

User manual EN



*AirLeaf*  
DC Inverter

We would first of all like to thank you for having chosen one of our products and congratulate you on your choice of air conditioning unit.

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 air conditioning unit that you have purchased will operate without problems giving you optimum room temperatures with minimum energy costs.

## Symbols

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

unmistakable way

## Editorial pictograms

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

## Safety pictograms

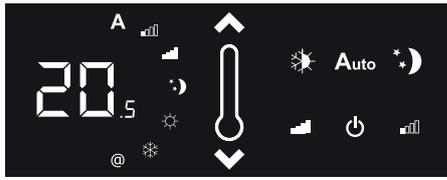
- |                                                                                                                                     |                                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
|  Generic danger                                  |  Danger due to heat                    |
| - Signals to the personnel that the operation described could cause physical injury if not performed according to the safety rules. | - Signals to the personnel that the operation described could cause burns if not performed according to the safety rules. |
|  Danger of high voltage                          |  Do Not                                |
| - Signals to the personnel that the operation described could cause electrocution if not performed according to the safety rules.   | - Refers to actions that absolutely must not be performed.                                                                |

## General warnings

These instructions are an integral part of the booklet of the device on which the kit will be installed. Refer to the

booklet for general warnings and fundamental safety rules.

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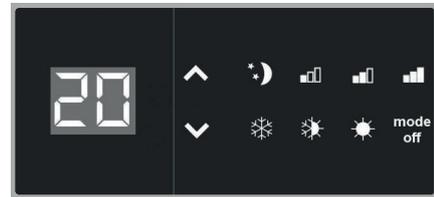
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## EB0644 - EB0647 - EB0664

### 1.1 Electronic TOUCH LCD command panel with continuous modulation on board the machine

The command makes environment temperature adjustment completely autonomous through the AUTO, SILENT, NIGHT and MAX programs, through a probe in the lower part of the device, and guarantees antifreeze safety, even when in standby.

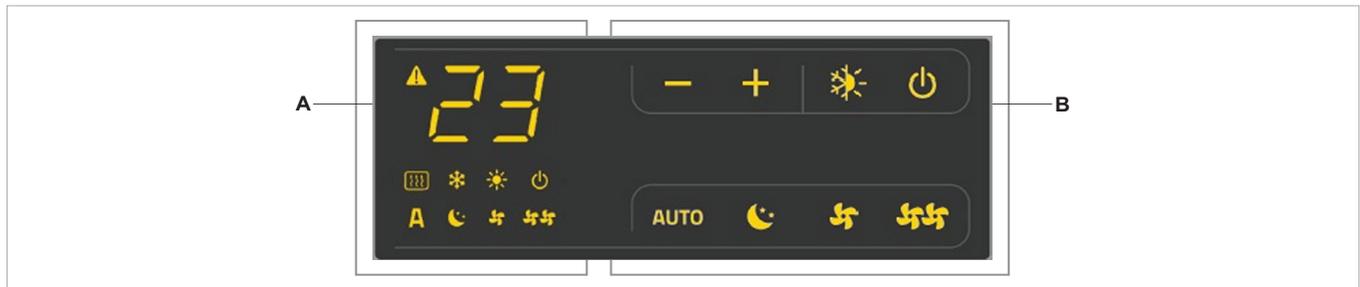
The control panel has function memory, so all the settings are not lost in case of switch off or in the event of power failure.

⚠ The commands cannot be installed on SLI and RSI versions.

⚠ After 20 seconds from the last action, the panel light purposely dims down for greater comfort during night time, and the environment temperature is shown on the display. Maximum luminosity is restored when pressing any key.

⚠ Thanks to the temperature probe, it guarantees anti-freeze safety, even when in stand-by.

A	Display
B	Keys



### 1.2 Display

The display also shows status and eventual alarms through the 8 specific symbols:

<b>A</b>	Automatic function selected
	Silent function selected
	Maximum ventilation speed selected
	Night function selected

	Active heating
	Active cooling
	Webserver supervision active. Flashing with CP presence contact closed.
	Alarm signal

### 1.3 Key function

The various functions are set with the 8 backlit keys:

	Temp + allows to increase set temperature.
	Temp - allows to decrease set temperature.
	Heating / Cooling : allows to switch operation mode between heating and cooling.
<b>Auto</b>	Makes ventilation speed adjustment completely automatic between a minimum and maximum value.

	Night function : ventilation speed is limited to a very contained value, and the set temperature is automatically changed.
	Max: allows to set the maximum ventilation speed.
	ON/Stand-By: Allows to activate the device or to put it in standby.
	Silent : allows to limit the ventilation speed to a more contained maximum value.

**1.4 General switch on**

To manage the device through the control panel, it must be connected to the mains.  
In case of a general switch on the mains supply line, it

must be switched on.  
- Switch on the system with the main switch.

**1.5 Activation**

To activate the device

key	Operation	Display
	Press ON standby.	Off
	Select one of the 4 operation modes by pressing the relative key.	

**1.6 Heating / cooling operation mode setting**

key	Operation	Display
	Keep Heating / Cooling pressed down for about 2 seconds to switch the operation mode between heating and cooling, shown through the 2 active heating or active cooling symbols which appear.	
	When heating, the symbol is switched on when the set point is higher than the environment temperature; they are both switched off when the set point is lower.	
	When cooling, the symbol is switched on when the set point is lower than the environment temperature; they are both switched off when the set point is higher.	
	In the 4 pipe version, with activated automatic cooling/heating adjustment system, the simultaneous switch on of the 2 symbols indicates reaching of a set-point (neutral band).	

Flashing of one of the 2 symbols indicates that the water temperature (hot or cold) is not satisfactory, and the ventilator is stopped until the temperature does not reach an adequate value to satisfy the request.  
If the water temperature does not reach a suitable

value for the requested operation, after 10 minutes, the command is blocked, the E5 alarm indicator symbol appears. Unlocking occurs automatically after 45 minutes, or manually by pressing one of the 8 keys.

**1.7 Stand By**

key	Operation	Display
	Keep the ON standby key pressed for about 2 seconds. The lack of any light indicators from the display indicates "standby" status (no function).	Off

When the command is in this operation mode, it guarantees anti-freeze safety. In case the environment temperature should drop below 5 °C, the hot water solenoid valve and

boiler consent outputs are activated.

**1.8 Temperature selection**

key	Operation	Display
	Set the desired temperature value, shown on the 3 digits of the display, with the aid of the two increase and decrease keys.	

The adjustment range goes from 16 to 28°C, with 0.5°C resolution, but over range values of 5°C and 40°C are also consented.  
Set these values only for brief periods, then adjust the

selection on an intermediate value.  
The command is very precise; reach the desired value and wait for the command to carry out the adjustment based on the effective environment temperature detected.

**1.9 Automatic function**

key	Operation	Display
<b>Auto</b>	Keep the AUTO key pressed. Activation of the function is indicated by the relative symbol appearing on the display.	<b>A</b>

Ventilation speed adjustment will occur automatically between a minimum and a maximum value, according to the effective distance of the environment temperature from the set point, based on a PI type algorithm.

**1.10 Silent function**

key	Operation	Display
	Keep the Silent key pressed. Activation of the function is indicated by the relative symbol appearing on the display.	

The ventilation speed is restricted to a more contained maximum value.

**1.11 Night function**

key	Operation	Display
	Keep the Night operation key pressed. Activation of the function is indicated by the relative symbol appearing on the display.	

By selection this operation mode, the ventilation speed is limited to a very contained value, and the set temperature is automatically changed as follows:  
 - decreased by 1 °C after one hour and an additional degree after 2 hours in heating function;  
 - increased by 1 °C after one hour and an additional degree after 2 hours in cooling function.

**1.12 Operation at maximum ventilation speed**

key	Operation	Display
	Keep the Max operation key pressed. Activation of the function is indicated by the relative symbol appearing on the display.	

With this mode of operation, the maximum distributable power is immediately obtained both in heating as well as cooling. Once the desired environment temperature is reached, it is advised to select one of the other 3 operation modes to obtain the best thermal and acoustic comfort.

**1.13 Key lock**

key	Operation	Display
	By pressing ON standby and Temp simultaneously for 1 second, the local block of all keys is activated, confirmed by the display of Loc.	<b>LOC</b>
	All adjustments are prevented to the user, and Loc. appears when pressing any key. To unlock the keys, repeat the sequence.	

**1.14 Deactivation**

key	Operation	Display
	Keep the ON standby key pressed for about 2 seconds. The lack of any light indicators from the display indicates "standby" status (no function).	Off

The command guarantees anti-freeze safety even when in standby.

**1.15 Switch off for long periods**

In case of seasonal switch-offs or for holidays, proceed as follows:

- Deactivate the device.

- Switch Off the main switch.

 The anti-freeze function is not active.

**1.16 Error indications**

Error	Display
Environment temperature probe fault (AIR).	 <b>E1</b>
Fault in the water temperature detection probe, in the 2 pipe (H2) versions, positioned in the main battery.	 <b>E2</b>
Fault of the cold water temperature detection probe on the 4 pipe (H4) versions. . (Only for EB0647)	 <b>E3</b>
Problem with the fan engine (for example, jamming due to extraneous bodies, fault in the rotation sensor, activation of the protective micro switch due to filter cleaning operation).	 <b>E4</b>
If, after 10 minutes of operation, the water temperature has not reached a suitable value for the requested operation, the solenoid valve and chiller or boiler consent contacts are deactivated (Example 1: in heating, with environment temperature 20°C and water temperature less than 15°C. Example 2: in cooling, with environment temperature 20°C and water temperature above 25°C).	 <b>E5</b>
Unlocking occurs automatically after 45 minutes, or manually by pressing one of the 8 keys.	

## EM0649

### 2.1 TOUCH LCD electronic wall command panel with environment probe

The wall remote control EM0649 is an electronic thermostat, equipped with an environment temperature probe which allows to control one or more (up to a maximum of 30) cooler-radiators/fan coils through broadcasting (with simultaneous command transmission) equipped with electronic command for ER0645 or ER0648 remote controlling.

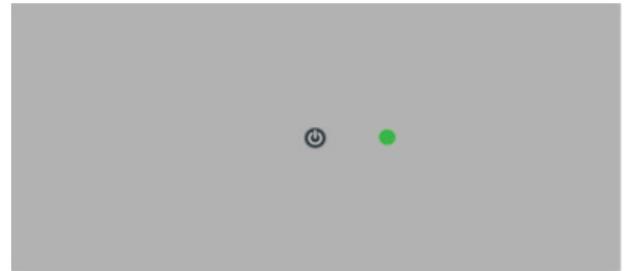
The control panel has function memory, so all the settings are not lost in case of switch off or in the event of power failure.

- ⚠ Eventual anomalies of the single connected terminals are not indicated by the wall panel.
- ⚠ Thanks to the temperature probe, it guarantees anti-freeze safety, even when in stand-by.
- ⚠ After a period of 20 seconds from the last action, the panel light dims and the display shows the environment temperature. Maximum luminosity is restored when pressing any key.

Wall command panel



Panel on board machine for remote controlling



### 2.2 Display

#### Wall command panel

The display also shows status and eventual alarms through the 8 specific symbols:

<b>A</b>	automatic function selected
	silent function selected
	maximum ventilation speed selected
	night function selected

	active heating
	active cooling
	webserver supervision active. Flashing with CP presence contact closed.
	alarm signal

#### Panel on board machine for remote controlling

	Green Led: Indicated device operation. Flashes in case of anomalies.
--	----------------------------------------------------------------------

## 2.3 Key function

### Wall command panel

The various functions are set with the 8 backlit keys:

	Temp + allows to increase set temperature.		Night function : ventilation speed is limited to a very contained value, and the set temperature is automatically changed.
	Temp - allows to decrease set temperature.		Max: allows to set the maximum ventilation speed.
	Heating / Cooling : allows to switch operation mode between heating and cooling.		ON/Stand-By: Allows to activate the device or to put it in standby.
<b>Auto</b>	Makes ventilation speed adjustment completely automatic between a minimum and maximum value.		Silent : allows to limit the ventilation speed to a more contained maximum value.

### Panel on board machine for remote controlling

	ON/Stand-By: Allows to activate the device or to put it in standby.
-----------------------------------------------------------------------------------	---------------------------------------------------------------------

## 2.4 General switch on

To manage the device through the control panel, it must be connected to the mains.

In case of a general switch on the mains supply line, it

must be switched on.

- Switch on the system with the main switch

## 2.5 Activation

To activate the device

key	Operation	Display
	Press ON standby.	Off
<b>Auto</b>   	Select one of the 4 operation modes by pressing the relative key.	  <b>A</b> 

## 2.6 Heating / cooling operation mode setting

key	Operation	Display
	Keep Heating / Cooling pressed down for about 2 seconds to switch the operation mode between heating and cooling, shown through the 2 active heating or active cooling symbols which appear.	 
	In the 4 pipe version, with activated automatic cooling/heating adjustment system, the simultaneous switch on of the 2 symbols indicates reaching of a set-point (neutral band).	 

Flashing of one of the 2 symbols indicates that the water temperature (hot or cold) is not satisfactory, and the ventilator is stopped until the temperature does not reach an adequate value to satisfy the request.  
If the water temperature does not reach a suitable

value for the requested operation, after 10 minutes, the command is blocked, the E5 alarm indicator symbol appears. Unlocking occurs automatically after 45 minutes, or manually by pressing one of the 8 keys.

**2.7 Stand By**

key	Operation	Display
	Keep the ON standby key pressed for about 2 seconds. The lack of any light indicators from the display indicates "standby" status (no function).	Off

When the command is in this operation mode, it guarantees anti-freeze safety. In case the environment temperature should drop below 5 °C, the hot water solenoid valve and

boiler consent outputs are activated.

**2.8 Temperature selection**

key	Operation	Display
 	Set the desired temperature value, shown on the 3 digits of the display, with the aid of the two increase and decrease keys.	

The adjustment range goes from 16 to 28 °C, with 0.5°C resolution, but over range values of 5°C and 40°C are also consented.  
Set these values only for brief periods, then adjust the

selection on an intermediate value.  
The command is very precise; reach the desired value and wait for the command to carry out the adjustment based on the effective environment temperature detected.

**2.9 Automatic function**

key	Operation	Display
<b>Auto</b>	Keep the AUTO key pressed. Activation of the function is indicated by the relative symbol appearing on the display.	<b>A</b>

Ventilation speed adjustment will occur automatically between a minimum and a maximum value, according to the effective distance of the environment temperature from

the set point, based on a PI type algorithm.

**2.10 Silent function**

key	Operation	Display
	Keep the Silent key pressed. Activation of the function is indicated by the relative symbol appearing on the display.	

The ventilation speed is restricted to a more contained maximum value.

**2.11 Night function**

key	Operation	Display
	Keep the Night operation key pressed. Activation of the function is indicated by the relative symbol appearing on the display.	

By selection this operation mode, the ventilation speed is limited to a very contained value, and the set temperature is automatically changed as follows:  
- decreased by 1 °C after one hour and an additional

degree after 2 hours in heating function;  
- increased by 1 °C after one hour and an additional degree after 2 hours in cooling function.

**2.12 Operation at maximum ventilation speed**

key	Operation	Display
	Keep the Max operation key pressed. Activation of the function is indicated by the relative symbol appearing on the display.	

With this mode of operation, the maximum distributable power is immediately obtained both in heating as well as cooling. Once the desired environment temperature is reached, it

is advised to select one of the other 3 operation modes to obtain the best thermal and acoustic comfort.

**2.13 Key lock**

key	Operation	Display
	By pressing ON standby and Temp simultaneously for 1 second, the local block of all keys is activated, confirmed by the display of Loc.	
	All adjustments are prevented to the user, and Loc. appears when pressing any key. To unlock the keys, repeat the sequence.	

**2.14 Deactivation**

key	Operation	Display
	Keep the ON standby key pressed for about 2 seconds. The lack of any light indicators from the display indicates "standby" status (no function).	Off

The command guarantees anti-freeze safety even when in standby.

**2.15 Switch off for long periods**

In case of seasonal switch-offs or for holidays, proceed as follows:  
 - Deactivate the device.

- Switch Off the main switch.

 The anti-freeze function is not active.

## ER0645 - ER0648

### 3.1 Electronic command panel with continuous modulation for remote connection to wall command

The electronic command for remote controlling allows control of all fan coil functions by the EM0649 wall remote control.

It is possible to connect up to a maximum of 30 fan coils to a remote control, which will be controlled through broadcasting (with simultaneous commands to all fan coils).

The command may be installed on all versions; it is equipped with a green LED indicator which indicates operation status and eventual anomalies, and a key for temporary mains insulation (the fan coil is in any case

switched back on at the following activation of the wall remote control).

The control panel has function memory, so all the settings are not lost in case of switch off or in the event of power failure.

The main operative parameters, the set-point and environment temperature, and transmitted by the EM0649 wall remote control to all terminals connected to the network, allowing for a homogeneous operation.

Refer to the instructions of this command for use of the fan coils.



### 3.2 Indications



Green Led: Indicated device operation. Flashes in case of anomalies.

#### Meaning of indications

Machine connected to the network and properly functional.	On steady
fan coil off or disconnected from mains supply; in case of the first, the fan coil is switched back on at the following activation of the remote control.	Off
Water requirement (hot or cold) not satisfactory. The fan stops until the water temperature does not reach an adequate value to satisfy the request.	1 flash + pause
Communication error; the command implies a continuous exchange of information on the RS485 serial line with the EM0649 wall remote control; if the exchange does not occur for over 5 minutes, the error is signaled and the cooler-radiator/fan coil is deactivated.	2 flashes + pause
Blocked for non suitable water, unlocking occurs automatically after 45 minutes or manually by pressing the ON standby key twice.	3 flashes + pause
Malfunctioning water probe; all outputs are switched off until the problem is resolved.	4 flashes + pause
The signal is associates with a problem with the fan engine (for example, jamming due to extraneous bodies, fault in the rotation sensor, activation of the protective micro switch due to filter cleaning operation).	5 flashes + pause

### 3.3 Key function



Allows to activate the device or to put it in standby.

### 3.4 Deactivation of the single terminal



Keep ON standby pressed for about 2 seconds on the electronic command on board the machine for remote controlling until the LED is switched off.

At the following activation of the wall remote control, the fan coil is switched back on.

## EB0643

EN

### 4.1 4 speed LCD electronic command panel on board the machine

The command makes environment temperature adjustment completely autonomous through the adjustable set point, from 5 to 40°C, of one of the 4 speeds, and the summer/ winter selection.

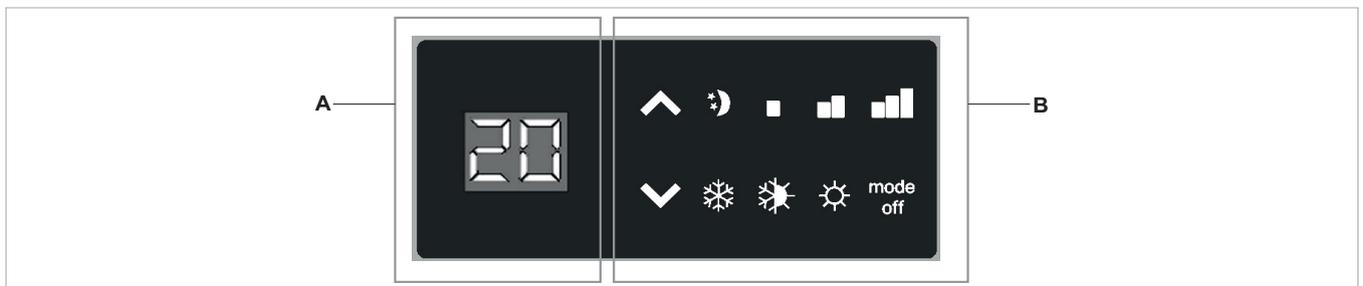
Since it is connected to the water temperature detection probe inside the battery, it carries out the minimum winter temperature function (30°C) and maximum summer temperature function (20°C).

The control panel has function memory, so all the settings are not lost in case of switch off or in the event of power failure.

⚠ The commands cannot be installed on SLI and RSI versions.

⚠ After 20 seconds from the last action, the panel light purposely dims down for greater comfort during night time, and the environment temperature is shown on the display. Maximum luminosity is restored when pressing any key.

A	Display
B	Keys and LED indicators



### 4.2 LED indications

The 6 LED indicators show the operation status:

	Green symbol minimum speed
	Green symbol average speed
	Green symbol maximum speed

	Green symbol Supersilent function
	Red symbol heating
	Blue symbol cooling

### 4.3 Key function

The various functions are set with the 4 keys:

	Temp + allows to increase set temperature
	Temp - allows to decrease set temperature

	Heating / Cooling : allows to switch operation mode between heating and cooling (2 seconds)
<b>mode off</b>	Allows to activate the device, to select one of the 4 speeds or to go in stand-by (2 seconds).

### 4.4 General switch on

To manage the fan coil through the control panel, it must be connected to the mains.

In case of a general switch on the mains supply line, it

must be switched on.

- Switch on the system with the main switch.

### 4.5 Activation

To activate the device

key	Operation	Display
mode off	Press the mode/off key	Off
mode off	Select one of the 4 operation speeds by pressing the relative mode/off key. When heating, the symbols remain switched on when the set point is higher than the environment temperature; they are switched off when the set point is lower. When cooling, the symbols are switched on when the set point is lower than the environment temperature; they are switched off when the set point is higher.	

### 4.6 Heating / cooling operation mode setting

key	Operation	Display
	Keep Heating / Cooling pressed down for about 2 seconds to switch the operation mode between heating and cooling, shown through the 2 active heating or active cooling symbols which appear.	

Flashing of one of the 2 o symbols indicates that the water temperature (hot or cold) is not satisfactory, and the

ventilator is stopped until the temperature does not reach an adequate value to satisfy the request.

### 4.7 Stand By

key	Operation	Display
mode off	Keep the mode/off key pressed for about 2 seconds. The lack of any light indicators from the display indicates "standby" status (no function).	Off

### 4.8 Temperature selection

key	Operation	Display
	Set the desired temperature value, shown on the 2 digits of the display, with the aid of the two increase and decrease keys.	

The adjustment range goes from 15 to 30 °C, with 1 °C resolution, but over range values of 5°C and 40°C are also consented. Set these values only for brief periods, then adjust the

selection on an intermediate value. The command is very precise; reach the desired value and wait for the command to carry out the adjustment based on the effective environment temperature detected.

### 4.9 Fan speed adjustment

key	Operation	Display
mode off	At each pressing of the mode/off key there is a corresponding change in fan speed between supersilent, minimum, medium and maximum. Activation of the function is indicated by the relative symbol appearing on the display.	

The supersilent speed causes strong de-humidification in cooling and a radiating-only function (with fan off and solenoid valve activated) in heating. By setting maximum speed, the maximum distributable power is immediately obtained both in heating as well as cooling.

Once the desired environment temperature is reached, it is advised to select one of the other 3 operation modes to obtain the best thermal and acoustic comfort.

**4.10 Key lock**

key	Operation	Display
	By pressing the increase and decrease keys simultaneously for 5 seconds, the local block of all keys is activated, confirmed by the display of bL.	
	All adjustments are prevented to the user, and bL appears when pressing any key. Repeat the sequence to unlock the keys.	

**4.11 Minimum brightness reduction**

After 20 seconds from the last action, the panel brightness is purposely dimmed for greater comfort during night time, and the room temperature is shown on the display. If the brightness is still annoying one can switch the display off completely by pressing and holding the Heating/Cooling button for 20 seconds until  appears on the

display.  
To restore the normal minimum brightness one must press the Heating/Cooling button for 20 seconds until  appears on the display.

**4.12 Deactivation**

key	Operation	Display
<b>mode off</b>	Keep the mode/off key pressed for about 2 seconds. The lack of any light indicators from the display indicates "standby" status (no function).	Off

**4.13 Switch off for long periods**

In case of seasonal switch-offs or for holidays, proceed as follows:

- Deactivate the device.
- Switch Off the main switch.

**4.14 Error indications**

Error	Display
Environment temperature probe fault (AIR). Flashing of 6 LED indicators (automatic re-arm alarm).	
Fault in the water temperature detection probe (H2) positioned in the main battery. Flashing of 2 LED indicators (possible manual re-arm)*.	
Problem with the fan engine (for example, jamming due to extraneous bodies, fault in the rotation sensor, activation of the grid protection micro switch due to filter cleaning operation). Simultaneous flashing of 4 LED indicators (automatic re-arm alarm).	
Water requirement (hot or cold) not satisfactory (above 20°C in cooling, below 30°C in heating). The selected function LED indicator flashed, and the fan stops until the water temperature does not reach an adequate value to satisfy the request.	

\* If the board detects the water temperature probe on the device, start-up occurs in normal conditions. If the probe is not connected, it is possible to confirm the

operation without a probe, by pressing Heating/Cooling for 5 seconds.

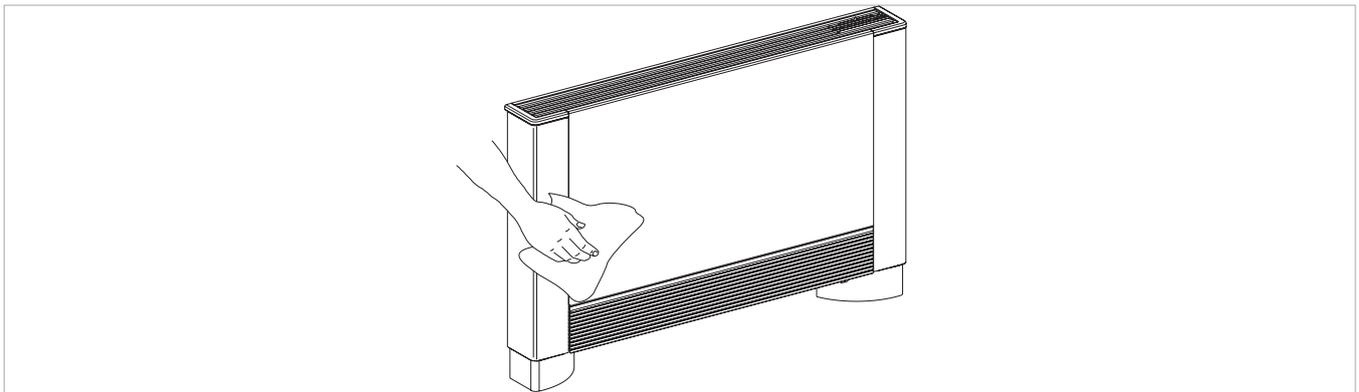
## MAINTENANCE

### 5.1 Cleaning the outside

- ⚠ Before every cleaning and maintenance intervention, disconnect the appliance from the mains by switching off the master switch.
- ⚠ Wait until the parts have cooled down to avoid the risk of burns.

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

When necessary, clean the outer surfaces of the cooler-convecteur with a soft cloth damp cloth.



### 5.2 Cleaning air suction filter

After a period of continuous operation and in consideration of the concentration of impurities in the air, or when he

intends to restart the plant after a period of inactivity, proceed as described.

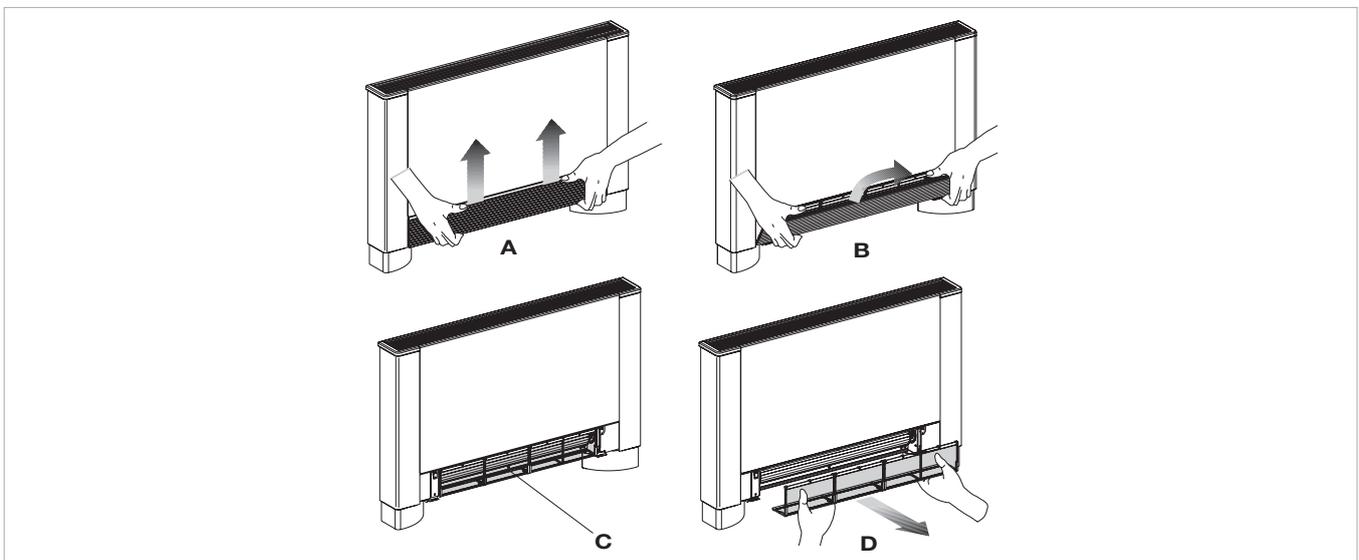
#### Extraction of filter cells in the versions with aspiration grill with flaps

- extract the front grille by lifting it slightly and turn it until it comes right out of its seat;

- extract the filter, pulling it horizontally outwards.

<b>A</b>	front grille
<b>B</b>	See grid

<b>C</b>	filter
<b>D</b>	extraction filter

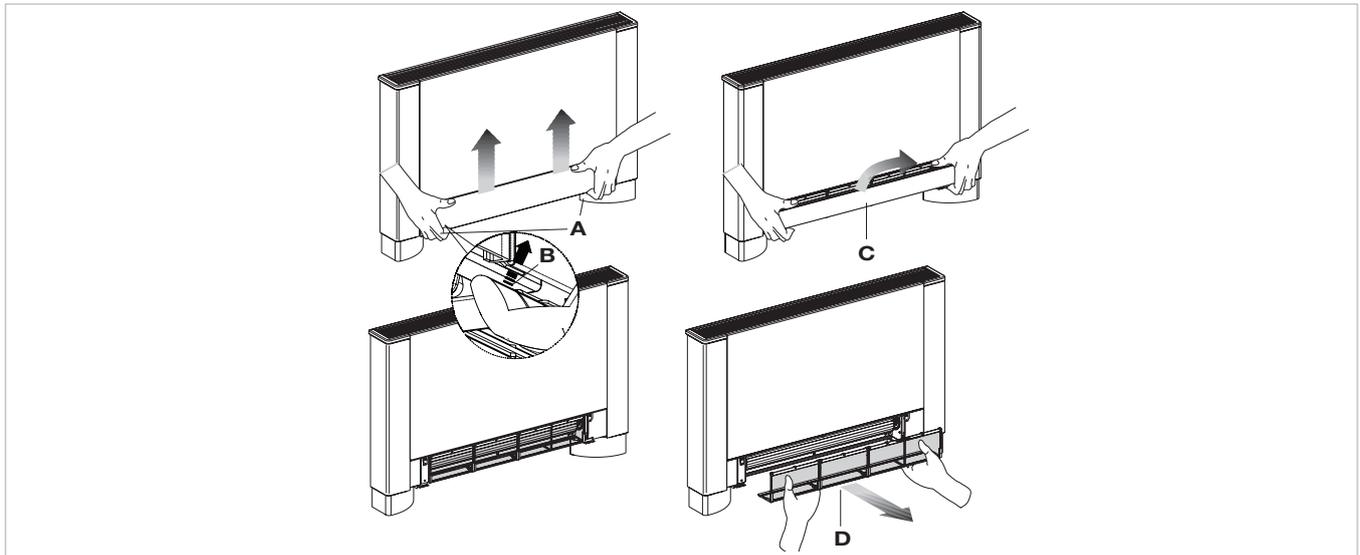


**Extraction of filter cells in the versions with mobile aspiration panel**

- Insert your hands under the end of mobile panel
- Press the plastic lug
- Lift and extract the mobile panel
- Extract the filter

<b>A</b>	flap
<b>B</b>	Plastic tabs

<b>C</b>	filter
<b>D</b>	extraction filter



**Cleaning filtering seats**

- suck up the powder with a vacuum cleaner
- wash the filter with running water without using detergents or solvents, and leave to dry.
- Remount the filter on the cooler-convector (fig. 32 ref. A), taking care to insert the lower flap into its seat.

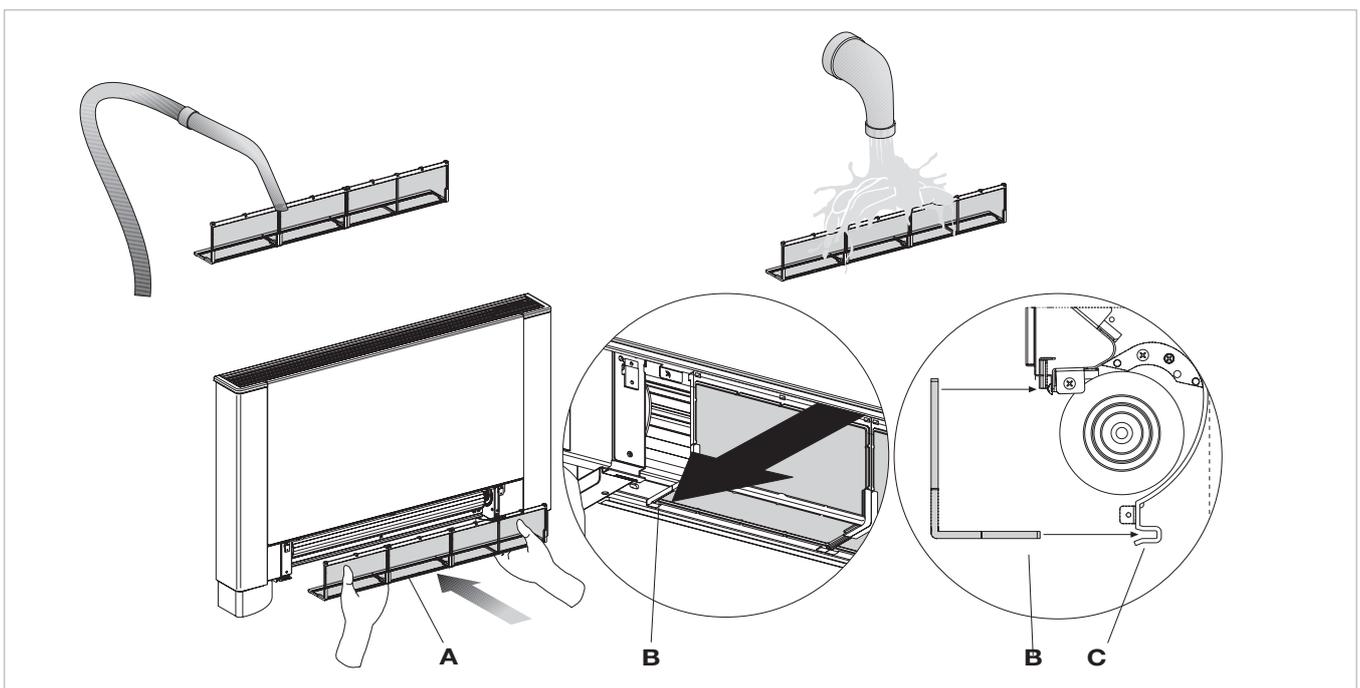
⊘ It is forbidden to use the unit without the net filters.

⚠ The appliance is fitted with a safety switch that prevents the operation of the cooler with the mobile panel missing or out of position.

⚠ After finishing the cleaning of the filter, check that the panel is mounted correctly.

<b>A</b>	filter
<b>B</b>	lower edge

<b>C</b>	The filter housing
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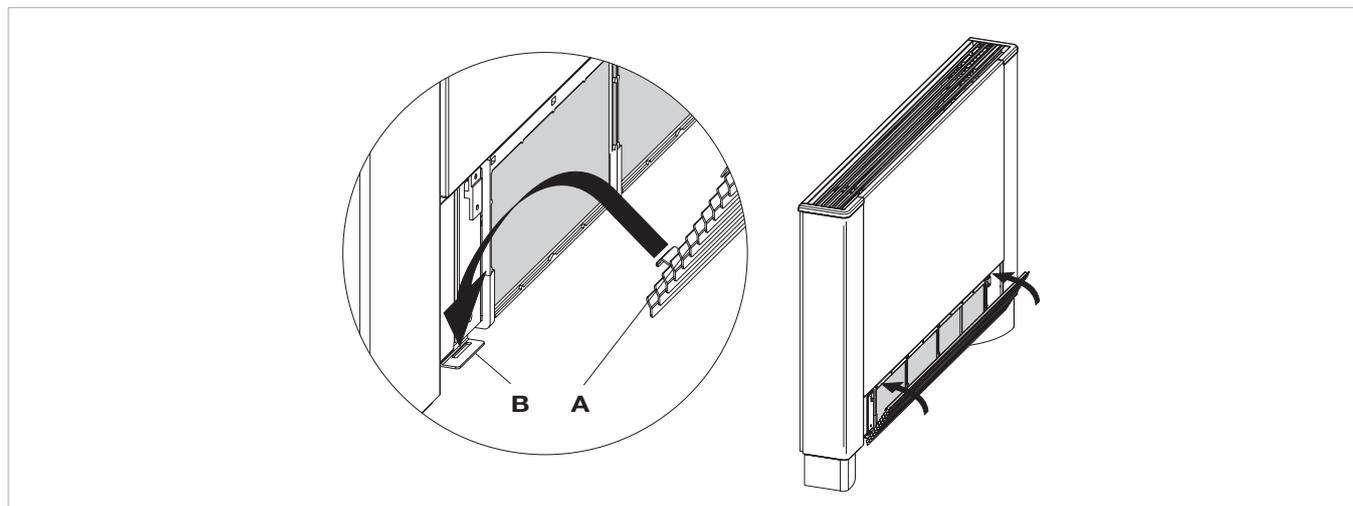


### Ending Cleaning Operations

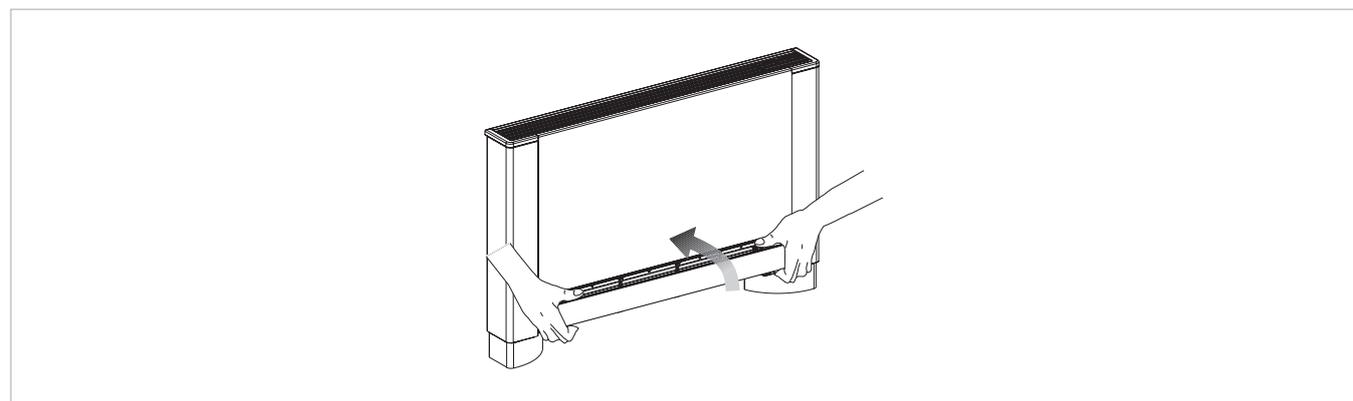
- For the versions with a grill with flaps, insert the two lugs into the special slots, turn it and hook it up with a slight tap on the upper part.

**A** tabs

**B** slots



- For the versions with a mobile panel, rest it in its position, parallel to the front panel and press until it is blocked.



### 5.3 Energy saving tips

- Always keep the filters clean;
- when far possible, keep the doors and windows closed in the room being conditioned;
- limit where possible the effect of direct sun rays in the rooms being conditioned (use curtains, shutters etc.)

## TROUBLESHOOTING

### 6.1 Troubleshooting

- ⚠** In case of water leaks or anomalous functioning immediately cut off the power supply and close the water taps.
- ⚠** Should one of the following anomalies occur, contact an authorised service centre or an authorised qualified person, but do not intervene personally.
- The ventilation does not activate even if there is hot or cold water in the hydraulic circuit.
  - The appliance leaks water during the heating function.
  - The appliance leaks water only during the cooling function.
  - The appliance makes an excessive noise.
  - There are formations of dew on the front panel.

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### 6.2 Table of anomalies and remedies

The interventions must be carried out by a qualified installer or by a specialised service centre.

Effect	Cause	Remedy
A delayed activation of the ventilation respect to the new temperature or function settings.	The circuit valve needs some time to open and as a result the hot or cold water takes time to circulate in the appliance.	Wait for 2 or 3 minutes to open the circuit valve.
The appliance does not activate the ventilation.	No hot or cold water in the system.	Check that the water boiler or cooler are functioning correctly.
The ventilation does not activate even if there is hot or cold water in the hydraulic circuit.	The hydraulic valve remains closed.	Dismount the valve body and check if the water circulation is restored. Check the working efficiency of the valve by powering it separately with 230V. If it activates the problem could be the electronic control.
	The fan motor is blocked or burnt out.	Check the windings of the motor and the free rotation of the fan.
	The micro-switch that stops the ventilation when the filter grill is opened does not close correctly.	Check that by closing the grill the micro-switch contact is activated.
	The electrical connections are not correct.	Check the electrical connections.
The appliance leaks water during the heating function.	Leaks in the hydraulic connections of the system.	Check the leak and fully tighten the connections.
	Leaks in the valve unit.	Check the state of the gaskets.
There are formations of dew on the front panel.	Thermal insulation unstuck.	Check the correct positioning of the thermo-acoustic insulation paying attention to that in the front above the finned battery.
There are drops of water on the air outlet grill.	In situations of high humidity (>60%) condensation could form, especially at the minimum ventilation speeds.	As soon as the humidity starts falling the phenomenon disappears. In any case the presence of a few drops of water in the appliance does not indicate a malfunction.
The appliance leaks water only during the cooling function.	The condensation bowl is blocked.	Slowly pour a bottle of water in the low part of the battery to check the drainage; if necessary, clean the bowl and/or increase the inclination of the drainage pipe.
	The condensation discharge does not need an inclination for correct drainage.	
	The connection pipes and the valve unit are not insulated well.	Check the insulation of the pipes.
The appliance makes a strange noise.	The fan touches the structure.	Check the clogging of filters and clean them if necessary
	The fan is unbalanced.	The unbalancing causes excessive vibrations of the machine; replace the fan.
	Check the clogging of filters and clean them if necessary	Clean the filters



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