

# Airwell

CLIMATISATION ET CHAUFFAGE

Installation manual EN



## XDO

Direct expansion console water source

DC Inverter technology

Silent heat pump

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We would first of all like to thank you for having chosen one of our products.

We are sure you will be happy with it because it represents the state of the art in the technology of home air conditioning.

By following the suggestions contained in this manual, the product you have purchased will operate without problems, giving you optimum room temperatures with minimum energy costs.

Airwell.

## Compliance

This unit complies with the following European Directives:




- Low voltage 2014/35/EU
- Electro-magnetic compatibility 2014/30/EU
- Use restrictions of hazardous substances in electrical and electronic equipment 2011/65/EC (RoHS2)
- Waste electrical and electronic equipment 2012/19/EC (WEEE).
- Energy consumption indication on the labels of energy-related products 2010/30/EU.
- ErP Directive 2009/125/EC and regulation 2012/20EC

## Symbols



The pictograms in the next chapter provide the necessary information for correct, safe use of the appliance in a

rapid, unmistakable way.

### Editorial pictograms

- |   |   |
|---|---|
|  <b>User</b><br>- Refers to pages containing instructions or information for the user.           |  <b>Service</b><br>- Refers to pages containing instructions or information for the CUSTOMER TECHNICAL ASSISTANCE SERVICE. |
|  <b>Installer</b><br>- Refers to pages containing instructions or information for the installer. |   |









### Safety pictograms

- |   |   |
|---|---|
|  <b>Warning</b><br>- It indicates actions that require caution and a suitable preparation. |  <b>Prohibition</b><br>- Refers to prohibited actions. |
|---|---|









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## GENERAL

### 1.1 General warnings

-  After unpacking, check that the contents are intact and that all parts are included. If not, contact the agent who sold the appliance to you.
-  The appliance must be installed by an authorised company. Once the work is done, it must issue a declaration of conformity to the client in compliance with current regulations and with the indications in the instruction manual supplied by the manufacturer with the appliance
-  These appliances have been designed for conditioning and/or heating rooms and they must be destined solely for this purpose, in accordance with their performance characteristics. The manufacturer refuses any contractual or extra-contractual liability for damage caused to people, animals or property resulting from incorrect installation, adjustment, maintenance or improper use.
-  In the event of water leaks, turn off the main switch and close the water taps.  
Immediately call the Technical Assistance Service or other qualified personnel and do not intervene personally on the appliance.
-  A temperature that is too high or too low is harmful to health and is an unnecessary waste of energy.  
Avoid prolonged direct contact with the air flow.
-  Do not leave the room closed for long. Periodically open the windows to ensure proper ventilation.
-  This instruction booklet is an integral part of the appliance and, therefore, it must be kept with care and must ALWAYS accompany the appliance, even when the latter is transferred to another owner or user or transferred to another system.  
If it gets damaged or lost, please request another copy from the local Technical Assistance Service.
-  Repairs or maintenance must be performed by the Technical Assistance Service or by qualified personnel in accordance with this manual.  
Do not modify or tamper with the appliance as this could create dangerous situations and the manufacturer will not be liable for any damage caused.  
The appliance is declared to have an IPX0 protection rating, therefore, it cannot be installed outdoors or in laundry rooms.

### 1.2 Fundamental safety rules

-  The use of products that use electricity and water requires the observation of some fundamental safety rules such as:
-  The unit can be used by children over the age of 8, and by people with reduced physical, sensory or mental capabilities, or with no experience or necessary knowledge, as long as they are monitored or after they have received instructions on the safe use of the unit and have understood the dangers involved.  
Children must not play with the appliance.  
The cleaning and maintenance that must be performed by the user should not be carried out by children without supervision.
-  It is forbidden to modify the safety or adjustment devices without authorisation from and indications of the manufacturer.
-  It is forbidden to pull, remove or twist the electric cables coming out of the unit, even when disconnected from the mains power supply.
-  It is forbidden to introduce objects or substances through the aspiration grills and the air outflow.
-  It is forbidden to open the access doors to the internal parts of the appliance without having turned off the main switch first or disconnecting the appliance from the electrical power supply.
-  It is forbidden to dispose of, or leave in the reach of children, the packaging materials which could become a source of danger.
-  It is forbidden to climb onto the appliance and/or to place any type of object on top of it.

### 1.3 Description

The air conditioning unit XDO is the new solution that represents a significant step towards reducing the aesthetic impact of air conditioners. With a depth of just 16 centimetres, XDO is the most compact and least bulky of the category. The aesthetic impact is therefore minimal.

#### Optimised Capacities

The conditioning capacities of XDO have been optimised so as to obtain the right temperature for the best level of comfort and, therefore, less consumption and less noise.

Thanks to the careful choice of sound insulation materials, the noise is similar to that of a standard wall split unit and consumption is drastically contained thanks to the new direct current fan.

#### BLDC inverter technology

We have perfected the inverter technology to offer the best in terms of acoustic comfort (noise) and performance: reduction of consumptions, maintenance of the best temperature level and humidity level in the room.

Thanks to the use of the cutting edge BLDC (brushless direct current) inverter regulation, vibrations have been completely eliminated and acoustic emissions have been lowered to exceptional levels.

The fan motor is of the BLDC direct current type to further reduce energy consumption and to make flow regulation more accurate.

The energy consumption is extremely reduced thanks to absorption values falling down under 300 W in the case of partial load. At the nominal cooling power XDO, in the DC Inverter versions, has an

EER more off 4.5, this is the cutting edge in the sector of monobloc climate control systems with fixed installation.

#### Easy to install

XDO can be installed on any wall, in a high or low position.

Everything that is required for installation (assembly template, support brackets), except for the drill of course, is contained in the packaging.

#### Remote control and on-board touch-screen display

In addition to the remote control, the touch-screen display on the unit enables the setting of any function. There's even a "lock" mode to avoid any improper use.

With a simple action on the touch screen display, the "heating" function can be deactivated: the appliance will then operate in "cooling" only.

The orientation of the air flaps, upwards or downwards, can also be set by simply pressing a key.


### 1.4 Storage

The packing is made of suitable material and carried out by expert personnel.

All units are checked and tested and are delivered complete and in perfect conditions, however please perform the following instructions to check the quality of shipping services:

- upon receipt, check if the box is damaged. If that is the case, accept the goods with reservations and keep photographic evidence of any damage found
- unpack and check the contents against the packing list.
- check that none of the parts have been damaged during shipment. In case of damage, report it to the shipping company within 3 days of receipt by registered letter with return receipt and attaching photographic documentation. A copy should also be sent by fax to

the MANUFACTURER.No notice of damage incurred will be accepted after 3 days from delivery.

 Keep the packing at least for the duration of the warranty period, in case you need to ship the air-conditioner to the service centre for repair. Dispose of the packing materials in compliance with current regulations on waste disposal.

Store the box in a closed environment protected from atmospheric agents and isolate it from the floor using planks or pallets.

 Do not turn the carton upside down

### 1.5 Handling

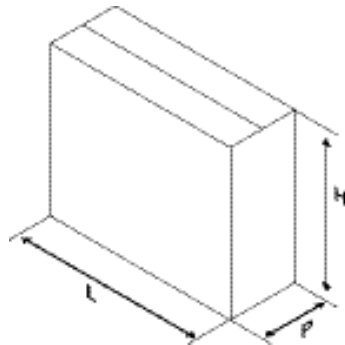
The unit is packed singularly in a cardboard box. Boxes can either be carried singularly by hand by two operators or loaded on a forklift truck, for a maximum of three units.

Handling must be performed by qualified personnel, with specific tools and with equipment suitable for the weight of the appliance.

The appliance is unbalanced on the right (compressor side).

During transportation, the appliance must be kept in vertical position.

### 1.6 Shipping dimensions and weight



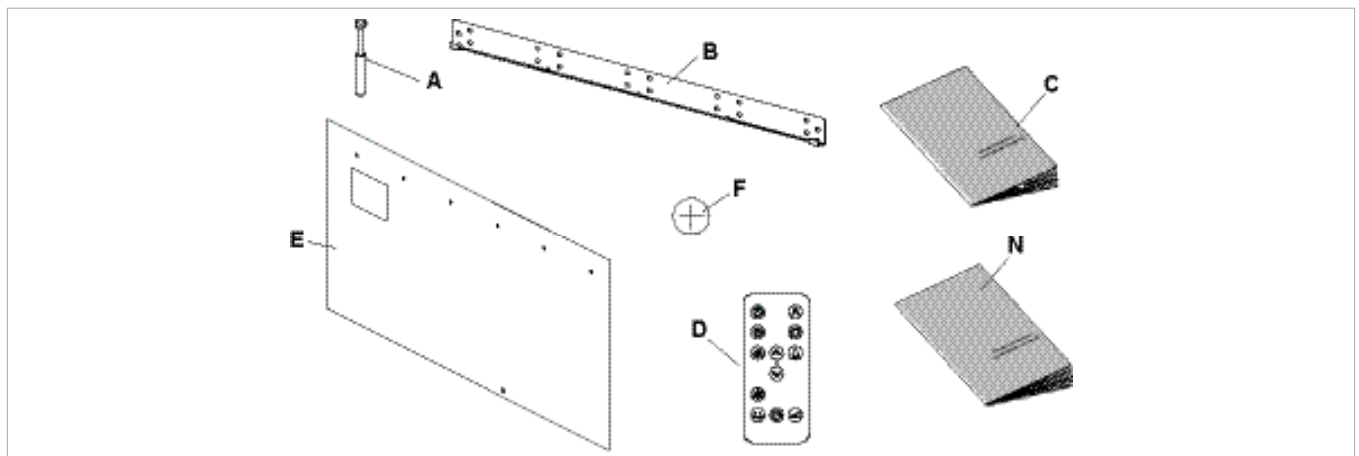
Packaging	M.E.	2.0 12 HP H <sub>2</sub> O
Dimensions		
Weight	kg	47,6
L	mm	1.100
H	mm	660
P	mm	260

### 1.7 Supplied components

The supply consists of the parts listed in the following table. Before assembly, please check that they are all at hand.

A	Screws and plugs kit (6 pcs)
B	Bracket for wall mounting
C	User manual
D	Remote control
E	Paper template for holes.
F	CR2025 3V remote control battery.

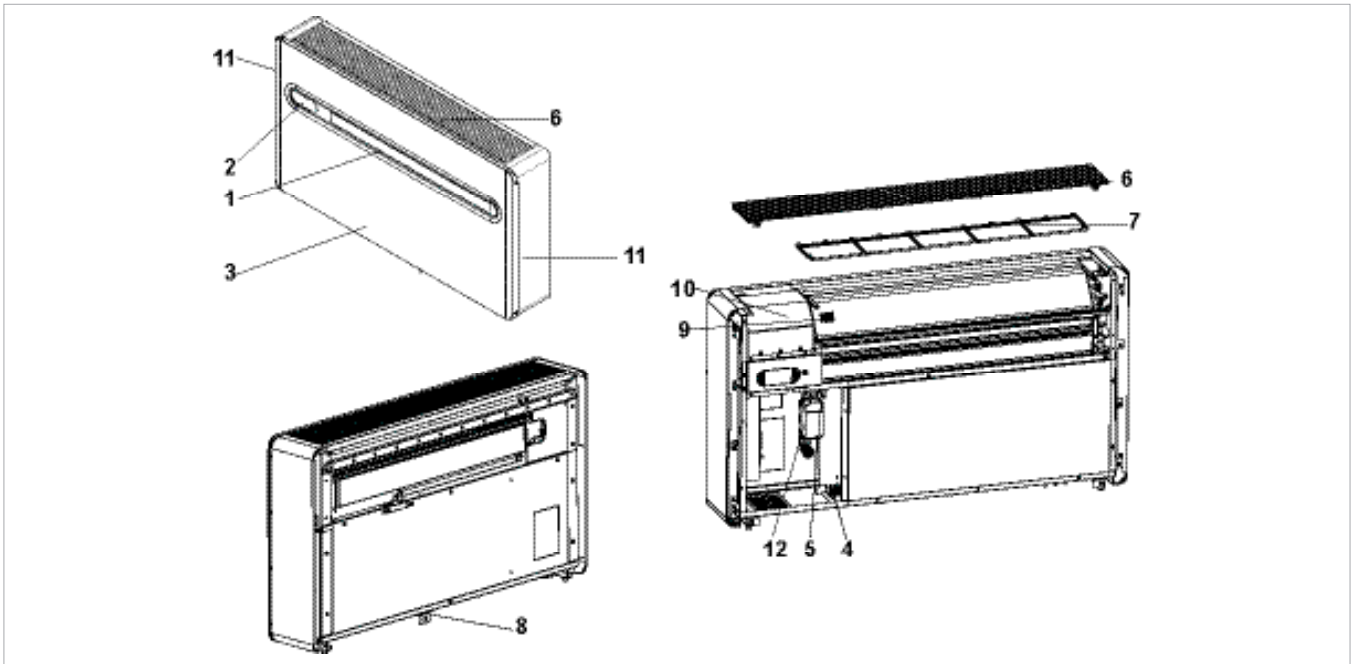
G	
H	
I	
L	
M	
N	Installation manual
O	



**1.8 Unit parts**

1	Air outlet flaps
2	Touch screen display
3	Front panel
4	Water input (Eurokonus M 3/4")
5	Water output (Eurokonus M 3/4")
6	Internal air intake grille

7	Air Filter
8	Anti-lifting bracket
9	Room air probe
10	Power supply terminal block
11	Decorative side panel
12	Modulating Valve Kit



## INSTALLATION

### 1.9 Installation method

Before installing the conditioner, it is essential to calculate the summer thermal loads (and winter ones for the models with a heat pump) of the room. The more exact the calculation, the better the product will work. Please refer to current regulations to carry out calculations. For large-scale installations, please call a specialised heat engineer firm.

Therefore, try to reduce higher heat loads by following instructions below:

- Cover large windows exposed to sunlight with curtains or with external maskings (blinds, porches, reflecting films, etc.).
- The room must remain closed for as long as possible.
- Avoid turning on halogen lamps or other high energy consumption appliances such as small ovens, steam irons, hot plates etc.).

### 1.10 Choosing the position of the unit

For the best performance of the appliance and to avoid malfunctions or dangerous situations, the location of the unit must meet the following requisites:

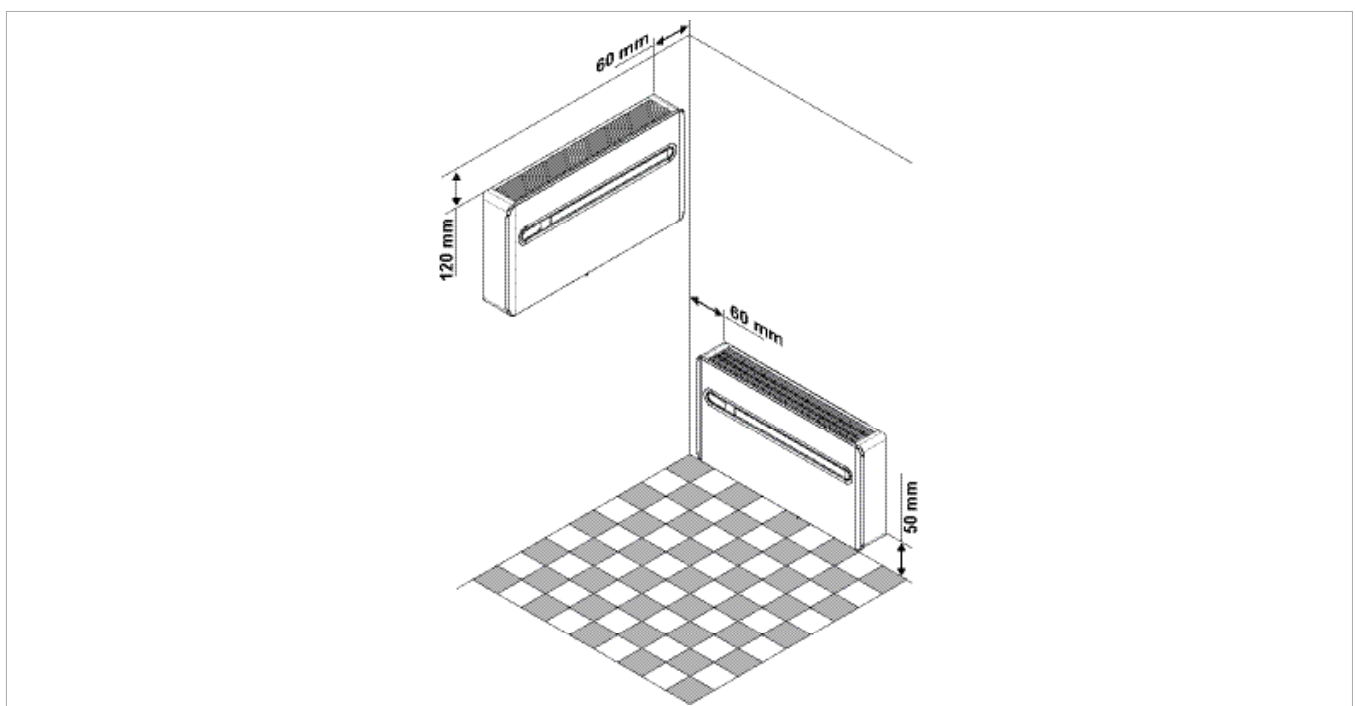
- Respect the minimum distances indicated in the diagram.
- The wall on which you intend to anchor the unit must be robust and able to support its weight.
- Leave enough space around the unit to perform maintenance operations.
- Nothing must obstruct the air flow both in the top suction part (curtains, plants, furniture) and in the lower outlet part, as it could cause vibrations which might prevent the appliance from working correctly.

The appliance is stated as having an IPX0 protection rating, therefore it is not suitable for outdoor installation.

Check that there are no structures or systems (beams, pillars, hydraulic pipes, electrical cables etc.) in the part that must be drilled.

Never force the air flap open;

The appliance must not be installed directly above another electrical appliance (TV, radio, fridge, etc.) or above a source of heat.








1.11 Assembling the unit

To install the unit on a wall, drill 6 holes to attach the fixing plate to the wall as indicated on the drilling template. The appliance weighs more on the right, so make sure to secure it properly on this side. The holes must have an 8 mm diameter to accommodate the 6 supplied plugs.

A thorough examination of the characteristics and consistency of the wall must always be carried out to determine the number of fixing points to be made and to choose specific plugs in particular conditions. In the case of installation on a plasterboard or on walls with low density, place a bracket, if necessary on the outside, that can support the appliance safely.

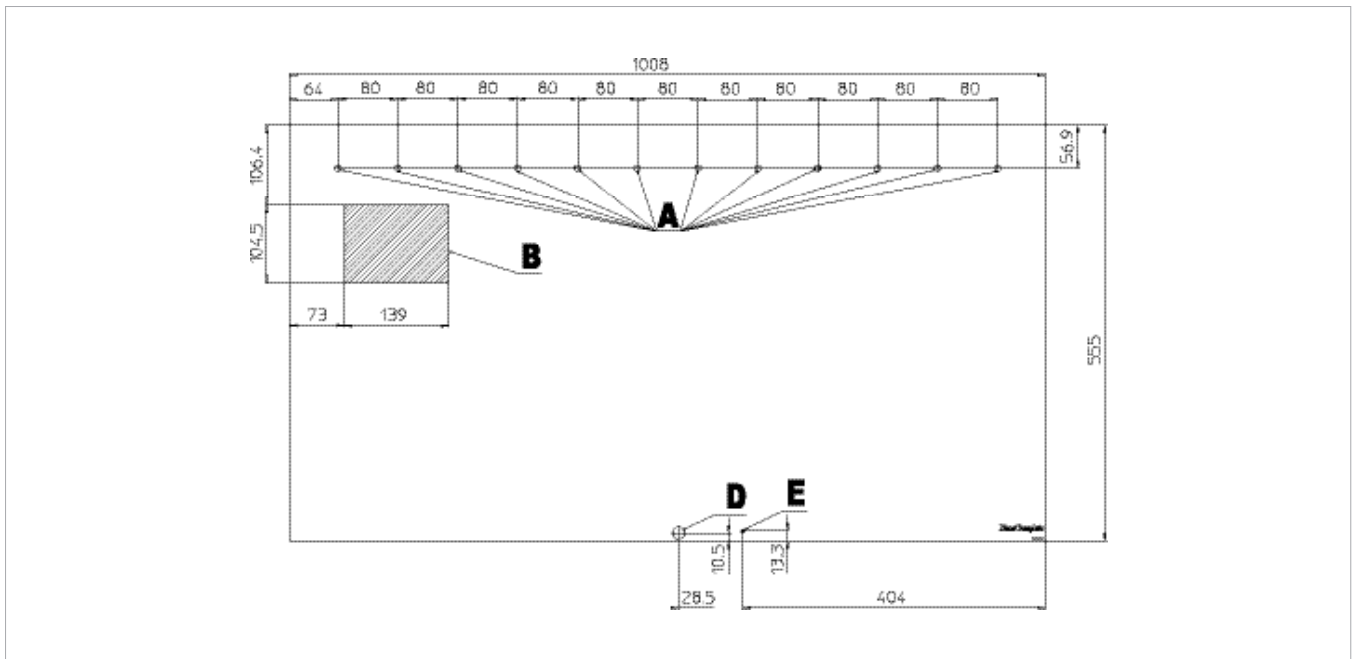
 The manufacturer cannot be held responsible for any underestimation of the structural consistency of the anchoring carried out by the installer. We, therefore, encourage you to pay the utmost attention to this operation as, if performed badly, it could cause serious damage to people and objects.

 To allow condensate drainage, drill a through hole in the position indicated on the drilling template.

 A hole is also indicated on the template to secure the appliance on the wall with an anti-lifting bracket, which is already on the appliance.

A	Holes for M8 plugs
B	Electrical connection area
C	

D	
E	Anti-lifting bracket hole



The console must be fixed in a horizontal position, use a spirit level

1.12 Condensation drain preparation

For machines that also operating in cooling mode, the condensate drain pipe (16mm internal diameter, not supplied) must be connected to the unit to the pipe in the hydraulic connection compartment.

Drainage occurs by gravity. For this reason, it is essential for the discharge pipe to have at least a 3% minimum slope in every point. The pipe to be used can be rigid or flexible with a minimum inner diameter of 16 mm. If the line flows into a sewer system, it is necessary to add a siphon before placing the pipe into the main drain. This siphon must be placed at least 300 mm under the mouth of the appliance.

If the line flows into a container (e.g. a tank), do not

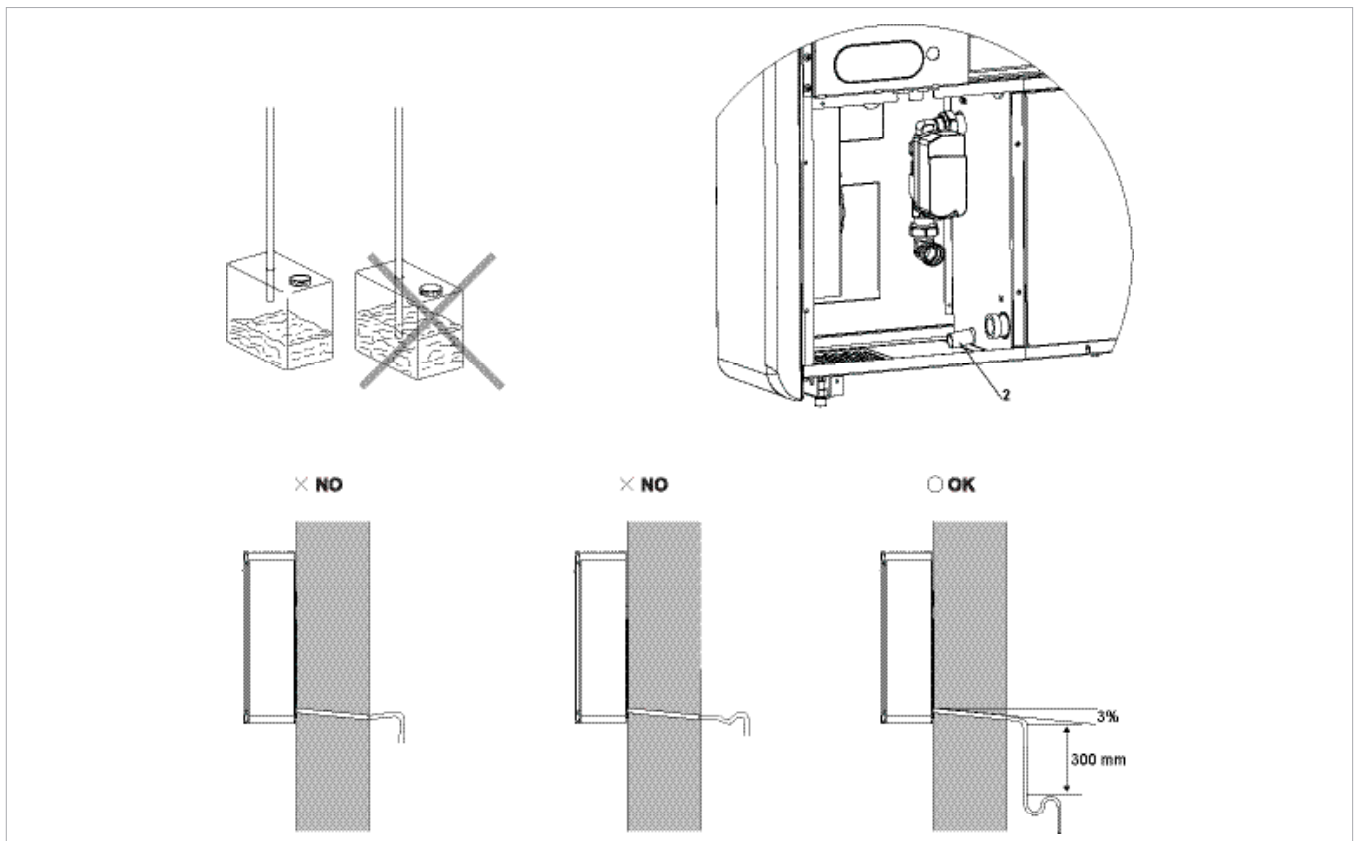
close the container hermetically and avoid immersing the draining pipe into the water.

The hole for the condensation pipe must always slope towards the outside.

Check that the expelled water does not cause any damage or problems to people or objects. During winter, this water may create sheets of ice outside.

When connecting the condensation drain, be careful not to squeeze the rubber duct.

1	Safety drain to empty tray
2	Condensation drain duct



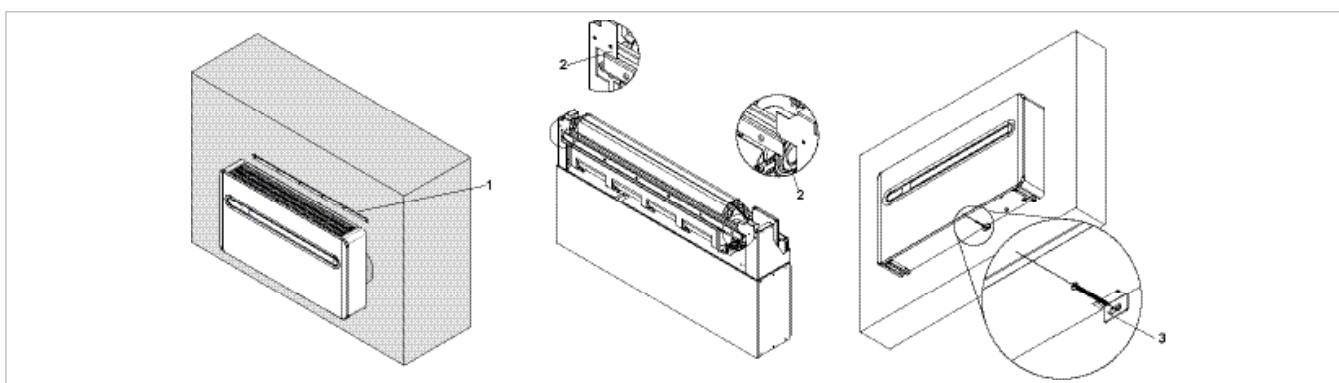
### 1.13 Mounting the appliance on the bracket

After checking that the bracket is anchored to the wall and that all necessary electrical connections and condensation drain preparations have been made, you can mount the conditioner. Lift it by the sides of the bottom base until the bracket fits on all of the right spots on the appliance. In order to ease the operation, slightly tilt the appliance towards you. Direct electrical connections (disconnecting the power supply cable) and the anchoring of the condensation drain must be carried out after having spaced the appliance from the wall using a wooden wedge or any other similar object.

After performing the operations, make sure that there are no gaps behind the appliance. To improve installation safety, the machine can be secured to the wall with a dedicated anti-lifting bracket which is located on the rear part of the machine. The drilling position is indicated on the installation template.

1	Bracket
2	Bracket anchoring points

3	Anti-lifting bracket
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### 1.14 Hydraulic connection

To work, the unit needs to be connected to an open or closed water circuit.

Components must be selected and installed by the installer, who must operate according to best practices and in line with current legislation. Prior to connecting pipes, check that these do not contain pebbles, sand, rust, slag or any foreign bodies that may damage the system.

It is advisable to provide a by-pass in the system in order to be able to wash the exchanger without having to disconnect the appliance. Connection pipes must be supported in such a way that their weight is not borne by the unit.

The hydraulic connections must be completed by installing:

- air relief valves in the highest points of the piping;
- flexible joints;
- shut-off valves.

The hydraulic connections are located in the lower part on the left and they must be arranged in such a way that they are hidden by the air conditioner casing.

 The minimum nominal diameter of the connecting pipes must be 1/2".


To allow maintenance or repair operations, all piping connections must be equipped with suitable manual stop valves.

The water connection pipes must be suitably insulated by virtue of the supply temperature.

To prevent air pockets inside the circuit, we strongly recommend placing automatic or manual relief valves in all the points (high pipes, siphons, etc.) where air may accumulate.

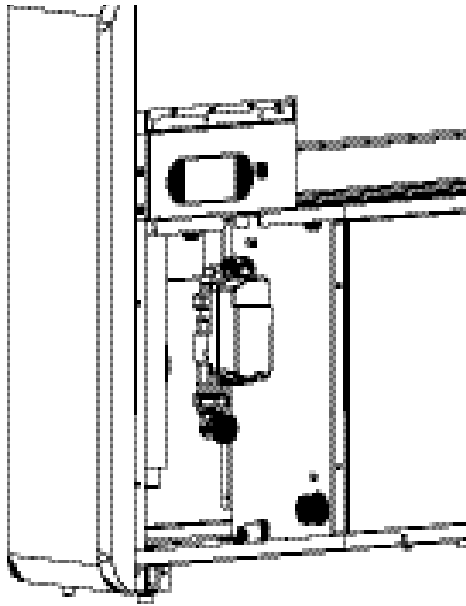
If the mains pressure is above 3 bar, install a pressure reducer on the load.

Install appropriate filters on the water inlet pipes of the appliance according to the quality of the water supplied.

 After installing, it is necessary for the installer to check the proper thermal insulation of each pipe and fitting in the hydraulic compartment.

In critical cases (hot and humid indoor air and low water temperature) water may leak from the base due to the formation of condensate on the connecting pipes used by the installer.

Hydraulic connections



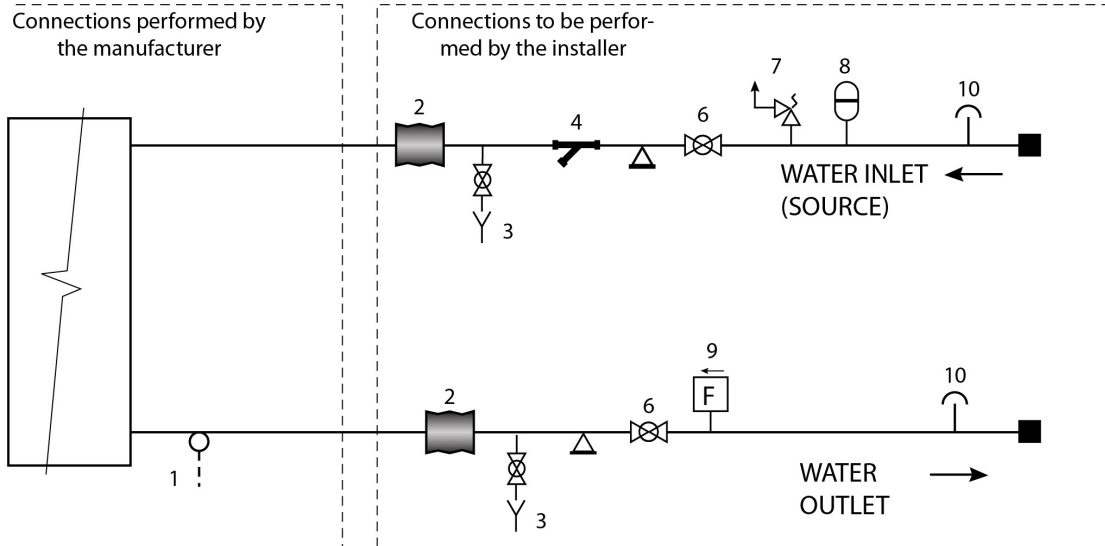
IMPORTANT

The inversion of the inlet/outlet connections can cause malfunctions and may damage the appliance

Hydraulic devices to be integrated for safety

As mentioned previously, the installer must provide some devices for the safety and proper maintenance of the appliance.

In particular, the devices indicated in the figure below must be installed.



KEY TO SYMBOLS

- 1 Temperature probe
- 2 Anti-vibration joint
- 3 Exhaust valve
- 4 Mesh filter
- 5 /
- 6 Shut-off valve
- 7 Safety valve
- 8 Expansion tank (for pressure surges)

- 9 Flow switch (only for application with waste water)
- 10 Relief valve



IMPORTANT

The relief valve must be placed at the highest point of the circuit

## 1.15 Hydraulic and chemical characteristics of water

The internal water supply circuit has a two-way modulating valve, driven directly from the interface by the machine controller, which monitors the temperature of the water leaving the exchanger adjusting the flow to the exchanger to maintain the 10°C target in heating and 35°C target in cooling, so as to minimise consumption and maximise performance.

During the initial start-up, the specialised technician must measure the system water reference values using the special

The KVS of the valve used is:  
Kv (m<sup>3</sup>/h with Δp = 100kPa = 1bar) = 1.2

The general expression (valid for water or technically similar fluids) for the calculation of load losses, knowing the flow rate value, is the following:

$$\Delta P [\text{bar}] = \left[ \frac{Q[\text{m}^3/\text{h}]}{k_v} \right]^2$$

test kits.

System water reference values		
pH		6,5 ÷ 7,8
Electrical conductivity	μS/cm	250 ÷ 800
Total hardness	°F	5 ÷ 20
Total iron	ppm	0,2
Manganese	ppm	< 0,05
Chlorides	ppm	< 250
Sulphur ions		absent
Ammonia ions		absent

If the total hardness is above 20°F, or some make-up water reference values do not fall within the indicated limits, contact our pre-sales service to determine the treatments to be implemented.

Well or non-aqueduct water must always be analysed carefully and, if necessary, conditioned by means of suitable treatments. If a water softener is installed, in addition to following the

manufacturer's instructions, adjust the hardness of the outlet water above 5°F (also performing pH and salinity tests) and check the outlet chloride concentration after resin regeneration.

**1.16 Electrical connection**

The appliance comes with a power cable with a F+E type plug (CEE 7/7 schuko plug). The cable can only be replaced by the manufacturer, by the service centre or by a qualified installer. If using a socket near the appliance, simply insert the plug.

- Before connecting the conditioner check that:
  - The power supply voltage and frequency values comply with the data plate of the appliance.
  - The power supply line has a suitable earth connection and that it is sized for the maximum absorption of the conditioner (minimum cable section equal to 1.5 mm<sup>2</sup>).
  - Power is only supplied using a suitable socket through the supplied plug.

If the supply cable is replaced, this must be done exclusively by the technical assistance service or by authorised personnel and in compliance with current national regulations.

The appliance must be connected to 230V/50 Hz mains via an omnipolar switch with a contact opening distance of minimum 3 mm, or using a device enabling the complete disconnection of the appliance in overvoltage III category conditions.

It is possible to carry out the electrical connection using a cable inside of the wall as indicated in the installation template (recommended for installations in the upper part of the wall). Please check that the power supply is provided with suitable protections against overloads and/or short-circuits (using a 10 Amp Time delay fuse or other equivalent devices is recommended).

To prevent any risk of electrocution, always disconnect the main circuit breaker before making electric connections or performing any maintenance on the units.

To carry out direct connections and substitute the power cord using the cable in the wall, proceed as follows:

- Remove the upper grill.
- Remove the two plastic side panels, by lifting them upwards.
- Undo the front panel fixing screws.
- Remove the front panel.
- Disconnect the power cord by unscrewing the 3 screws from the terminal block.
- Connect the wall cable, checking that the power supply line has a suitable earth connection and that it is sized for the maximum absorption of the conditioner (minimum cable section equal to 1.5 mm<sup>2</sup>).

**Auxiliary Load Power Supply (for external 2-way valves or pumps)**

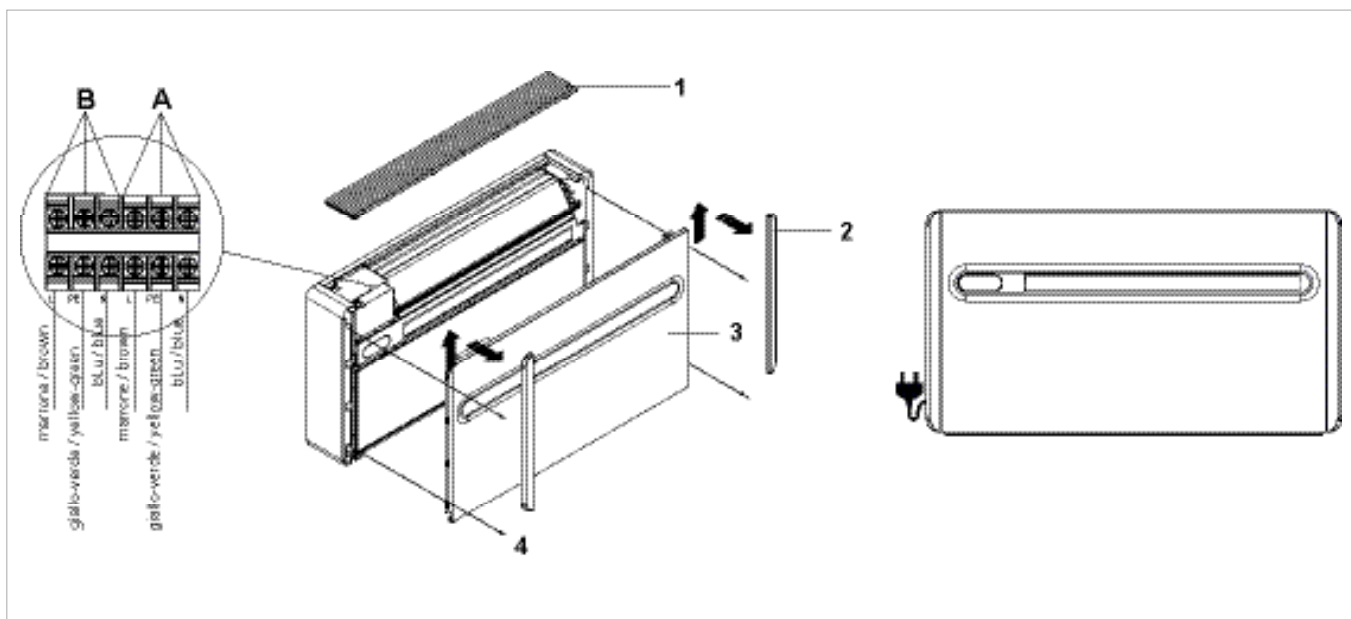
The electrical terminal board, in addition to the connections required for the power supply, is set up for the connection of an auxiliary load.

The auxiliary load is activated 75 seconds before the compressor starts and it is deactivated when the compressor

stops. The maximum load that can be connected is 1A. The output is not compatible with motors using starting capacitors; the installer must check whether the pump installed is of the electronic type.

A	230V/50 Hz Electrical power supply terminal block
B	Auxiliary load connection
1	Upper grill

2	Plastic side panels
3	Front panel
4	Fixing screws





### CP occupancy contact input connection

Near the main terminal board there is another terminal board with 2 terminals featuring the CP label.

When the CP contact opens (very low voltage, connected to a free non-live contact) the appliance is put in stand-by and CP appears on the display.

Using this contact, it is possible to connect an external

device that inhibits the functioning of the appliance such as: open window contact, on/off remote, infrared presence sensors, enabling badge, etc.

We recommend using a double insulation cable.

### 1.17 High/low installation configuration

The unit can be installed either in the lower part (near the floor) or in the upper part (near the ceiling) of the wall. In order to optimise air distribution and comfort, the direction of the air flow can be modified by adjusting the position of the air flap. The appliance is supplied ready to be installed in the lower part of the wall, so the air flow is directed upwards. The same configuration can also be used in the upper part of the wall in cooling mode, which increases the air flow in the room

(coanda effect).

In this case, purchase the lower cover decorative kit code GB0737.

This operation must be performed while the appliance is switched off and disconnected.

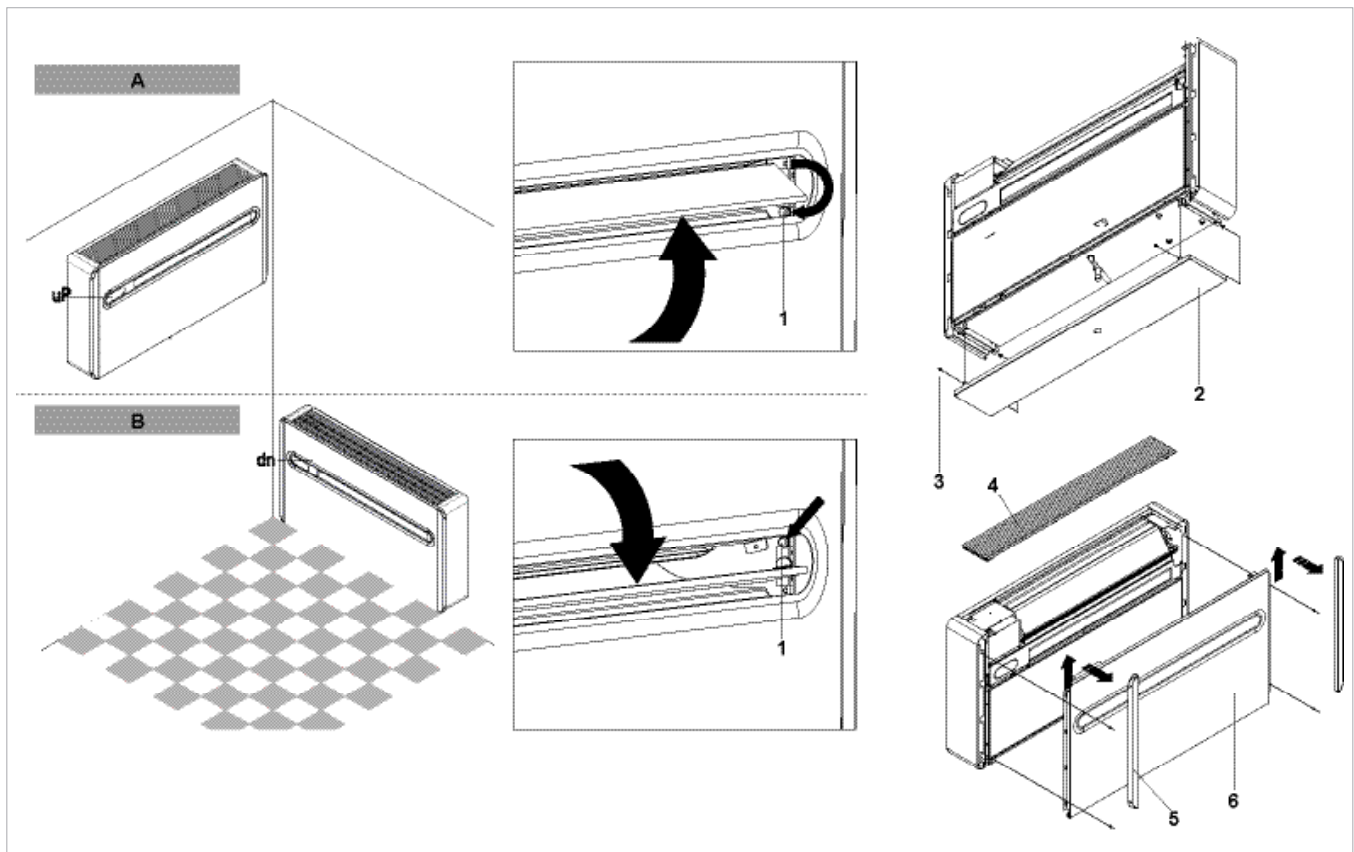
#### Modification from lower wall to the upper wall installation

- Open the air outlet flap gently
- Remove the flap opening block insert located internally on the right of the air outlet mouth and place it in the lower hole.
- Remove the upper grill
- Remove the two plastic side panels by moving them up
- Unscrew the fixing screws

- Remove the front panel
- Place the bottom cover and fix it with the supplied screws (optional kit GB0737)
- Refit in the reverse order.

A	High installation
B	Low installation (factory settings)
1	Block insert
2	Lower cover (kit code GB0737)

3	Fixing screws (supplied with the optional kit GB0737)
4	Upper grill
5	Plastic side panels
6	Front panel



After adjusting the air outlet flap position, it is necessary to set up the electronic control of the appliance:

- Keep pressed the button on the display for 5 seconds;
- The dn (lower wall) symbol flashes on the display;
- Press the key again;
- The uP (upper wall) symbol lights up on the display.
- If no other operations are performed in the following 2 seconds, the new setting is memorised.

For the appliance to work properly, each time the configuration of the air outlet flap is modified, the electronic control must be set.



### 1.18 Setting cool only or heat only modes

It is possible to deactivate the heating or the cooling modes following a simple procedure.  
 Keep the A key on the touch-screen display pressed for 5 seconds until HC (heating and cooling) appears on the display.  
 Press the A key for 1 second to switch to the CO (cooling

only) mode.  
 Press the A key again to switch back to HO (heating only) mode.  
 Wait for 3 seconds without touching anything to memorise the setting and return to normal operations.

### 1.19 Brightness regulation

The display brightness sensor can be disabled (leaving the maximum brightness at all times) by pressing and holding

the night button (☾) for 10 seconds.  
 "ds" (disabled) or "En" (enabled) will appear on the display.

### 1.20 Touch-screen display key lock

The key lock is activated by keeping the Timer symbol (🕒) on the touch-screen display pressed for three seconds.  
 The user cannot perform any actions.  
 The stand-by symbol flashes every second.  
 To deactivate the lock, keep the Timer symbol pressed for

three seconds once again.  
 The lock remains active also for the next operations performed via remote control and in the event of a power failure.

### 1.21 Hotel function

Press and hold the air exchange key (🔄) for 10 seconds to enable the function ("En" displayed); the dehumidification and Auto functions are disabled (leaving active only

ventilation, heating and cooling) and the settable set range is reduced from 22 to 28 in cooling mode and from 16 to 24 in heating mode).

### 1.22 Detecting possible faults

If the conditioner blocks because of an alarm (see following table), please communicate to the assistance centre the







code on the display to facilitate interventions.

Display indications	Cause
E1	Faulty room temperature RT probe
E2	Faulty evaporative battery IPT probe
E3	
E4	Faulty conditioner battery OPT probe
E5	Faulty indoor air fan motor
E6	Antifreeze alarm (in heating)/High condensation (in cooling)
E7	Lack of communication with the display
E8	Compressor discharge probe failure

#### Open CP contact

If the presence contact is not closed, the appliance will not start and the CP alarm appears on the display.

### Use of the appliance

-  Objects or structural obstacles (furniture, curtains, plants, leaves, blinds, etc.) must not obstruct the normal air flow both from the internal and from the external grids.
-  Do not lean against, or worse sit on, the body of the conditioner, this would damage the appliance.
-  Do not move the horizontal air outlet flap manually. Always use the remote control to perform such operation.
-  In the event of water leaks, turn off the appliance and disconnect the electric power supply. Call the nearest service centre.
-  The appliance must not be installed in rooms where explosive gases develop or where there are humidity and temperature conditions that exceed the maximum levels reported on the installation manual.
-  Clean the air filter regularly as described in the specific paragraph.

### Operations after installation

Before leaving the site, the packaging should be gathered up and all traces of dirt that have deposited on the unit during assembly should be eliminated with a damp cloth. These operations, which are not strictly necessary, in any case allow for a more professional appearance of the installation in the eyes of the user.

To avoid unnecessary calls by the user, before leaving the site it is also a good idea to:

- outline the contents of the manual,
- show them how to clean the filter,
- explain when and how they should contact Customer Service.



## MAINTENANCE



### 1.1 Periodic Maintenance

The air conditioner you have bought has been designed to keep maintenance operations to a minimum, in fact, they

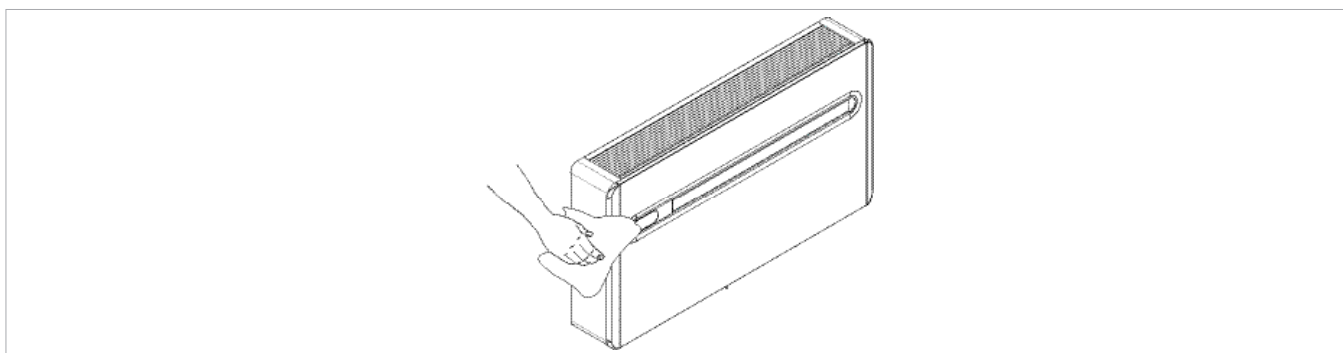
only include the following cleaning operations:

#### External cleaning

-  Disconnect the unit from the power supply before each cleaning and maintenance intervention by setting the main power supply switch to off.
-  Wait for the components to cool down in order to avoid any burns.

-  Pay attention to the sharp edges.
-  Do not use abrasive sponges or abrasive or corrosive detergents as you might damage the painted surfaces.

When necessary, clean the external surfaces with a soft damp cloth.



#### Cleaning the filters

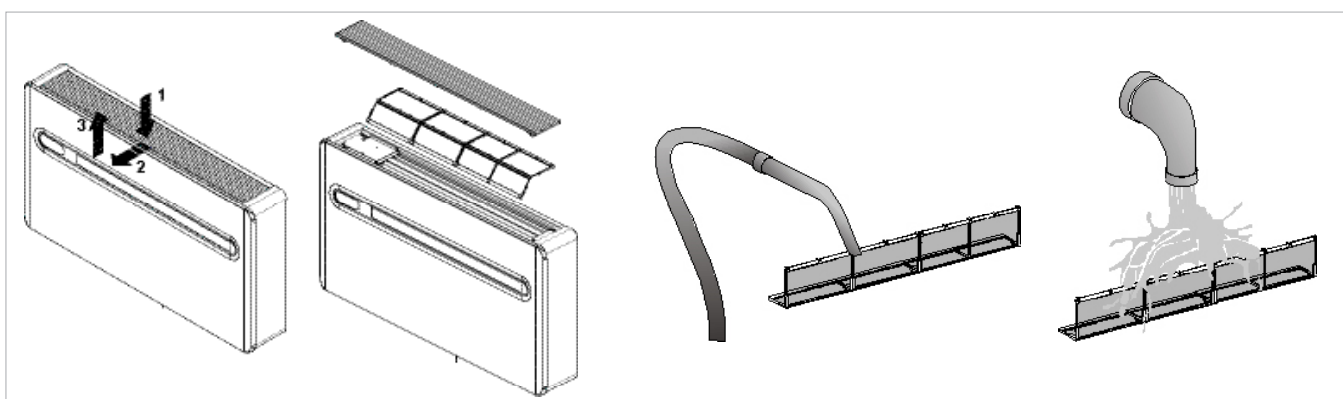
The air conditioner you have bought has been designed to keep maintenance operations to a minimum, in fact, they only include the following cleaning operations:  
Clean the air filter after a period of continuous use and according to the concentration of impurities in the air, or when you wish to start-up the appliance after a period of inactivity.

NB: before performing any operation, take care with the hot and/or sharp surfaces of the metal.  
The filter is located in the top part of the appliance.

- To extract the filter:
- open the grille and carry out operations 1, 2, 3, then remove it from its housing;
  - extract the filter by lifting it;
  - remove the dust from the filter with a vacuum cleaner or by washing it in running water without using detergents or solvents and leave to dry;
  - put the filters back on top of the coils, taking care to position them correctly;
  - put the grille back in reverse order.

-  After filter cleaning, check if the panel is properly mounted.

 It is forbidden to use the device without its mesh filter.



**1.2 Troubleshooting**

In the even of a malfunction, please refer to the following table. please contact the authorised technical assistance.  
 If, after performing the suggested checks, the problem is not solved,

Fault	Possible causes	Solution
The appliance doesn't switch on	No power supply	Check there is power supply (by turning a light on, for example). Check that the thermal-magnetic circuit breaker used exclusively to protect the appliance has not been tripped (if it has, reset it). If the problem repeats immediately, please call the Service Centre and avoid trying to make the appliance work.
	Remote control batteries have run out	Check that the appliance can be turned on using the touch-screen display and substitute the batteries.
The appliance does not cool/heat adequately.	The temperature set is too high or too low.	Check and, if necessary, adjust the temperature setting on the remote control
	The air filter is clogged	Check the air filter and clean it if necessary
	Make sure that the air flow is not obstructed.	Remove anything that might block the air flow.
	The heating and cooling load has increased (for example, a door or a window has been left open or an appliance has been installed in the room which generates a lot of heat).	Try to reduce the heating and cooling load of the room following instructions below: Cover large windows exposed to sunlight with curtains or with external maskings (blinds, porches, reflecting films, etc.); The air conditioned room must remain closed for as long as possible; Avoid turning on halogen lamps or other high energy consumption appliances such as small ovens, steam irons, hot plates etc.).

**Display alarms**

An alarm code appears on the display in the event of faults. column).  
 Some of the functions, however, remain active (see FUNCTIONING

Alarm	Cause	Operation
E1	Faulty room temperature RT sensor	It is still possible to activate Cooling, Dehumidification and Heating modes. It only monitors the antifreeze function of the internal coil.
E2	Faulty internal coil IPT sensor	None of the modes can be activated.
E3		
E4	Faulty external coil OPT sensor	None of the modes can be activated.
E5	Faulty internal fan motor	None of the modes can be activated.
E6	Antifreeze/High condensation	None of the modes can be activated.
E7	Lack of communication with the display *	None of the modes can be activated.
E8	Compressor discharge probe failure *	None of the modes can be activated.
CP	Open CP contact	The appliance only works if the contact is closed. Check that the clamps are connected.
OF	Maximum level float intervention	The condensate should flow freely through the dedicated pipe. In the event of an alarm, check that the condensation pipe is not bent or obstructed, thus preventing the water from flowing out.

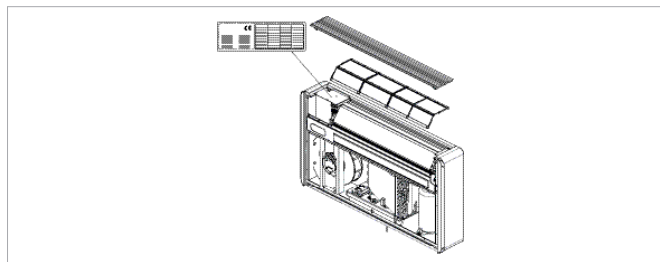
\* for DC Inverter models: lack of communication between the main, power, driver or display boards

The only way to solve the problem is to disconnect and reconnect the appliance. If the alarm still appears, please contact the authorised technical assistance.

### 1.3 Technical specifications

Please read data plate to obtain the technical data listed below.

- Power supply voltage
- Maximum absorbed power
- Maximum absorbed current
- Amount of refrigerant gas
- Casing protection rating



Technical specifications				
Size			XDO 09	XDO 012
<b>Cooling</b>				
Cooling capacity	1	kW	2.53	3.56
Total power input	1	kW	0.384	0.762
EER	1	-	6.58	4.67
<b>Heating</b>				
Heating capacity	2	kW	2.27	3,26
Total power input	2	kW	0.710	1.089
COP	2	-	3.20	3.00
<b>Compressor</b>				
Type of copressor		-	Inverter driven	Inverter driven
N° of compressor		-	1	1
Refrigerant gas			R-410A	R-410A
Refrigerant charge		kg	0.75	0.75
<b>Air handling section fan</b>				
Type of fan		-	Centrifugal	Centrifugal
Number of fan		-	1	1
Min. air flow rate		m³/h	195	220
Med. air flow rate		m³/h	250	310
Max. air flow rate		m³/h	310	410
Boost air flow rate		m³/h	385	435
<b>Water side exchanger</b>				
Type of exchanger		-	Coaxial	Coaxial
Water flow rate	3	l/s	0.139	0.206
Water fittings			Eurokonus M 3/4"	Eurokonus M 3/4"
<b>Power supply</b>				
Standard power supply		V/ph/Hz	230/1/50	230/1/50
<b>Noise Levels</b>				
Sound power level		dB(A)	52	57

**Note:**

The product is compliant with the ERP (Energy Related Products) European directive.

It includes Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot 21

Performances referred to the maximum speed fan (Max.)

1) Cooling: inlet air temperature 27°C w.b./19°C d.b.; in/out water temperature 30°C/35°C

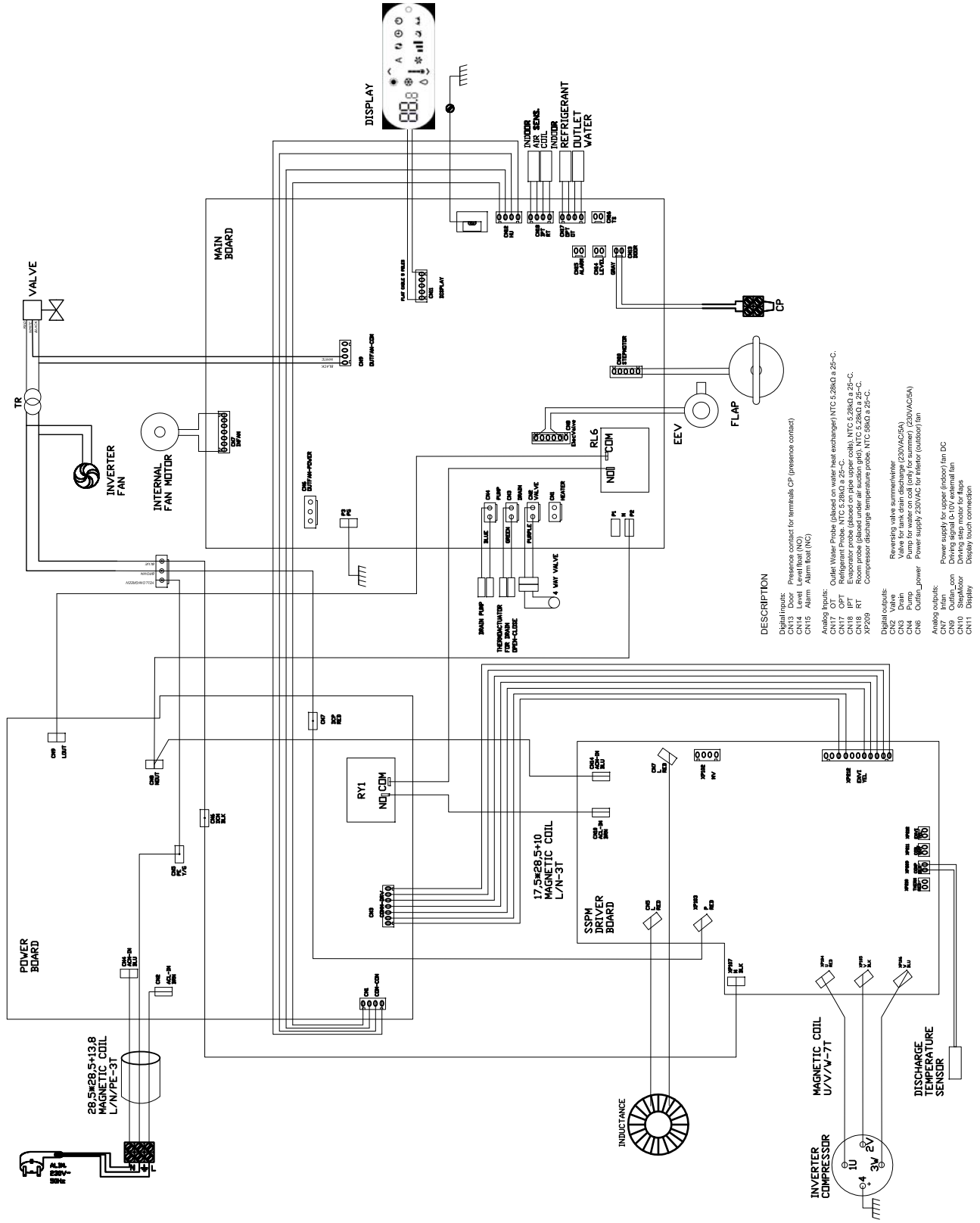
2) Heating: inlet air temperature 20°C; in/out water temperature 10°C/7°C (well source)

3) Water flow rate measured in cooling at maximum speed fan (Max.)

#### Operating limits

	Internal ambient temp.	Water inlet temp.
Maximum operating temperature in cooling mode	DB 35°C - WB 24°C	45° C
Minimum operating temperature in cooling mode	DB 18°C	7° C
Maximum operating temperatures in heating mode	DB 27°C	40° C
Minimum operating temperatures in heating mode	DB 5°C	7° C

# INVERTER WATER ELECTRICAL DRAWING



**WE DECLARE UNDER OUR SOLE RESPONSIBILITY THAT THE MACHINE**

NOUS DÉCLARONS SOUS NOTRE SEULE RESPONSABILITÉ QUE LA MACHINE  
 DICHIARIAMO SOTTO LA NOSTRA SOLA RESPONSABILITÀ CHE LA MACCHINA  
 WIR ERKLÄREN EIGENVERANTWORTLICH, DASS DIE MASCHINE  
 EL FABRICANTE DECLARA BAJO SU EXCLUSIVA RESPONSABILIDAD QUE LA MÁQUINA  
 IZJAVLJAMO S POLNO ODGOVORNOSTJO, DA NAPRAVA

CATEGORY	<b>WATER LOOP HEAT PUMP SYSTEMS - Heat pump</b>
CATEGORIE	<b>SYSTÈMES À BOUCLE D'EAU - Pompe à chaleur</b>
KATEGORIE	<b>WASSERRINGANLAGEN FÜR WÄRMEPUMPEN - Wärmepumpe</b>
CATEGORIA	<b>SISTEMI AD ANELLO D'ACQUA - Pompa di calore</b>
CATEGORIA	<b>SISTEMAS ANILLO DE AGUA - Bomba de calor</b>

**TYPE / TIPO / TYP / TYPE / TIPO / TIP**

AW-XDO009-H11

AW-XDO012-H11

- **COMPLIES WITH THE FOLLOWING EEC DIRECTIVES, INCLUDING THE MOST RECENT AMENDMENTS, AND THE RELEVANT NATIONAL HARMONISATION LEGISLATION CURRENTLY IN FORCE:**
- EST CONFORME AUX DIRECTIVES CEE SUIVANTES, Y COMPRIS LES DERNIÈRES MODIFICATIONS, ET À LA LÉGISLATION NATIONALE D'ACCUEIL CORRESPONDANTE:
- RISULTA IN CONFORMITÀ CON QUANTO PREVISTO DALLE SEGUENTI DIRETTIVE CEE, COMPRESSE LE ULTIME MODIFICHE, E CON LA RELATIVA LEGISLAZIONE NAZIONALE DI RECEPIMENTO:
- DEN IN DEN FOLGENDEN EWG-RICHTLINIEN VORGESEHENEN VORSCHRIFTEN, EINSCHLIEßLICH DER LETZTEN ÄNDERUNGEN, SOWIE DEN ANGEWANDTEN LANDESGESETZEN ENTSPRICHT:
- JE SKLADNA Z NASLEDNJIMI VELJAVNIMI DIREKTIVAMI EU IN HARMONIZIRANIMI STANDARDI :

<input checked="" type="checkbox"/>	<b>2014/35/UE</b>	<b>low voltage directive</b> directive basse tension direttiva bassa tensione Bestimmungen der Niederspannungsrichtlinie directiva de baja tensión
<input checked="" type="checkbox"/>	<b>2014/30/UE</b>	<b>electromagnetic compatibility</b> compatibilité électromagnétique compatibilità elettromagnetica Elektromagnetische Verträglichkeit compatibilidad electromagnética
<input checked="" type="checkbox"/>	<b>2009/125/UE</b>	<b>Ecodesign</b> / Éco-conception / Progettazione ecocompatibile / Ecodesign / Ecodiseño
<input checked="" type="checkbox"/>	<b>2011/65/UE</b>	<b>RoHs</b>

-Unit manufactured and tested according to the followings Standards:  
 -Unité construite et testée en conformité avec les Réglementations suivantes:  
 -Unità costruita e collaudata in conformità alle seguenti Normative:  
 -Unidad construida y probada de acuerdo con las siguientes Normativas  
 -Gebautes und geprüftes Gerät nach folgenden Normen

EN 60335-2- 40:2003 + A11:2004 + A12:2005 + A1:2006 + EC:2006 + A2:2009  
 + A13:2012 + A13/EC:2013, EN 60335-1:2002 + A11:2004 + A1:2004 +  
 A12:2006 + A2:2006+ A1/EC:2007 + A13:2008 + EC:2009 + EC:2010 +  
 A14:2010 + A15:2011  
 EN 60335-1:2012, EN 55014-1:2006 + A1:2009 + A2:2011, EN 61000-3-2:2014,  
 EN 61000-3-3:2013, EN 55014- 2:2015, EN 62233:2008  
 D. Lgs. no. 15 of 16/02/2011

**-Responsible to constitute the technical file is the company Airwell Residential SAS - 3, Avenue du Centre, Les Quadrants BAT. A - 78280 Guyancourt- FR**  
**-Responsable pour compiler le dossier technique est la société Airwell Residential SAS - 3, Avenue du Centre, Les Quadrants BAT. A - 78280 Guyancourt- FR**  
**-Responsabile a costituire il fascicolo tecnico è la società Airwell Residential SAS - 3, Avenue du Centre, Les Quadrants BAT. A - 78280 Guyancourt- FR**  
**-Verantwortliche für die technischen Unterlagen zusammenstellen Airwell Residential SAS - 3, Avenue du Centre, Les Quadrants BAT. A - 78280 Guyancourt- FR**  
**-Encargado de elaborar el expediente técnico es la empresa Airwell Residential SAS - 3, Avenue du Centre, Les Quadrants BAT. A - 78280 Guyancourt- FR**

GUYANCOURT, 01/08/2018

NAME/ PRÉNOM / NOME / VORNAME / NOMBRE  
 SURNAME/ NOM / COGNOME / ZUNAME / APELLIDOS  
 COMPANY POSITION/ FONCTION / POSIZIONE / BETRIEBSPOSITION/ CARGO

  
 Damien Riccio  
 DIRECTEUR GÉNÉRAL

