

innova
something new in the air

Installation manual

2.0



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

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.

Innova S.r.l

Compliance

This unit complies with European directives:

- Low voltage 2006/95/EC
- Electro-magnetic compatibility 2004/108/EC
- Use restrictions of hazardous substances in electrical and electronic equipment 2011/65/EC (RoHS2)
- Waste electrical and electronic equipment 2002/96/EC (WEEE).
- Energy consumption indication on the labels of energy-related products 2010/30/EU

Symbols

Pictograms in the next chapter provide the necessary information for a correct and safe use of the machine in a

rapid, unmistakable way.


Editorial pictograms


U User
- Refers to pages containing instructions or information for the user.

I Installer
- Refers to pages containing instructions or information for the installer.

S Service
- Refers to pages containing instructions or information for the CUSTOMER TECHNICAL ASSISTANCE SERVICE installer.

Safety pictograms

 Warning
- It indicates actions that require caution and a suitable preparation.

 Do Not
- Refers to actions that absolutely must not be performed.

General		
1	General warnings	4
2	Fundamental safety rules	4
3	Description	5
4	Receipt and unpacking	5
5	Storage	5
6	Handling	5
7	Shipping dimensions and weight	6
8	Supplied components	6
9	Unit parts	7
Installation		
1	Installation mode	8
2	Choosing the position of the unit	8
3	Assembling the unit	9
4	Assembling air ducts and external shutters	11
5	Mounting the appliance on the bracket	11
6	Electrical connection	12
7	High/low installation configuration	13
8	Setting cool only or heat only modes	13
9	Touch-screen display key lock	14
10	Operations tests and anomaly diagnosis	14
Troubleshooting		
1	Periodic Maintenance	15
2	Troubleshooting	16
3	Technical data	17

This booklet code N273027A - Rev. 0 - (03/13) consists of 20 pages.

GENERAL

1.1 General warning

- ⚠ After unpacking, check that the contents are intact and that all parts are included. If they're not, please contact the Agent who sold you the appliance.
- ⚠ 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 indications on the instruction manual supplied with the appliance.
- ⚠ These appliances have been designed for conditioning and/or heating rooms and they must be destined solely for this purpose compatibly with their performance characteristics.
The manufacturer refuses any contractual or extra-contractual responsibilities for damage caused to people, animals or things 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.
- ⚠ If the temperature is set too low or too high, not only it is unhealthy, but it is also a useless waste of energy. Avoid prolonged direct contact with the air flow.
- ⚠ Do not leave the room closed for long. Open the windows periodically to change the air.
- ⚠ 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 to the local INNOVA Technical Assistance Service.
- ⚠ Any repair or maintenance operations must be performed by the Technical Assistance Service or by qualified personnel in accordance with this booklet. Do not modify or tamper with the appliance as this could lead to dangerous situations and the manufacturer will not be liable for any damage caused.

1.2 Fundamental safety rules

- ⊖ We would like to remind you that some fundamental safety rules should be followed when using products that work with electricity and water;
- ⊖ The use of the appliance by children and unassisted disabled persons is forbidden.
- ⊖ It is forbidden to touch the appliance if barefoot or with wet or humid parts of the body.
- ⊖ It is forbidden to clean the appliance without having first disconnected the appliance from the mains power supply by turning off the main switch.
- ⊖ It is forbidden to modify safety or adjustment devices without authorisation and the indications from the manufacturer.
- ⊖ It is forbidden to pull out or twist the electric cables coming out of the appliance, even if they are disconnected from the mains power supply.
- ⊖ It is forbidden to introduce objects and substances through the air inlet and outlet grids.
- ⊖ It is forbidden to open the access doors to the internal parts of the appliance without having turned off the main switch first.
- ⊖ It is forbidden to dispose of and leave within the reach of children the packing materials as they could be 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

"2.0" is the new solution by INNOVA, a significant step towards reducing the aesthetic impact of air conditioners. Being only 16 centimetres deep, "2.0" is the thinnest and less bulky in its category, therefore both the internal and external aesthetic impact is kept to a minimum.

Optimised Capacities

The conditioning capacities of "2.0" 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.

162 millimetre holes

An important choice not only design-wise, but also because of a considerable installation advantage: it is easier to find drilling tools as there's no need for professional ones, with lower aesthetic impact.

Easy to install

"2.0" can be installed on any perimeter wall either low or high. Everything needed for installation (template, support bracket, hole pipes and external grids), excluding the drill, is included in the box.

Folding external grids

"2.0" is equipped with folding grids activated by inlet and outlet air. They open when the unit is working and close when it's turned off. Better indoor comfort, less dust, noise and pollution, less maintenance and even less outdoor visibility.

Remote control and 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. It is possible to deactivate the "heating" mode by simply touching the screen. The unit then works in "cool only" mode, without the need to use the condensation drain pipe. The orientation of the air flaps can also be adjusted by simply pressing one key.

1.4 Receipt and unpacking

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 will be accepted after 3 days from delivery.

- ⚠ Keep the packing at least for the whole length of warranty should you need to ship the appliance to the service centre for repair. Dispose of the packing materials in compliance with current regulations on waste disposal.

1.5 Storage

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

- ⚠ Do not turn upside down.

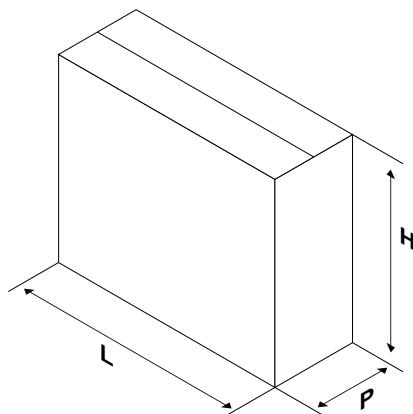
1.6 Handling

The unit is packed singularly in a cardboard box. Boxes can either be carried singularly by hand by two operators or loaded on a cart, 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.

1.7 Shipping dimensions and weight



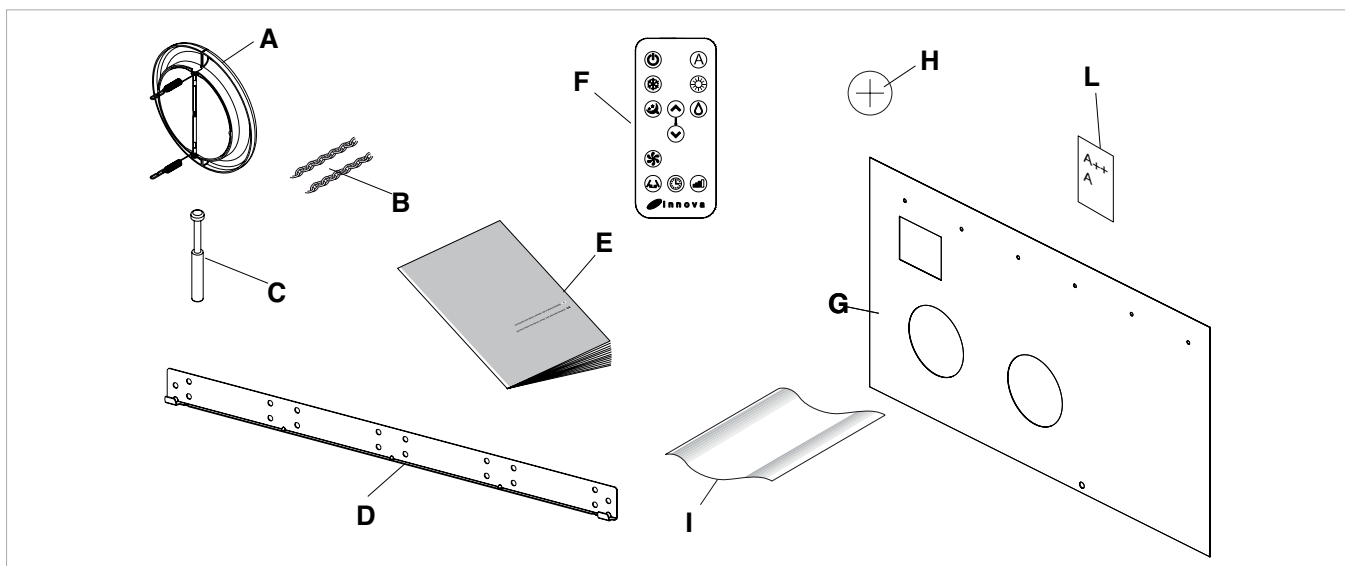
Packaging	U.M.	"2.0" 8 HP	"2.0" 10 HP
Dimensions			
Weight	Kg	48	50
L	mm	1100	1110
H	mm	660	660
P	mm	260	260

1.8 Supplied components

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

A	External grids for air inlet and outlet with springs (2 pcs)
B	Chains (4 pcs)
C	Screws and plugs kit (6 pcs)
D	Bracket for wall mounting
E	Use and maintenance booklet

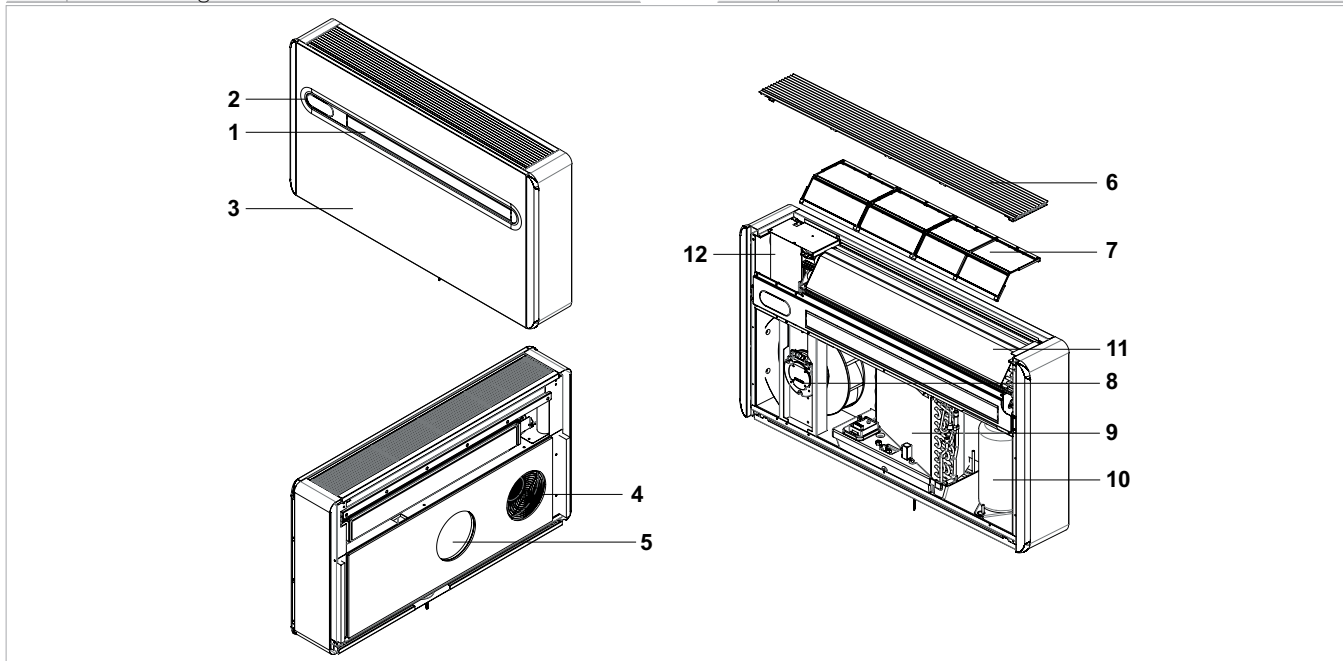
F	Remote control
G	Paper template for holes.
H	CR2025 3V remote control battery
I	Wall inlet pipes (2 pcs)
L	Energy efficiency label



1.9 Unit parts

1	Air outlet flaps
2	Touch-screen display
3	Front panel
4	Outdoor air suction
5	Outdoor air outlet
6	Air suction grid

7	Air filters
8	Outdoor air outlet fan
9	Outdoor air heat exchanger
10	Compressor
11	Indoor air heat exchanger
12	Electronic board



INSTALLATION

2.1 Installation mode

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 calculations are exact, the better the product will work. Please refer to current regulations to carry out calculations. For big installations please call a study specialised in thermotechnics. Try to reduce the thermal refrigeration 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 room must remain closed for as long as possible.
- Avoid using halogen lamps or other high energy consumption appliances such as small ovens, steam irons, cooking plates etc.

2.2 Choosing the position of the unit

For a better 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 picture.
- The wall on which you wish 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

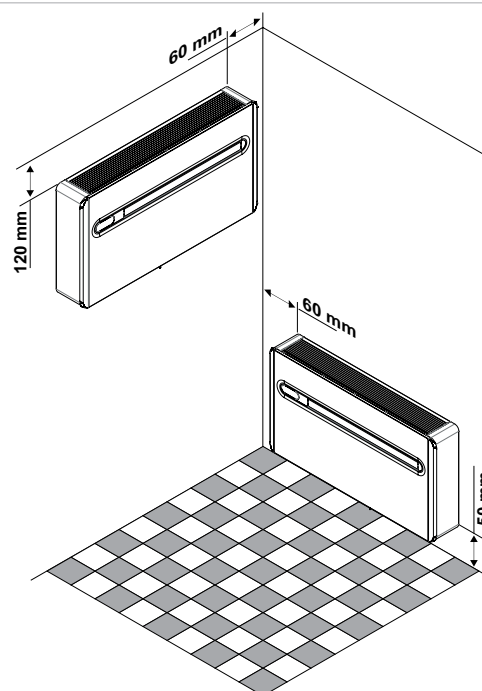
⚠ The appliance must be installed against a wall communicating with the outside.

⚠ Check that there are no structures or systems (beams, pillars, hydraulic pipes, electrical cables etc.) in the part that must be drilled. Check that nothing is placed in front of the holes thus obstructing the air flow (plants and leaves, panelling, shutters, thick grates or grids, etc.)

⚠ The unit shouldn't be installed in a position where the air flow aims directly at the people nearby;

⚠ Do not 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.



2.3 Assembling the unit

⚠ The maximum length of the holes is of 1 m and there must be no bends. Use the supplied grids or grids with the same characteristics.

For the unit to work, two holes must be placed as indicated on the template;

The holes on the wall must be drilled using suitable equipment that facilitates your work and that does not cause damage or excessive inconvenience to Your client. The best tools to make big holes on walls are special drills (called "core drills") with a high torque and whose speed can be adjusted according to the diameter of the hole to make and to the material. In order to avoid excessive dust and debris in the room, "core drills" can be combined with suction systems composed of a vacuum connected to e.g. a suction cup placed next to the perforation tip.

In order to make the holes, proceed as follows:

- Place the template provided against the wall respecting the minimum distances from the ceiling, the floor and the side walls as indicated on the template. The template can be held in place using adhesive tape.
- Mark the centre of each hole with a small drill or a punch before actual drilling.
- Using the core drill, make two holes for inlet and outlet air.

⚠ The holes must be drilled slightly downwards to avoid water from entering.

The majority of the removed material is expelled outwards, so please be careful that it doesn't hit people or objects. In order to avoid breaking the outer plaster, be careful while drilling the final part of the hole and ease the pressure on the core drill.

Drill the 6 holes for the bracket as indicated on the template.

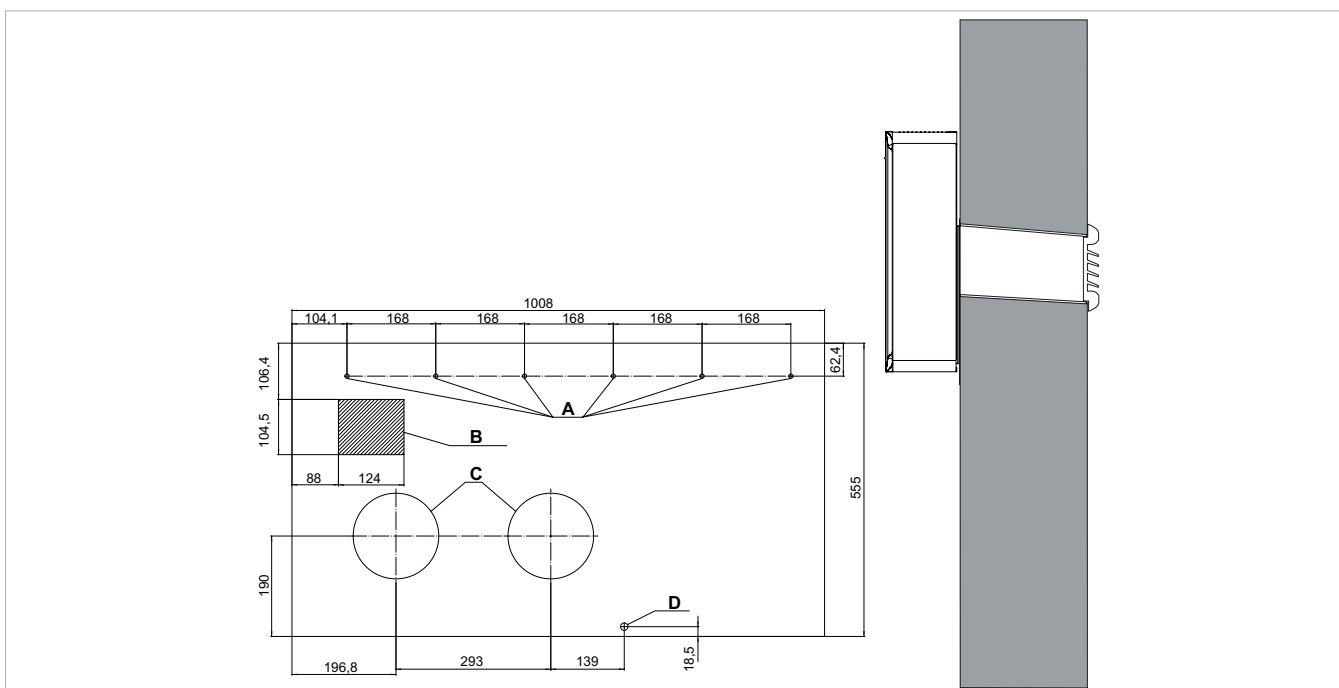
The appliance weights more on the right, so make sure to secure it properly on this side. The holes must have an 8 mm diameter to accommodate the 6 supplied plugs.

In any case, check the characteristics and the consistency of the wall to see whether specific plugs are needed.

⚠ The manufacturer cannot be held responsible for any underestimates of the structural consistency of the anchoring arranged 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.

Drill a hole in the position indicated on the template for those heat-pump appliances without a condensation drain built in the wall in order to enable the draining of condensation.

A	Holes for M8 plugs
B	Electrical connection area
C	Ø160 mm Holes for air channelling
D	Ø14 mm Condensation drain



Condensation drain predisposition

For heat pump appliances, a condensation drain pipe (Ø10 mm, internal, not supplied) must connect the unit to the pipe on the top part of the appliance.

A solenoid valve will start the flow of the condensation from the internal collection tray when the maximum level has been reached. For cooling only appliances, said pipe must be connected if the appliance is going to be used with low external temperatures (below 23°C). As it's a gravity drain, it is essential for the line to have at least a 3% slope minimum in every point. A rigid or flexible pump can be used with a minimum internal diameter of 10 mm. If the line flows into a sewage system, it is necessary to perform a siphoning operation before inserting the pipe in the main drainage. Said 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 lean towards the outside.

⚠ The exact position in which to place the pipe mouth is indicated on the template.

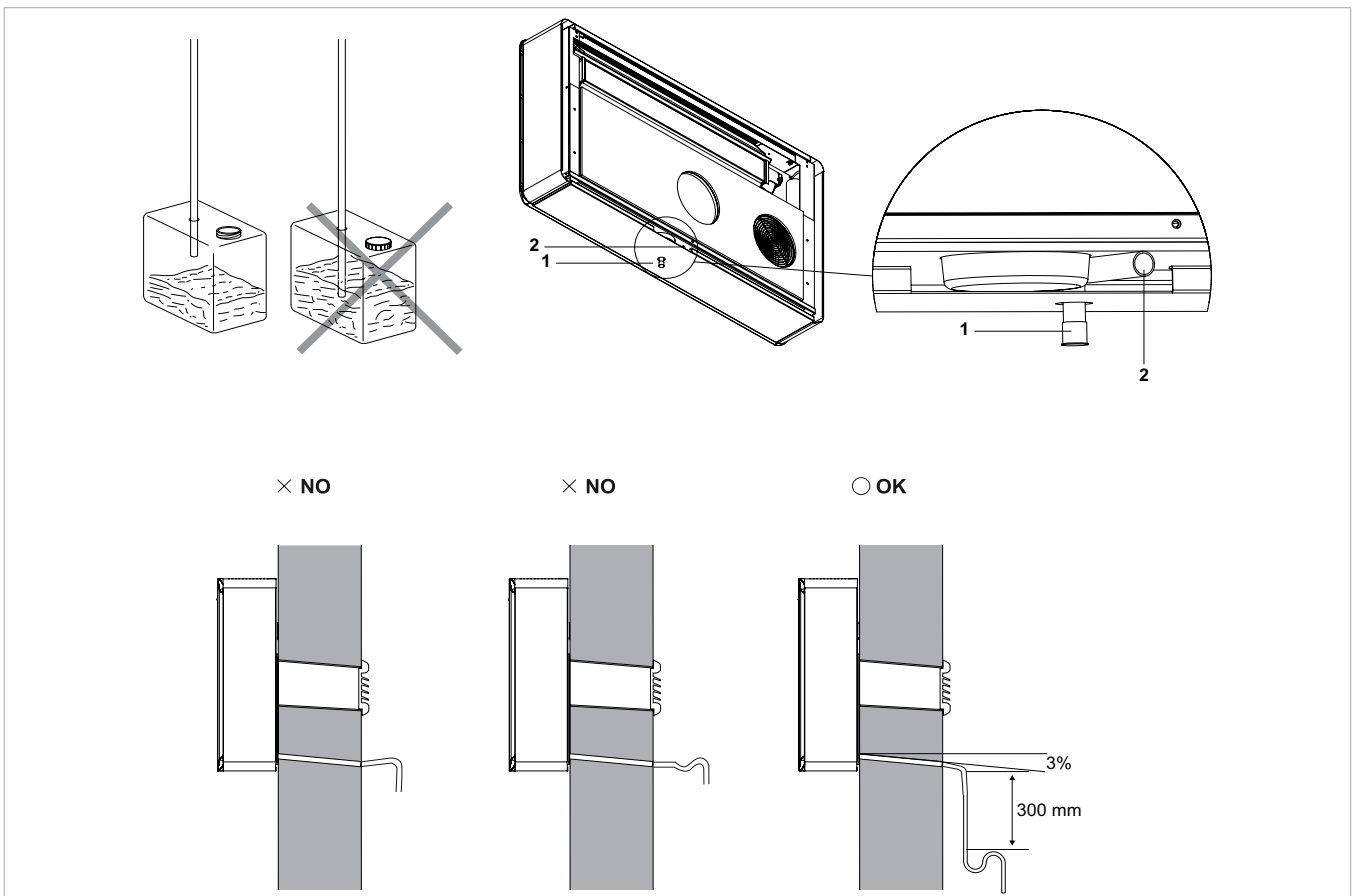
⚠ Check that the expelled water does not cause any damage or problems to people or objects. During winter, this water may create sheets of ice outside.

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

⚠ It is possible to empty the collection tray using the safety drain at the base of the appliance if necessary.

1 Safety drain to empty tray

2 Condensation drain duct



2.4 Assembling air ducts and external shutters

Once the holes have been made, place the supplied plastic sheets inside them.

Roll up the sheet and insert it in the hole, checking that the A junction line is aiming upwards.

Use a cutter to remove any excess pipe.

To place the external grids, proceed as follows:

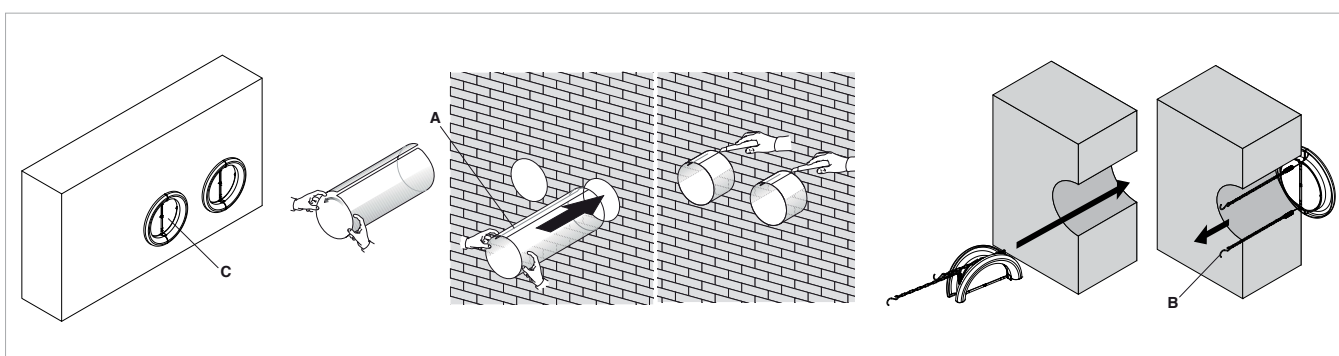
- connect the chains to the ends of the springs;
- fold the external shutters;
- insert your arm in the hole to push the shutter outside while holding the ends of the chains with the other hand to prevent them from falling down;
- open the shutter inside the hole;
- rotate the shutter to bring the flap in the vertical C position and check that the closing mechanism works;
- pull the chains by tensioning the springs;

- use a bolt cutter to remove any excess chain.
- anchor the hook of the chain to wall B.

⚠ Use only the supplied grids or grids with the same characteristics.

A	Junction line
B	Hook

C	Flap in vertical position
----------	---------------------------



2.5 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 predispositions 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.

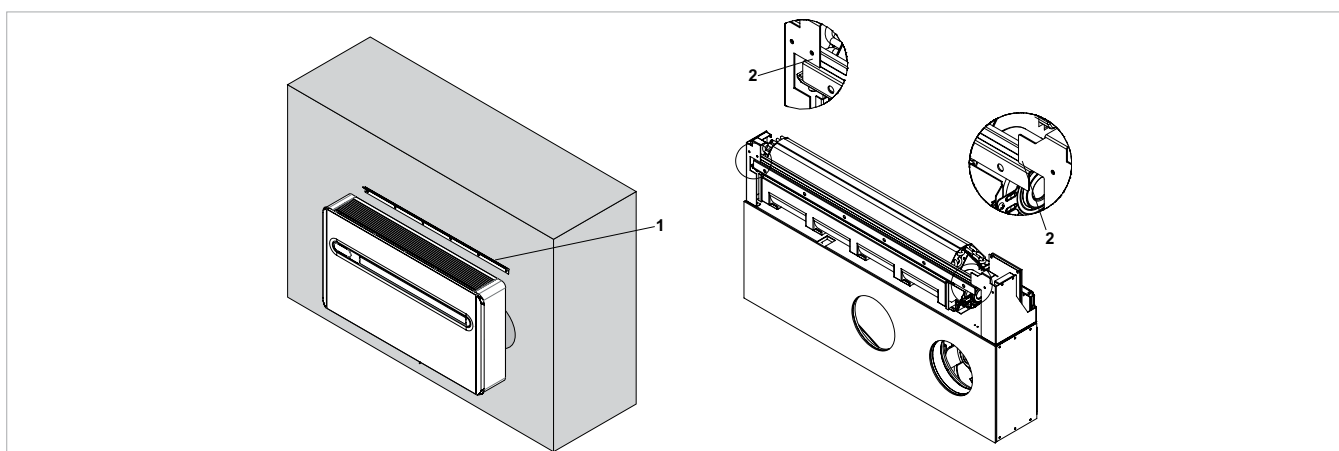
Direct electrical connections (disconnecting the power

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.

Once the work is done, check that there are no openings on the back of the appliance, especially where the air ducts are connected.

1	Bracket
----------	---------

2	Bracket anchoring points
----------	--------------------------



2.6 Electrical connection

The appliance is equipped with a power cord and plug (Y-type connection, the cord can only be replaced by the manufacturer, the assistance centre or a qualified installer). If using a socket near the appliance, 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 is provided with a suitable earth connection and that it is dimensioned for the maximum absorption of the conditioner (minimum cable section equal to 1.5 mm²).
 - Power is only supplied using a suitable socket through the supplied plug.
- ⚠ The power cord must be replaced only by the technical assistance service or by authorised personnel.
- ⚠ The appliance must be connected to 230V/50Hz 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 at delay fuse or other equivalent devices is recommended).

- ⚠ This operation must be performed only by the installer or by authorised personnel in compliance with current national regulations

It is essential to disconnect the main switch before making any connection or maintenance operation in order to avoid any risk of electrocution.

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

- Space the appliance from the wall using a wooden wedge or a similar object.
 - Disconnect the power cord by unscrewing the 3 screws from the terminal board.
 - Connect the wall cable checking that the power supply line is provided with a suitable earth connection and that it is dimensioned for the maximum absorption of the conditioner (minimum cable section equal to 1.5 mm²).
- ⚠ These operations must be carried out with the appliance already placed on the bracket, therefore read the following instructions carefully before completing the connection.

CP presence contact input connection

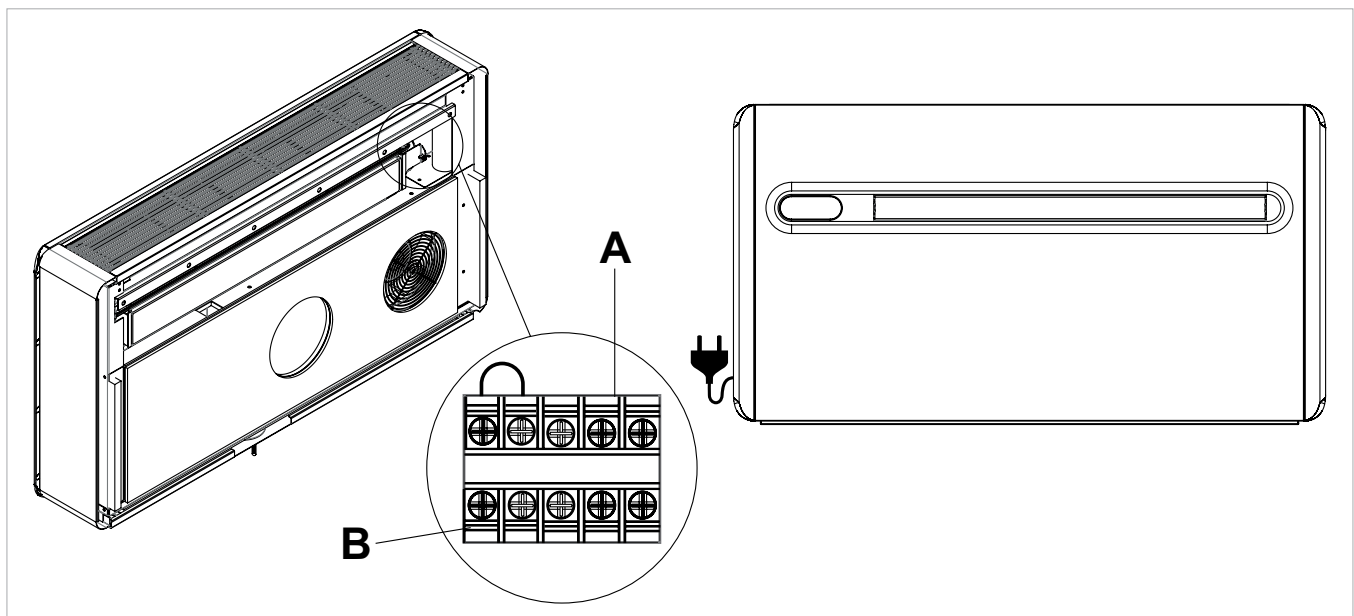
When the CP contact opens (connected to a free non-live contact) the appliance is put in stand-by and CP appears on the display.

Using this contact, it is possible to connect an external

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

A 230V/50Hz Electrical power supply terminal board

B CP presence contact



2.7 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 air is dispensed upwards. The same configuration can also be used in the upper part of the wall

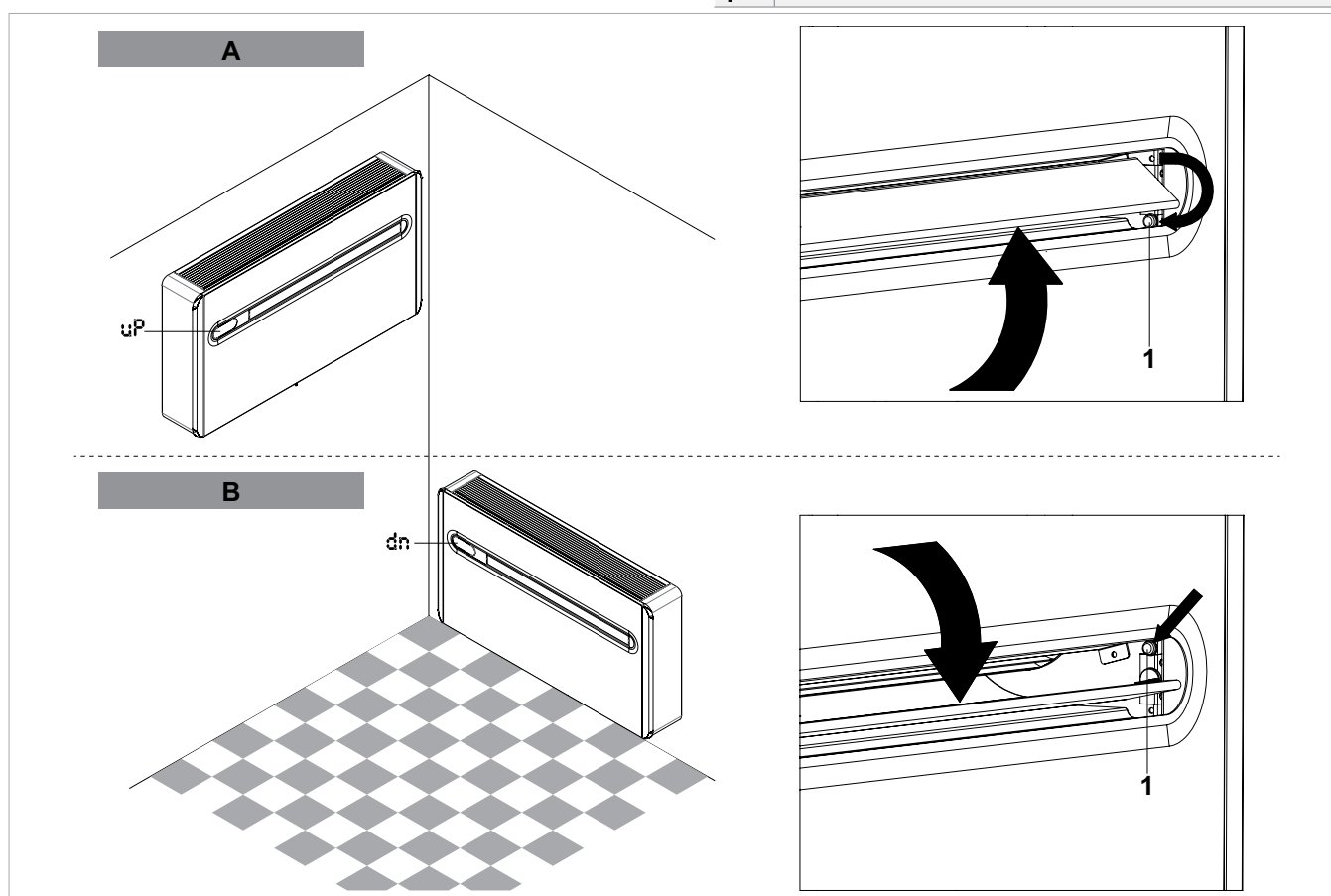
in cooling mode, which increases the air flow in the room (coanda effect).

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



Adjust the air outlet flap configuration from the lower wall position to the upper wall position.

- 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.

A	High installation
B	Low installation (factory settings)
1	Block insert



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 lights up on the display
- Press the  button 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.

2.8 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 for the Co (cooling only)

mode.

Press the A key again for Ho (heating only) mode.

Wait for 3 seconds without touching anything to memorise the setting.

2.9 Touch-screen display key lock

The key lock is activated by keeping the Timer  symbol on the touch-screen display pressed for three seconds.

Any action is prevented by the user.

The stand-by symbol flashes at 1 second intervals.

To deactivate the lock, keep the Timer symbol pressed for three seconds once again.

Any key on the remote control deactivates the lock!

2.10 Operations tests and anomaly diagnosis

The conditioner can perform a short self-diagnosis cycle to check the temperatures detected by the 4 probes and the status of the 3 inlets.

In order to activate the self-diagnosis function, press the  button within 10 seconds from the electric power supply.

The display will lit all symbols for 2 seconds and then it will show the 7 information at 2 second intervals.

After 5 cycles, or when any key is pressed either in the display or on the remote, the self-diagnosis mode will stop.

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 code	Cause
E1	Broken room temperature RT probe
E2	Broken evaporative battery IPT probe
E3	Broken outdoor air temperature OT probe
E4	Broken conditioner battery OPT probe
E5	Broken indoor air fan motor
E6	Broken outdoor air fan
E7	Lack of communication with the display

Open CP contact

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

Emergency condensation air discharge

Should any anomaly occur in the condensation water system, the maximum level float blocks the conditioner and the OF code appears on the display.

During cooling and dehumidification, electronics switches the compressor off and keeps the water distribution system active with the battery - together with the fan - to disperse excess water in the container. If the problem

persists, please contact the assistance service.

During heating, condensations should drain freely through the specific pipe. In the event of an alarm, check that the condensation pipe is not bent or obstructed, thus preventing the water from flowing out.

Operations after installing

Before leaving, collect the packing and clean any dust on the appliance with a damp cloth. These operations, though not strictly essential, transmit a sense of professionalism to the User.

- explain how to clean the filter.
- clarify when and how to call the Assistance Service.

In order to avoid useless calls from the User, before leaving:

- explain the contents of the Manual,

MAINTENANCE

3.1 Periodic Maintenance

The air conditioner you have bought has been designed to keep maintenance operations to a minimum, which only

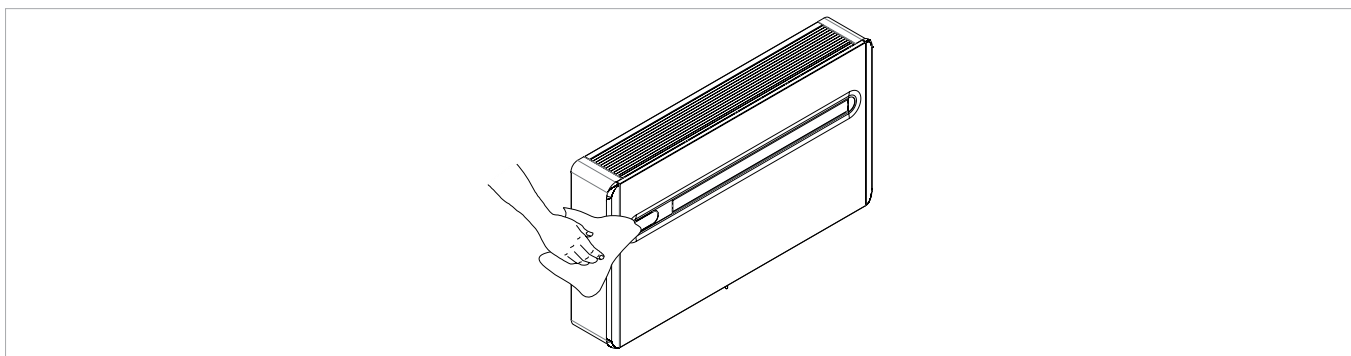
concern the following cleaning operations.

External cleaning

- ⚠ Before any cleaning and maintenance operation, disconnect the unit from the mains by switching off the main switch.
- ⚠ Wait until the parts have cooled down to avoid getting burned.

- ⚠ Do not use abrasive sponges or abrasive or corrosive detergents to avoid damaging varnished surfaces.

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



Cleaning filtering seats

The air conditioner you have bought has been designed to keep maintenance operations to a minimum, which only concern the following cleaning operations:

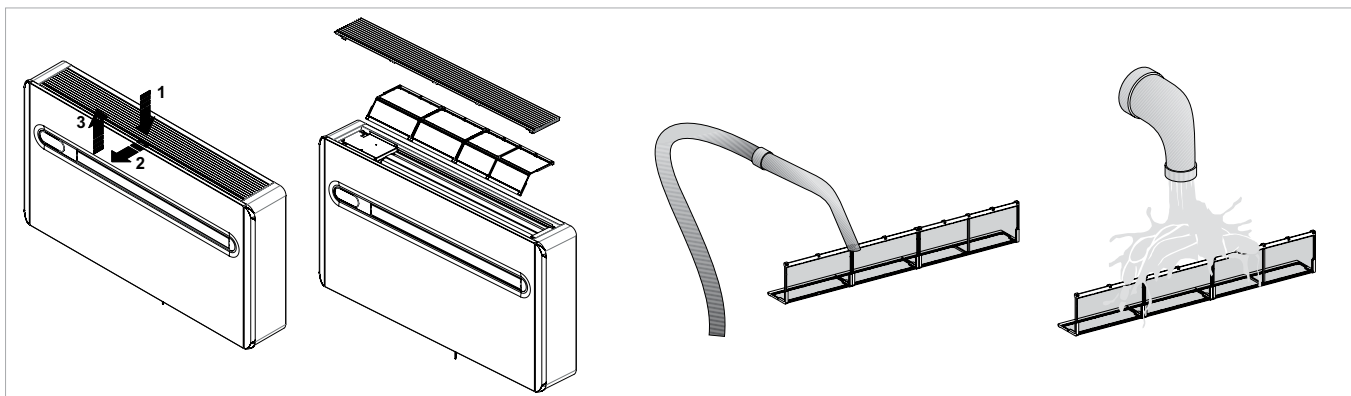
- Clean the air filter after a period of continuous use and in accordance with the concentration of impurities in the air, or when you wish to start-up the appliance after a period of inactivity. The filter is placed on the top part of the appliance.

To extract the filters:

- open the grid and remove it;
- extract the filters by lifting them;
- remove the dust from the filter with a vacuum cleaner or washing it in running water without using detergents or solvents and leave to dry;
- put the filters back on top of the batteries, taking care to position them correctly;
- put the grid back.

- ⚠ Check that the panel is mounted correctly after cleaning operations.

- ⊘ Using the appliance without the net filters is prohibited



3.2 Troubleshooting

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

Anomaly	Possible cause	Solution
The appliance doesn't switch on	No power supply	Check the voltage (by turning the light on, for example). Check that the exclusive magneto-thermic switch that protects the appliance hasn't intervened (if it has, reset it). If the problem repeats immediately, please call the Service Centre and avoid trying to make the appliance work.
	Batteries ran out	Check that the appliance turns on using the touch-screen display and substitute the batteries.
The appliance does not cool/heat enough.	The set temperature is too high or too low.	Check and adjust the temperature on the remote
	The air filter is clogged	Check the air filter and clean it if necessary
	Check that there are no other obstacles of the air flow both inside and outside.	Remove anything that might block the air flow.
	The thermal refrigeration load has increased (for example, a door or a window has been left open or an appliance has been installed in the room, generating a lot of heat).	Try to reduce the thermal refrigeration load of the room with the following advice: 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, cooking plates etc.

Display alarms

An alarm code appears on the display in case of anomalies. Some of the functions remain active (see FUNCTIONING column)

Alarm displayed	Cause	Functioning
E1	Broken room temperature RT sensor	It is still possible to activate the Cooling, Dehumidification and Heating modes. It only monitors the antifreeze function of the internal battery.
E2	Broken internal battery IPT sensor	None of the functioning modes works.
E3	Broken outside temperature OT sensor	None of the functioning modes works.
E4	Broken outside battery OPT sensor	It is still possible to activate the Cooling, Dehumidification and Heating modes. Defrosting is performed at fixed times.
E5	Broken internal ventilator motor	None of the functioning modes works.
E6	Broken external ventilator motor	None of the functioning modes works.
E7	Lack of communication with the display	None of the functioning modes works.
CP	Open CP contact	The appliance only works if the contact is closed. Check that the clamps are connected.
OF	Maximum level float intervention	During cooling and dehumidification, electronics switches the compressor off and keeps the water distribution system active with the battery - together with the fan - to disperse excess water in the container. During heating, condensations should drain freely through the specific pipe. In the event of an alarm, check that the condensation pipe is not bent or obstructed, thus preventing the water from flowing out.

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

3.3 Technical data

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

- Power supply voltage
- Maximum absorbed power
- Maximum absorbed current
- Amount of refrigerant gas
- Casing protection level
- Max. working pressure

	U.M.	"2.0" 8 HP	"2.0" 10 HP
Technical data			
Cooling power (1)	kW	1.65	2.30
Heating power (2)	kW	1.70	2.25
Power absorbed when cooling (1)	W	580	850
Power absorbed when heating (2)	W	545	725
Annual energy consumption for cooling (1)	kWh	290	425
Dehumidification capacity	l/h	0.8	1.1
Power supply voltage	V-F-Hz	230-1-50	230-1-50
EER	W/W	2.84	2.71
COP	W/W	3.12	3.1
Energy efficiency ratio when cooling		A	A
Energy efficiency ration when heating		A	A
Internal-external ventilation speed	No.	3	3
Dimensions (WxHxD)	mm	1030x555x170	1030x555x170
Weight	Kg	46	48
Noise level (min-max)*	dB(A)	29/38	32/41
Wall holes diameter	mm	162	162
Refrigerant gas		R-410A	R-410A
Minimum cooling temperatures (internal/external, DB)		18°C/-5°C	18°C/-5°C
Minimum heating temperatures (internal/external, DB)		5°C/-10°C	5°C/-10°C

Operating limits

	Room t	External t
Test conditions		
Cooling mode tests (1)	DB 27°C - WB 19°C	DB 35°C - WB 24°C
Heating mode tests (2)	DB 20°C - WB 15°C	DB 7°C - WB 6°C

* Noise pressure measured 1 m away and 1.5 m high

Relevant regulation EN 14511. 1. 2.3.4

INNOVA s.r.l.
Fraz . Strada, 16 - 38085 PIEVE DI BONO (TN) - ITALY
tel. +39.0465.670104 fax +39.0465.674965
info@innovaenergie.com

N273027A - Rev. 0