User's manual (Translation of original instructions)



AirLeaf

EEB749 - EFB749 - EGB749 EEA649 - EEB649 - EFA649 - EFB649

ECA644 - ECA647 - EWF644 - EWF647 E4T643 - E2T543 - B3V137 First of all, we would like to thank you for having chosen a device of our production.

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.

Conformity

Refer to the Installer Manual of the paired unit.

Markings

CE



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CODING

1.1 Coding accessories

	Accessory description	Combinable products	Code
Controls on the	e appliance		
Control panels			
236 - • • • •	SMART TOUCH on-board electronic control with continuously modulating thermo- stat. Integrated WiFi module	SL 4 pipes	EWF647II (1)
235 - * * * *	SMART TOUCH on-board electronic control with continuously modulating thermo- stat. Integrated WiFi module	SL FULL FLAT SL SLS RS RS FULL FLAT	EWF644II (1)
236 - • • •	SMART TOUCH on-board electronic control with continuously modulating thermostat	SL 4 pipes	ECA647II (1)
230 - • • • •	SMART TOUCH on-board electronic control with continuously modulating thermostat	SL FULL FLAT SL SLS RS RS FULL FLAT	ECA644II (1)
	SMART TOUCH on-board electronic control with 4 fixed speeds and thermostat	SL FULL FLAT SL SLS RS RS FULL FLAT	E4T643II (1)
20 û , -	On-board electronic control with 4 fixed speeds and thermostat	SL FULL FLAT SL SLS RS RS FULL FLAT	E2T543II (1)
Speed selector			
·	On-board speed selector. For connection with standard single-contact wall thermostats	SL FULL FLAT SL SLS RS RS FULL FLAT	B3V137II (1)
Wall-mounted	control panels M7 series		
Control panels	•		
	LED electronic control panel with touch interface, wall-mounted complete with thermostat and room temperature and relative humidity probe. Bluetooth connection. Colour white	All	EGB749II
3	LED electronic control panel with touch interface, wall-mounted complete with thermostat and room temperature and relative humidity probe with integrated WiFi module, InnovAPP. Cable connection. Colour white	All	EFB749II
	LED electronic control panel with touch interface, wall-mounted complete with thermostat and room temperature and relative humidity probe. Cable connection. Colour white	All	EEB749II

Accessories can be installed and tested at the factory
 The control panel is connected to the device via cable. The WiFi antenna allows remote management via app.

	Accessory description	Combinable products	Code
Control panels	i		
	SMART TOUCH wall mounted control panel with thermostat and room tempera- ture and relative humidity probe with integrated WiFi module, InnovAPP. Colour black	All	EFA649II (2)
	SMART TOUCH wall mounted control panel with thermostat and room tempera- ture and relative humidity probe with integrated WiFi module, InnovAPP. Colour white	All	EFB649II (2)
	SMART TOUCH wall mounted control panel with thermostat and room temperature and relative humidity probe. Colour black	All	EEA649II
	SMART TOUCH wall mounted control panel with thermostat and room temperatu- re and relative humidity probe. Colour white	All	EEB649II

Accessories can be installed and tested at the factory
 The control panel is connected to the device via cable. The WiFi antenna allows remote management via app.



GENERAL INFORMATION

2.1 About the manual

This manual was written to provide all the explanations for the correct management of the appliance.

- ▲ This instruction manual forms an integral part of the device and therefore must be carefully preserved and must ALWAYS travel with it, even if you transfer the device to another owner or relocate it to other premises. If the manual gets damaged or lost, download a copy from the website.
- ▲ Read this manual carefully before proceeding with any operation and follow the instructions in the individual chapters.
- ▲ The manufacturer is not responsible for damages to persons or property caused by failure to follow the instructions in this manual.
- ▲ This document is restricted in use to the terms of the law and may not be copied or transferred to third parties without the express authorization of the manufacturer.

2.1.1 Editorial pictograms

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

Related to security

A High risk warning (bold text)

• The operation described above presents a risk of serious physical injury, fatality, major damage to the appliance and/or to the environment if not carried out in compliance with safety regulations.

▲ Low risk warning (plain text)

- The operation described above presents a risk of minor physical injury or minor damage to the appliance and/or to the environment if not carried out in compliance with safety regulations.
- Prohibition (plain text)
 Refers to prohibited actions.

(*i*) Important information (bold text)

• This indicates important information that must be taken into account during the operations.

In the texts

- procedures
- lists

In the control panels

- actions required Expected responses following an action.

In the figures

1 The numbers indicate the individual components.

- A The capital letters indicate component assemblies.
 - The white numbers in black marks indicate a series of actions to be carried out in sequence.
- (A) The black letter in white identifies an image when there are several images in the same figure.

2.1.2 Pictograms on the product

Symbols are used in some parts of the appliance:

Related to security

🖄 Caution: electrical danger

• The concerned personnel is informed to the presence of electricity and the risk of suffering an electric shock.

2.1.3 Recipients

User

Non-expert person capable of operating the product in safe conditions for people, for the product itself and the environment, interpreting an elementary diagnostic of faults and abnormal operating conditions, carrying out simple adjustment, checking and maintenance operations.

Installer

Expert person qualified to position and connect (hydraulically, electrically, etc.) the unit to the plant; this person is responsible for handling and correct installation according to the instructions provided in this manual and the national standards currently in force.

Technical Service Centre

Expert and qualified person authorised directly by the manufacturer to carry out all routine and supplementary maintenance operations, as well as every adjustment, check, repair and replacement of parts necessary during the life of the unit itself.

2.1.4 Manual organisation

The manual is divided into sections each dedicated to one or more target groups.

Coding

It addresses all recipients.

It contains the list of products and/or accessories referred to in the manual.

General information

It addresses all recipients.

It contains general information and important warnings that should be known before installing and using the appliance.

Control panels

It addresses all recipients.

It contains section by control mode and information on the use of the main functions.

2.2 Disposal



The symbol on the product or its packaging indicates that the product must not be treated as normal household

2.3 General warnings

- ▲ This instruction is an integral part of the booklet of the appliance.
- ▲ The manufacturer reserves the right to make changes to its models at any time to improve its product, without prejudice to the essential characteristics described in this manual. The manufacturer is not obliged to add such modifications to machines previously manufactured, already delivered or under construction.

▲ All repair or maintenance interventions must be performed by the technical service department or by professionally qualified personnel as foreseen in this booklet. Do not modify or intervene on the appliance as this could create dangerous situations and the manufacturer will not be responsible for any damage caused.

▲ 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 put any containers on top of the appliance, especially if they contain liquids, as this could cause a short circuit or cause damage to the appliance and/or be exposed to danger of electrocution.

- \bigwedge Do not lean on the appliance.
- ▲ In the event of water leaks, turn off the appliance and disconnect the electric power supply. Call the Technical Service Centre.

 \bigwedge In case of replacement of parts, use only original parts.

Maintenance and Troubleshooting

It addresses all recipients. It contains specific warnings and useful information for regular maintenance work.

waste, but must be taken to the appropriate collection point for the recycling of electrical and electronic equipment.

Proper disposal of this product avoids harm to humans and the environment and promotes the reuse of valuable raw materials.

For more detailed information about the recycling of this product, contact your local city office, your household waste disposal service or the shop where you purchased the product.

Illegal disposal of the product by the user involves the application of the administrative sanctions provided for by the regulations in force.

This provision is only valid in the EU Member States.

M7 SERIES CONTROLS EEB749 - EFB749 - EGB749

3.1 Interface

3.1.1 Description

M7 series LED electronic control panels with touch interface for wall installation allow:

- room temperature control
- management of the main functions of the device
- temperature and humidity measurement
- fan speed regulation

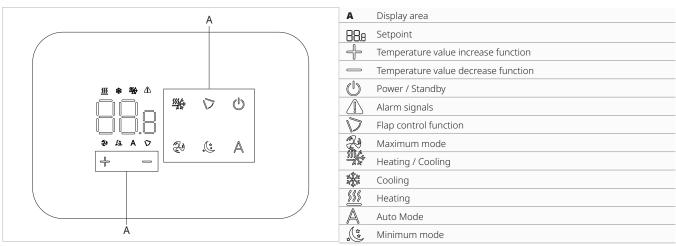
3.1.2 Display

Statuses and active alarms on display.

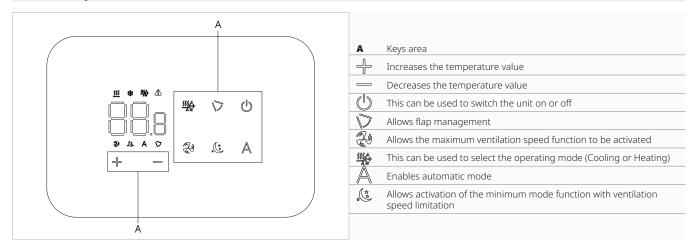
They are fitted with:

 internal memory with data saving even in case of shut-down or power outage

▲ After 20 seconds after the last action the panel brightness is reduced, only the room temperature is seen on the display. The maximum brightness is restored to the pressure of any key.



3.1.3 Keys functions



3.2 Main functions

3.2.1 General start-up

Before the activation:

 \bigwedge Make sure that the remote control is connected to the mains.

 \bigwedge In case of a master switch on the power supply line, switch on the system by inserting the switch.

To activate the control

- press the (¹) key for about 2 seconds *The text* appearing on the display. The device turns on.

3.2.2 Put in stand-by the control

To put in stand-by the control

- press the 🕛 key for about 2 seconds The symbol $\Box \vdash$ appears The control goes out.

 \bigwedge In stand-by mode the control ensures an antifreeze safety. In case of temperature <5 °C, the hot water solenoid valve outputs and boiler consent are activated automatically.

3.2.3 Set room temperature

To set-up the temperature

- operate the 🕂 — keys to decrease or increase the desired value The displayed value change.

 \bigwedge The adjustment range goes from 16 °C to 28 °C, with a resolution of 0,5 °C.

⚠ Out of range values from 5 °C and 40 °C are allowed, except in automatic mode. These value should be set only for short periods of time.

3.2.4 Automatic season operation (Heating/Cooling)

 \bigwedge Function only available for 4-pipe versions.

To access the automatic season

- press the ¹¹/₄ key for 10 seconds The symbol ¹¹/₄ on indicates the automatic function enable.

At the same time, one of the two symbols 💹 or 💥 lights up to indicate the current operating mode.

 \bigwedge In heating function the symbols is alight with setpoint higher than the room temperature.

 \bigwedge In cooling function the symbols is alight with setpoint lower than the room temperature.

 \bigwedge In the case of an incorrect setpoint, the symbol of the activated function flashes and ventilation stops until the appropriate value is reached.

🛕 After 15 minutes the symbol 🂹 or 🗱 flashes, error E6 appears on the display.

▲ Please refer to chapter "Visualization of alarms on display" <u>*p.* 13</u> for the list of errors shown on the display.

3.2.5 Cooling only mode

To select the Cooling operation

press the 🚟 key for about 2 seconds The symbol 🗱 on indicate the Cooling function enable.

The device dehumidifies and cools the room.

 \bigwedge In cooling function the symbols is alight with setpoint lower than the room temperature.

3.2.6 Heating only mode

To select the Heating operation

- press the ¹¹/₂ key for about 2 seconds The symbol ¹¹/₂ on indicates the Heating function enable. The device heats the room.
- \bigwedge In heating function the symbols is alight with setpoint higher than the room temperature.

3.2.7 Automatic operation

To select the Automatic function

- press the \mathbb{A} key for about 2 seconds The symbol \mathbb{A} on indicates the Automatic function enable.
- ⚠ The ventilation speed is automatically adjusted between a minimum value and a maximum value based on an algorithm type PI, according to the actual distance from the room temperature set-point.

3.2.8 Minimum mode operation

To select minimum mode operation

- press the (key for about 2 seconds The symbol (on indicates that fan operation in minimum mode.

In this mode the fan is set to minimum speed.

3.2.9 Maximum ventilation speed

To select the operation at the maximum ventilation speed

- press the 🐉 key for about 2 seconds The symbol 🚑 on indicates the maximum speed
- function enable
- Maximum power output is immediately obtained both in heating and cooling.
- \bigwedge After reaching the desired room temperature, select a different function to increase the thermal and acoustic comfort.

3.2.10 Set the key lock

To set-up the key locking

press both keys - for 3 seconds The text [] appearing on the display.

 \bigwedge All settings are inhibited by the user.

 \bigwedge Repeat the sequence to unlock the control.

3.3 Basic menu

To access the basic menu

- with the display off, hold down () for 10 seconds The text [] appearing on the display. The device turns on.
- hold down the $(\[b])$ key
- The text no appearing on the display.
- release the 🖒 key
 - The text $\Box \vdash$ appearing on the display.

To navigate in the menu

- use the icons 🕂 —

To select a menu item and to confirm the changes made

- press the key 🕛 for about 2 seconds
- confirming the change takes you to the next item

To exit the menu

- press the icon 🕛 for 10 seconds
- or wait 30 seconds the automatic shutdown

After 30 seconds from the last action the control goes out and the settings is memorized.

3.3.1 Menu items

CF: Scale

ub: Buzzer volume

Fr: Factory reset

3.3.2 Scale

To change the temperature unit of measure

- select[F
- press 🕛 to change settings
- select °C o °F
- use the from icons to move inside the menu
- press () to confirm
- By default the temperature unit of measure is $^{\circ}$ C.

3.3.3 Adjusting buzzer volume

To change the volume

- select 🚛
- press $\overline{\mathbb{O}}$ to change settings
- operate the keys to decrease or increase the desired value
- press () to confirm The volume setting range is from 00 (min) to 03 (max).
- \bigwedge The volume changes after confirm the modification.

3.3.4 Factory reset

To reset the factory parameters

- select 🗐
- press () to change settings
- select No to not reset the factory parameters
- select Yes to reset the factory parameters
- use the ficons to move inside the menu
- press () to confirm

By default digital input is set to No.

3.4 Warnings

3.4.1 Long period shut-down

For seasonal shutdowns or for long periods:

- disable the device
- set the main system switch to Off

 \bigwedge The antifreeze function is not on.

3.4.2 In case of control blockage

▲ This procedure should only be carried out in the event that the control locks and no longer responds to commands.

In case of control blockage

press both keys and () for 10 seconds
 h appears on the display accompanied by a beep.
 The control was reset.

3.4.3 Visualization of alarms on display

In the event of a malfunction, the display shows the fixed symbol \mathbf{A} .

To visualize the alarm code on control panel, it is necessary to access the Settings Menu (Menu 04).

▲ To access the Setup menu, it is necessary to access the Basic menu. See section "Basic menu" <u>*p.* 13</u>.

To visualise errors on the wall control panel

- access the basic menu
 then press Å.
- Appears
- press 🖵
- increase the value to .
- Appears LIL.
- press \bigcirc to confirm Appears $\square \square$.

Then the number assigned to the fancoil and the alarm code are displayed.

▲ In the event of an alarm, the device still maintains active functions.

The symbol \triangle is displayed on the wall control panel to indicate alarms.

To exit the menu

- press the icon 🕛 for 10 seconds
- or wait 30 seconds the automatic shutdown

After 30 seconds from the last action the control goes out and the settings is memorized.

Displayed alarms

- E1 Room temperature probe AIR/T1 disconnected or faulty
 None of the modes can be activated.
- E2 Faulty internal fan motor or disconnected
- None of the modes can be activated.
- E3 Water temperature probe H2/T2 disconnected or failure
- None of the modes can be activated. - E7 Module Communication Alarm Bluetooth communication not functioning.
- E8 Communication error alarm
 Error in the communication between the wall control panel and the fancoil. None of the unit's functions can be activated.
- Impeggiante Incorrect water temperature In heating the water temperature is below 30 °C and in cooling it is above 20 °C.
- The approximate and the water temperature is below 30 °C and in cooling it is above 20 °C.

Errors E7 and E8 are displayed without the error display procedure on the wall control panel.

Alarm E7 is an error that only appears with the control panel for wall control with Bluetooth connection (Code EGB749II).

3.4.4 Reset filter cleaner alarm

The flashing $\ensuremath{\Delta}$ symbol indicates that filter cleaning is required.

After the filters have been replaced, it is necessary to reset the filter hour count.

- press 🕲 for about 8 seconds
 - The 🛦 symbol disappears.



SMART TOUCH REMOTE CONTROLS EEA649 - EEB649 - EFA649 - EFB649

4.1 Interface

4.1.1 Description

Smart Touch wall control panels with thermostat and room temperature and relative humidity probe are electronic thermostats with the possibility of control over several appliances with electronic remote control.

Allow:

- room temperature control
- management of the main functions of the device

They are fitted with:

temperature probe

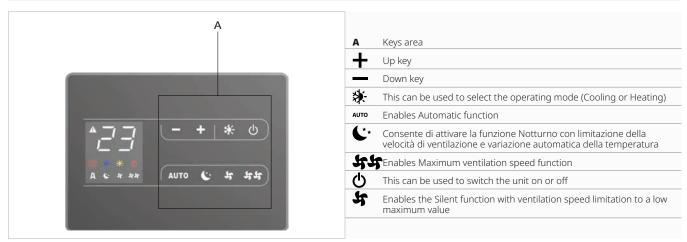
4.1.2 Display

Statuses and active alarms on display.

- internal memory with data saving even in case of shut-down or power outage
- \bigwedge The control can control up to a maximum of 30 units.
- ▲ The room temperature probe ensures an antifreeze safety even when the control is in stand-by
- ▲ After 20 seconds after the last action the panel brightness is reduced, only the room temperature is seen on the display. The maximum brightness is restored to the pressure of any key.
- Any faults of the connected individual terminals are not indicated by the wall panel.

Auto C 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		A Display area A Automatic function active S Silent function active S Silent function speed active Image: S Maximum ventilation speed active Image: S Night function active Image: Heating function on Cooling function on
Image: Contract C		
Cooling function on A C * ** A C * ** A C * ** A C * ** Cooling function on A C * ** A C * ** Cooling function on A C * ** A C * ** Cooling function on A C * **	The second se	Night function active
A C + ++ AUTO C + +++ AUTO C + ++++ AUTO C + +++++ AUTO C + ++++ AUTO C + +++++ AUTO C + ++++++ AUTO C + ++++++ AUTO C + +++++++++++++++++++++++++++++++++		
A & * ** Auto () * ** A & * ** Auto () * ** A & Supervision active with flashing icon and CP contact closed () The appliance is in stand-by mode		🗱 Cooling function on
Supervision active with flashing icon and CP contact closed The appliance is in stand-by mode		Alarm active with fixed icon
	A C # ## AUTO C Jr JrJr	Supervision active with flashing icon and CP contact closed
Resistance enabled indication	the second se	U The appliance is in stand-by mode
		Resistance enabled indication

4.1.3 Keys functions



4.2 Main functions

4.2.1 General start-up

Before the activation:

▲ Make sure that the remote control is connected to the mains.

 \bigwedge In case of a master switch on the power supply line, switch on the system by inserting the switch.

To activate the control

- press the 🖒 key
- The symbol 🕁 lights up.

4.2.2 Operating mode set-up

to switch the operating mode

press the key for about 2 seconds
 The symbol indicates the Heating function
 enable

The symbol $mathbf{R}$ on indicate the Cooling function enable

▲ In heating function the symbols is alight with setpoint higher than the room temperature.

▲ In cooling function the symbols is alight with setpoint lower than the room temperature.

▲ In the case of an incorrect setpoint, the symbol of the activated function flashes and ventilation stops until the appropriate value is reached.

4 pipes versions

In 4-pipe versions, with automatic Cooling/Heating regulation active, the simultaneous switching on of the \div \ddagger symbols indicates that the set-point has been reached.

4.2.3 Put in stand-by the control

To put in stand-by the control

- press the **b** key for about 2 seconds *The control goes out.*

▲ In stand-by mode the control ensures an antifreeze safety. In case of temperature <5 °C, the hot water solenoid valve outputs and boiler consent are activated automatically.

4.2.4 Set room temperature

To set-up the temperature

- - The displayed value change.

▲ The adjustment range goes from 16 °C to 28 °C, with a resolution of 0,5 °C.

▲ Out of range values from 5 °C and 40 °C are allowed, except in automatic mode. These value should be set only for short periods of time.

4.2.5 Automatic operation

To select the Automatic function

- press the AUTO key for about 2 seconds The symbol on indicates the Automatic function enable. ▲ The ventilation speed is automatically adjusted between a minimum value and a maximum value based on an algorithm type PI, according to the actual distance from the room temperature set-point.

4.2.6 Silent operation

To select the Silent operation

- press the stress key for about 2 seconds The symbol stress on indicates the Silent function enable

The ventilation speed is limited at a more reduced maximum value.

4.2.7 Night function

To select the Night function

- press the C key for about 2 seconds The symbol C on indicate the Night function enable.

 $\underline{\Lambda}$ The ventilation speed is limited at a very low value.

- The set temperature is automatically changed:
 in Heating mode, decreases by 1 °C after one hour and by another - 1 °C after two hours
 - in Cooling mode, increases by 1 °C after one hour and by another + 1 °C after two hours

4.2.8 Maximum ventilation speed

To select the operation at the maximum ventilation speed

- press the **ss** key for about 2 seconds
- The symbol **syst** on indicates the maximum speed function enable
- Maximum power output is immediately obtained both in heating and cooling.
- ▲ After reaching the desired room temperature, select a different function to increase the thermal and acoustic comfort.

4.2.9 Set the key lock

To set-up the key locking

- press both keys — + for 10 seconds The text $|_{a}|_{appearing}$ on the display.

 \bigwedge All settings are inhibited by the user.

 \bigwedge Repeat the sequence to unlock the control.

4.2.10 Brightness reduction

To reduce the display brightness

- with thee display off, press the + key for 5 seconds
 - The text 🛛 lappearing on the display.
- press the key to decrease the value
- wait 20 seconds
 The brightness is reduced.

▲ After 20 seconds from the last action the panel brightness will be reduced to increase the comfort during night use. On the display will appear only the room temperature.



4.2.11 Deactivation

To deactivate the display

press the key for about 2 seconds
 All the light signals go off.

▲ In stand-by mode, the control guarantees antifreeze protection.

4.2.12 Room temperature probe offset adjustment

To adjust the room temperature probe offset

 from display off, press the — key for about 5 seconds

Access to the variation menu of the AIR probe offset displayed on the display.

- press the - + keys to edit The displayed value change.

▲ Since the room temperature probe is located at the bottom of the unit, it is possible that in some cases the measurement may differ from the actual temperatura.

- ▲ Use this adjustment carefully.
- ▲ This adjustment must be carried out only after having found actual deviations from the room temperature using a reliable tool.
- Adjust the measured value in a range of 9/+ 12 K, with variations of 0.1 °C.
- After 20 seconds from the last action the control goes out and the settings is memorized.

4.2.13 WiFi network On, Off and Reset

⚠ Setting only valid for EFA649 - EFB649 controls.

To activate the WiFi network

- from the display on, press the **\$\$** key for about 10 seconds
- The text "On" appearing on the display.
- do not touch any keys for another 10 seconds The WiFi network is active and remains visible and usable with the last configured name.

To reset and restore the WiFi network to its original configuration

- from the display on, press the **\$\$** key for about 10 seconds
- The text "On" appearing on the display. - press again the अक्ष key
 - The text "rSt" appearing on the display.
- do not touch any keys for another 10 seconds, switch off and on the power supply of the control. *WiFi network is reset.*

To turn off the WiFi network

- from the display on, press the **\$\$\$** key for about 10 seconds
- The text "On" appearing on the display.
- press again the \$\$ key again until "OFF" appears The text "OFF" appearing on the display.
- do not touch any keys for another 10 seconds The WiFi network is turned off and will not be displayed on your smartphone or tablet.

4.3 Warnings

4.3.1 Long period shut-down

- For seasonal shutdowns or for long periods:
 - disable the device
 - set the main system switch to Off

 Λ The antifreeze function is not on.

4.3.2 Visualization of alarms on display

Displayed alarms

- E1 Room temperature probe disconnected or faulty
- None of the modes can be activated.
- **A** E2 Fault or connection of a remote double room sensor on one of the fan coil units *None of the modes can be activated.*
- **A** E3 Humidity probe disconnected or faulty *None of the modes can be activated.*
- **A** E4 Air quality probe disconnected or faulty
 - None of the modes can be activated.

ON-BOARD CONTROL ECA644 - ECA647 - EWF644 - EWF647

5.1 Interface

The controls can only be installed on the versions Air-Leaf SL, AirLeaf SLS, AirLeaf RS.

5.1.1 Description

The on-board electronic controls with continuously modulating thermostat allow:

• room temperature control

management of the main functions of the device

They are fitted with:

 internal memory with data saving even in case of shut-down or power outage

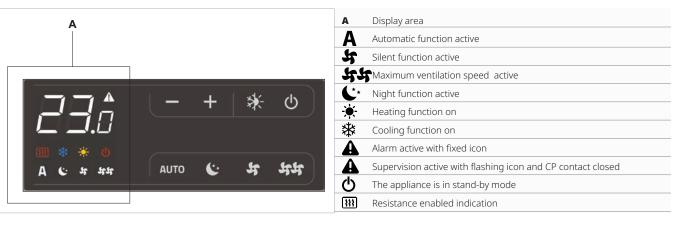
5.1.2 Display

Statuses and active alarms on display.

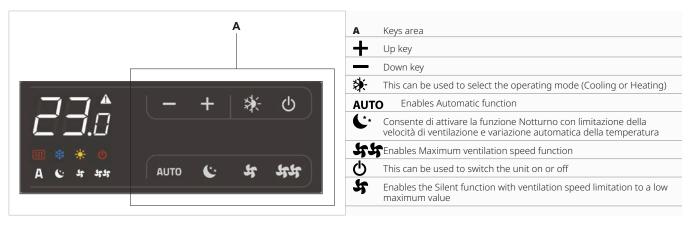
Through the water temperature probe (10 k Ω) positioned in the compartment on the unit's coil, the functions can be regulated:

- minimum temperature in heating mode (30 °C)
- maximum temperature in cooling mode (20 °C)
- ▲ The room temperature probe ensures an antifreeze safety even when the control is in stand-by

▲ After 20 seconds after the last action the panel brightness is reduced, only the room temperature is seen on the display. The maximum brightness is restored to the pressure of any key.



5.1.3 Keys functions



5.2 Main functions

5.2.1 General start-up

Before the activation:

 \bigwedge Make sure that the remote control is connected to the mains.

 \bigwedge In case of a master switch on the power supply line, switch on the system by inserting the switch.

To activate the control

- press the 🕁 key The symbol 🕁 lights up.

5.2.2 Operating mode set-up

to switch the operating mode

press the 🔆 key for about 2 seconds The symbol 🔆 on indicates the Heating function enable

The symbol 🔆 on indicate the Cooling function enable

- \bigwedge In heating function the symbols is alight with setpoint higher than the room temperature.
- \bigwedge In cooling function the symbols is alight with setpoint lower than the room temperature.

 \bigwedge In the case of an incorrect setpoint, the symbol of the activated function flashes and ventilation stops until the appropriate value is reached.

If the printed circuit board detects the water temperature probe correctly, start-up takes place under normal conditions.

▲ The printed circuit board provides for operation without a water probe. In this case, the fan stop thresholds are ignored.

4 pipes versions

In 4-pipe versions, with automatic Cooling/Heating regulation active, the simultaneous switching on of the 💥 🗱 symbols indicates that the set-point has been reached.

5.2.3 Put in stand-by the control

To put in stand-by the control

- press the 🕁 key for about 2 seconds The control goes out.

 \bigwedge In stand-by mode the control ensures an antifreeze safety. In case of temperature <5 °C, the hot water solenoid valve outputs and boiler consent are activated automatically.

5.2.4 Set room temperature

To set-up the temperature

- operate the keys to decrease or increase the desired value
 - The displayed value change.

↑ The adjustment range goes from 16 °C to 28 °C, with a resolution of 0,5 °C.

⚠ Out of range values from 5 °C and 40 °C are allowed, except in automatic mode. These value should be set only for short periods of time.

5.2.5 Automatic operation

To select the Automatic function

- press the AUTO key for about 2 seconds The symbol A on indicates the Automatic function enable.
- ⚠ The ventilation speed is automatically adjusted between a minimum value and a maximum value based on an algorithm type PI, according to the actual distance from the room temperature set-point.

5.2.6 Silent operation

To select the Silent operation

- press the stress key for about 2 seconds The symbol stress on indicates the Silent function enable.

A The ventilation speed is limited at a more reduced maximum value.

5.2.7 Night function

To select the Night function

 press the C* key for about 2 seconds The symbol 🕻 on indicate the Night function enable.

 \bigwedge The ventilation speed is limited at a very low value.

\Lambda The set temperature is automatically changed:

- in Heating mode, decreases by 1 °C after one hour and by another - 1 °C after two hours
- in Cooling mode, increases by 1 °C after one hour and by another + 1 °C after two hours

5.2.8 Maximum ventilation speed

To select the operation at the maximum ventilation speed

- press the **\$\$** key for about 2 seconds
- The symbol **\$\$** on indicates the maximum speed *function enable*
- Maximum power output is immediately obtained both in heating and cooling.
- \bigwedge After reaching the desired room temperature, select a different function to increase the thermal and acoustic comfort

5.2.9 Set the key lock

To set-up the key locking

 press both keys — for 10 seconds The text [] appearing on the display.

 \bigwedge All settings are inhibited by the user.

Repeat the sequence to unlock the control.

5.2.10 Brightness reduction

To reduce the display brightness

- with thee display off, press the key for 5 seconds
 - The text \Box appearing on the display.

- press the key to decrease the value
- wait 20 seconds
- The brightness is reduced.

 \bigwedge After 20 seconds from the last action the panel brightness will be reduced to increase the comfort during night use. On the display will appear only the room temperature.

5.2.11 Deactivation

To deactivate the display

- press the key 🕐 for about 2 seconds All the light signals go off.

 \bigwedge In stand-by mode, the control guarantees antifreeze protection.

5.2.12 Room temperature probe offset adjustment

To adjust the room temperature probe offset

 from display off, press the — key for about 5 seconds

Access to the variation menu of the AIR probe offset displayed on the display.

- press the 🛶 📥 keys to edit The displayed value change.
- \bigwedge Since the room temperature probe is located at the bottom of the unit, it is possible that in some cases the measurement may differ from the actual temperatura.
- ▲ Use this adjustment carefully.
- A This adjustment must be carried out only after having found actual deviations from the room temperature using a reliable tool.

- Adjust the measured value in a range of 9/+ 12 K, with variations of 0.1 °C.
- \bigwedge After 20 seconds from the last action the control goes out and the settings is memorized.

5.2.13 WiFi network On, Off and Reset

\Lambda Setting only valid for EWF644 - EWF647 controls.

To activate the WiFi network

- from the display on, press the 😽 key for about 10 seconds
 - The text "On" appearing on the display.
- do not touch any keys for another 10 seconds The WiFi network is active and remains visible and usable with the last configured name.

To reset and restore the WiFi network to its original configuration

- from the display on, press the **sty** key for about 10 seconds
- The text "On" appearing on the display. press again the **\$\$** key
- The text "rSt" appearing on the display.
- do not touch any keys for another 10 seconds, switch off and on the power supply of the control. WiFi network is reset.

To turn off the WiFi network

- from the display on, press the **\$\$** key for about 10 seconds
 - The text "On" appearing on the display.
- press again the \$\$ key again until "OFF" appears The text "OFF" appearing on the display.
- do not touch any keys for another 10 seconds The WiFi network is turned off and will not be displayed on your smartphone or tablet.

5.3 Warnings

5.3.1 Long period shut-down

For seasonal shutdowns or for long periods:

- disable the device
- set the main system switch to Off

 \bigwedge The antifreeze function is not on.

5.3.2 Visualization of alarms on display

Displayed alarms

A E1 Room temperature probe disconnected or faulty

None of the modes can be activated.

A E2 Failed internal fan motor (e.g. jamming due to foreign objects or failure of the rotation sensor)

None of the modes can be activated.

- Water temperature probe H2 alarm **A** E3 not suitable, temporary stop of the ventilation until the temperature reaches an appropriate value
- Water temperature probe H4 alarm **A** E5 not suitable, temporary stop of the ventilation until the temperature reaches an appropriate value. Only for ECA647 - EWF647 (4-pipe versions)
- Incorrect set-point. The symbol of the activated function flashes and ventilation stops until the appropriate value is reached.

A Check that the probe is correctly positioned in the compartment on the coil.

↑ The printed circuit board provides for operation without a water probe. In this case, the fan stop thresholds are ignored.

ON-BOARD CONTROL E4T643

6.1 Interface

▲ The control can only be installed on the view versions AirLeaf SL, AirLeaf SLS, AirLeaf RS.

6.1.1 Description

The SMART TOUCH on-unit electronic control with 4 fixed speeds and thermostat allows:

- room temperature control
- management of the main functions of the device
- The electronic control on-board the unit is equipped with: • internal memory with data saving even in case of shut-down or power outage

6.1.2 Display

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Statuses and active alarms on display.

C

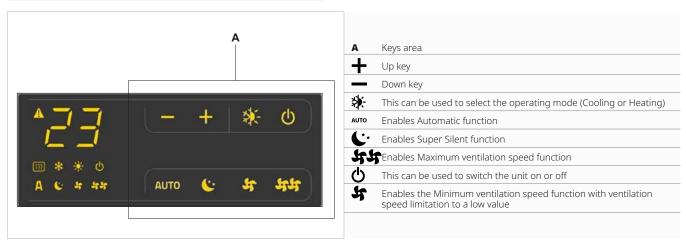
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Through the water temperature probe (10 k Ω) positioned in the compartment on the unit's coil, the functions can be regulated:

- minimum temperature in heating mode (30 °C)
- maximum temperature in cooling mode (20 °C)
- ▲ The room temperature probe ensures an antifreeze safety even when the control is in stand-by
- ▲ After 20 seconds after the last action the panel brightness is reduced, only the room temperature is seen on the display. The maximum brightness is restored to the pressure of any key.

A	Display area
Α	Automatic function active
4	Minimum ventilation speed active
77	Maximum ventilation speed active
(**	Super Silent function active
	Heating function on
*	Cooling function on
	Alarm active with fixed icon
A	Supervision active with flashing icon
	The appliance is in stand-by mode
***	Resistance enabled indication

6.1.3 Keys functions



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AUTO

6.2 Main functions

6.2.1 General start-up

Before the activation:

 \bigwedge Make sure that the remote control is connected to the mains.

 \bigwedge In case of a master switch on the power supply line, switch on the system by inserting the switch.

To activate the control

- press the 🕁 key The symbol 🕁 lights up.

6.2.2 Operating mode set-up

to switch the operating mode

- press the 🔆 key for about 2 seconds The symbol 🔆 on indicates the Heating function enable

The symbol 🔆 on indicate the Cooling function enable

 \bigwedge In heating function the symbols is alight with setpoint higher than the room temperature.

 \bigwedge In cooling function the symbols is alight with setpoint lower than the room temperature.

 \bigwedge In the case of an incorrect setpoint, the symbol of the activated function flashes and ventilation stops until the appropriate value is reached.

If the printed circuit board detects the water temperature probe correctly, start-up takes place under normal conditions.

⚠ The printed circuit board provides for operation without a water probe. In this case, the fan stop thresholds are ignored.

4 pipes versions

In 4-pipe versions, with automatic Cooling/Heating regulation active, the simultaneous switching on of the 🔆 🗱 symbols indicates that the set-point has been reached.

6.2.3 Put in stand-by the control

To put in stand-by the control

press the 🖒 key for about 2 seconds The control goes out.

 \bigwedge In stand-by mode the control ensures an antifreeze safety. In case of temperature <5 °C, the hot water solenoid valve outputs and boiler consent are activated automatically.

6.2.4 Set room temperature

To set-up the temperature

- operate the keys to decrease or increase the desired value
 - The displayed value change.

↑ The adjustment range goes from 16 °C to 28 °C, with a resolution of 0,5 °C.

⚠ Out of range values from 5 °C and 40 °C are allowed, except in automatic mode. These value should be set only for short periods of time.

6.2.5 Automatic operation

To select the Automatic function

press the AUTO key for about 2 seconds The symbol A on indicates the Automatic function enable.

A In automatic mode the fan performs a 'step' regulation as the room temperature approaches the set-point.

6.2.6 Minimum speed ventilation function

To select the operation at the Minimum ventilation speed

- press the **S** key for about 2 seconds The symbol 🔄 on indicates the Minimum speed
- function enable.
- ▲ The ventilation speed is limited at a more reduced maximum value.

6.2.7 Super Silent Function

To select Super Silent function

press the C* key for about 2 seconds The symbol 🕑 on indicates that the Super Silent function is activated.

When the Super Silent function is selected, it is activated: strong dehumidification in cooling mode

· radiant-only operation (with fan off, solenoid valve and in the RS version active micro-fans) in heating mode

6.2.8 Maximum ventilation speed

To select the operation at the Maximum ventilation speed

press the **ss** key for about 2 seconds The symbol ses on indicates the maximum speed function enable

▲ Maximum power output is immediately obtained both in heating and cooling.

After reaching the desired room temperature, select a different function to increase the thermal and acoustic comfort

6.2.9 Set the key lock

To set-up the key locking

- press both keys — for 10 seconds The text $[-1]_{appearing}$ on the display.

 \bigwedge All settings are inhibited by the user.

Repeat the sequence to unlock the control.

6.2.10 Brightness reduction

To reduce the display brightness

- with thee display off, press the 🕂 key for 5 seconds
 - The text $\begin{bmatrix} 1 \\ 1 \end{bmatrix}$ appearing on the display.
 - press the ____ key to decrease the value
- wait 20 seconds
 - The brightness is reduced.

▲ After 20 seconds from the last action the panel brightness will be reduced to increase the comfort during night use. On the display will appear only the room temperature.

6.2.11 Deactivation

To deactivate the display

- press the key **(b)** for about 2 seconds *All the light signals go off.*

▲ In stand-by mode, the control guarantees antifreeze protection.

6.2.12 Room temperature probe offset adjustment

To adjust the room temperature probe offset

 from display off, press the — key for about 5 seconds

Access to the variation menu of the AIR probe offset displayed on the display.

6.3 Warnings

6.3.1 Long period shut-down

For seasonal shutdowns or for long periods: – disable the device

- set the main system switch to Off

 \bigwedge The antifreeze function is not on.

6.3.2 Visualization of alarms on display

- **A** E1 Faulty room temperature probe *None of the modes can be activated.*
- A E2 Motor alarm (for example, jamming due to foreign bodies or fault of the rotation sensor)
- **A** E3 Water temperature probe H2 alarm not suitable, temporary stop of the ventilation until the temperature reaches an appropriate value
- \bigwedge Make sure the probe installed is 10 kΩ.

- press the + keys to edit The displayed value change.
- Since the room temperature probe is located at the bottom of the unit, it is possible that in some cases the measurement may differ from the actual temperatura.
- ▲ Use this adjustment carefully.
- This adjustment must be carried out only after having found actual deviations from the room temperature using a reliable tool.
- Adjust the measured value in a range of 9/+ 12 K, with variations of 0.1 °C.
- After 20 seconds from the last action the control goes out and the settings is memorized.

ON-UNIT CONTROL E2T543

7.1 Interface

▲ The control can only be installed on the view versions AirLeaf SL, AirLeaf SLS, AirLeaf RS.

7.1.1 Description

The electronic control on the unit with 4 fixed speeds and thermostat allows:

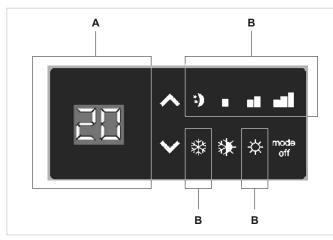
- room temperature control
- management of the main functions of the device

It is fitted with:

• internal memory with data saving even in case of shut-down or power outage

7.1.2 Display

Statuses and active alarms on display.

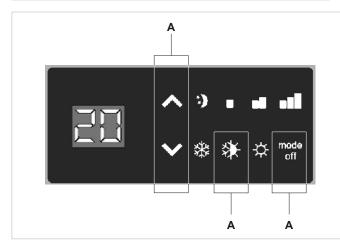


Through the water temperature probe (10 k Ω) positioned
in the compartment on the unit's coil, the functions can be
regulated:

- minimum temperature in heating mode (30 °C)
- maximum temperature in cooling mode (20 °C)
- After 20 seconds after the last action the panel brightness is reduced, only the room temperature is seen on the display. The maximum brightness is restored to the pressure of any key.

A	Display area
В	Led area
	Minimum speed active
	Medium speed active
	Maximum speed active
*.)	Super Silent function active
Å.	Heating function on
*	Cooling function on

7.1.3 Keys functions



A	Keys area
$\mathbf{\wedge}$	Up key
$\mathbf{\vee}$	Down key
≯	This can be used to select the operating mode (Cooling or Heating)
mode off	Allows you to switch the unit on or off and select operating modes



7.2 Main functions

7.2.1 General start-up

Before the activation:

 \bigwedge Make sure that the remote control is connected to the mains.

 \bigwedge In case of a master switch on the power supply line, switch on the system by inserting the switch.

To activate the control

- press the **mode** key off The control turns on.

The text \Box_{\Box} appearing on the display.

7.2.2 Operating mode set-up

to switch the operating mode

press the 🔆 key for about 2 seconds The symbol \diamondsuit on indicates the Heating function enable

able

 \bigwedge In heating function the symbols is alight with setpoint higher than the room temperature.

 \bigwedge In cooling function the symbols is alight with setpoint lower than the room temperature.

 \bigwedge In the case of an incorrect setpoint, the symbol of the activated function flashes and ventilation stops until the appropriate value is reached.

7.2.3 Put in stand-by the control

To put in stand-by the control

- press the **mode** key for about 2 seconds The control goes out.

7.2.4 Set room temperature

To set-up the temperature

- operate the \checkmark keys to decrease or increase the desired value
 - The displayed value change.

▲ The temperature adjustment range is from 15 to 30°C, with a resolution of 0.5°C.

▲ Off-scale values of 5°C (Lo) and 40°C (Hi) are possible, except in automatic mode. Only set these values for short periods.

7.2.5 Setting the ventilation speed

To select the fan speed control

- press the key off The symbol **S** on indicates the Silent function enable

▲ The ventilation speed is limited at a more reduced maximum value.

- press the 🔆 key for about 2 seconds The symbol \Leftrightarrow on indicates the Heating function enable The symbol \circledast on indicate the Cooling function en-

able

- \bigwedge In heating function the symbols is alight with setpoint higher than the room temperature.
- \bigwedge In cooling function the symbols is alight with setpoint lower than the room temperature.

7.2.6 Set the key lock

To set-up the key locking

The text $[-]_$ *appearing on the display.*

All settings are inhibited by the user.

\Lambda Repeat the sequence to unlock the control.

7.2.7 Brightness reduction

To reduce the display brightness

- press the 🔆 key for 10 seconds The text $\lfloor \square$ appearing on the display.

To restore normal display brightness

- press the 🔆 key for 10 seconds The text H | appearing on the display.
- \bigwedge After 20 seconds from the last action the panel brightness will be reduced to increase the comfort during night use. On the display will appear only the room temperature.

7.2.8 Deactivation

To deactivate the display

- press the key **mode** for about 2 seconds All the light signals go off.

7.3 Warnings

7.3.1 Long period shut-down

For seasonal shutdowns or for long periods:

- disable the device
- set the main system switch to Off

7.3.2 Visualization of alarms on display

E1 and flashing of all LEDs Room temperature probe disconnected or faulty (automatic reset alarm)

None of the modes can be activated.

[⚠] In stand-by mode, the control guarantees antifreeze protection.

- E2 and flashing of LEDs 🔆 🗱 Failure in the water temperature probe located in the main coil
- E3 and flashing of LEDs *****) **B Motor** alarm (e.g. jamming due to foreign bodies or fault of the rotation sensor) (automatic reset alarm)
- Flashing of LED 🔆 Water temperature alarm, water demand not met (<30 °C in heating). Temporary stop of ventilation until the appropriate value is reached
- Flashing of LED * Water temperature alarm, water demand not met (>20 °C in cooling). Temporary stop of ventilation until the appropriate value is reached

▲ Check that the probe is correctly positioned in the compartment on the coil.

▲ The printed circuit board provides for operation without a water probe. In this case, the fan stop thresholds are ignored.



SPEED SELECTOR B3V137

8.1 Interface

The control can only be installed on the view versions AirLeaf SL, AirLeaf SLS, AirLeaf RS.

8.1.1 Description

The on-board speed selector allows:

management of the main functions of the device

Α

mode off

*.)

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Α

8.1.2 Display

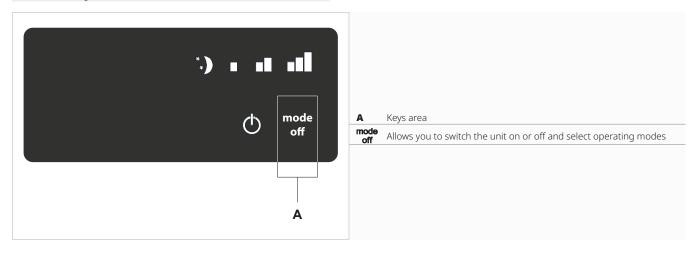
Statuses and active alarms on display.

It is fitted with:

- internal memory with data saving even in case of shut-down or power outage
- ▲ After 20 seconds after the last action the panel brightness is reduced, only the room temperature is seen on the display. The maximum brightness is restored to the pressure of any key.

A	l ed area
	Minimum speed active
	Medium speed active
	Maximum speed active
*.)	Super Silent function active
Ó	The appliance is in stand-by mode with a fixed icon
Ŏ	Open TA contact with flashing icon

8.1.3 Keys functions



8.2 Main functions

8.2.1 General start-up

Before the activation:

 \bigwedge Make sure that the remote control is connected to the mains and to a room thermostat with a single 230 V ac contact.

▲ In case of a master switch on the power supply line, switch on the system by inserting the switch.

To activate the control

- press the mode off key The control turns on.

8.2.2 Put in stand-by the control

To put in stand-by the control

press the mode off key for about 2 seconds The control goes out.

8.2.3 Setting the ventilation speed

To select the fan speed control

 press the key mode off
 The symbol *, on indicates that the Super Silent function is activated.

8.3 Warnings

8.3.1 Long period shut-down

For seasonal shutdowns or for long periods:

- disable the device
- set the main system switch to Off

8.3.2 Visualization of alarms on display

- Led 🖒 flashing TERM contact open
- Led 🕑 lit steadily TERM contact closed
- Led 1 lit steadily Super Silent function active (400 rpm)
- Led lit steadily Minimum active speed (680 rpm)
- Led 📕 lit steadily Average speed active (1100 rpm)
- Led **I** lit steadily Maximum active speed (1500 rpm)

The icon lit up indicates the minimum speed activated.

The icon lit up indicates the average speed activated.

The *icon lit up indicates the maximum speed* function activated.

By setting the maximum speed, the maximum output power is immediately obtained in both heating and cooling mode.

After reaching the desired room temperature, select a different function to increase the thermal and acoustic comfort.

8.2.4 Deactivation

To deactivate the display

- press the key """ for about 2 seconds All the light signals go off.



MAINTENANCE

10.1 Preliminary warnings

Before each cleaning and maintenance intervention:

- disconnect the device from the power mains by turning the system master switch to "OFF"
- wait for the components to cool down in order to avoid any burns
- Carrying out any technical or cleaning work before disconnecting the unit from the power supply is forbidden.
- \bigwedge Make sure that there is no voltage before operating.
- After completing the maintenance work, must be restored the original condition.

10.2 Routine maintenance

Routine maintenance is essential to keep the device always efficient, safe and reliable over time.

It can be done:

every six months

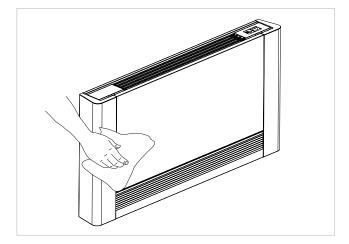
Before each cleaning and maintenance intervention:

- disconnect the device from the power mains by turning the system master switch to "OFF"
- Wait for the components to cool down in order to avoid any burns.

After completing the maintenance work, must be restored the original condition.

It is forbidden to open the access doors and carry out any technical or cleaning intervention, before having disconnect the device from the mains supply by placing the main switch of the system on "OFF".

10.2.1 External cleaning



Clean the external surfaces using a soft cloth dampened with water.

▲ Do not use abrasive sponges or abrasive or corrosive detergents as you might damage the painted surface.

▲ Disconnect the unit from the power supply before each cleaning and maintenance intervention by setting the main power supply switch to off.

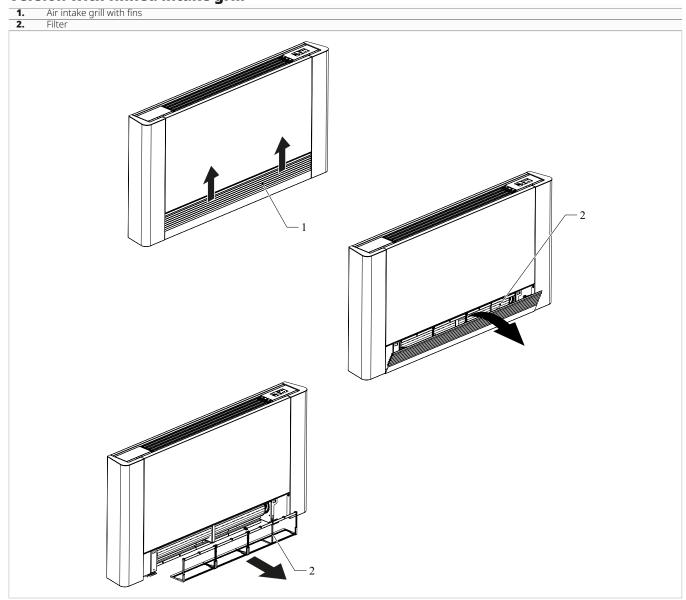
10.2.2 Air intake filter cleaning

Cleaning the filter must be carried out:

- after prolonged operation, considered the concentration of impurities in the air
- when you plan to restart the system after prolungate disuse

Filter extraction

Version with finned intake grill



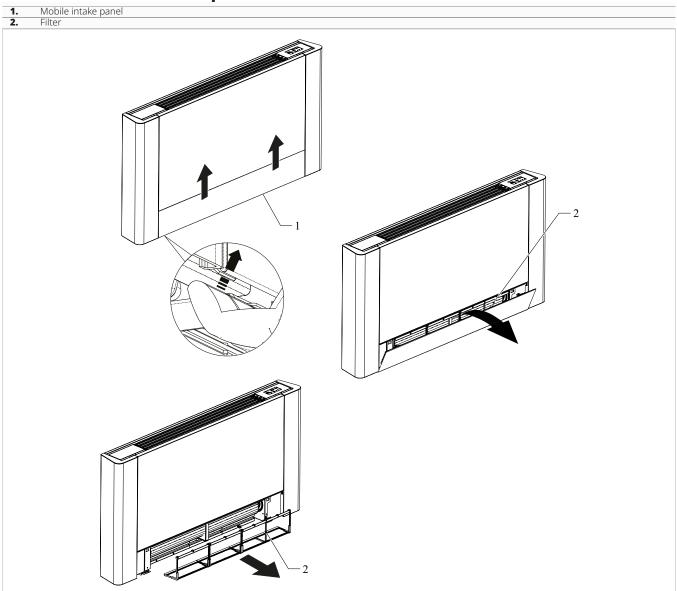
For removing the filter in versions with a finned intake grill:

- lift the fin grill slightly
 rotate the fin grill until it comes completely out of the remove the gridremove the filter



Version with mobile intake panel

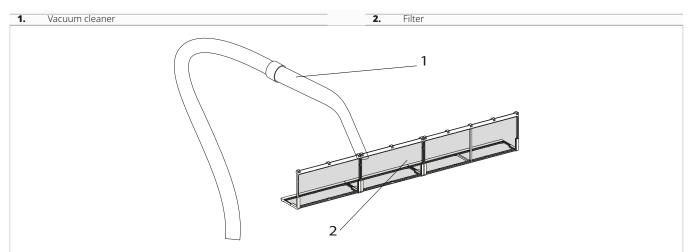
1. 2.



To removing the filter in versions with mobile intake panel:

- press the plastic tabs at the lower ends of the mobile panel
- lift the mobile panel slightly
- rotate until the complete exit from the housing
- remove the mobile panelremove the filter

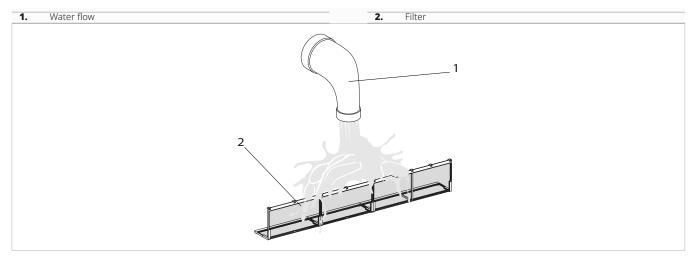
Cleaning the filters



To clean the filter:

- use a vacuum cleaner

- aspirate dust



If the quantity of dust is considerable: – wash the filter under running water (max. 40 °C) – allow to dry in the shade

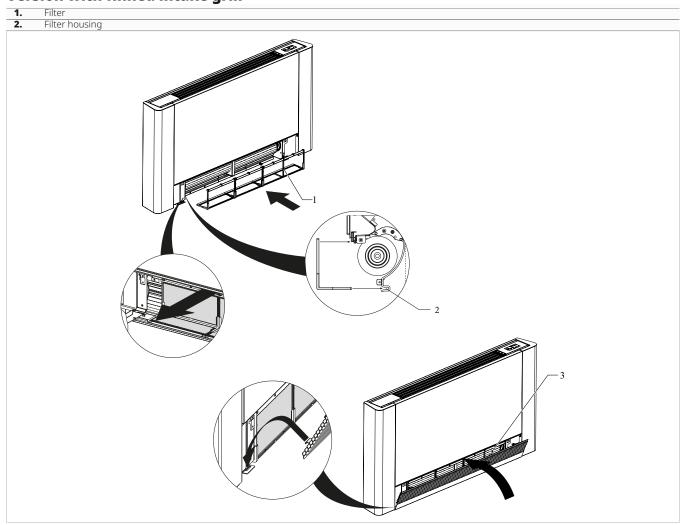
 \bigwedge Exposure to the sun or washing water temperatures above 40 °C can shrink the filters.

It is forbidden to use detergents or solvents to clean the filter.



Filter installation

Version with finned intake grill



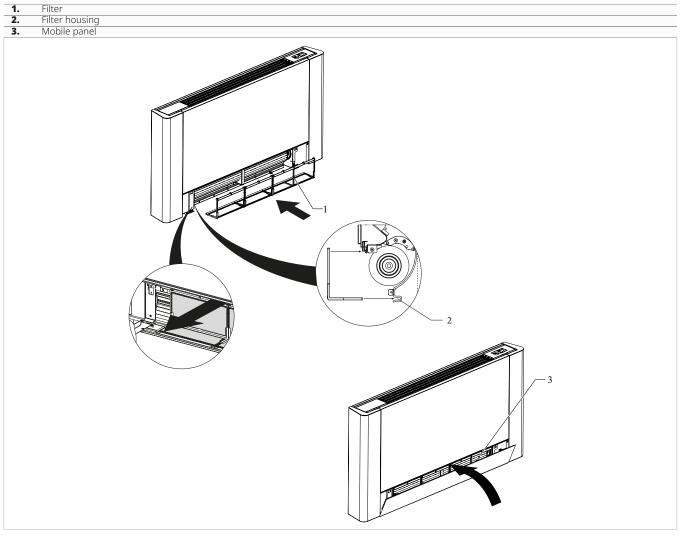
To reassemble the filter:

- bring the filter closer to the unit
- insert the filter into its housing
- bring the finned grill closer
- insert the grill into the appropriate slots
- rotating the grillhooking the grill

 \bigstar Check that the filter is fitted correctly.

It is forbidden to use the unit without a filter.

Version with mobile intake panel



To reassemble the filter:

- bring the filter closer to the unit
- insert the filter into its housing
- place the mobile panel on the appliance
- press the panel until it locks

▲ The appliance is equipped with a safety switch that prevents fan operation in the absence or with a poorly positioned moving panel.

 \bigwedge Check that the filter is fitted correctly.

It is forbidden to use the unit without a filter.

10.3 Suggestions for energy saving

For a correct operation of the device and a great energy saving:

• keep the filters clean

- keep the doors and windows of the locations fitted with air conditioning systems closed as much as possible
- During summer limit the entry of direct sun rays into the rooms to be air-conditioned by means of external screens (projections, curtains, shutters, etc.)



TROUBLESHOOTING

11.1 Preliminary warnings

Should you encounter any of the anomalies below:

- the ventilation does not start even if the water circuit is filled with hot or cold water
- the device is losing water in heating mode
- the device is loosing water in cooling mode
- the device generates excessive noise
- there is dew on the front panel

Follow the instructions below:

- disconnect the device from power supply immediately
- close the water taps
- contact immediately an authorized technical support center or qualified staff
- The interventions must be carried out by a qualified installer or by a specialized support center.
- Do not intervene personally.

11.2 Troubleshooting table

Effect	Cause	Solution	
The ventilation is delayed with respect to the new temperature or function settings.	The circuit valve requires a certain time to open and therefore to make the hot or cold water circulate inside the device.	Wait 2 or 3 minutes to allow the circuit valve to open.	
The device does not activate the ventilation.	Cold or hot water is missing from the system.	Make sure the boiler or the water cooler are on.	
		Demount the body of the valve and check if the water circulation is restored.	
The ventilation does not start even if the water circuit is filled with hot or cold water.	The hydraulic valve stays closed.	Check the valve operation feeding it separately to 230 V. If you were to turn on, the problem may be in the electronic control.	
	The ventilation motor is jammed or burnt.	Check the motor windings and check if the fan rotates freely.	
	The wirings are not correct.	Check the electrical connections.	
	Leaks at the hydraulic connections of the system.	Check the leak and tighten the connection.	
The device is losing water in heating mode.	Losses in the valve group.	Check the condition of the gaskets.	
There is dew on the front panel.	Detached thermal insulation.	Check the correct positioning of the thermal and acou- stic insulations paying particular attention to the front one located on top of the finned coil.	
There are water drops on the air vent.	High humidity conditions (>60%) might generate con- densation, especially at minimum ventilation speeds.	As soon as the level of relative humidity drops, the phe- nomena disappears. However, a few water drops falling inside the device will not cause any malfunction.	
	The condensate tray is clogged.	Slowly pour a bottle of water in the lower section of the battery to check the drainage; if necessary clean the tray and/or improve the slope of the drain pipe.	
The device is loosing water in cooling mode.	The condensate discharge pipe does not have the slope required for correct drainage.		
	The connection pipes and the valves unit are not well insulated.	Check the pipe insulation.	
	The fan touches the structure.	Check.	
The device generates excessive noise.	The fan is unbalanced.	The unbalancing generates excessive machine vibra- tions: replace the fan.	
	Check the filters for dirt and clean them if necessary.	Clean the filters.	

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