responsible for securing the load on the means of transport. JONIX S.p.A. declines any responsibility in case of damage caused by loads poorly transported by the carrier.

To handle the device, use appropriate means, in good condition and suitable capacity, depending on the weight, as required by Directive 89/391/EEC and subsequent amendments.

Please take great care while unloading and positioning the devices, to prevent damaging the casing or components. Always make sure that the load is stable. Avoid uncontrolled rotations. Lifting assistance must, if necessary, be carried out with rods, levers, grappling hooks without ever using hands alone.

During lifting and/or transport and/or handling operations, provide for appropriate signalling and confinement of the dangerous zone, signalling the prohibition of access to the dangerous zone by unauthorised personnel.

5.3 INSPECTION UPON RECEPTION

When you receive the device please check all its parts, in order to make sure that it has not been damaged during transport.
Any damage must be reported to the carrier, by filling in the relevant section on the delivery note and specifying the type of damage.

Any type of complaint must be sent in writing within eight days from receiving the goods.

5.4 STORAGE

In case of prolonged storage before installation, the device must be protected from dust, weather and kept away from heat and vibration. Do not allow the device to come into contact with corrosive substances.

JONIX S.p.A. declines all liability for damage due to poor handling, transportation and storage.

6 - INSTALLATION AND COMMISSIONING

The Manufacturer disclaims any liability for failure to comply with the safety and prevention standards as described below.
The Manufacturer also disclaims any liability for damage caused by improper use of devices and/or alterations carried out without prior authorisation.

6.1 SAFETY INSTRUCTIONS

- The device must be installed in strict accordance with the instructions contained in this manual.
- The installation must be carried out by specialised personnel.
- During installation operations, use suitable and accident prevention clothing: gloves, accident prevention shoes in accordance with EU Regulation 2016/425 and the provisions of the site safety plan, the company's risk assessment document or other safety document relating to the installation site. • While performing installation, operate in full safety and in a clean environment clear of obstructions.
- During each phase of use and/or maintenance it is forbidden to operate wearing loose or dangling clothes, long loose hair, jewellery, chains and anything that could be a danger of entanglement.
- **Before switching the device on check the integrity of the various components and of the electrical mains to which it is connected, making sure that it is fitted with a circuit breaker upstream of the power line.**
- Before putting the device into operation, check that it has been connected to an effective earthing system.
- Do not service or clean the device without first unplugging it from the mains.
- Worn or damaged parts must only be repaired or replaced by qualified staff and by following the instructions given in this manual.
- Spare parts must meet the requirements defined by the Manufacturer.
- Do not insert objects of any kind into the device, as coming into contact with live parts or electrical terminals may cause fires or electric shocks. In case of maintenance, check that you have removed all tools and objects before closing the panels and restarting the device.
- Comply with the laws in force in the country in which the device is installed, regarding the use and disposal of the packaging and products used for cleaning and servicing the device; you should also observe the recommendations given by the manufacturers of such products.
- In the event of decommissioning or disposing of the MIC device, follow the anti-pollution regulations set out by the country in which the device is installed.
- **Use only the power supply indicated on the nameplate. If you are not sure about the type of power supply available, ask your local retailer or electricity provider for assistance.**
- Do not spill water or other liquids on the device.
- Place the device so that the power cable cannot be stepped on and/or does not cause tripping.
- Do not connect the device to power supply lines connected to any other electric utilities or devices.

- Do not touch the inside of the device, unless otherwise specified in the instructions contained in this manual.
- Never force the components when installing or performing maintenance operations: although it is built with high strength materials, the parts of the device can be damaged if handled incorrectly.
- Do not try to perform maintenance work on the device, except where specified in this manual. Opening or removing the outer casing may expose you to dangerous live parts or may involve other risks. All maintenance work must be carried out by authorised staff, except where specified in this manual.
- Do not tamper with or modify the device.
- Do not perform maintenance or other operations in low light and visibility conditions.
- Do not modify the functional and performance components of the device.
- Do not tamper with the safety devices.
- Do not use the machine after maintenance without making sure it is safe. Check that all components are correctly restored before restarting it.
- Do not remove or make illegible the safety, hazard, and mandatory signs on the device.
- Do not use water or liquids to put out a fire.
- Do not allow unauthorized personnel to access the internal parts of the device.
- The device has slots and openings for ventilation, do not obstruct or cover them, even partially.
- Always leave the necessary space for ventilation in front of cracks and openings, as indicated in this manual.
- Always connect the air ducts to the unit before powering it up to eliminate the possibility of reaching internal parts of the device through the inlet of external fresh air and the expulsion of exhaust air.
- Installation of the device must be carried out in compliance with the provisions relating to construction, safety and personnel qualifications, required by the regulations of the country of installation.
- Disconnect the device from the power supply and contact the Manufacturer or a dealer for service when you fall into any of the following cases:
  - the internal parts of the device have come into contact with water or other liquids of any kind;
  - A malfunction persists despite all the installation and/or maintenance procedures having been performed properly.
  - The power supply cable is damaged or worn.

ATTENTION! During installation, check that the fixing holes made in walls and/or ceilings do not interfere with electrical cables, pipes and other components of existing systems and equipment.

IMPORTANT: The installer and the user, when using the vmc 4people device, must take into account and solve all the other types of risk associated with the system. For example, risks arising from foreign bodies getting into the device or risks due to dangerous flammable or toxic gases at high temperature.

ATTENTION!
Any use other than that specified herein shall be deemed to be incorrect.

6.2 GETTING STARTED

- Check that the various components of the device are fully intact.
- Check that the documentation and all components for installation are contained in the package.
- Equip yourself with suitable devices for lifting and unpacking of the device.

- Carry the device in its packaging as close to the installation site as possible.
- Do not rest weights or tools on the device, or place it on an unstable surface.

6.3 CHOOSING THE INSTALLATION SITE

- Do not put the device in places where there are flammable gases, acidic, aggressive and corrosive substances that can damage the various components beyond repair.
- Provide a minimum clearance, in order to install the device and carry out routine and special maintenance.
- Make sure that the building regulations of the country of installation are complied with.

The environment in which the device is placed must have the following characteristics:
- air temperature between 0°C and 40°C;
- relative air humidity below 80%.

Use suitable devices for lifting and unpacking the device.

- Check that the fixing surface is able to support the weight of the device.
- The device is not equipped with its own lighting, check that the ambient lighting is sufficient, especially for maintenance operations.
- Do not place the device outside.

Do not place the device in environments where there are flammable gases, acidic, aggressive and corrosive substances that could damage it.

The device must not be installed in an explosive environment due to the presence of electrical and electronic equipment not specially designed.

Fig. 3

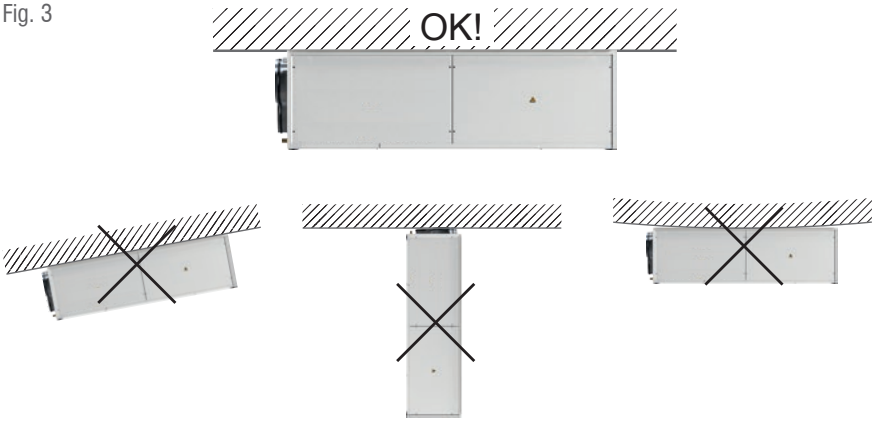


Fig. 4: Provide adequate **technical space** to guarantee the installation and ordinary and extraordinary maintenance operations.

Provide a clearance of at least 800 mm near the ambient air intake and the delivery grid of the ionized flow.

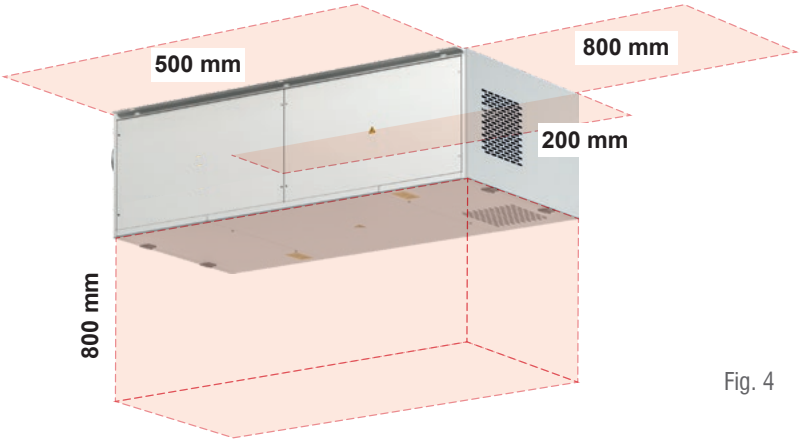


Fig. 4

6.3.1 Position of the operator

During operation of the unit, the presence of the operator near the device is not required. For maintenance, the operator must access the inspection panels. To switch the device on and off and to adjust it, the operator must access the display.

Place the display in an ergonomic position, easily identifiable and not covered, for example, by furniture.

Fig. 5: Position of the operator for maintenance operations.

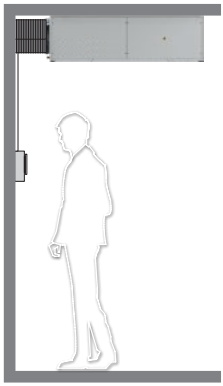


Fig. 5

6.4 ELECTRICAL CONNECTIONS

ATTENTION! BEFORE STARTING ANY OPERATION, MAKE SURE THAT THE GENERAL POWER SUPPLY LINE IS DISCONNECTED AND THAT THE DEVICE CANNOT BE ACCIDENTALLY POWERED!

- The electrical connections must be carried out following the instructions provided in this manual.
- **Make sure that voltage and frequency of the electric line correspond to those provided on the name plate.**

ATTENTION!
Using a power supply that does not meet the requirements of the device may result in damage to the device or some of its parts.

- The electrical mains of the JONIX vmc 4people basic device must be used for the device only, there must be no other devices connected to the same power line. Do not use adapters, power strips and/or extension cords.
- Make the connection with cables of suitable section in relation to the power input and in compliance with the regulations in force.
- **The installer must see to it to assemble the device as close to the power disconnector as possible, according to standards in force and as far as necessary to protect the electrical parts.**
- Connect the device to an effective earthing outlet.

ATTENTION!
Electrical connections must be carried out by qualified and authorized personnel.

6.5 ELECTRIC POWER SUPPLY

The JONIX vmc 4people basic device is equipped with a dedicated line at the electronic board. Specialized and authorized personnel of the user must pass a power cable of suitable section composed of F, N and T inside the unit and connect it to a thermal-magnetic circuit breaker as shown in the attached wiring diagram.

ATTENTION!
Provide the connection to the network with a cable of suitable section composed of F, N and T.

Before making any connections, ALWAYS make sure the mains voltage complies with what is shown on the plate.

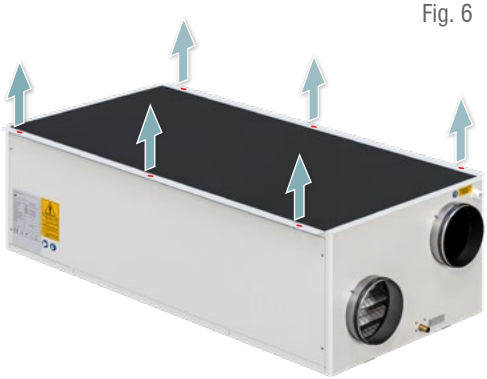
ATTENTION!
It is recommended to check that the energy delivered is stable. Otherwise a voltage stabilizer must be installed upstream.

Power cables are NOT supplied with the device.

6.6 INSTALLING THE DEVICE

Fig. 6

Fig. 6: The JONIX vmc 4people basic device has been designed to be fixed directly to the ceiling through the appropriate fixing holes located on the support plate.



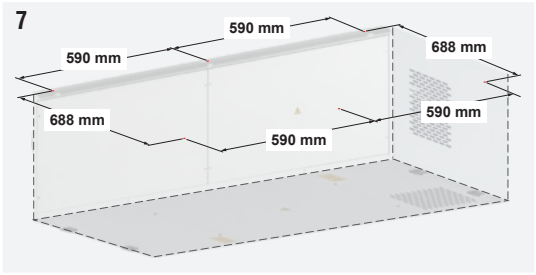
Before installation:
- **make sure that there is enough space to allow air flow;**
- **make sure that there is enough space for maintenance;**
- **make sure that there are no existing sub-services, installations and equipment that could be damaged by the fixing holes of the device.**

ATTENTION!
Choose the fixing system suitable for the type of ceiling also considering the weight and shape of the device.
Carefully check the stability of the device and the tightness of the supporting ceiling after installation.

The fixing system and/or fixing screws are NOT included in the scope of delivery of the JONIX vmc 4people basic. Use stainless steel fastening systems and screws.

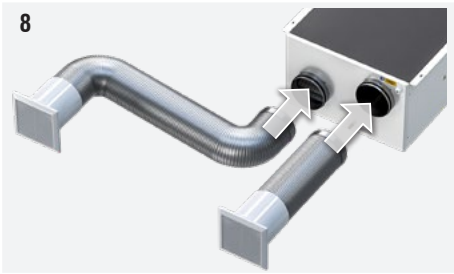
ATTENTION!
for all operations that require elevation with respect to the floor, use compliant devices and adequately informed, trained and instructed personnel.

Fig. 7. Mark the anchor points on the support surface. Fix the device to the ceiling using the holes provided. Choose the fixing system suitable for the type of ceiling, the environment and the specific installation. Connect the air ducts (not included in the supply).



Use anti-vibration feet at each anchoring point to avoid the transmission of noise and vibrations.

Fig. 8. Connect the air ducts (not included in the supply).



The device can be installed with any standard air duct system.

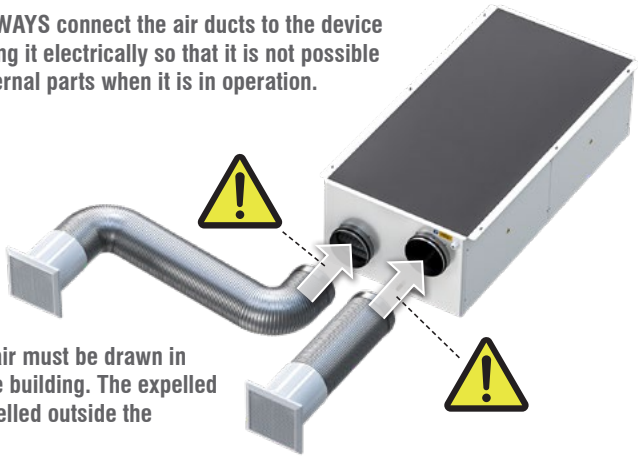
The device can be installed with any standard air duct system.

When installing the air ducts, always keep the following points in mind:
- the distance between the opening of the inlet duct and the opening of the exhaust air duct must prevent a return of stale air;
- the position of the external air inlet opening with respect to other possible sources of exhaust air must prevent a return of stale air;
- the air ducts must not be obstructed in any way;
- the air ducts must not have excessive bends, dents or screws inside the ducts themselves;
- respect the minimum diameter of the air ducts (180 mm);
- minimise the use of bends and fittings to limit pressure drops;
- use internally smooth pipes to limit pressure drops;
- the air ducts must be as short and as straight as possible to obtain maximum performance;
- limit air leaks by carefully sealing the joints;
- isolate the air ducts to avoid condensation and undesirable thermal exchanges with the environment;
- if crossing fire walls or fire compartments, provide adequate fireproof insulation to comply with the regulations of the country of installation.

ATTENTION! If the air ducts are not properly insulated, condensation from contact with cold surfaces can drip into the areas below the ducts and the device.

JONIX S.p.A. is not responsible for damage caused by the installation of air ducts that are not suitable for the device and for the environment in which it is installed.

ATTENTION! ALWAYS connect the air ducts to the device before connecting it electrically so that it is not possible to reach the internal parts when it is in operation.



The fresh inlet air must be drawn in from outside the building. The expelled air must be expelled outside the building.

Fig. 8

Fig. 9. Install the grilles outside to protect the air ducts (not included in the supply).

When installing the grilles, always keep the following aspects in mind:
- consider the pressure drops of the grilles, in addition to those of the air ducts, with respect to the prevalence of the fans of the installed device;
- do not obstruct or cover the grilles to ensure the correct supply of fresh air and exhaust air.

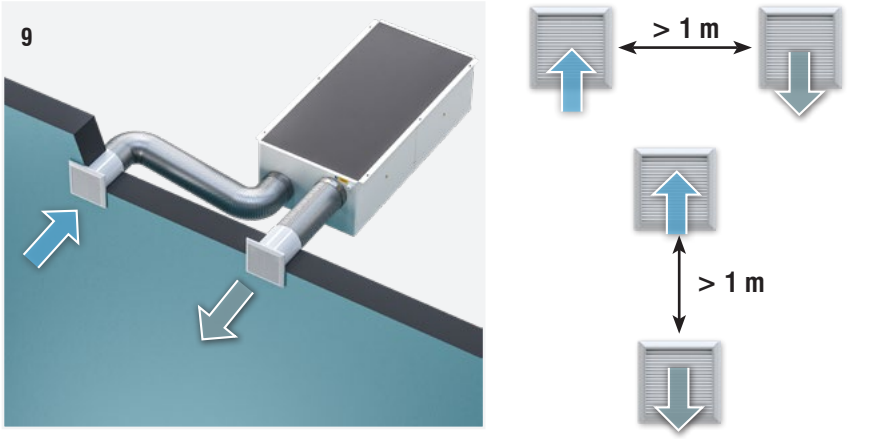
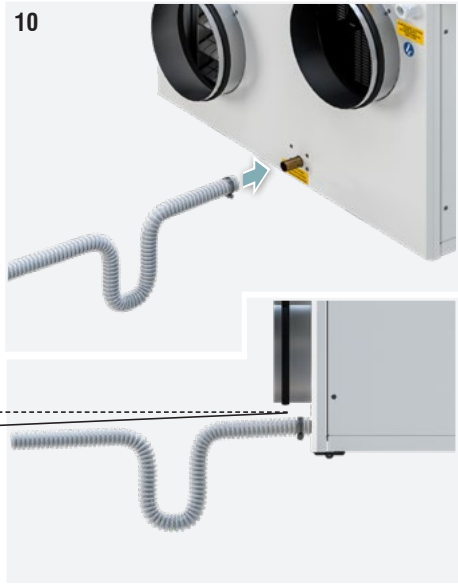


Fig. 10. Install the condensate drain with a flexible rubber hose and a minimum internal diameter of 16 mm. Create a siphon on the exhaust pipe with a head at least equal to the suction head of the fan. The condensate drain must be insulated if it passes through unheated spaces to prevent freezing.



The condensate created by the device must be discharged not freezing, at a slope of at least 9% and hermetically sealed.
Do not install a water stop valve on the device.
Prime the siphon system before starting the device.

Fig. 11. Open the inspection panel on the inside (1) and the inspection panel on the outside (2).

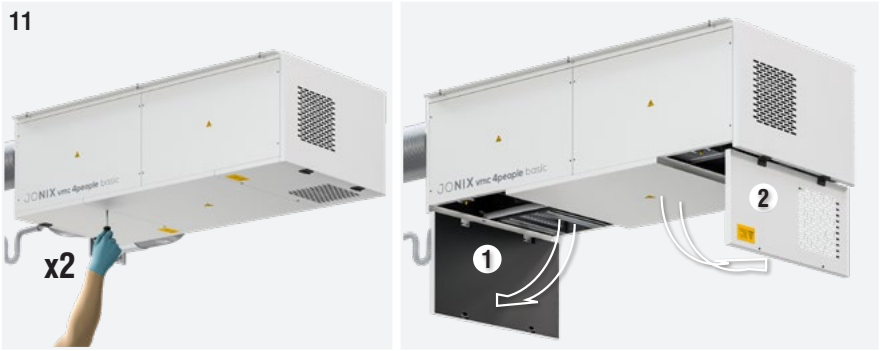
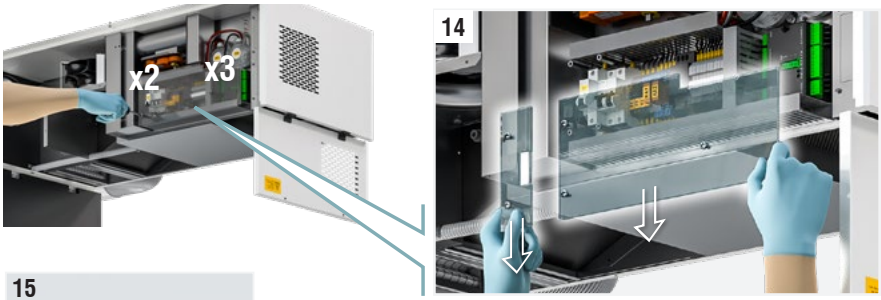


Fig. 12. Remove the lower panel.

Fig. 13. Remove the two side panels on the side of the electrical panel.

Fig. 14. Remove the plexiglass panels.



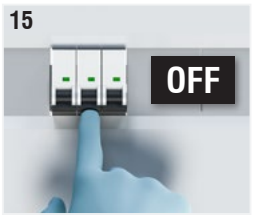


Fig. 15: Disconnect the power supply by acting on the safety thermomagnetic circuit upstream of the device. Make sure that the power supply cannot be accidentally restored.

Fig. 16. Connect the device to the power line. Use electrical cable of adequate size. Cross the casing with the dedicated cable gland.

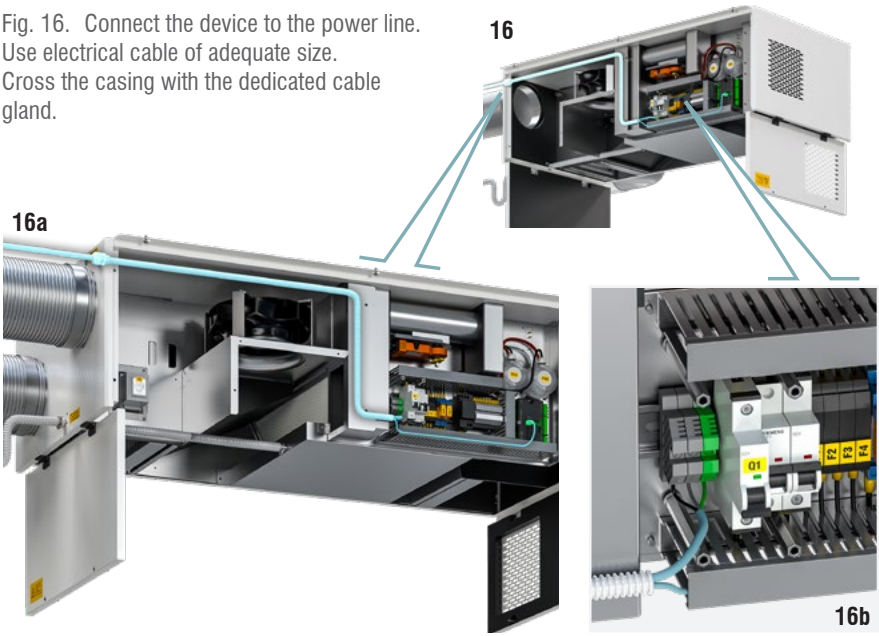


Fig. 17. Wire the cable according to the wiring diagram (fig. "Electrical power supply connection diagram"). **ATTENTION: electric cable NOT included in the supply of the device**.

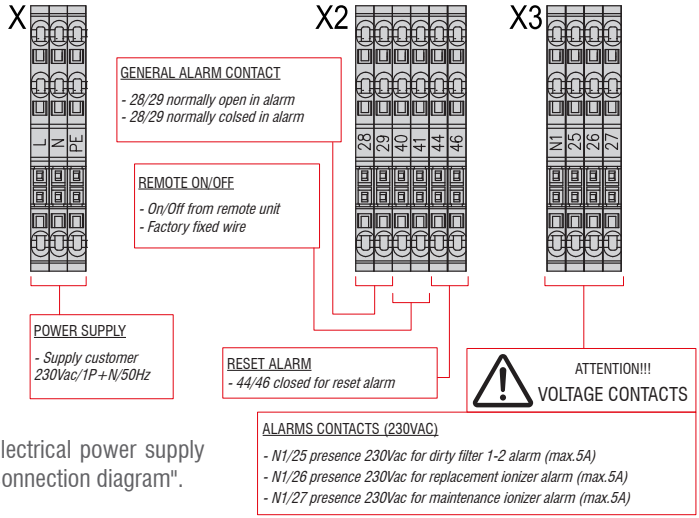


fig. 17 "Electrical power supply connection diagram".

Fig. 18. Install the control display on the wall. Connect the display to the device as indicated in the wiring diagram (fig. 17 "electrical power supply connection diagram").
ATTENTION: electric cable NOT included in the supply of the device.

Open the display case by loosening the two screws on the sides.

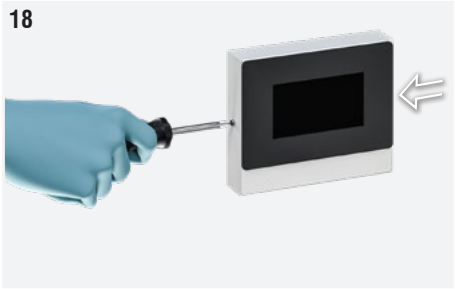


Fig. 19. Fix the case to the support in the desired position using the appropriate holes. Choose the fixing system suitable for the type of surface.

Place the display in an ergonomic position, easily identifiable and that is not covered by furniture for example.

Fig. 20. Connect the display to the device. Use electrical cables of adequate size. Cross the casing with the dedicated cable gland.

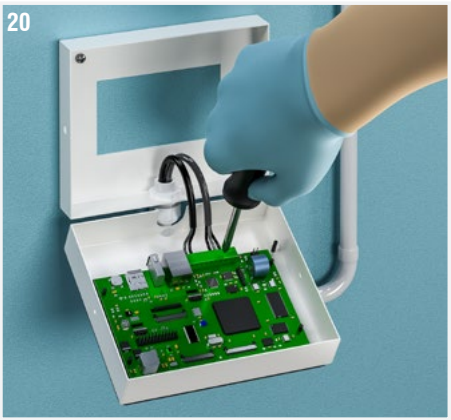


Fig. 21. Wire the cable according to the wiring diagram (fig. "Display connection diagram"). **ATTENTION: electric cable NOT included in the supply of the device**.

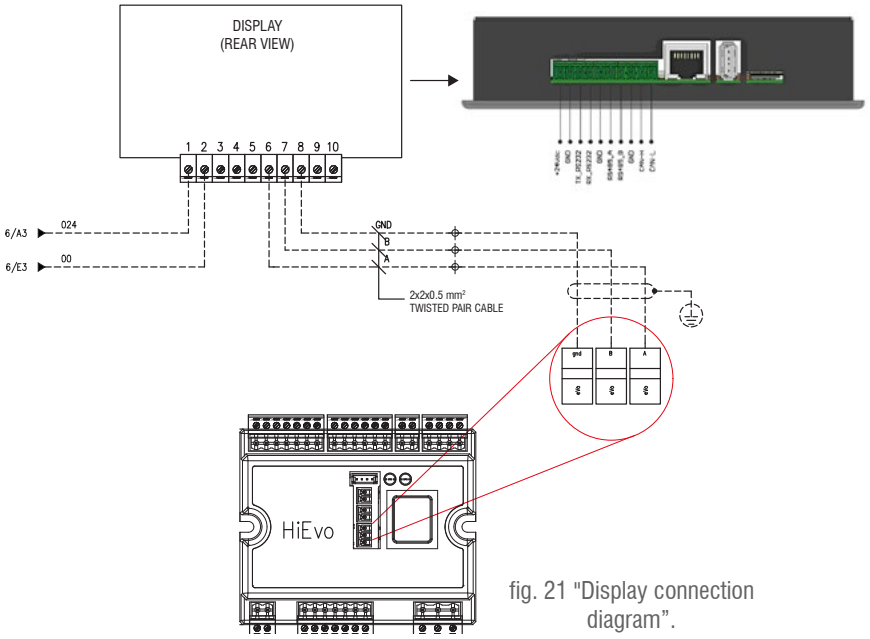


fig. 21 "Display connection diagram".

Fig. 22. Close the display case by tightening the two screws on the sides.

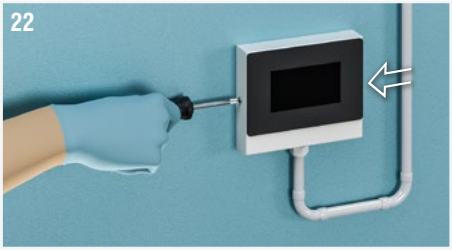


Fig. 23. Refit the plexiglass panels.

Fig. 24. Check that the magnetothermic switch for disconnecting of the power supply inside the electrical panel is in the ON position.

Fig. 25. Refit the two side panels on the side of the electrical panel.

Fig. 26. Refit the lower panel.

Fig. 27. Take the ionising pipes, remove the bubble wrap and check the integrity of the glass. Gently screw the ionising pipes by gripping them at the base (green part).

ATTENTION: do not overtighten the screw after reaching its end stop.

Check that the earthing spring is in contact with the outer mesh once the ionising tubes have been screwed back into place. Otherwise contact the manufacturer.

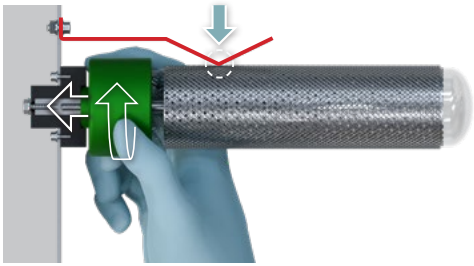
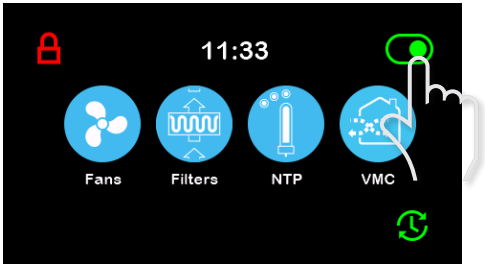


Fig. 28. Close the inspection panels.

Fig. 29. Act on the safety magnetothermic switch positioned on the circuit upstream of the device to restore the electrical power supply.



Turn on the device using the remote display.

ATTENTION!
for all operations that require elevation with respect to the floor, use compliant devices and adequately informed, trained and instructed personnel.

Check the operation of the device: the air flow generated by the fan will be perceived.

It is possible to use the device without display by remoting the ON-OFF contacts. In this case, only the switching on and off of the device will be controlled and will operate according to the factory settings (see fig. "Electric line connection diagram").

6.7 DEFAULT SETTINGS

The device is set with the following default parameters:
a) Air flow: 50%.
b) Minimum possible air flow: 10%.
c) Maximum possible air flow: 100%.
d) Internal room temperature setpoint: 20°C.
e) Buzzer sound when pressing a key on the display: YES.
f) Waiting time for display standby: 10 minutes.

6.7.1 First start checks

At first start-up, the device should be subjected to at least the following checks:
- check the integrity and stability of the JONIX vmc 4people basic as a whole;
- check that all panels and covers are closed and securely fastened;
- check that the mains voltage is correct in relation to what is indicated on the nameplate of the device;
- check that the air channels are correctly installed;
- check that the condensate drain has been created correctly;
- check that the unit responds to the commands on the display;
- check that there are no alarm signals on the display;
- check that the air flow is regular;
- check that you can hear the slight sizzle of the ionizing tube.

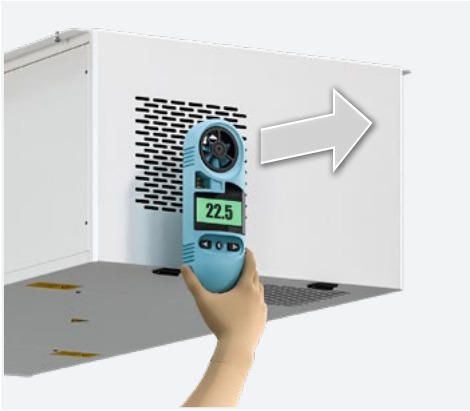
Repeat the checks carried out at the first start-up even after each extended shutdown period and after maintenance.

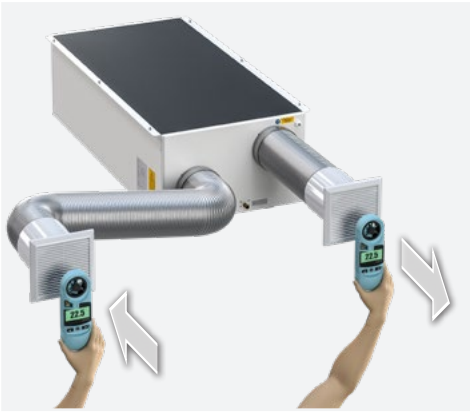
6.7.2 Balancing the system

The air flow must be adjusted to balance the system.
Measurement of the air flow rates must be performed using an anemometer (or equivalent equipment) positioned in such a way as to completely cover the vents.

The device is adjusted via the display (see paragraph 6.8.11.5.3 Menu reserved for the maintenance technician - VMC)

Close all internal and external doors and windows completely before starting the balancing operations.



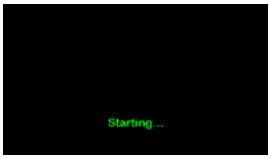


6.8 USER INTERFACE AND MENU NAVIGATION

JONIX vmc 4people basic device is provided with a touch screen, allowing the user to control device status and to modify its operation as needed.

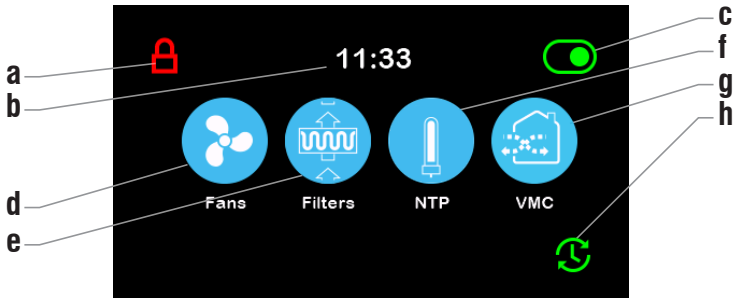
6.8.1 Display start-up screen

When the device starts up successfully these screens will appear:



6.8.2 Main screen

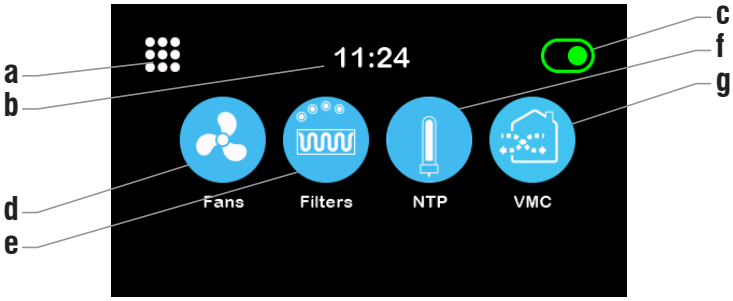
It allows to check quickly the device status and to modify its operation mode. The various icons create a shortcut to other screens where the user can check the status of every single component in a more detailed way and its own personalization as needed.
Example 1: Main screen with device ON, display locked, active time bands.



In the main screen are reported this information:

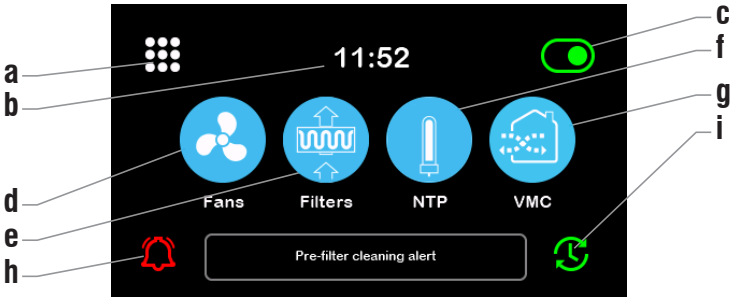
a) **Lock screen button**: it is possible to lock the screen of the device. With the screen locked, it is not possible to perform any actions without first entering the password. When the screen is released, the settings button is displayed as in example 2.
b) **Time:** indicates the time set.
c) **On/Off:** it allows to change the operating status of the device.
d) **Fan:** allows access to the fan menu.
e) **Filters:** allows access to the filters menu.
f) **NTP:** allows access to the ionizers menu (NTP).
g) **VMC:** it is used to access the screen that shows the status of the **vmc 4people**.
h) **Active time slots:** it indicates that the time slots are active. If the time slots are not active, the icon is not present as in example 2.

Example 2: Main screen with device ON, display unlocked, time slots not active, active filter sanitization:



a) **Settings**.
b) **Time:** indicates the time set.
c) **On/Off:** it allows to change the operating status of the device.
d) **Fan:** allows access to the fan menu.
e) **Filters with sanitisation cycle active:** allows access to the filters menu.
f) **NTP with sanitisation cycle active:** allows access to the ionizers menu.
g) **VMC:** it is used to access the screen that shows the status of the **vmc 4people**.

Example 3: Main screen with device ON, display released, active time slots, presence of an alarm:



a) **Settings**.
b) **Time:** indicates the time set.
c) **On/Off:** it allows to change the operating status of the device.
d) **Fan:** allows access to the fan menu.
e) **Filters:** allows access to the filters menu.
f) **NTP:** allows access to the ionizers menu.
g) **VMC:** it is used to access the screen that shows the status of the **vmc 4people**.
h) **Alarm present:** the bell symbol and the associated description indicate that the device is OFF due to an alarm.
i) **Active time slots:** it indicates that the time slots are active. If the time slots are not active, the icon is not present as in example 2:

For information on the meanings of the symbols, on the device settings and on the alarm status, read the following paragraphs carefully. Keep this manual for future reference.

6.8.3 Display standby

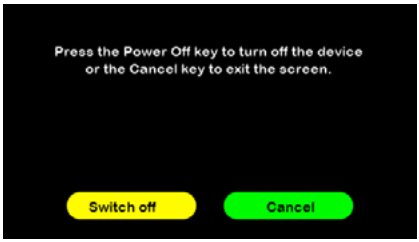
After 10 minutes of inactivity, the display locks automatically and the standby screen appears. To release the screen, tap it and follow the instructions indicated in para. 6.8.5 - Screen release and settings.

6.8.4 Switching the device on/off

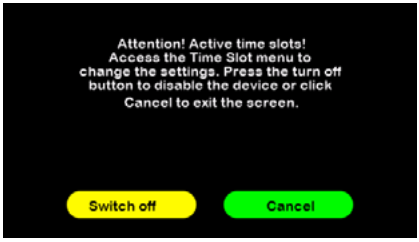
On the main screen, the top right symbol marked with (C) is used to intuitively identify the status of the device as indicated in the table.

(C)	DESCRIPTION OF THE GRAPHIC SYMBOL
	The device is switched ON.
	The device is switched OFF.
	The device is switched OFF according to the setting of the time slots. The device will restart when requested by setting the time slots.
	The device is switched OFF, because it has been disabled by remote control (external contact).
	The device is switched OFF because the front panel is open; disconnect the power supply before maintenance or close the panel.
	The device is turned OFF due to an alarm.

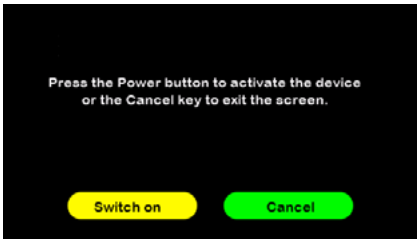
If the device is , pressing will result in confirmation being prompted with this message:



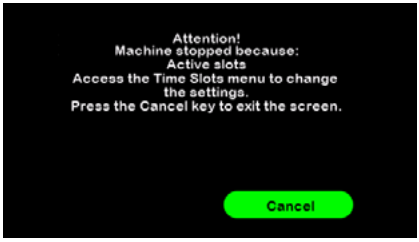
If the device is with the time slots active pressing will result in confirmation being prompted with this message:



If the device is pressing will result in confirmation being prompted with this message:

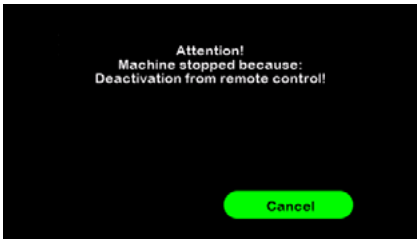


If the device is pressing will result in this message being displayed:



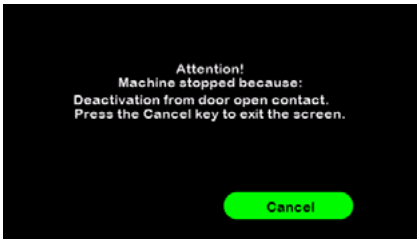
If the device is pressing will result in this message being displayed:

To reactivate the device, activate it from the remote control.



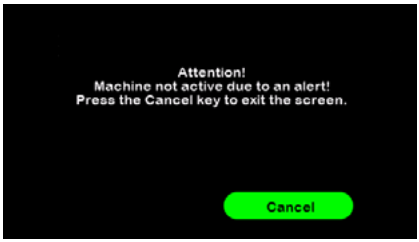
If the device is pressing will result in this message being displayed:

To reactivate the device, close the front panel for maintenance.

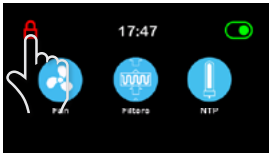


If the device is pressing will result in this message being displayed:

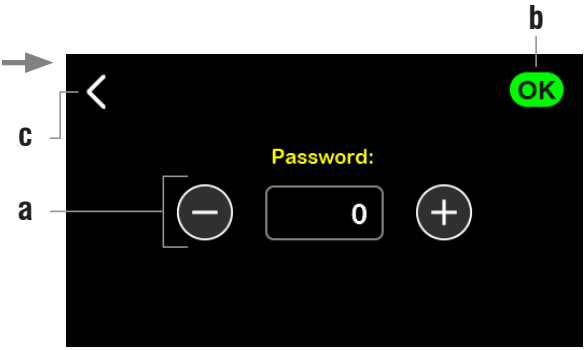
To reactivate the device, close the front panel for maintenance.



6.8.5 Screen lock and settings

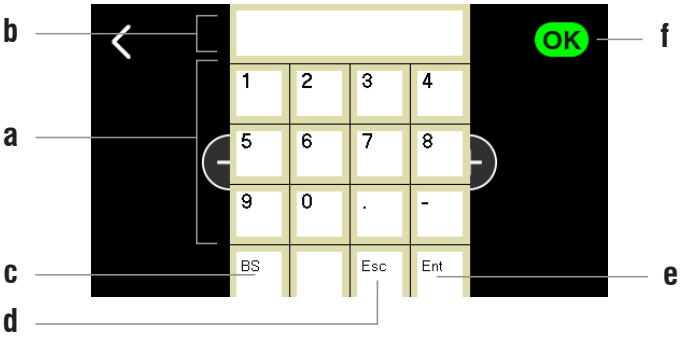


To release the display, press the key in the main screen in the top left. The device prompts for the user password.



a) **Password entry:** using the "-" and "+" keys it is possible to set the value of the password to be entered (from 0 to 999999).
b) **OK:** confirm the entered password by pressing this key.
c) **<:** to return to the previous screen.

NOTE: the password can also be entered via a numeric keypad. Press inside the central box with numbers to view it.



a) **Numeric keypad:** enter the password by pressing the numbers on the keypad.
b) **Keypad display:** the numbers entered appear.
c) **BS (BackSpace):** key to delete one or more of the digits entered.
d) **Esc:** key to close the numeric keypad without confirming.
e) **Ent (Enter):** key to confirm password entry. When this key is pressed, the numeric keypad closes.
f) **OK:** confirm the entered password by pressing this key.

If the password is incorrect, the corresponding message appears. Wait a few seconds, the message disappears and it is possible to return to the password entry screen.

USER PASSWORD = 100

The passwords cannot be changed. The passwords must only be distributed to personnel authorised to carry out the corresponding operations.

6.8.6 User and maintenance technician login/logout

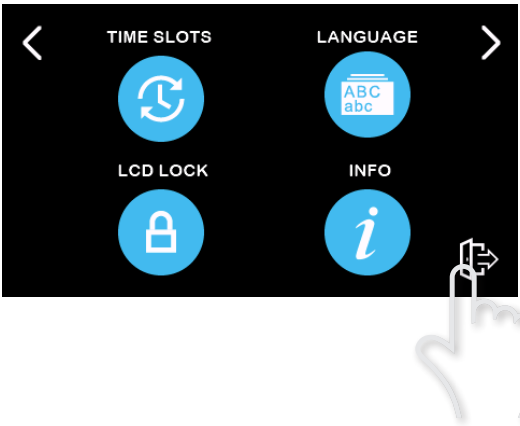
To make the device settings, it is necessary to log in to the USER, that is, type in the password to be able to use some or all of the functions.

The USER LOGIN is always required to:
- lock / unlock the screen (paragraph 6.8.3 Screen lock and settings);
- access to the filter sanitisation cycle setting screen (paragraph 6.8.9);
- access the TIME SLOTS menu (paragraph 6.8.10.1);
- access to the LCD LOCK menu (paragraph 6.8.10.3).

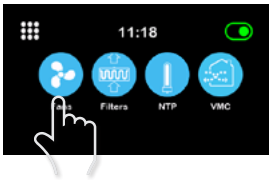
The MAINTENANCE TECHNICIAN LOGIN is always required for:
- access to the menus RESERVED FOR THE MAINTENANCE TECHNICIAN (paragraph 6.8.10.5);
- Access to the RECORDING OF FILTER AND IONISER MAINTENANCE EVENTS (paragraph 6.8.11);
- Access to the sections reserved for the maintenance technician marked with the wrench logo.

From when the password is entered, the USER or MAINTENANCE TECHNICIAN login lasts 10 minutes. Once this time has elapsed, the device will automatically perform the LOGOUT and, changing screen, will ask for the password again to proceed with the settings.

To perform the USER LOGOUT at any time, press the key that appears in the bottom right of the settings screen (paragraph 6.8.10).

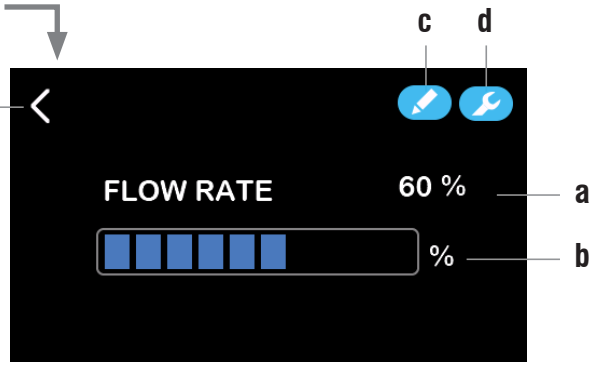


6.8.7 Fan screen

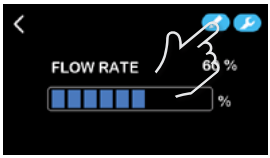


On the main screen, press the "fan" logo to access the fan detail screen:

It displays the status of the fan in detail and allows its operation to be adjusted according to the user's requirements.



a) **Current air flow in %:** it displays the value selected by the user in %.
b) **Current air flow %:** it displays the value selected by the user in % of the maximum permitted speed (100%).
c) **Key to set the range (pencil):** it allows the user to access the screen to set the air flow. Furthermore, when this key is pressed, there will be a prompt to enter the user password.
d) **Key to set the range (wrench):** it allows the maintenance technician to access the advanced screen of the fan. Furthermore, when this key is pressed, there will be a prompt to enter the user password. maintenance technician.
e) **< :** to return to the main screen.

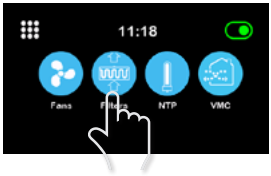


Press the logo to access the airflow setting screen:

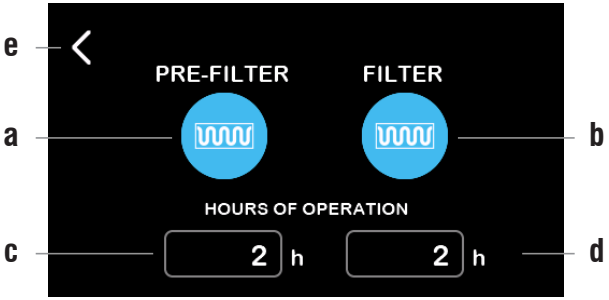
a) **Air flow rate set:** through the buttons "-" and "+", it is possible to set the value of the air flow generated by the fan, in 10% increments between the minimum 10% and maximum 100% values.
b) **<** : to return to the previous screen.

Attention: when the time slots are activated, the air flow cannot be changed and the icon is present within the fan screen. To change the airflow setting, disable time slots.

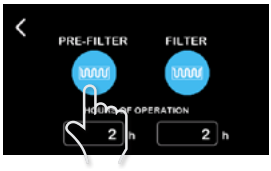
6.8.8 Filters screen



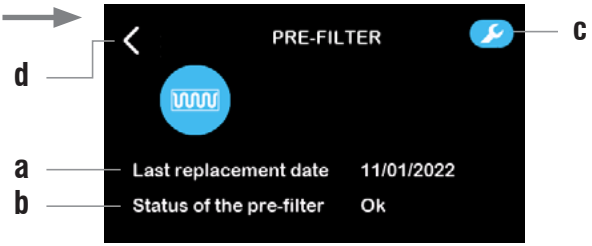
On the main screen, press the "filters" logo to access the fan detail screen:



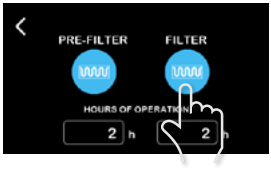
a) **Pre-filter:** allows access to the screen of the fine particulate filter.
b) **Filter:** allows access to the screen of the absolute filter.
c) **Hours of Pre-filter operation:** time in hours (h) of operation with fan on of the fine particulate filter.
d) **Hours of Filter operation:** time in hours (h) of operation with fan on of the absolute filter.
e) **<** : to return to the main screen.



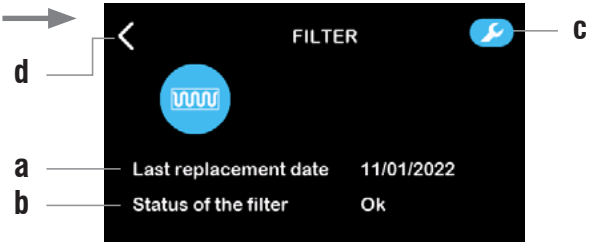
Press the "PRE-FILTER" logo to access the screen with information on the fine particulate filter:



a) **Last replacement date:** the date of the last filter replacement is displayed.
b) **Pre-filter status:** the pre-filter status is displayed. If the filter is not dirty, this message appears: **Ok**. If the filter is dirty, this message appears: **Replace**.
c) **Maintenance technician key (wrench):** section reserved for the maintenance technician. When this key is pressed, a prompt appears to enter the maintenance technician password.
d) **<:** to return to the previous screen.



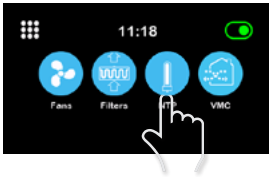
Press the "FILTER" logo to access the screen with information on the absolute filter:



a) **Last replacement date:** the date of the last filter replacement is displayed.
b) **Filter status:** the filter status is displayed. If the filter is not dirty, this message appears: **Ok**. If the filter is dirty, this message appears: **Replace**.
c) **Maintenance technician key (wrench):** section reserved for the maintenance technician. When this key is pressed, a prompt appears to enter the maintenance technician password.
d) **<:** to return to the previous screen.

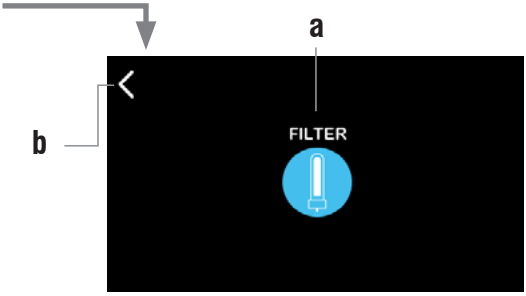
Note: if the filters were installed by the manufacturer, the last replacement date will be 00/00/0000.

6.8.9 Ionising modules screen

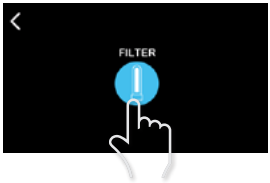


On the main screen, press the “Ioniser” logo to access the screen with the detail of the ionising modules:

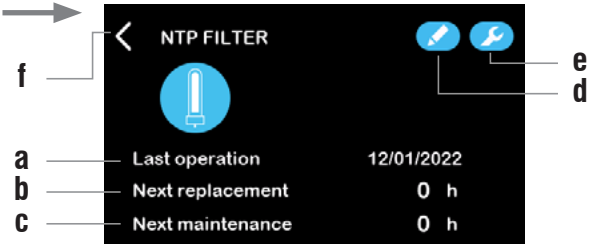
It displays the status of the modules in detail and allows them to be managed independently, according to the user's requirements.



a) **Ioniser Filter:** it allows access to the screen with the information of the ionising filter module.
b) **<** : to return to the main screen.

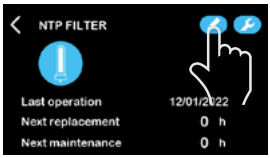


Press the logo to access the screen with information on the ionizing module:

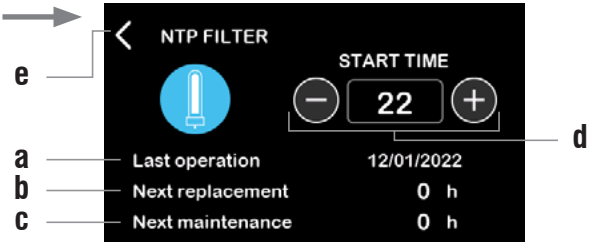


a) **Last intervention:** date on which the last maintenance operation was recorded.
b) **Next replacement (hours):** hours left to replace the ionising tube.
c) **Next maintenance (hours):** hours until cleaning of the ionising tube.
d) **Sanitisation time set key (pencil):** it allows the user to access the screen to set the activation time of the sanitisation cycle. When this key is pressed, the user password is requested.
e) **Key for the maintenance technician (wrench):** section reserved for the maintenance technician to record the cleaning or maintenance of the ioniser. When this key is pressed, a prompt appears to enter the maintenance technician password
f) **<:** to return to the previous screen.

Note: if it is the first installation of the ionisers, the date of the last intervention will be 00/00/0000.

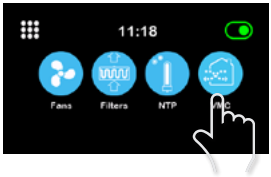


Press the logo to access the screen for the activation time set for the sanitisation cycle of the ionising module. The user password is requested:



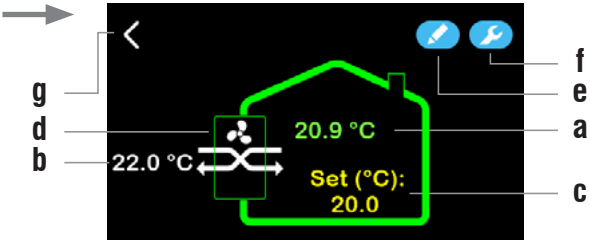
a) **Last intervention:** date on which the last maintenance operation was recorded.
b) **Next replacement (hours):** hours left to replace the ionising tube.
c) **Next maintenance (hours):** hours until cleaning of the ionising tube.
d) **Activation time of the sanitisation cycle:** the factory setting is 22:00. Using the "-" and "+" keys it is possible to modify the set time.
e) **<:** to return to the previous screen.

6.8.10 Controlled Mechanical Ventilation Screen (VMC)



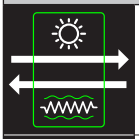
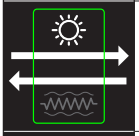
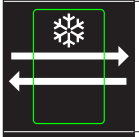
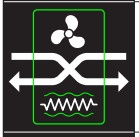
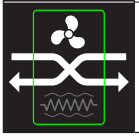
On the main screen, press the "VMC" logo to access the screen with the detail of the controlled mechanical ventilation operation:

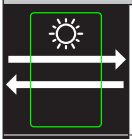
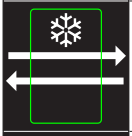
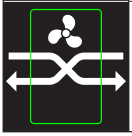
It displays the status of the temperatures and allows adjustment, according to the user's requirements.



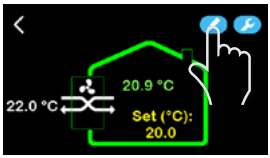
a) **Internal temperature:** indicates the internal temperature detected by the device in °C.
b) **External temperature:** indicates the external temperature detected by the device in °C.
c) **Setpoint:** the set point is displayed, i.e. the temperature, in °C, desired in the internal environment.
d) **"VMC STATUS" logo:** it can assume different symbols according to the state of the machine (see the following table).
e) **Advanced screen access key (pencil):** it is used to access the screen for setting of the temperature of the internal environment set. When this key is pressed, the user password is requested.

f) **Advanced screen access key (wrench):** section reserved for the maintenance technician to access the advanced settings. When this key is pressed, a prompt appears to enter the maintenance technician password.
g) **<** : to return to the main screen.

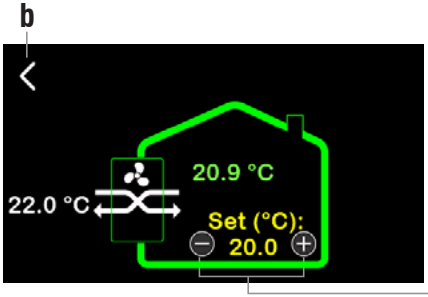
VMC STATUS WITH ELECTRICAL HEATING ELEMENT	
	Free-heating with electrical heating element on.
	Free-heating with electrical heating element off.
	Free-cooling.
	Heat recovery with electrical heating element on.
	Heat recovery with electrical heating element off.

VMC STATUS WITHOUT ELECTRICAL HEATING ELEMENT	
	Free-heating.
	Free-cooling.
	Heat recovery.

The electrical heating element is an accessory. The corresponding symbol is only displayed on the “VMC STATUS” logo if it is present inside the machine.



Press the logo to access the screen to set the internal environment setpoint. The user password is requested:

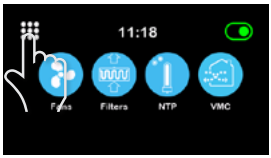


a) **Setpoint:** using the "-" and "+" keys it is possible to set the value of the internal room temperature set (°C), in 0.1°C increments.
b) **<:** to return to the previous screen.

The factory setting of the indoor environment setpoint is 20°C.

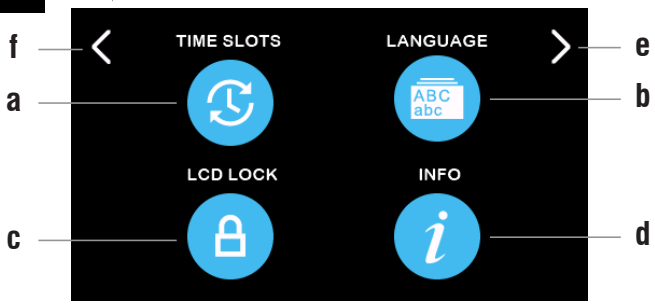
The indoor environment setpoint can be set from 10.0°C to 40.0°C.

6.8.1 Settings screen



On the main screen, press the "settings" button to navigate through the modifiable data menus:

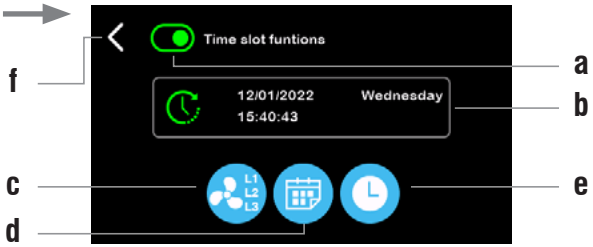
In each screen it is possible to return to the previous one by pressing <.



a) **Time slots** (paragraph 6.8.11.1).
b) **Language** (paragraph 6.8.11.2).
c) **Screen lock** (paragraph 6.8.11.3).
d) **Info** (paragraph 6.8.11.4).
e) **Menu reserved for the maintenance technician** (paragraph 6.8.11.5).
f) **< :** to return to the main screen.

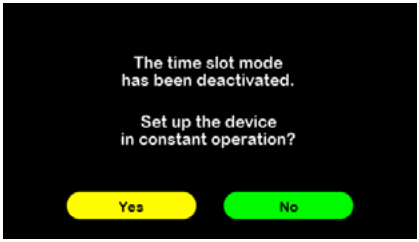
6.8.11.1 Time slots

On the “Settings” screen, press the logo to navigate in the corresponding menu and to set the time slots for autonomous operation of the device:

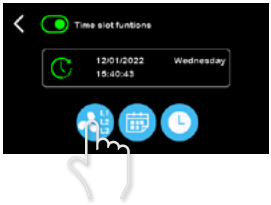


a) **Activation/deactivation of time slots**.
b) **Date/Time/Day of the week**.
c) **Setting ventilation levels L1, L2 and L3:** it is used to access the screen to set the ventilation levels that can be used in the set of time slots.
d) **Scheduler:** it is used to access the screen with the buttons to set the time slots and to copy the time slots of a given day to the other days of the week.
e) **Date and time settings:** it is used to access the screen to set the date and time.
f) **<:** to return to the previous screen.

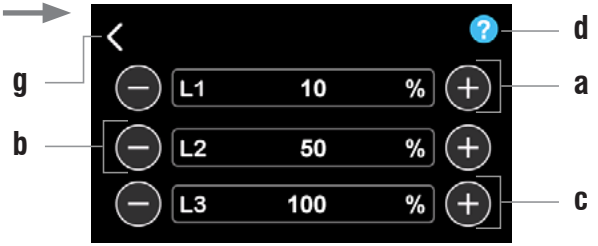
When the time zone mode is deactivated, the device requests permission to set continuous operation.
Press YES to confirm and NO to turn off the device.



6.8.11.1.1 Time slots - ventilation levels



On the "time slots" screen, press the logo to navigate to the corresponding menu and to set the ventilation levels:

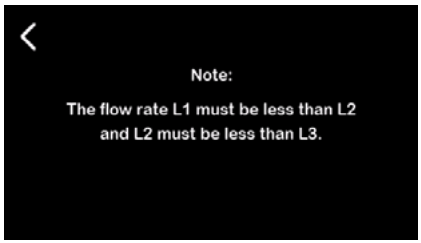


a) **L1:** using the "-" and "+" keys it allows selection, with a step of 10%, the first level available in the SET of the time slots. The value of this field must be between 10% and the value of the level selected for L2.
b) **L2:** using the "-" and "+" keys it allows selection, with a step of 10%, of the second level available in the SET of the time slots. The value of this field must be greater than the value selected for L1 and less than the value of the level selected for L3.
c) **L3:** using the "-" and "+" keys it allows selection, with a step of 10%, of the third level available in the SET of the time slots. The value of this field must be greater than the value selected for L2 and less than/equal to 100%.

10% <= L1 < L2 < L3 <= 100%

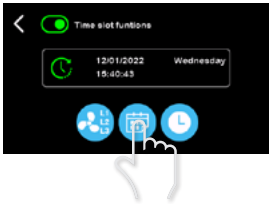
d) **?:** it is used to view the information note on how to set the L1 - L2 - L3 values.
e) **<:** to return to the previous screen, saving any changes made.

Press the logo to view the information note on how to set the L1 - L2 - L3 values:



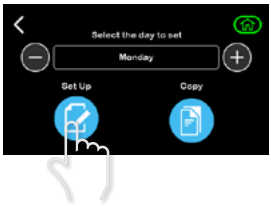
In each screen it is possible to return to the previous one by pressing <.

6.8.11.1.2 Time slots - scheduler

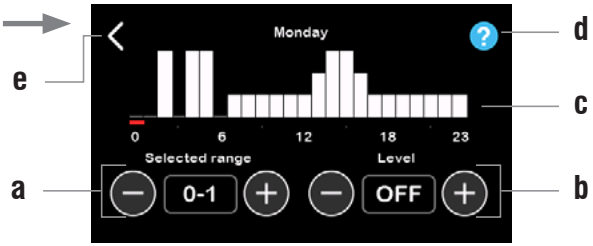


On the "time slots" screen, press the logo to navigate to the corresponding menu and set the day schedule:

a) **Selection of the day:** using the "-" and "+" keys, it it is used to select the day of the week for which the time slots are to be set.
b) **Set:** the screen for setting of the time slots for the selected day is accessed.
c) **Copy:** access is provided the screen to copy the settings of the time slots of the selected day to another day.
d) **Home:** to return to the main screen.
e) **<:** to return to the previous screen.

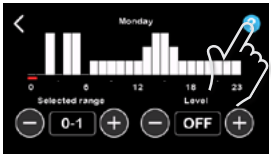


On the "scheduler" screen, press the logo to navigate to the corresponding menu and to set the time slots for the selected day:

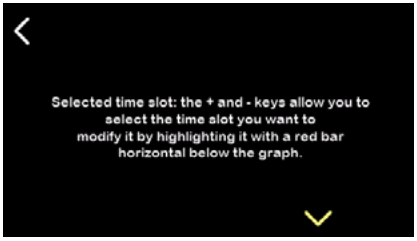


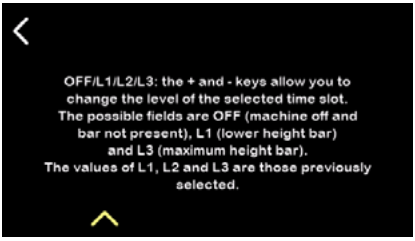
a) **Selected range:** using the "-" and "+" keys, it is possible to select the time slot to be modified. The values in this field range from 0-1 to 23-0. The selected slot is highlighted with a horizontal red bar under the graph.
b) **OFF/L1/L2/L3:** using the "-" and "+" keys it is possible to modify the level of the selected time slot. The possible fields are:
OFF for device switched off;
L1, L2, L3 whose values have been set in the "ventilation levels" screen.
c) **Graph:** display of the time slots of the selected day. The selected level is graphically represented in the selected slot with a vertical white bar of different heights:
OFF bar not present | L1 minimum bar | L2 medium bar | L3 maximum bar.
d) **?**: it is used to view the information note on the setting mode.
e) **<:** to return to the previous screen, saving any changes made.

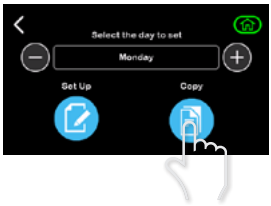
There may be a delay of 2 minutes with respect to the scheduled intervention time to allow the device to activate the set configuration.



Press the logo to view the information note on the setting mode:
Use the keys ^ v to move from one screen to another.







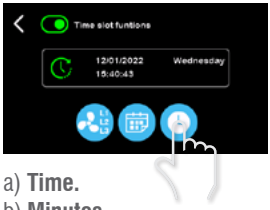
On the "scheduler" screen, press the logo to navigate to the corresponding menu and copy the time slots:

a) **Copy the day programming:** using the "-" and "+" keys, it is used to select the day with the programming of the time slots to be copied to another day.
b) **Over the day:** using the "-" and "+" keys it allows selection the day on which to copy the programming of the time slots of the day (a).
c) **OK:** to confirm the copy of the schedule from one day to another. After being pressed, the button disappears and reappears when you (a) or (b) are changed.
d) **<:** to return to the previous screen.

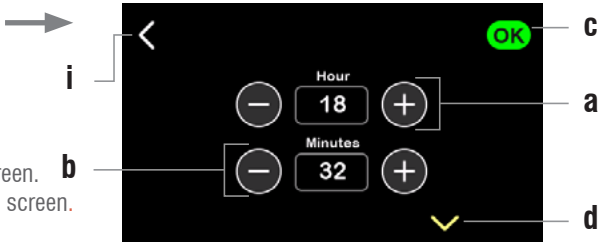
It is possible to copy the slots on only one day at a time. To copy over several days, it is necessary to repeat the operation as many times as there are days in which the slots are to be copied.

It is necessary to save by pressing OK before changing the day or leaving the "copy" screen. Otherwise all the changes made will be lost.

6.8.11.1.3 Time slots - device date and time setting

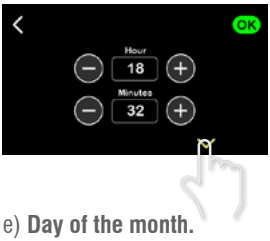


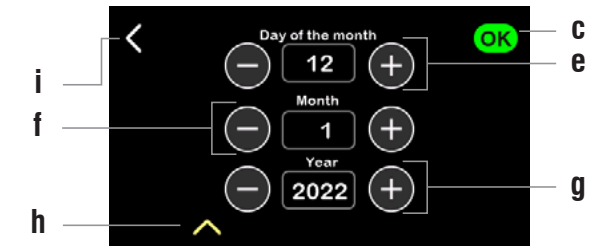
On the "time slots" screen, press the logo to navigate to the corresponding menu and set the date and time of the device:



a) **Time.**
b) **Minutes.**
c) **OK:** to save the settings.
d) **⌄** : to move to the next screen.
i) **< :** to return to the previous screen.

It is necessary to save by pressing OK.



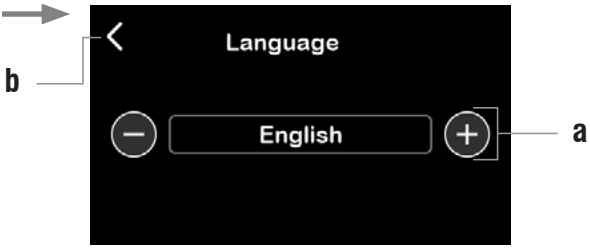


e) **Day of the month.**
f) **Month.**
g) **Year.**
h) **^ :** to move to the previous screen.
i) **< :** to return to the previous screen.

It is necessary to save by pressing OK.

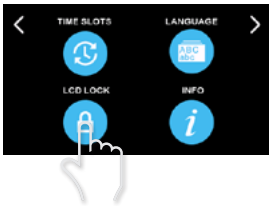
6.8.11.2 Language

On the "Settings" screen, press the logo to navigate in the corresponding menu and change the language in which the texts are shown on the display:

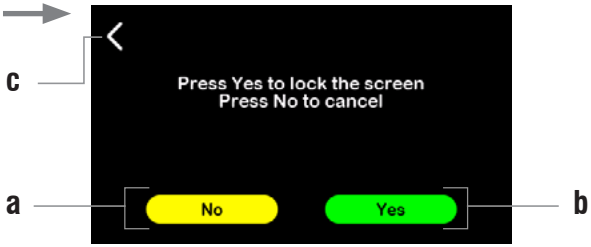


a) **Language selection:** using the "-" and "+" keys it is possible to select the desired language from those available.
b) **<:** to return to the previous screen saving any changes made.

6.8.11.3 Screen lock

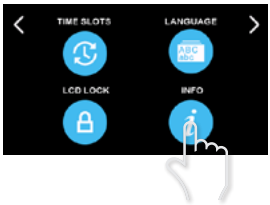


On the "Settings" screen, press the logo to navigate within the corresponding menu and to lock the screen by entering the user password:



a) **No:** to return to the “Settings” screen.
b) **Si:** to lock the screen. Entering the password is required if login has not been performed in the previous 10 minutes.
c) **<:** to return to the previous screen.

6.8.11.4 Info

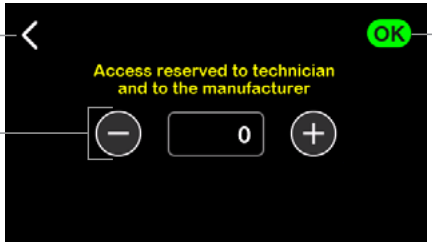


On the "Settings" screen, press the logo to navigate to the corresponding menu and to view the information:

a) **Contact for assistance:** e-mail address for assistance.
b) **Display version:** identification code of the display version.
c) **Display code:** display identification code.
d) **Board version:** board identification code.
e) **Home:** to return to the main screen.
f) **<:** to return to the previous screen.

6.8.11.5 Menu reserved for the maintenance technician

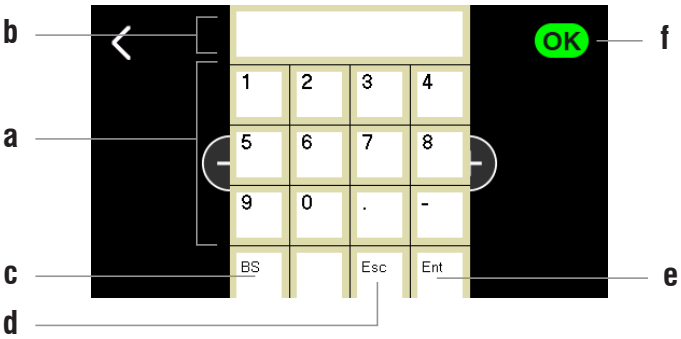
On the "Settings" screen, press the logo > to navigate the menu reserved for the maintenance technician:



Access is only possible with the maintenance technician password.

a) **Entering of password:** using the "-" and "+" keys it is possible to set the value of the password (from 0 to 999999).
b) **OK:** confirm the entered password by pressing this key.
c) **<:** to return to the previous screen.

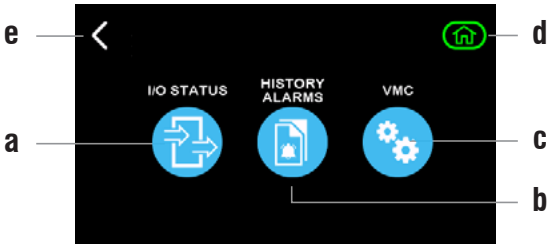
NOTE: the password can also be entered via a numeric keypad. Press inside the central box with numbers to view it.



a) **Numeric keypad:** enter the password by pressing the numbers on the keypad.
b) **Keypad display:** the numbers entered appear.
c) **BS (BackSpace):** key to delete one or more of the digits entered.
d) **Esc:** key to close the numeric keypad without confirming.
e) **Ent (Enter):** key to confirm password entry. When this key is pressed, the numeric keypad closes.
f) **OK:** confirm the entered password by pressing this key.

If the password is incorrect, the corresponding message appears.
Wait a few seconds, the message disappears and it is possible to return to the password entry screen.

Once logged in with the maintenance password, it is possible to access the reserved menu:



a) **I/O status:** it is used to view the status of the inputs and outputs of the device.
b) **Alarm history:** it is used to view the alarms present in the device.
c) **VMC:** it is used to set the advanced operating parameters of the controlled mechanical ventilation according to the requirements of the users and depending on the installation environment.
d) **Home:** to return to the main screen.
e) **<:** to return to the previous screen.

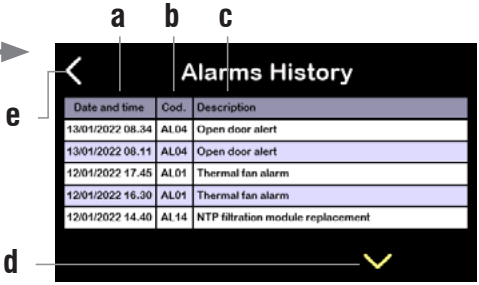
6.8.11.5.1 Menu reserved for the maintenance technician - device inputs and outputs status

On the "maintenance technician menu" screen, press the logo to view the status of the inputs and outputs of the device:

a) **Status of digital and analog outputs.**
b) **>:** to move to the next screen.
c) **Status of digital and analog inputs.**
d) **<:** to move to the previous screen.
e) **<:** to return to the previous screen.

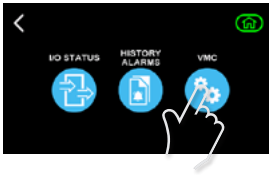
6.8.11.5.2 Menu reserved for the maintenance technician - alarm history

On the "maintenance technician menu" screen, press the logo to view the alarm history:

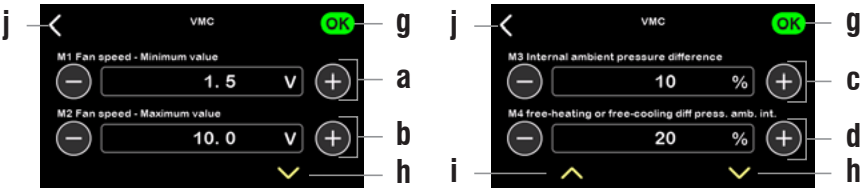


a) **Date and time.**
b) **Code.**
c) **Description.**
d) **:** to move from one screen to another.
e) **<:** to return to the previous screen.

6.8.11.5.3 Menu reserved for the maintenance technician - VMC

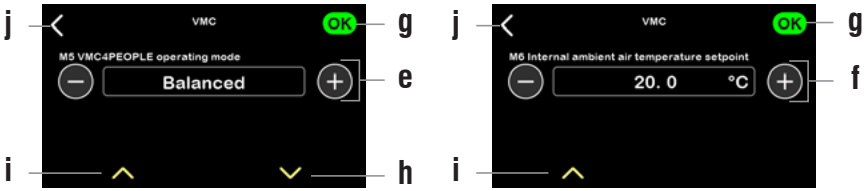


On the "maintenance technician menu" screen, press the logo to navigate in the menu for setting of the advanced operating parameters of controlled mechanical ventilation:



For optimal functioning of the **vmc 4people**, set the advanced parameters of controlled mechanical ventilation based on the characteristics of the environment in which it is installed and on the pressure measurements in the field.

a) **M1 Fan speed - Minimum value:** settable range 2 V - 10 V.
b) **M2 Fan speed - Maximum value:** settable range 2 V - 10 V.
c) **M3 Internal ambient pressure difference:** settable range 0% - 50% ..
d) **M4 Internal ambient pressure difference free-heating or free-cooling:** settable range 0% – 50%.
g) **OK:** to save the settings.
h) **:** to move to the next screen.
i) **:** to move to the previous screen.
j) **<:** to return to the previous screen.



e) **M5 Mode of operation of vmc 4people:** according to the environment in which the machine is located, using the "-" and "+" keys it is possible to set the parameters:
Balanced: the speeds of the air supply and intake air fans are the same.
Overpressure: parameters M3 and M4 are used to decrease the speed of the intake fan and to keep the environment in overpressure.
Depression: parameters M3 and M4 are used to increase the speed of the intake fan and to keep the environment in depression.

f) **M6 Internal ambient air temperature set point:** settable range 10°C - 40°C.

g) **OK:** to save the settings.

h) **⌄ :** to move to the next screen.

i) **⌃ :** to move to the previous screen.

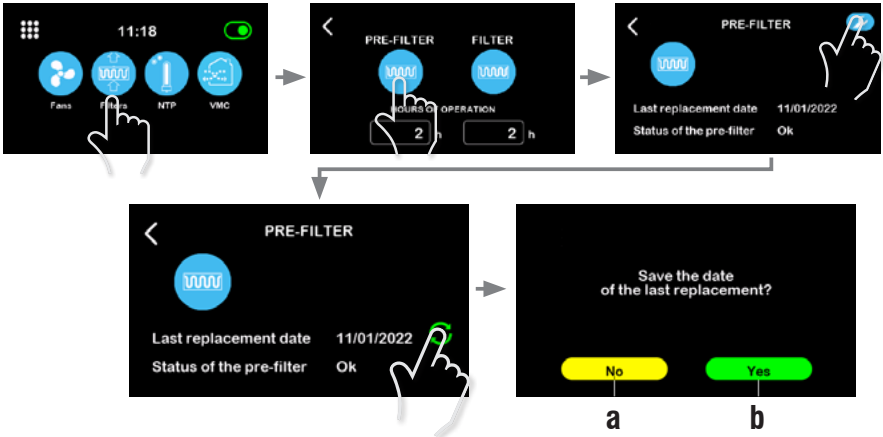
j) **<:** to return to the previous screen.

It is necessary to save by pressing OK before changing the screen.
Otherwise all changes made will be lost.

6.8.12 Recording of filter and ioniser maintenance events

6.8.12.1 Recording of fine particulate filter maintenance events (PRE-FILTER)

On the main screen, press the "filters" logo . Press the “PRE-FILTER” logo.
Press the logo to access the PRE-FILTER screen reserved for the maintenance technician.
Entering of the maintenance technician password is requested.
Press the logo to record the maintenance intervention.

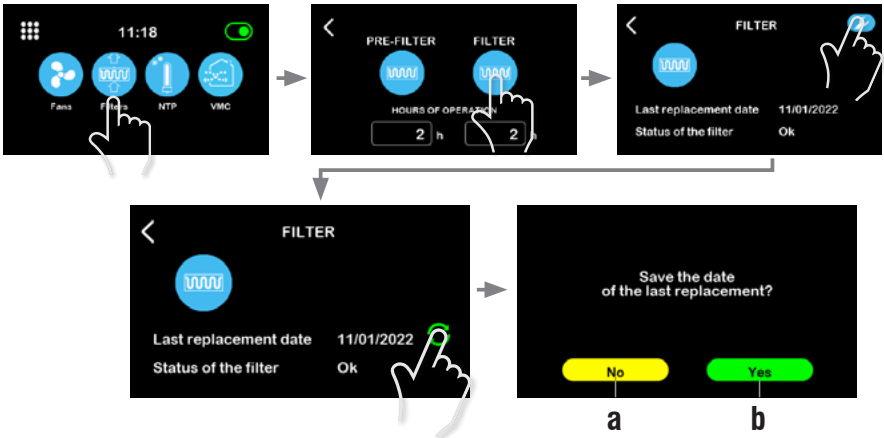


a) **No:** the previous screen is returned to without saving.
b) **Yes:** updating of the date of the last replacement, resetting of the filter operating hours counter and return to the previous screen.

NOTE: **this operation only involves RECORDING of the maintenance intervention.**
The maintenance procedures are explained in chapter 7 "Maintenance" of this manual.

6.8.12.2 Recording of absolute filter maintenance events (FILTER)

On the main screen, press the "filters" logo . Press the “FILTER” logo.
Press the logo to access the FILTER screen reserved for the maintenance technician. Entering of the maintenance technician password is requested.
Press the logo to record the maintenance intervention.

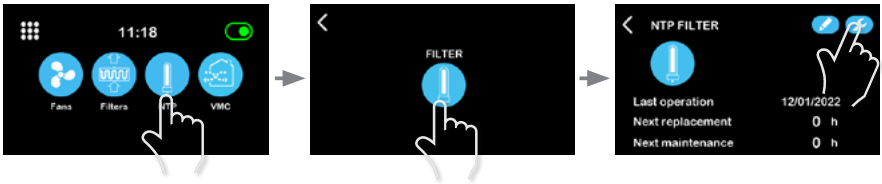


a) **No:** the previous screen is returned to without saving.
b) **Yes:** updating of the date of the last replacement, resetting of the filter operating hours counter and return to the previous screen.

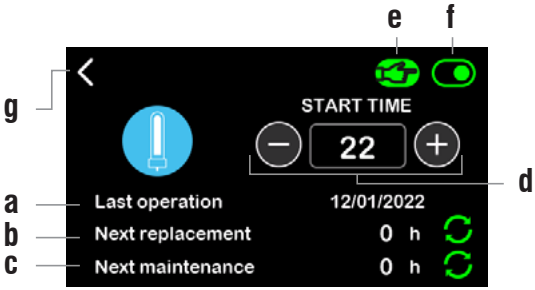
NOTE: **this operation only involves RECORDING of the maintenance intervention.**
The maintenance procedures are explained in chapter 7 "Maintenance" of this manual.

6.8.12.3 Recording of filter ioniser maintenance

On the main screen, press the “Ioniser” logo . Press the “FILTER” logo.
Press the logo to access the ioniser screen reserved for the maintenance technician.

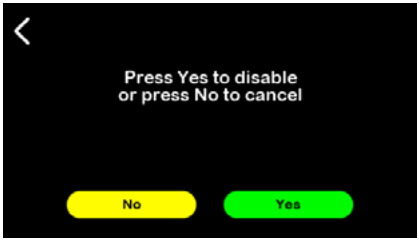


Access is only possible with the maintenance technician password.

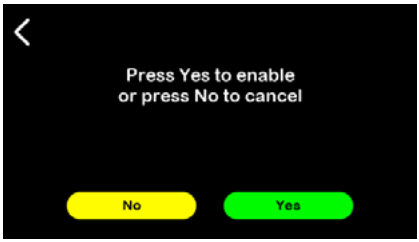


a) **Last intervention:** date on which the last maintenance operation was recorded.
b) **Next replacement (hours):** hours left to replace the ionising tube.
c) **Next maintenance (hours):** hours until cleaning of the ionising tube.
d) **Activation time of the sanitisation cycle:** the factory setting is 22:00. Using the "-" and "+" keys it is possible to modify the set time.
e) / **:** starts or stops a manual sanitisation cycle.
f) **Enabling/disabling of the filter ioniser.**
g) **<:** to return to the previous screen.

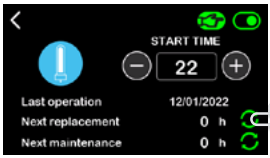
To disable the filter ioniser press the key .



To enable the filter ioniser press the key .



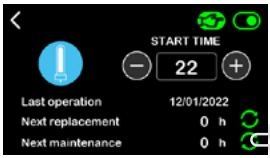
Press the logo to record
the replacement intervention.



a) **No:** the previous screen is returned to without saving.
b) **Yes:** updating of the date of the last replacement, resetting of the filter ioniser operating hours counter and return to the previous screen.

NOTE: **this operation only involves RECORDING of the maintenance intervention.**
The maintenance procedures are explained in chapter 7 "Maintenance" of this manual.

Press the logo to record
the maintenance intervention (cleaning).



a) **No:** the previous screen is returned to without saving.
b) **Yes:** updating of the date of the last maintenance, resetting of the filter ioniser operating hours counter and return to the previous screen.

NOTE: **this operation only involves RECORDING of the maintenance intervention.**
The maintenance procedures are explained in chapter 7 "Maintenance" of this manual.

6.8.13 Operation display viewing

During normal and correct operation of the device, it is possible to view on the display:

	Symbols that identify the turning fan.
	The symbol that identifies the filter when the device is OFF.
	Symbols that identify the air flow through the filters.
	The symbol that identifies the ioniser OFF.
	Symbols that identify the functioning of the ionisers.
	The symbols that identify the sanitation cycle ON.
	The symbol that identifies the ON device.
	The symbol that identifies the OFF device.

6.8.14 Filter ioniser function

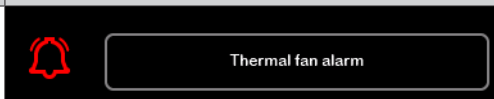
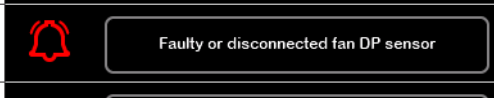
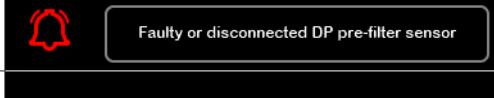
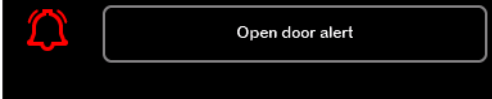
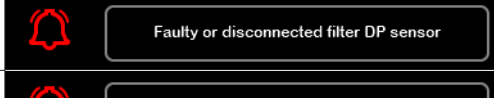
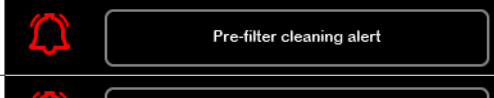
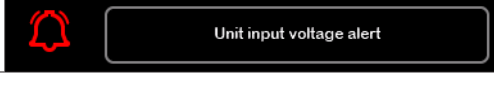
The filter ionisation cycle works once a day. Enable it and set the start time as described in paragraph 6.8.9 "Ionising modules screen". At the set time, the ionisation cycle of the filter starts:

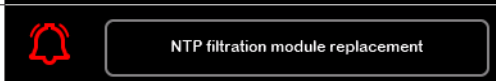
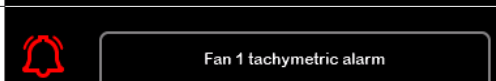
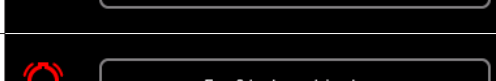
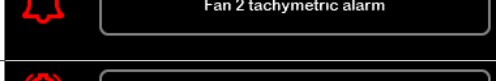
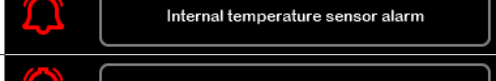
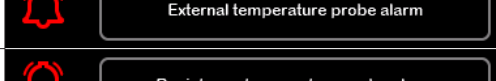
1) the fan stops for 29 minutes (the symbol remains present but static) and the ioniser ( ) starts working;
2) the fan runs for 1 minute at reduced speed (the symbol turns) and the ioniser ( ) remains in operation;
3) the fan stops for 29 minutes (the symbol remains present but static) and the ioniser ( ) remains in operation. The ionisation cycle of the filter is repeated for 300 minutes (5 hours).

The ionisation cycle is performed both with the device ON and with the device OFF. To disable the ionisation cycle, follow the instructions in paragraph 6.8.12.3 "Recording of filter ioniser maintenance". Entering of the maintenance technician password is requested:

6.8.15 Alarm status notifications

On the main screen, notifications appear on the icon of the component that generates an alarm to request intervention by the user or a maintenance technician authorised by JONIX S.p.A.. The following table indicates how to proceed for resolution of the alarms based on the code and the description:

CODE	DESCRIPTION	ACTION
AL01		Contact an authorised JONIX S.p.A. maintenance technician and see para. 7.3.1 - “Fan thermal alarm reset”.
AL02		Contact an authorised JONIX S.p.A. maintenance technician.
AL03		Contact an authorised JONIX S.p.A. maintenance technician.
AL04		The device is switched OFF because the front panel is open; disconnect the power supply before maintenance or close the panel if the door is not correctly closed. When the alarm persists contact an authorised JONIX S.p.A. maintenance technician.
AL05		Contact an authorised JONIX S.p.A. maintenance technician.
AL06		See par. 7.2.1 "replacing filters".
AL07		See par. 7.2.1 "replacing filters".
AL08		Contact an authorised JONIX S.p.A. maintenance technician.

CODE	DESCRIPTION	ACTION
AL11		See para. 7.2.3.2 "cleaning the ionising pipe for the sanitization of internal components".
AL14		See para. 7.2.4.2 "replacing the ionising pipe for the sanitization of internal components".
AL15		Contact an authorised JO**NIX** S.p.A. maintenance technician and see para. 7.3.2 Reset fans tachometer alarm
AL16		Contact an authorised JO**NIX** S.p.A. maintenance technician and see para. 7.3.2 Reset fans tachometer alarm.
AL17		Contact an authorised JO**NIX** S.p.A. maintenance technician.
AL18		Contact an authorised JO**NIX** S.p.A. maintenance technician.
AL19		Contact an authorised JO**NIX** S.p.A. maintenance technician.

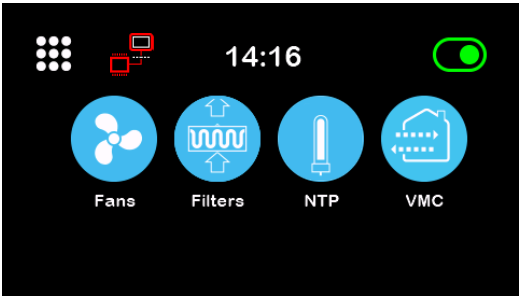
To solve the problem displayed read the chap. 7 “MAINTENANCE” of this manual.

Contact JONIX S.p.A. or a Distributor always quoting the product code and serial number shown on the device plate:
- **if a malfunction other than that described in this use and maintenance manual is found;**
- **if the problem cannot be resolved correctly and the alarm status persists.**

6.8.16 Electronic card-display communication malfunction

If, when the device is turned on, the display remains on the home screen:

Or if the icon appears on the main screen of the display during device operation :



There is a malfunction in the communication of the display with the internal board.

Contact JONIX S.p.A. or a Distributor always quoting the product code and serial number shown on the device plate.

7 - MAINTENANCE

7.1 WARNINGS

BEFORE CARRYING OUT ANY MAINTENANCE OPERATION MAKE SURE THAT THE DEVICE IS NOT AND CANNOT ACCIDENTALLY BE POWERED ELECTRICALLY. YOU MUST THEREFORE UNPLUG THE DEVICE BEFORE CARRYING OUT ANY MAINTENANCE.

- It is the duty of the user to perform all the maintenance operations on the device listed below.
- If a malfunction not indicated in this manual occurs, disconnect the power supply to the device and consult your dealer and/or the Manufacturer.
- Only trained and qualified personnel can perform maintenance operations.

ATTENTION!
for all operations that require elevation with respect to the floor, use compliant devices and adequately informed, trained and instructed personnel.

For all maintenance operations it is good practice to use Personal Protective Equipment provided for by the regulations in force.

The frequency of the operations to be performed to ensure proper maintenance of the JONIX vmc 4people basic device depends mainly on the quality of the treated air.
Air can be particularly harmful to non-technical plasma generators if it contains pollutants or aggressive substances in high quantities such as:
- Industrial flue gas
- Salt
- Chemical smoke
- Heavy powders

By coming into contact with the inside or outer surfaces of the device by means of the air flow or by direct exposure, these substances can lead to a structural and functional failure of the device and of its performance as time passes and without proper, systematic maintenance.

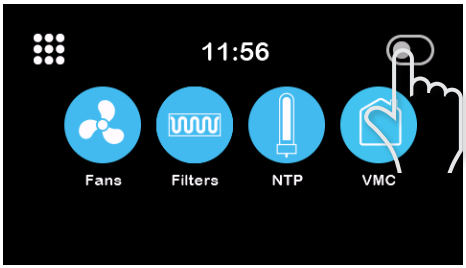
7.2 ROUTINE MAINTENANCE

The JONIX vmc 4people basic device requires a small amount of maintenance which consists of checking and replacing the filters or the periodic and regular replacement of the non-thermal plasma generator (ionising pipe).
The JONIX vmc 4people basic device, signals the need to perform maintenance on the non-thermal plasma generator, through an alarm viewed on the display (paragraph 6.8.15 "Alarm status notifications") every 7000 hours of operation.
Filters do not need to be cleaned periodically but will need to be changed when they reach saturation. The device signals the need for maintenance by means of an alarm shown on the display (paragraph 6.8.15 "Alarm status notifications").

7.2.1 Replacing filters

The device JONIX vmc 4people basic indicates the need to replace the filters through the presence of an alarm on the main screen. The filter alarm notifications are:

Replace the filters every time it is notified on the display.



ATTENTION!
When servicing the filters, pay particular attention to your fingers to avoid the risk of pinching.

Turn off the device using the remote display.

Fig. 23: Disconnect the power supply by acting on the safety thermomagnetic circuit upstream of the device. Make sure that the power supply cannot be accidentally restored.

Fig. 31. Open the inspection panel on the inside (1) and the inspection panel on the outside (2).

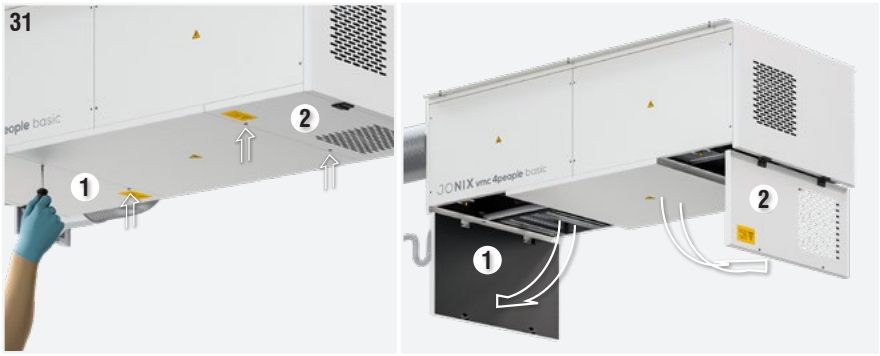
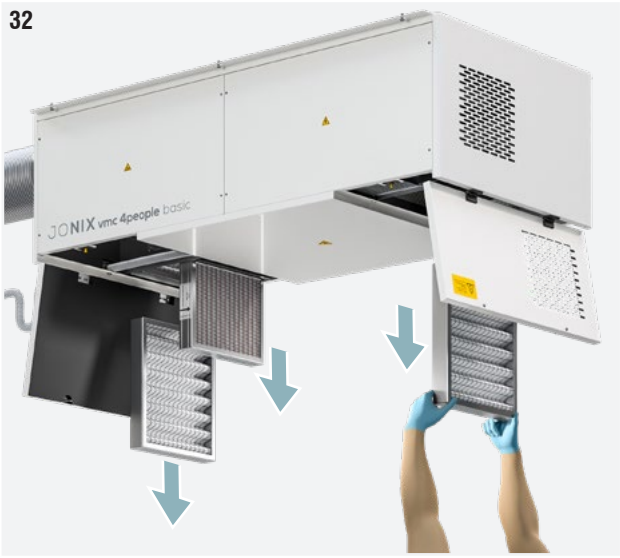


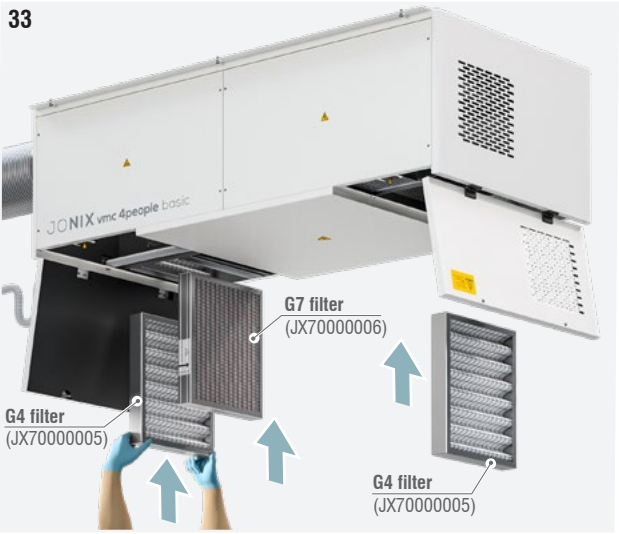
Fig. 32. Remove the dirty filters.



Dispose of dirty filters in accordance with the regulations in force in the country of installation.

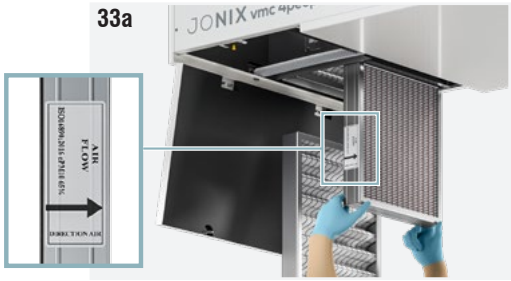
Attention: residual risk of falling objects. The filters are held in place by magnetic contact. Ensure that the filters do not fall to the ground.

Fig. 33. Position the new / cleaned filters paying particular attention to the correct positioning of the G4 filters and of the F7 filter.



Attention: residual risk from falling objects.
The filters are held in place by magnetic contact. Ensure that the filters do not fall to the ground.

On the F7 filter there is an arrow that indicates the correct air flow. Respect the indications present.



Fully insert the filters, sliding them inside the guides. Check the correct coupling of the magnet, gradually releasing the filter.

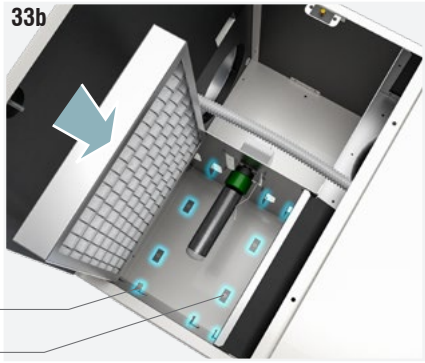
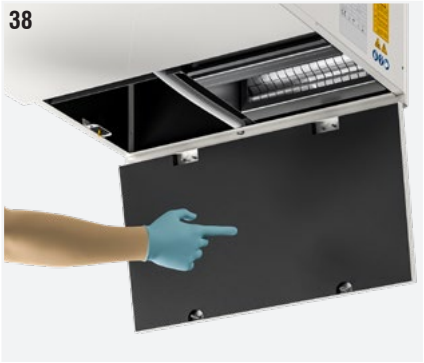


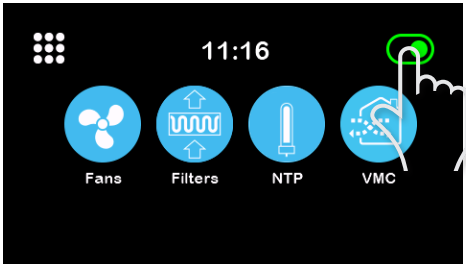
Fig. 38. Check that the insulation panels inside the unit are intact. There must be no places where the insulation is missing or crumbling.



ATTENTION:
Contact a maintenance technician authorised by the Manufacturer in case of missing or crumbling internal insulation of the panels.

Fig. 39. Close the inspection panel on the inside and the inspection panel on the outside.

Fig. 40. Act on the safety magnetothermic switch positioned on the circuit upstream of the device to restore the electrical power supply.



Turn on the device using the remote display.

ATTENTION!
for all operations that require elevation with respect to the floor, use compliant devices and adequately informed, trained and instructed personnel.

Check the operation of the device: the air flow generated by the fans will be perceived.

Record the maintenance operation performed using the display as described in the paragraphs:
- 6.8.11.1 Recording of fine particulate filter maintenance events (PRE-FILTER)
- 6.8.11.2 Recording of absolute filter maintenance events (FILTER)
The alarm notification automatically disappears from the main screen after the maintenance recording is complete.

Dirty filters must be disposed of in compliance with the instructions in chapter 9 "DISPOSAL" and in compliance with the regulations in force in the country of installation.

7.2.2 External cleaning of the device

Fig. 41: Clean the outside of the device with a damp cloth.
If the casing is in stainless steel, use specific products for this material.

Do not use liquid cleaners, sprays, soap or other products directly on the device.

Pay particular attention to the air passage grilles: check that they are clean to ensure the passage of air.

ATTENTION!
for all operations that require elevation with respect to the floor, use compliant devices and adequately informed, trained and instructed personnel.

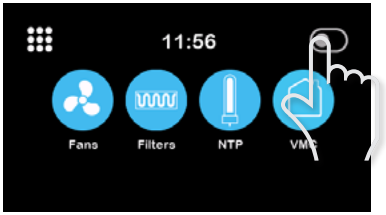
7.2.3 Cleaning of ionizing tube

The device JONIX vmc 4people basic indicates the need for cleaning of ionising tube through the presence of an alarm on the main screen. The alarm notification of the ionizing tube is as follows:

	See para. 7.2.3.1 "cleaning of the ionising tube for internal components sanitisation".

7.2.3.1 Ionising pipe cleaning for the sanitization of internal components

The JONIX vmc 4people basic device signals the need to clean the ionising pipes per for air sanitation every 7000 hours of operation.
Clean the ionising tube every time it is shown on the display.



Turn off the device using the remote display.

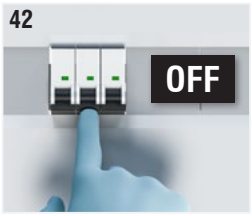


Fig. 42: Disconnect the power supply by acting on the safety thermomagnetic circuit upstream of the device. Make sure that the power supply cannot be accidentally restored.

Fig. 43. Open the inspection panel on the inside (1).

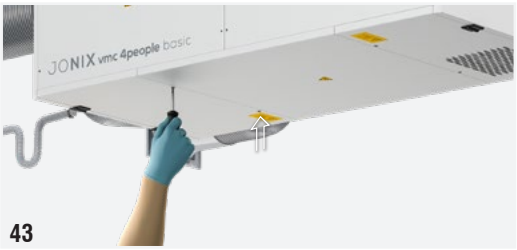
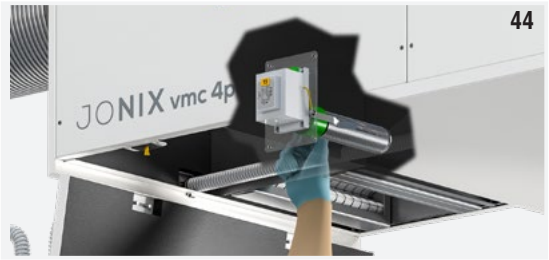


Fig. 44: Gently unscrew the ionising pipe, gripping it at the base (green part).



If the operation is difficult to perform, pull slightly the earthing spring so that it is not in contact with the surface of the tube.

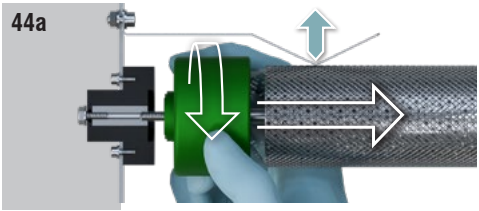
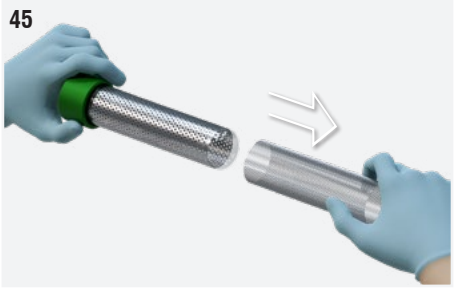


Fig. 45: Pull off the outer mesh from the tube. If this is difficult to do, turn the mesh around the glass while pulling to remove it.



Check that the tube is in good conditions: there must not be any cracks or other damage; otherwise it must be replaced.

Fig. 46: Clean the glass using a damp cloth.

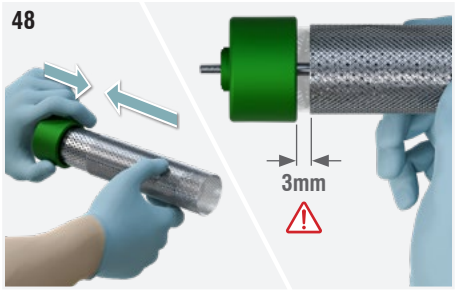
Do not use liquid cleaners, sprays, soap or other products.

The presence of a whitish layer on the perforated metal sheet inside the glass indicates the need to replace the pipe. **The tube must usually be replaced within 18 months of use.**

Fig. 47: Wash the mesh under running hot water and dry it thoroughly with a non-fraying cloth.

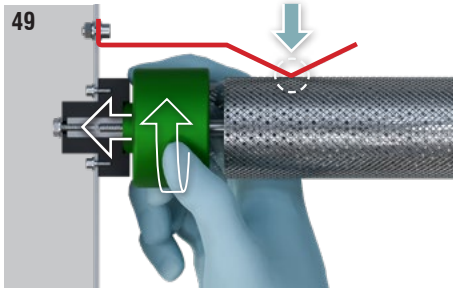
Do not put back the mesh on the ionising tube if it is even partially wet.

Fig. 48: Put the outer metal mesh back on the glass tube so that it fully overlaps the internal plate.



In any case ensure a minimum distance of at least 3 mm from the base of the tube.

Fig. 49: Gently screw the tubes ionizing by grasping them at the base (part green). If the operation is difficult to perform, pull slightly the earthing spring so that it is not in contact with the surface of the tube.

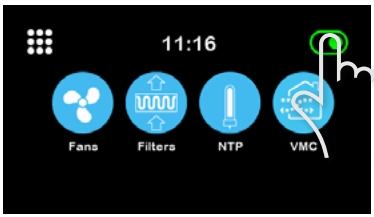


ATTENTION: do not overtighten the screw after reaching its end stop.

Check that the earthing spring is in contact with the outer mesh once the ionising tubes have been screwed back into place. Otherwise contact the manufacturer.

Fig. 50: Close the inspection panel on the inside.

Fig. 51. Act on the safety magnetothermic switch positioned on the circuit upstream of the device to restore the electrical power supply.



Turn on the device using the remote display.

Check the operation of the device, a slight crackling must be heard coming from the ionising pipes and the air flow generated by the fan will be perceived.

ATTENTION!
for all operations that require elevation with respect to the floor, use compliant devices and adequately informed, trained and instructed personnel.

Record the maintenance operation performed using the display as described in the paragraph:
- 6.8.12.3 Recording of filter ioniser maintenance.
The alarm notification automatically disappears from the main screen after the maintenance recording is complete.

Should a malfunction persist, unplug the device from the mains and contact qualified staff. **Failure to clean the ionising pipe when indicated by the device will result in a reduction in system performance.**

7.2.4 Replacement of the ionizing tube

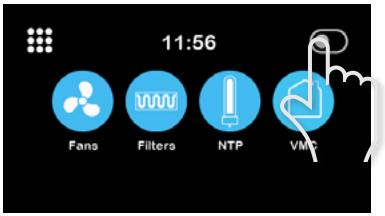
The ionising pipe is the component of the device which will eventually deteriorate over time and will therefore require replacement. When signs of wear appear, it is necessary to replace the component. They are evident with the appearance of oxide in the condenser internal mesh that will make it whitish, and that will render the glass opaque.

The device JONIX vmc 4people basic indicates the need for replacing the ionising tube through the presence of an alarm on the main screen. The alarm notification of the ionizing tube is as follows:

NTP filtration module replacement	See para. 7.2.4.1 "replacement of the ionising tube for internal components sanitisation".

7.2.4.2 Replacing the ionising tube for the sanitization of internal components

The JONIX vmc 4people basic signal the need of replacement of the ionising tube for the sanitization of internal components after 14000 hours of operation.
Replace the ionising tube every time it is shown on the display.



Turn off the device using the remote display.

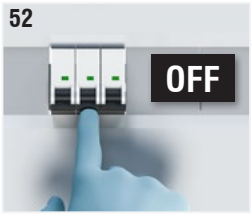
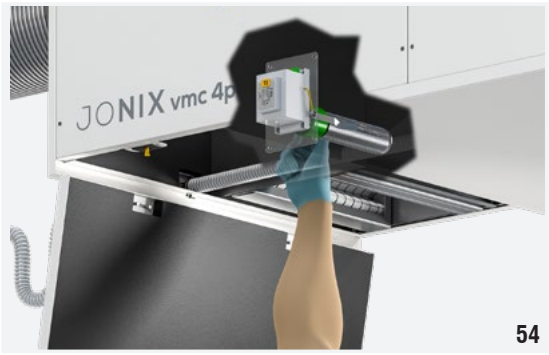


Fig. 52: Disconnect the power supply by acting on the safety thermomagnetic circuit upstream of the device. Make sure that the power supply cannot be accidentally restored.

Fig. 53: Open the inspection panel on the inside (1).

Fig. 54: Gently unscrew the ionising pipe, gripping it at the base (green part).



If the operation is difficult to perform, pull slightly the earthing spring so that it is not in contact with the surface of the tube.

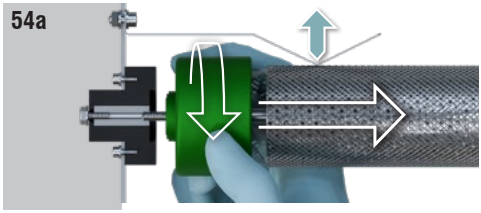
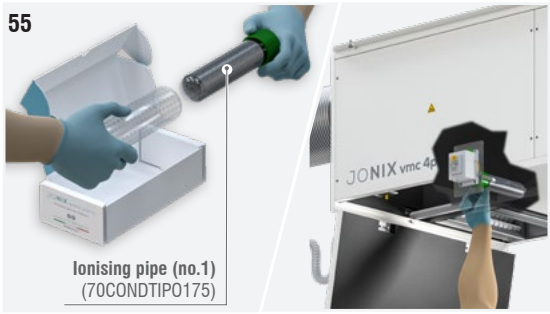


Fig. 55: Gently screw in the **new ionising pipe**, holding on to the base (green part).



ATTENTION: do not overtighten the screw after reaching its end stop.

Check that the earthing spring is in contact with the outer mesh once the ionising tube have been screwed back into place. Otherwise contact the manufacturer.

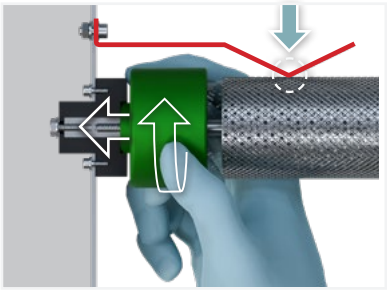
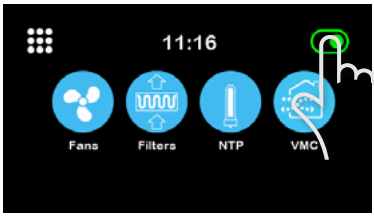


Fig. 56: Close the inspection panel on the inside.

Fig. 57: Act on the safety magnetothermic switch positioned on the circuit upstream of the device to restore the electrical power supply.



Turn on the device using the remote display.

Check the operation of the device, a slight crackling must be heard coming from the ionising pipes and the air flow generated by the fan will be perceived.

ATTENTION!
for all operations that require elevation with respect to the floor, use compliant devices and adequately informed, trained and instructed personnel.

Record the maintenance operation performed using the display as described in the paragraph:
- 6.8.12.3 Recording of filter ioniser maintenance.
The alarm notification automatically disappears from the main screen after the maintenance recording is complete.

Should a malfunction persist, unplug the device from the mains and contact qualified staff. **Failure to clean the ionising pipe when indicated by the device will result in a reduction in system performance.**

7.3 SPECIAL MAINTENANCE

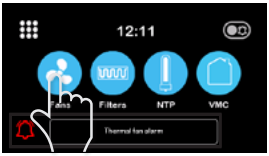
Any maintenance that does not fall within the operations described as routine maintenance must only be carried out by specialist personnel expressly authorised and trained by the Manufacturer.

7.3.1 Fan thermal alarm reset

The JONIX vmc 4people basic device indicates a problem with the fan through the presence of an alarm on the main screen:

Contact a maintenance technician authorised by JONIX S.p.A. to resolve the problem.

When the problem on the device has been resolved, reset the corresponding alarm:

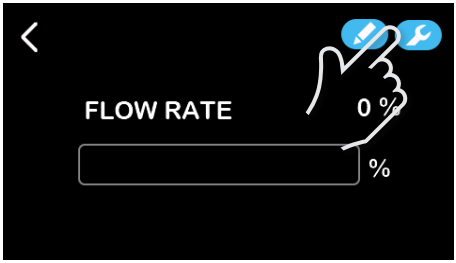


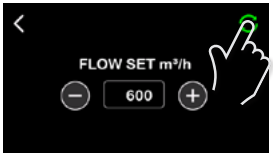
On the main screen, press the "fan" logo to access the fan detail screen:

Access is only possible with the maintenance technician password.

Press the logo to access the screen reserved for the maintenance technician.

Enter the maintenance technician password as indicated in paragraph 6.8.5 Screen release and settings.





Press the logo to record the maintenance intervention.

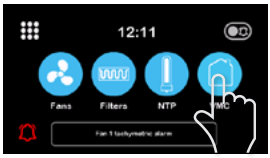
a) **No:** the previous screen is returned to without saving.
b) **Yes:** the fan thermal alarm is reset with return to the previous screen.
c) **<:** to return to the previous screen.

7.3.2 Reset fans tachometer alarm

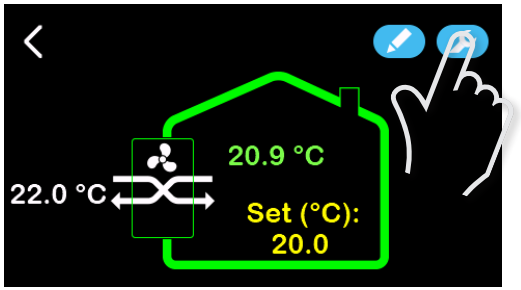
The device JONIX vmc 4people basic indicates a problem with the fan through the presence of an alarm on the main screen:

Contact a maintenance technician authorised by JONIX S.p.A. to resolve the problem.

When the problem on the device has been resolved, reset the corresponding alarm:



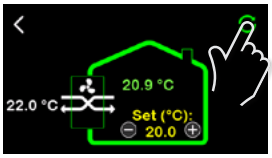
On the main screen, press the "VMC" button to browse the pages dedicated to the vmc 4people:



Press the logo to access the screen reserved for the maintenance technician.

Access is only possible with the maintenance technician password.

Enter the maintenance technician password as indicated in paragraph 6.8.5 Screen release and settings.



Press the logo to record the maintenance intervention.

a) **No:** the previous screen is returned to without saving.
b) **Yes:** the fan tachimetric alarm is reset with return to the previous screen.
c) **<:** to return to the previous screen.

7.3.3 General cleaning of the device

This operation must only be carried out by authorised personnel trained by the Manufacturer.

Check the state of cleanliness and preservation of the internal components of the device at least once every 3 years. The frequency of the check depends on the general conditions of the environment in which the device is installed.

1) Turn off the device using the remote display.
2) Disconnect the power supply by acting on the safety magnetothermic switch positioned on the circuit upstream of the device. Make sure that the power supply cannot be accidentally restored.
3) Open the access panel to the electrical panel.
4) Turn the power off switch to the OFF position.
5) Disconnect the condensate drain hose.
6) Open the closing panel of the exchanger.
7) Disassemble and extract the condensate collection tray.
8) Disassemble and extract the heat recovery unit.
9) Proceed with the cleaning operations.
10) Reassemble the components, close the panels and restart the device.

To clean the internal components, use a vacuum cleaner, a damp cloth, a soft bristle brush or a low pressure compressor.

ATTENTION: Never touch the fins of the exchanger, handle the exchanger keeping it only on the closed sides.

ATTENTION: never remove the fans and/or the air by-pass system.

ATTENTION: never use liquids on the electrical heating element, optional on request.

ATTENTION!
for all operations that require elevation with respect to the floor, use compliant devices and adequately informed, trained and instructed personnel.

8 - CHECKING OPERATION AND POSSIBLE FAULTS (DIAGNOSTICS)

This section summarises the most common problems that may arise when using the unit. Before contacting customer service, perform the checks described in the paragraph on diagnostics and check that there are no alarm signals (paragraph 6.8.15 "Alarm status notifications").

8.1 DIAGNOSTICS

PROBLEM	POSSIBLE CAUSE	SOLUTION
The display is off.	Lack of power to the device.	Check that the electrical connection is correctly made.
		Check that the magnetothermic switch for disconnecting of the power supply is in the ON position.
		Check the integrity of the power cord.
		Check that power is present in the distribution mains.
	Display-device connection interrupted.	Check that the connection between the remote display and the device board has been made correctly and that it is intact.
Difficult start-up.	Low or inconsistent power supply voltage.	Check that the power supply voltage is the same as that indicated on the identification plate and that it is constant.
There is no crackling sound from the ioniser.	The ionising pipe is faulty.	Contact a maintenance technician authorised by the manufacturer.
	Maintenance required on the ionising pipe.	Follow the instructions in section 7.2 "ROUTINE MAINTENANCE".
The ionisation of the air does not correspond to expectations.	The device settings are not correct with respect to the characteristics and volume of the room to be treated.	Increase the air flow.
	Need for maintenance on the ionising pipe.	Follow the instructions in section 7.2 "ROUTINE MAINTENANCE".
	Faulty fans.	Contact a maintenance technician authorised by the manufacturer.
Display on but little or no airflow.	The fan is not powered.	Check that the magnetothermic switch for disconnecting of the power supply is in the ON position.
	Faulty fan.	Check that the magnetothermic switch for disconnecting of the power supply is in the ON position.
	Dirty fan.	Check that the filters are present and that they are clean. Contact a maintenance technician authorised by the manufacturer.
	Dirty external air inlet and/or exhaust air ducts.	Check that the filters are present and that they are clean. Contact a maintenance technician authorised by the manufacturer.
	The filters are dirty and have not been replaced.	Follow the instructions in section 7.2 "ROUTINE MAINTENANCE".
	Some condition is active which involves stopping of the fans.	See the instructions in paragraph 6.8 "USER INTERFACE AND NAVIGATION IN MENUS.
	Very low external temperature.	The device may be in anti-freeze mode. Wait until the external temperature rises.

PROBLEM	POSSIBLE CAUSE	SOLUTION
The symbol appears on the main screen of the display: 🔔	The device detects an alarm on the affected component.	See the instructions in paragraph 6.8 "USER INTERFACE AND NAVIGATION IN MENUS.
High noise.	The noise comes from the device.	Check the integrity of the device panels.
		Check the siphon connection.
		Contact a maintenance technician authorised by the manufacturer.
	The noise comes from the ducts.	Check that the ducts are correctly connected to the device.
		Check the integrity of the ducts.
High vibrations.	The panels of the device vibrate.	Check the integrity of the device panels.
		Check that the inspection panels are tightly closed.
		Check that the connection to the wall or ceiling is correct.
	Damaged fans.	Contact a maintenance technician authorised by the manufacturer.
Condensate loss.	The air ducts are not properly insulated.	Insulate the air ducts.
	Condensate drain clogged.	Clean the condensate drain.
	Condensate does not flow from the exhaust duct.	Check the slope of the exhaust duct.
		Check that the device is positioned level.
The incoming air is very cold.	The external temperature conditions are unfavourable for heat exchange.	Wait for better weather conditions.
	The electrical heating element (optional on request) does not work.	Check the status of the device on the display and contact a maintenance technician authorised by the manufacturer.
Pulsations in the air flow.	The air flow of the fans is almost nil.	Check the voltage of the electrical power supply.
		Increase the air flow of the fans.
	Instability of the air flow due to obstructions or to overly high pressure drop.	Replace the filters.
		Check and/or modify the intake and exhaust ducts.

8.2 GENERAL DIAGNOSTIC PROVISIONS

If a malfunction other than that described above occurs, contact the Manufacturer or a Distributor and always quote the part number and serial number on the plate of the device.

Disconnect the device from the electrical power supply and contact the Manufacturer or a dealer for assistance even in the event of a malfunction even though all the procedures in this use and maintenance manual have been carried out correctly.

9 - DISPOSAL

When the JONIX devices are no longer used they must be disposed of in compliance with the regulations in force in the country of installation. The devices consists of the following materials:

- Stainless steel.
- Galvanised sheet.
- Painted sheet.
- Aluminium.
- Glass.
- Nylon.
- Plastic.
- Paper and Cardboard.
- Wood.
- Sintered expanded polystyrene.
- Copper.

MANAGEMENT OF WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT

This product falls within the scope of Directive 2012/19/EU on the management of waste electrical and electronic equipment (WEEE). The appliance must not be disposed of with household waste as it consists of various materials that can be recycled at appropriate facilities. Inform yourself through your local authority as to the location of the ecological platforms for receiving the product for disposal and its subsequent proper recycling. The product is not potentially dangerous for human health and the environment, as it does not contain harmful substances as per Directive 2011/65/EU (RoHS), but if left in the environment it has a negative impact on the ecosystem. Read the instructions carefully before using the unit for the first time.

It is recommended that the product should not be used for any other purpose than that for which it was intended, as there is a risk of electric shock if used improperly.

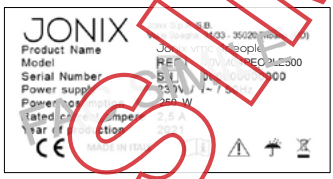
DISPOSAL OF FILTERS

The filters are not washable and are not recyclable. For the replacement procedure, refer to paragraph 7.2.1 "REPLACING THE FILTERS". The filters must be disposed of in unsorted municipal waste or according to the requirements of the regulations of the country of installation.

EC DECLARATION OF CONFORMITY

JONIX pure living	DICHIARAZIONE CE DI CONFORMITÀ EC DECLARATION OF CONFORMITY EG-KONFORMITÄTSERKLÄRUNG DÉCLARATION CE DE CONFORMITÉ DECLARACIÓN CE DE CONFORMIDAD	2006/42/CE - II A

Il Fabbricante The Manufacturer Der Hersteller Le Fabricant El Fabricante	**JONIX SPA S.B.** **Viale Spagna, 31/33** **35020 Tribano (PD)** **ITALY**
Dichiara che il prodotto Declares that the product Erklärt daß das Produkt Déclare que le produit Declara que el producto	**VMC con dispositivo di purificazione dell'aria** **VMC with air purification device** **VMC mit Luftreinigungs Gerät** **VMC avec dispositif de purification d'air** **VMC con dispositivo de desinfección de aire** **VMC 4people basic**



E' conforme alle disposizioni pertinenti delle direttive comunitarie Is in conformity with the relevant provisions of the community directives Erfüllt die einschlägigen Harmonisierungsrechtsvorschriften der Union Est conforme à la législation d'harmonisation de l'Union applicable Es conforme con las pertinentes disposiciones de las directivas comunitarias	**2006/42/CE** **2014/30/UE** **2011/65/UE** **2012/19/UE**
Riferimento alle norme armonizzate che sono state applicate References to the used relevant harmonised standards Fundstellen der angewandten harmonisierten Normen Référence aux normes harmonisées qui ont été utilisées Referencia a las normas armonizadas que se hayan utilizado	**UNI EN ISO 12100:2010** **EN 60335-1:2012** **EN 61000-6-3:2007** **EN 55014-1:2017** **EN 55014-2:2015**
Nome e indirizzo della persona autorizzata a costituire il fascicolo tecnico Name and address of the person authorised to compile the technical file Name und Anschrift der Person, die bevollmächtigt ist, die technischen Unterlagen zusammenzustellen Nom et adresse de la personne autorisée à constituer le dossier technique Nombre y dirección de la persona facultada para elaborar el expediente técnico	**Mauro Mantovan** **viale Spagna, 31/33** **35020 Tribano (PD)** **ITALY**

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