

INSTALLATION, MAINTENANCE AND OPERATING MANUAL

MODULATING ELECTRIC HEATER EH15 - EH30



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1. WARNINGS

PLEASE READ BEFORE PROCEEDING

This technical manual must be kept in good condition with the appliance.

The characteristics, illustrations, and descriptions contained in this document are, to the best of our knowledge, accurate at the time of approval for printing. We reserve the right to modify, discontinue certain features, or stop production without prior notice. This does not constitute a commitment on our part.

Safety rules

- It is forbidden to block or reduce the ventilation openings of the installation room or the appliance.
- Never modify settings made by a qualified professional.
- Never spray water on the appliance, nor touch it with wet hands or feet.
- Never touch hot surfaces or moving parts.
- Do not place the appliance in a way that could ignite flammable materials.
- Do not cover the appliance with clothing or any object that could cause overheating and fire.
- Any intervention on the appliance is forbidden before disconnecting it from the electrical network.
- Do not modify the appliance settings, safety systems, or controls, as this may create dangerous conditions.

Inform after-sales service if the supply voltage is changed.

If the appliance remains unused for a long period, disconnect the electrical supply. When restarting, contact a qualified technician. All repair or maintenance operations must be carried out exclusively by authorized personnel.

A maintenance contract is strongly recommended. Ask your installer.

Safety notice

Electrical components and mechanical moving parts can cause injury. To avoid inherent risks during installation or maintenance, the power supply must be disconnected. All persons involved must comply with applicable health and safety standards.

2. GENERAL INFORMATION

These appliances comply with the essential requirements of the EMC Directive 2014/30/EU. Installation must respect EMC. rules.

They are intended for large-volume buildings such as warehouses, garages, workshops, sports halls, etc.

Warranty and manufacturer responsibility are void in case of damage caused by incorrect installation, settings, maintenance, or inappropriate use.

Do not install the appliance in humid or corrosive environments.

Installation must be performed by qualified personnel, with access to electrical components allowed only when power is off.

This manual is part of the supplied equipment and must be given to the user. It must be kept near the appliance.

2.1 Reception and storage

Check the condition of the equipment. Unpack using proper protective measures.

If damaged, notify the carrier upon delivery.

Store in a clean, dry area, protected from shocks, vibrations, and humidity (< 90%).

2.2 Recycling and end of life

This appliance is built largely from materials that can be recycled. At the end of its service life, special attention must be paid to its disposal. Certain components, such as electrical equipment, are subject to specific regulations. National regulations in force must be observed when disposing of these components.

1. For the disposal of the product and its parts, contact public or private waste-management companies.
2. For further information on proper disposal of the product, contact the local municipality, the waste collection and treatment service, or the retailer from whom the product was purchased.



Appliances or equipment bearing this symbol must not be disposed of with household waste, but must be collected separately. Proper recycling helps prevent environmental damage and health risks.

3. PRESENTATION

3.1 Description and operation

The modulating electric air heater automatically adjusts its heating output according to the difference between the detected ambient temperature and the setpoint temperature. When the difference is significant, the appliance delivers its maximum power to heat the area quickly. As the temperature approaches the setpoint, the power is progressively reduced.

This modulation principle ensures optimal comfort, improved energy efficiency, and increased component longevity by avoiding repeated ON/OFF cycles.

When the appliance stops heating, the fan continues to operate until the internal temperature drops below a certain threshold, allowing the heating elements to cool down and ensuring the long-term durability of the appliance.

Specific feature of the EH30 model

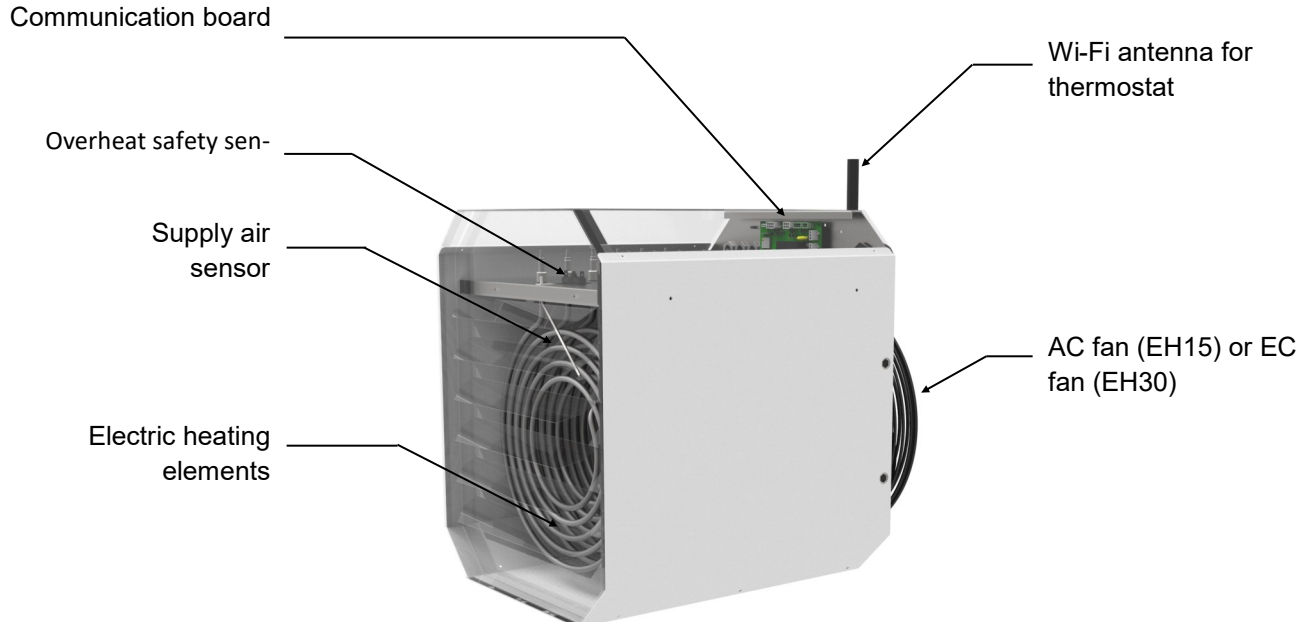
The EH30 model is additionally equipped with a variable-speed fan. This fan automatically adjusts its airflow according to the actual heating demand. This intelligent control provides:

- Airflow adapted to the conditions, avoiding uncomfortable drafts,
- Uniform heat distribution,
- Optimized electrical consumption of the fan.

Electrical connection

All modulating electric air heater models are designed for quick and economical installation. The power supply is 380 V three-phase without neutral.

Main components and safety devices



Safety features of the appliance

In the event of overheating, the overheat safety thermostat is triggered. Do not reset the thermostat until the appliance has fully cooled down and the cause of the overheating has been corrected. To reset the thermostat, press the red button.

Do not place the appliance near of a water source (shower, sink, swimming pool, etc.).

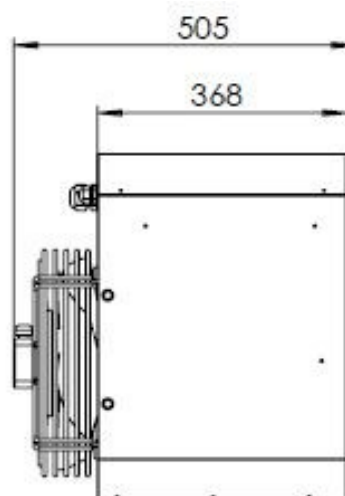
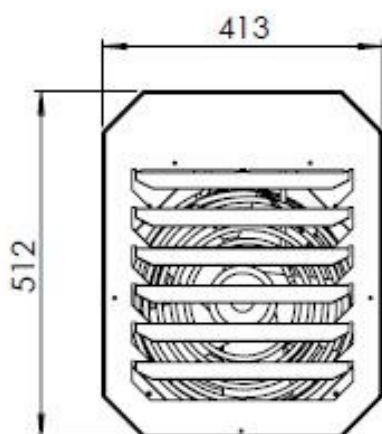
Respect the minimum safety distances from flammable materials (see § 4 – Installation).

3.2 Technical data

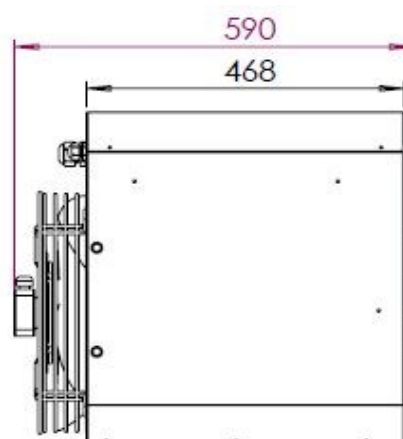
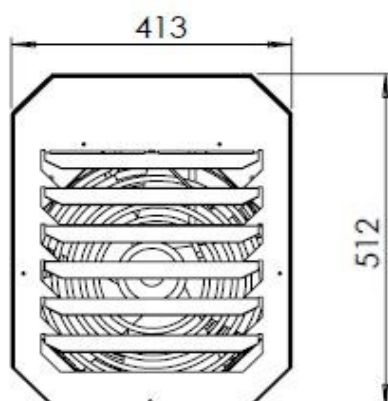
General Information	EH15	EH30
Maximum / minimum power	15 / 5 kW	30 / 10 kW
Electrical supply	Three-phase 380 V	Three-phase 380 V
Maximum current	23 A	46 A
Maximum airflow	1 200 m³/h	2 200 m³/h
Airflow variation	Non	30% à 100%
Ambient operating range	0°C - 40°C	
Relative humidity range	10% - 80%, non-condensing	
Communication	Wi-Fi connection between the appliance and the thermostat	
Protection rating	IP42	
Weight	25 kg	28kg

3.3 Dimensions

EH15



EH30



4. INSTALLATION

4.1 General installation requirements

The modulating electric air heater must be installed in accordance with current electrical standards (NF C 15-100) and industry best practices. Only qualified and authorized personnel are permitted to carry out this installation.

Precautions:

- The appliance must be installed in a dry, clean, non-corrosive environment, free from excessive dust and aggressive vapors.
- Never install the air heater in humid areas or where it may be exposed to water splashes.
- Ensure a sufficient safety clearance around the appliance to allow proper air distribution and facilitate maintenance operations.

4.2 Positioning of the appliance

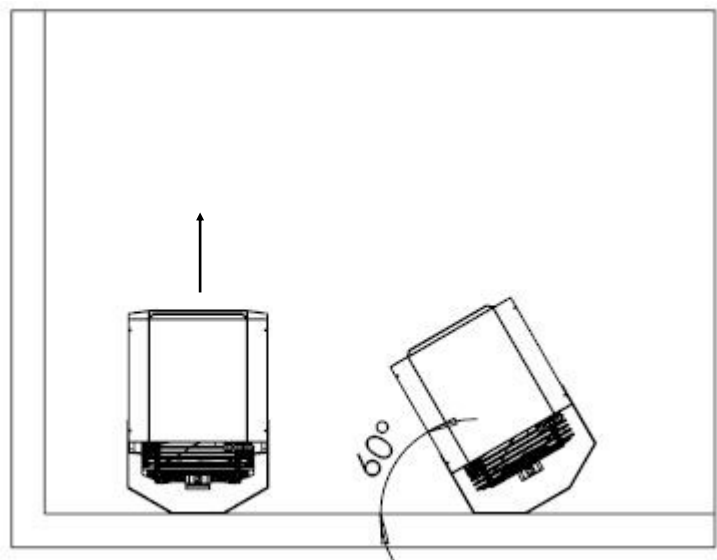
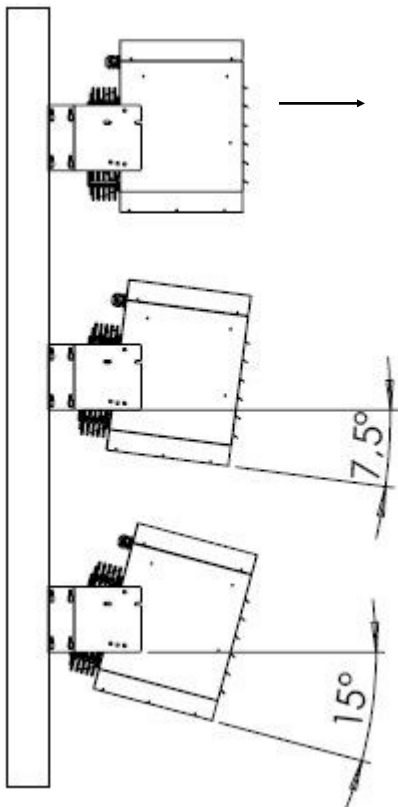
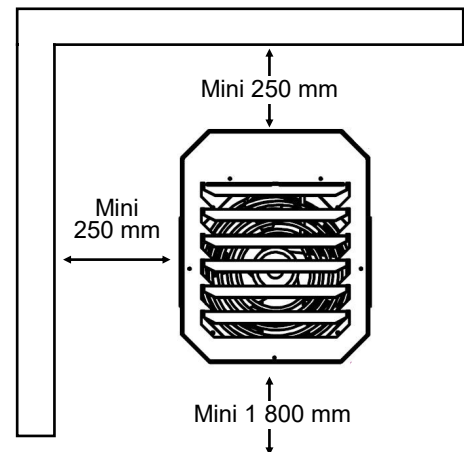
The air heater can be wall-mounted using the dedicated support bracket. It must be installed at a sufficient height to ensure uniform distribution of warm air throughout the area to be heated.

The bottom of the appliance must be positioned at a minimum height of 1.8 m above the floor to ensure both safety and effective air diffusion.

It is also important to avoid installing the unit near obstacles such as partitions, shelving, or beams, as they may disrupt airflow circulation.

4.3 Mounting the wall bracket

The air heater is supplied with a wall-mounting bracket specifically designed to provide flexible orientation of the airflow. This bracket allows three positions in vertical orientation and three positions in horizontal orientation, enabling optimal adjustment based on the layout and heating requirements of the room.



Thanks to this modularity, the air heater can be oriented optimally according to the layout of the room and the areas that need to be heated. It is essential to mount the bracket on a solid wall capable of supporting the weight of the appliance, and to strictly follow all safety instructions during installation.

4.4 Positioning of the louvers

After installation, adjust the louvers while the fans are stopped.



1– Louvers closed

2– Adjustment of the louvers to the desired angle

3– Louvers opened

Before each start-up, make sure that the louvers are open. This ensures proper airflow, optimizes heat distribution, and prevents any risk of overheating of the appliance.



THE LOUVERS MUST ALWAYS BE OPEN AT A MINIMUM ANGLE OF 45°.

4.5 Installation of the ambient temperature sensor

The modulating electric air heater is controlled by a thermostat setpoint based on an ambient temperature sensor, which is supplied and already connected to the heater. The 3-meter cable length allows the sensor to be positioned at a distance from the appliance. To ensure optimal operation and consistent thermal comfort, the following installation recommendations must be observed.

Installation recommendations:

Position the sensor at least 1.5 m above the floor, in a location that reflects the average temperature of the room.

Avoid the following locations:

- Direct exposure to sunlight
- Near doors, windows, or areas with drafts
- Above or too close to the air heater

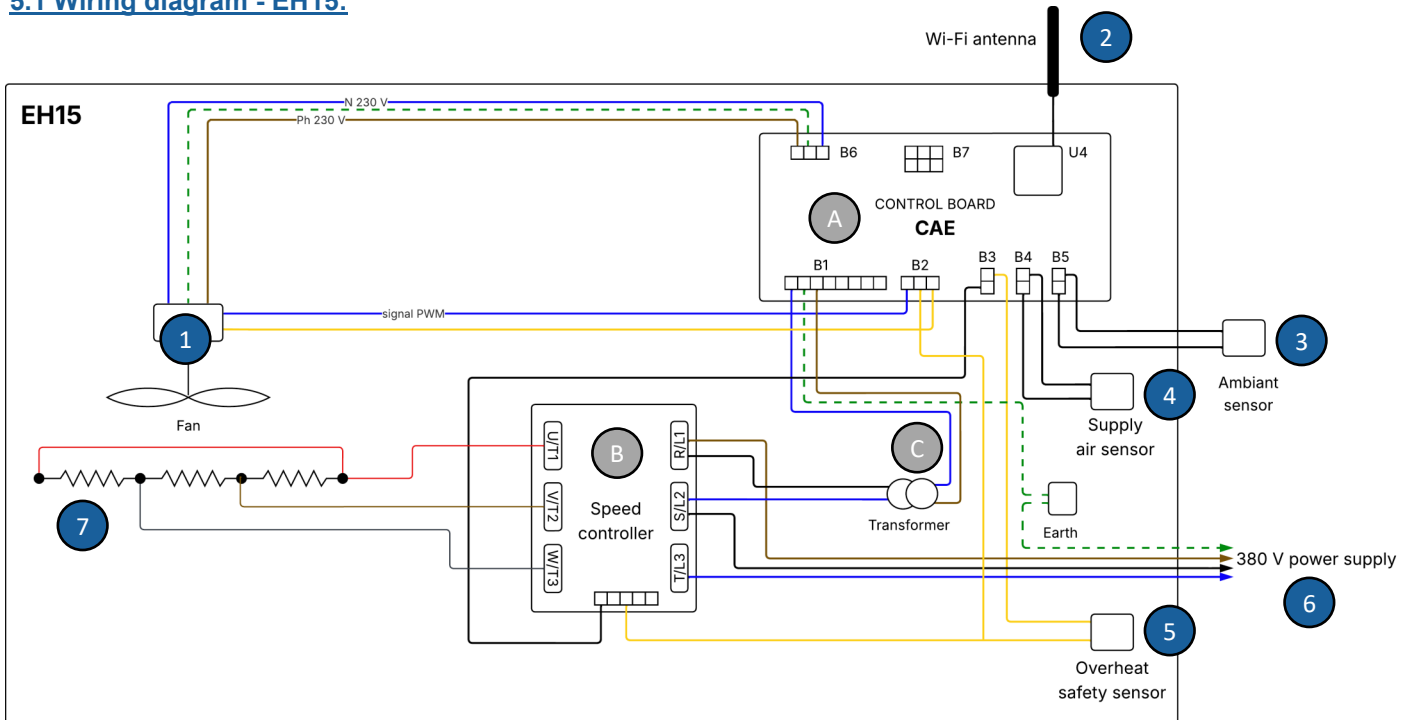
Mount the sensor using a wall bracket (not supplied).

Warning: Incorrect placement of the sensor may result in poor comfort and increased energy consumption.

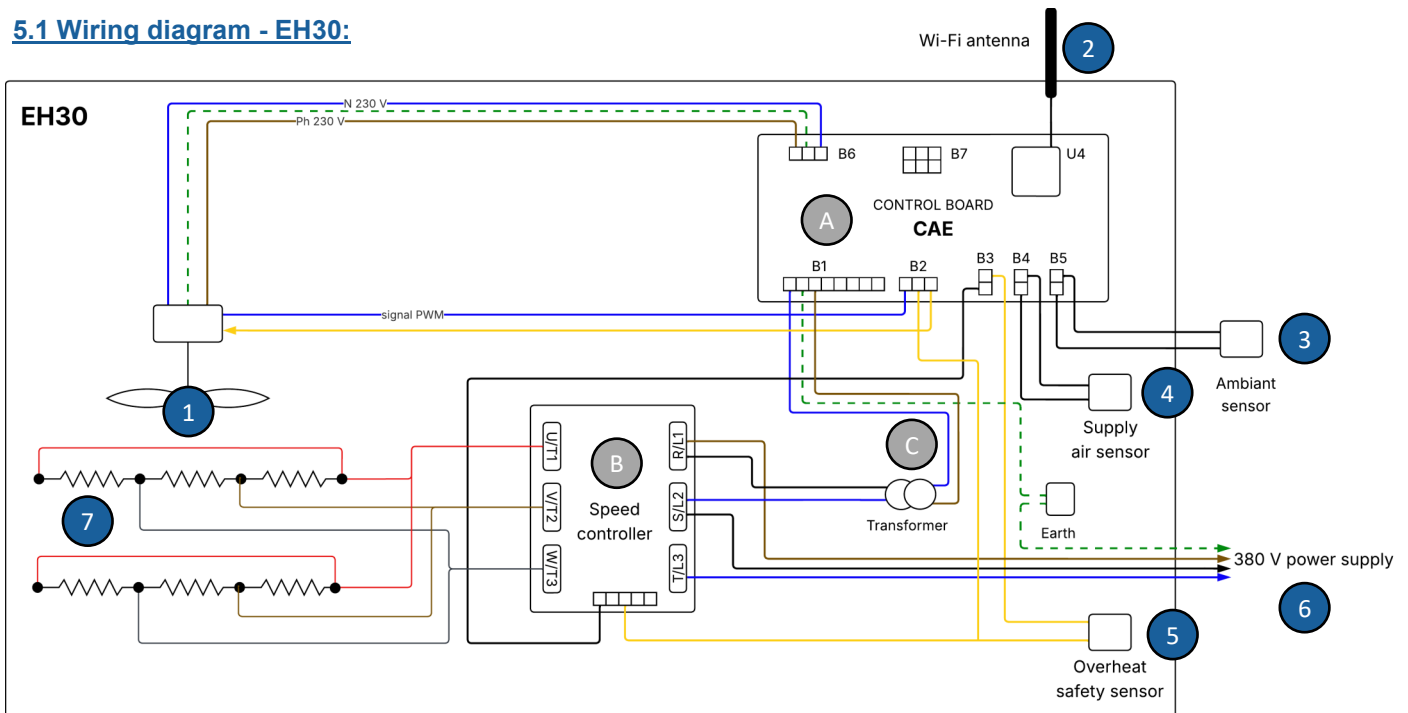
5. ELECTRICAL CONNECTIONS

Cable connections must be made with the power switched off, and only by personnel with the required qualifications. The protection system and power supply cables must be selected according to the specifications indicated on the nameplate and in compliance with local regulations.

5.1 Wiring diagram - EH15:



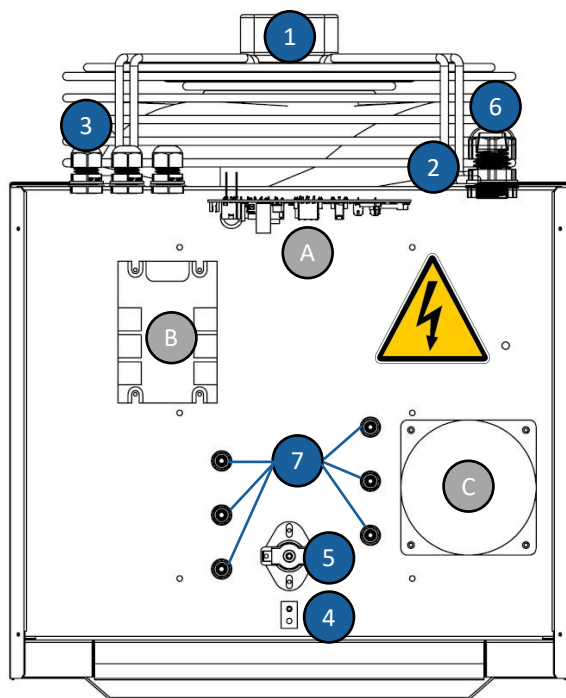
5.1 Wiring diagram - EH30:



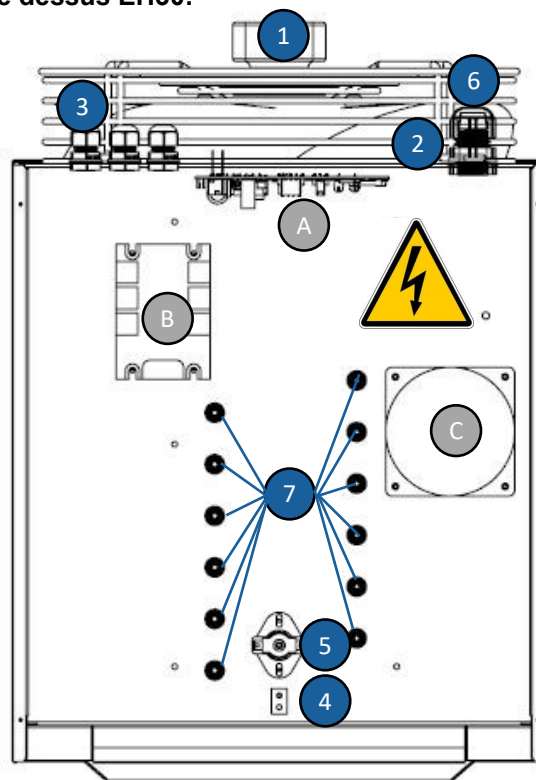
The numbers (1–7) and letters (A–C) on the wiring diagrams correspond to the items shown on the top views in section 5.3, allowing each component to be located inside the appliance.

5.3 Electrical compartment and components

Vue dessus EH15:



Vue dessus EH30:

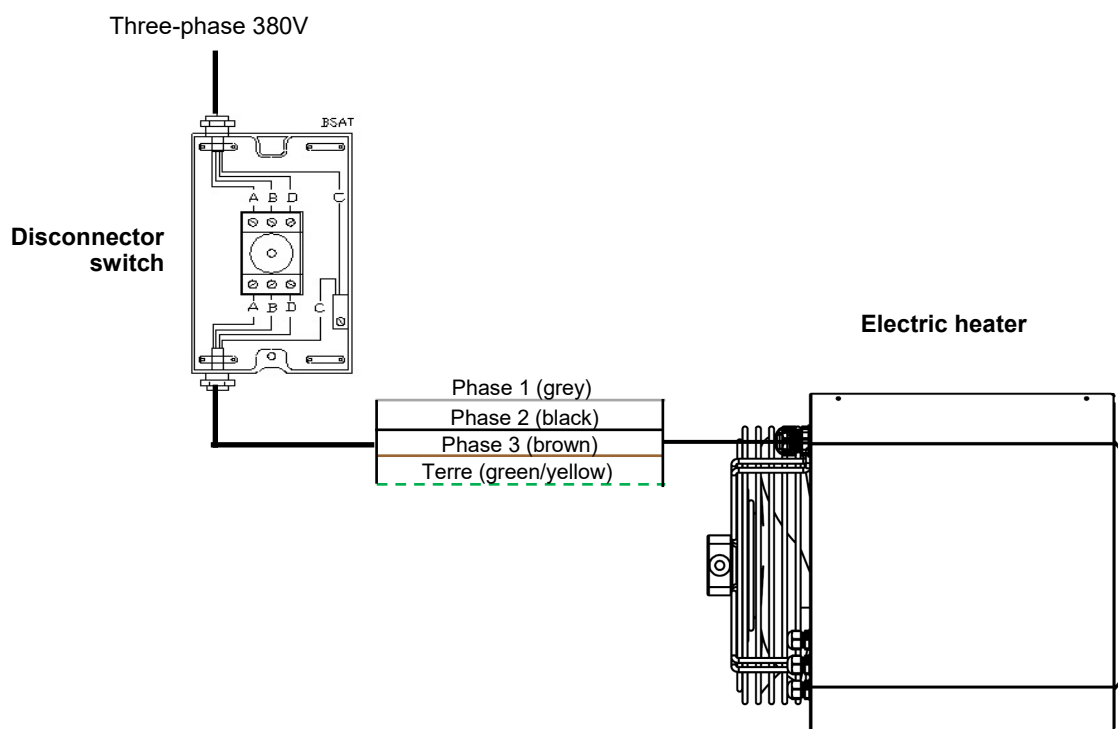


5.4 Electrical connection :

The air heater is supplied with a 1-meter power cable, which must be connected to a local isolator such as a disconnectable terminal block or a circuit breaker suitable for the appliance's power rating.

The installer must ensure that the terminal block selected corresponds to the model being installed, as the nominal current differs according to the appliance's power: EH15: 23 A / EH30: 46 A.

The air heater operates on a three-phase supply without neutral, requiring only the three phases and the earth connection.



6. COMMISSIONING

6.1 Checks before commissioning

Before putting the appliance into service, carry out the following checks:

- Verify that the electrical connection complies with the specified wiring diagram.
- Ensure that no obstacles are present in the air discharge area.
- Check that the thermostat is functioning correctly.

Once these checks have been completed, the thermostat(s) must be addressed and each corresponding air heater must be paired. This step allows each unit to be identified, named, and ensures proper communication between the thermostats and the appliances (see “Thermostat Addressing” and “Unit Pairing,”).

Note: A single thermostat can control up to 6 units.

6.2 Thermostat installation

The touchscreen thermostat (ref. TW1) supplied with the modulating electric air heaters provides full control of the system. It communicates wirelessly, via a Wi-Fi connection, with the EH units; no wired link is required between the thermostat and the appliances. One thermostat can control up to 6 air heaters.

Each air heater is equipped with an integrated Wi-Fi antenna, allowing direct communication with the thermostat and with other heaters. The transmission range is approximately 50 meters in open space between the thermostat and each appliance.

For optimal operation:

- If possible, install the thermostat within a 50-meter radius of all the air heaters to be controlled.
- If some units are beyond this range, they can communicate by relay through the nearest air heaters acting as intermediate transmission points.
- In the event of a relay unit failure (e.g., malfunction or power outage), the more distant units will temporarily lose communication with the thermostat. However, each appliance retains the last received setpoint in memory and continues operating accordingly until the Wi-Fi connection is restored.

Mounting

The thermostat is supplied with a wall-mounting bracket, two fixing screws, and a power adapter.

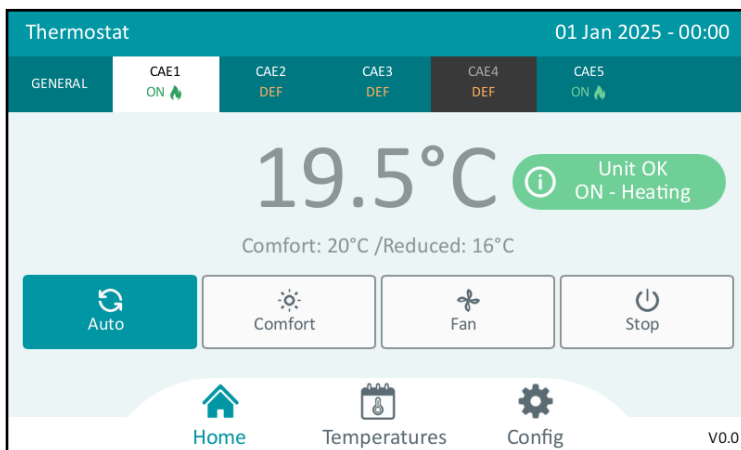
1. The mounting bracket is supplied with the thermostat
2. Choose a location approximately 1.5 m above the floor, away from heat sources, drafts, and direct sunlight, and within Wi-Fi range of the units (see above). Mark the two fixing holes through the bracket's end tabs.
3. Drill the wall, fit suitable wall plugs, and secure the bracket with the thermostat attached using two screws appropriate for the wall type (not supplied).



Power supply

The thermostat is powered by the supplied power adapter. Connect the adapter to the thermostat and plug it into a 230 V mains socket located near the installation point.

6.3 Thermostat Display and Settings



Home Screen

The thermostat home screen shows the overall status of the system and of each connected unit.

The upper section displays the units associated with the thermostat:
ON with a green flame: the unit is calling for heat.
ON: the unit is at temperature (standby).
FAN: unit is on ventilation only
OFF: the unit has been switched off manually.
DEF: a fault has been detected on the unit.

The "GENERAL" tab allows all units to be controlled in a single action. The AUTO, COMFORT, VENTILATION and STOP buttons send the same command to all units simultaneously.

A tab shown on a darkened background (e.g. CAE4) indicates a loss of communication with the unit.

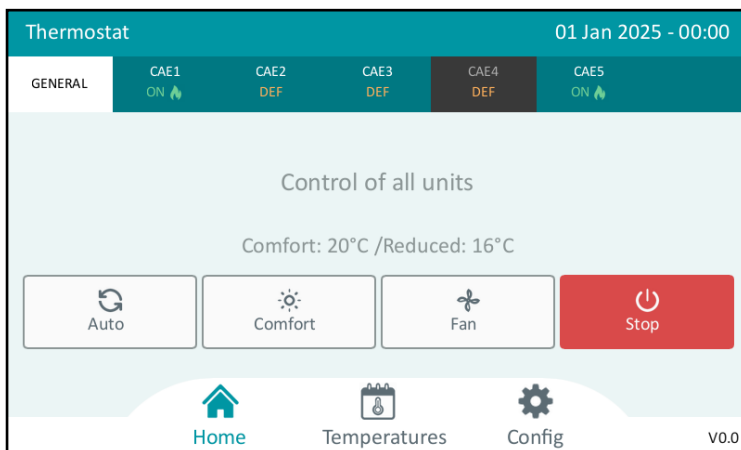
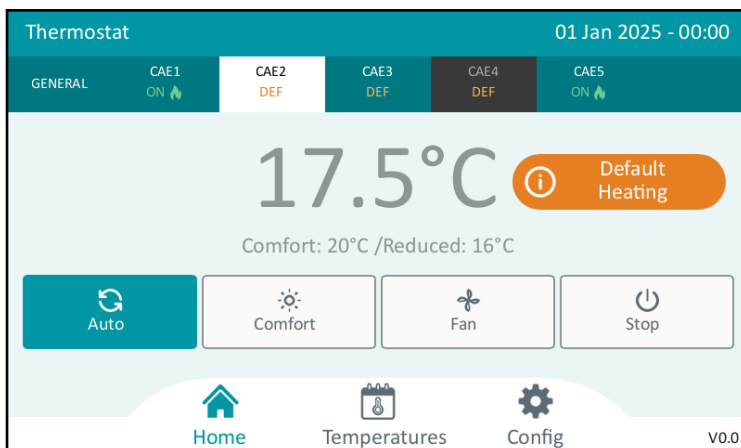
The central area displays the ambient temperature measured by the selected unit, together with the Comfort and Reduced setpoints.

The "Info" button indicates the status of the selected unit:

- Green with the message "Unit OK" when everything is operating normally
- Orange with the label of the detected fault (e.g. "Heating fault", "Communication fault"). Pressing this button opens the "Information" window.

The AUTO, COMFORT, VENTILATION and STOP buttons are used to select the control mode of the selected unit. The active mode is highlighted with a solid button: blue for Auto, Comfort and Ventilation, red for Stop. On the first screen, unit CAE1 is running in Auto mode; on the second, unit CAE2 has been set to Stop.

The bottom menu gives access to the Home, Temperatures and Config sections.

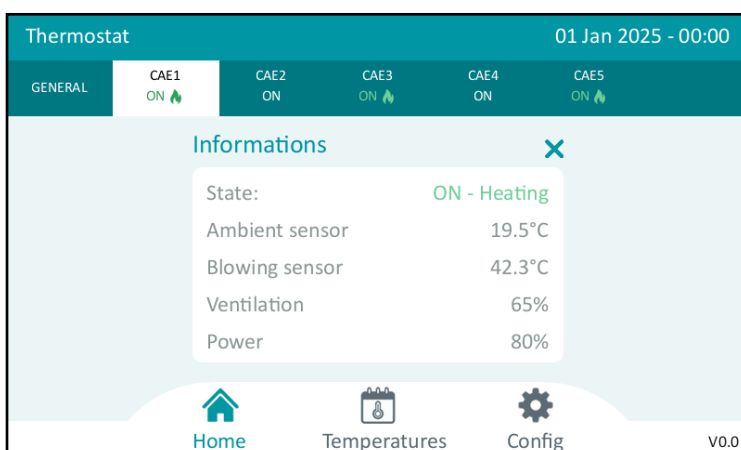


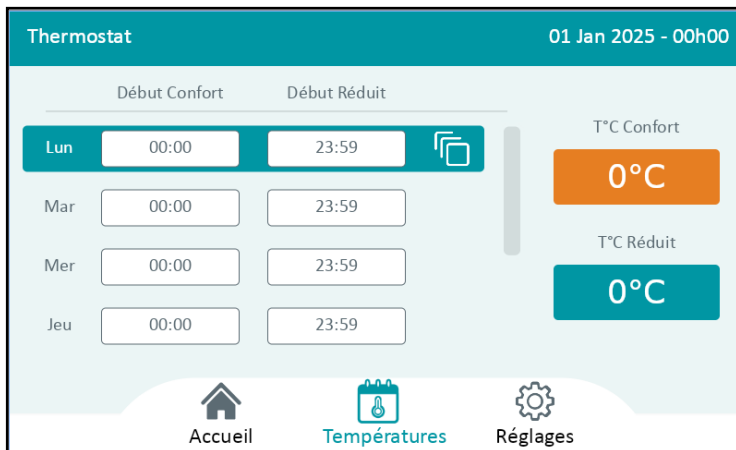
Unit Information

The "Information" window displays the real-time parameters of the selected air heater.

It is accessed from the home screen by pressing the "Info" button (green or orange, with the (i) symbol).

It shows the general status of the unit (e.g. "ON - Heating"), the temperatures measured by the ambient and blowing sensors, the fan speed and the heating element power in real time. In the event of an anomaly, the detected fault is shown on the "State" line.



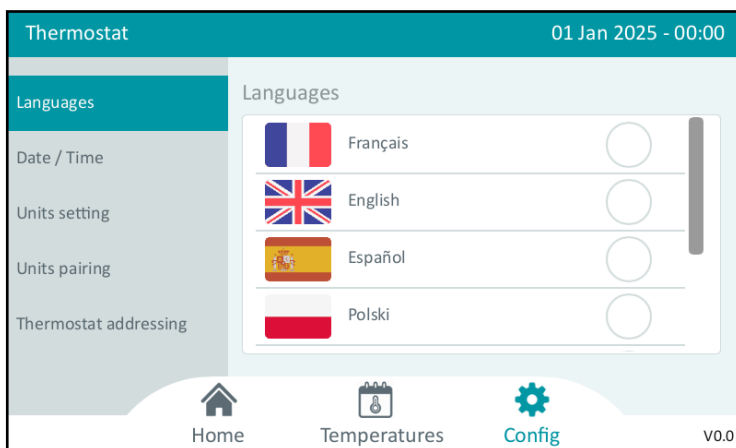


Weekly Programming temperature

In the « Temperatures » menu, the screen allows the user to define Comfort and Reduced time periods for each day of the week.

To repeat the same time period for all days, by pressing the button

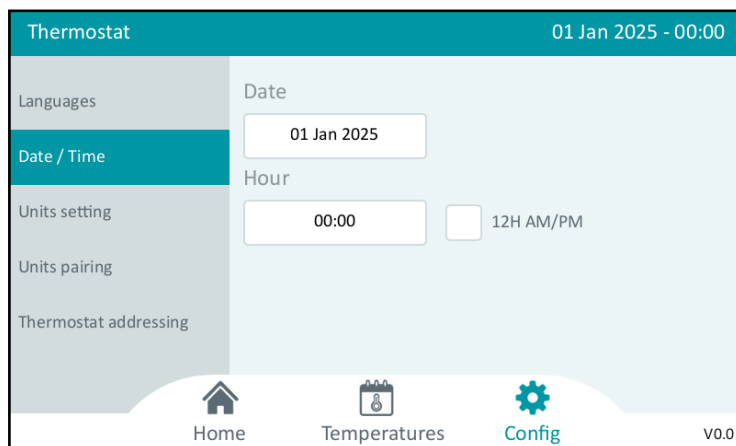
The setpoint temperatures are displayed on the right and can be modified by pressing the comfort or reduced value.



Languages

In the « Config. » menu you can access to the selection of the user interface display language. Several languages are available: French, English, Spanish, etc. The user selects the desired language by pressing the corresponding option, with the active language indicated by a checkmark.

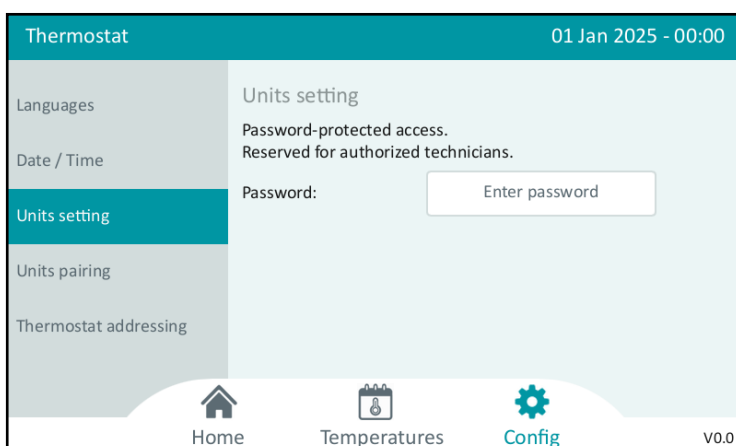
The language change takes effect immediately and applies to all thermostat menus, making the device easy to use in various international environments.



Date and Time

This screen allows the user to set the day, month, year, and the system's current time. These parameters are essential for ensuring proper operation of the scheduling features, as the Comfort and Reduced time periods rely directly on this configuration.

The settings are adjusted directly from this screen by selecting and modifying the desired fields



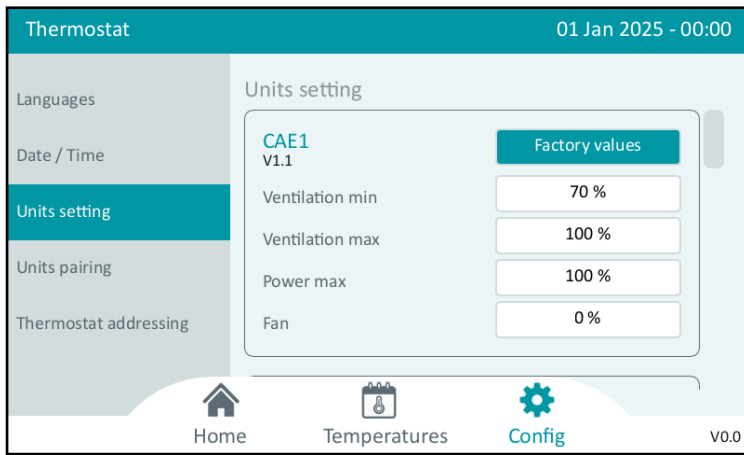
Unit Settings

The "Unit Settings" screen is reserved for authorized personnel.

Access is protected by a password to prevent any unauthorized modifications.

This menu allows technicians to adjust the internal parameters of the units (configuration, calibration, communication).

The password required to unlock the menu is: 77100.

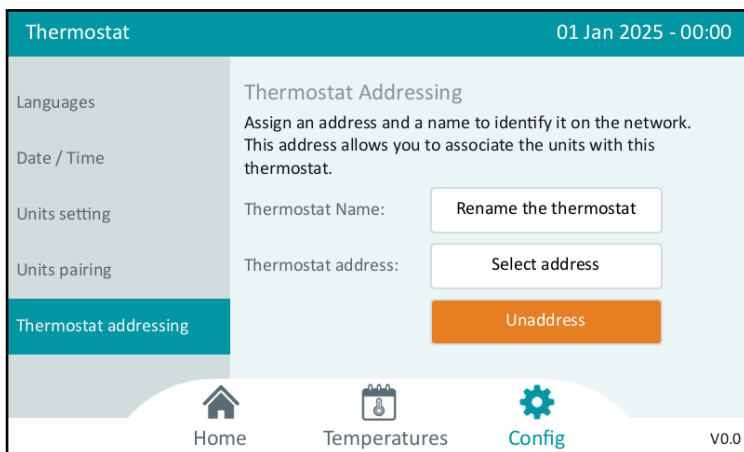


Unit Adjustment

This screen provides access to various unit settings:

- Minimum ventilation: minimum fan speed
- Maximum ventilation: maximum fan speed
- Maximum power: limit the unit power
- Fan: to adjust the ventilation power when the Fan mode is activated.

The screen can be scrolled down to access all available information. These settings allow the operation of the units to be adapted according to the room configuration or the actual heating requirements.

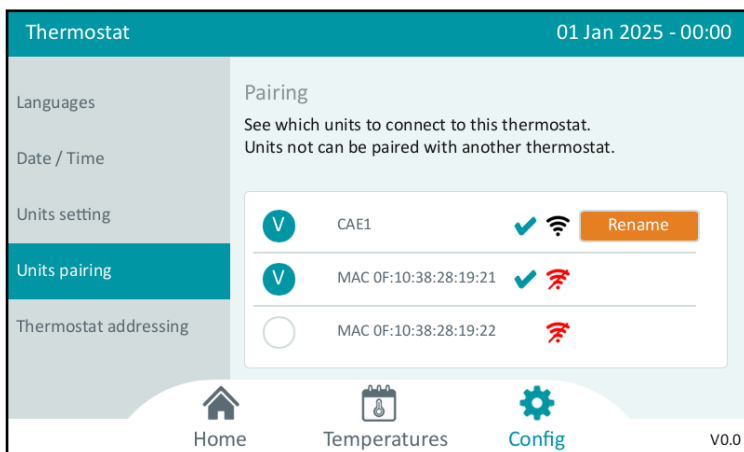


Thermostat Addressing

Before commissioning, the thermostat must be assigned an address and paired with the units it will control to ensure proper operation.

Each thermostat must be assigned a unique address from the available range (1 to 10) by selecting an address in the dedicated field. It is also possible to assign a name to the thermostat to make identification easier.

In the event of a reconfiguration or a change in the installation, the thermostat can be de-addressed and the linked units unpaired using the "Unaddress" button.



Unit Pairing

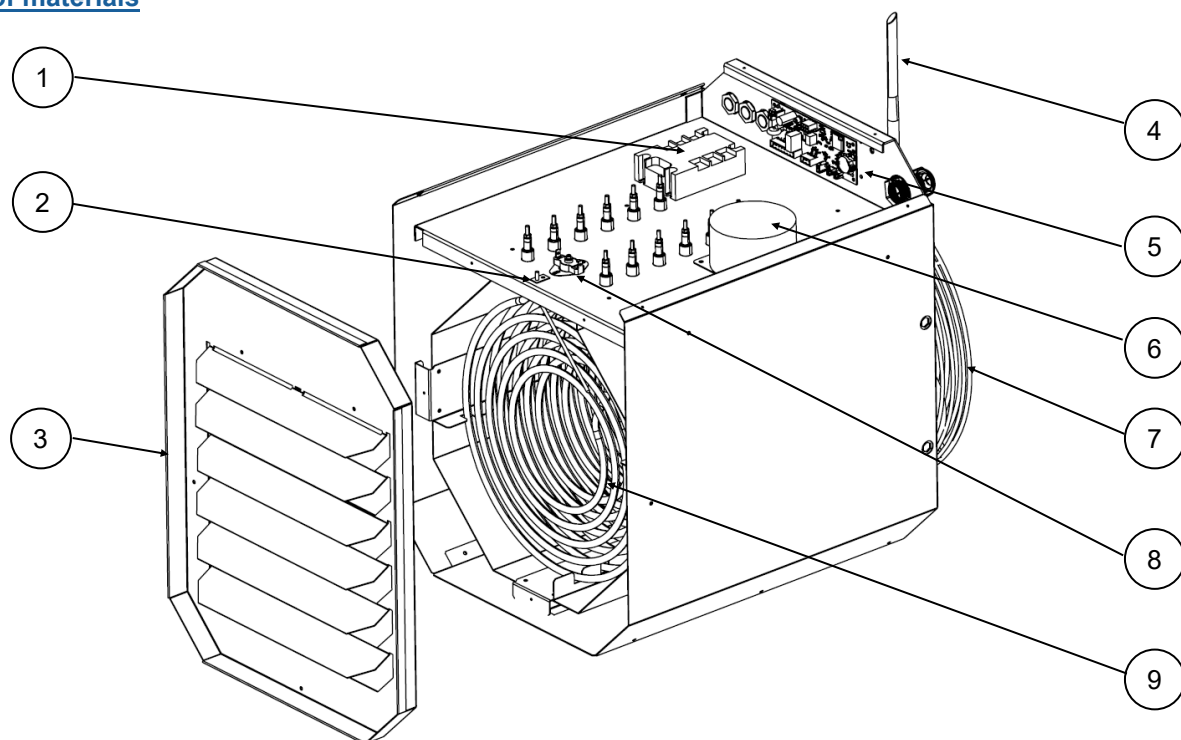
After addressing, the units that will be controlled by the thermostat must be paired.

All units available on the network are automatically detected and displayed on the screen.

To make identification easier, it is recommended to power the units one by one. Only the units that are powered will appear.

Once all units have been identified and renamed, select the ones you wish to associate with the thermostat.

6.4 Bill of materials



No.	Description	EH15	EH30
1	Speed controller	EHE0003	EHE0003
2	Supply air sensor	HB0062	HB0062
3	Louvers	EH07A30	EH07A30
4	WIFI antenna	EHE0005	EHE0005
5	Control/ communication board	ELE1130	ELE1130
6	Autotransformer	EHE0002	EHE0002
7	Supply fan	ATE801S	ATE823EC09
8	Safety thermostat with manual reset	THE149	THE149
9	5 kW heating element	EH0001 x 3	EH0001 x 6

7. MAINTENANCE

7.1 General Information

Regular maintenance (at least once a year) is required to preserve performance, optimize energy consumption, and ensure the safety of the installation.

In very dusty, corrosive, or particle-laden environments (workshops, storage areas, industrial sites), more frequent maintenance operations may be necessary (e.g., every 6 months).

Failure to perform maintenance may lead to reduced efficiency, abnormal noise, clogging, or more costly interventions.

7.2 Recommended Maintenance Operations

Below is the list of recommended actions during maintenance:

- Disconnect the electrical power supply before any intervention.
- Remove dust and dirt inside the unit using a soft cloth or a low-power vacuum cleaner, taking care not to impact any components.
- Clean the intake and discharge grilles to ensure unobstructed airflow.
- Visually inspect the condition of accessible components (heating elements, fan, mounting bracket, casing).
- Check the tightening of non-internal electrical connections, if accessible.

8. TROUBLESHOOTING

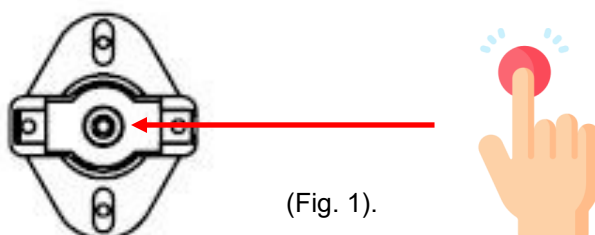
The following faults may prevent the proper operation of the EH15 / EH30 electric air heater. **Before any intervention, disconnect the electrical power supply and check that all connections are safe.**

Symptom	Possible causes	Solutions
The air heater does not operate	- No electrical power supply - No communication with the thermostat - The unit is in "STOP" or "FAULT" mode on the thermostat	- Check the presence of voltage on the 380 V three-phase power supply. - Check the circuit breaker and fuses. - Verify that the thermostat is correctly addressed and paired with the air heater (see "Thermostat Display and Settings" chapter). - Check the unit status on the thermostat.
"Communication" fault displayed	- Incorrect addressing or pairing - No electrical power supply - The WiFi antenna is disconnected or damaged - The unit is too far from thermostat or another unit to communicate	- Check or redo the pairing between the thermostat and the unit. - Verify that the unit is powered. - Verify the WiFi antenna - Move the unit closer to the thermostat or the closest heating unit (less than 50m)
"Sensor" fault displayed	- Faulty or disconnected ambient or supply-air sensor	- Check the sensor wiring. - Replace the faulty sensor if necessary.
"Heating" fault displayed	- Overheat safety tripped - Defective or disconnected PWM connector (B3) - Faulty Wi-Fi control/communication board or faulty speed controller	- Reset the manual safety thermostat if necessary. - Check the wiring on the control board. - Replace the control board or the speed controller.

Overheating

In the event of overheating, the safety thermostat automatically cuts off the heating elements and the ventilation. Once the cause has been identified and corrected, and after the unit has completely cooled down, press the reset button to reactivate the overheat thermostat (Fig. 1).

WARNING! Any work inside the appliance's electrical connection compartment must be carried out by a qualified professional with the power supply disconnected.



(Fig. 1).

9. USER RECOMMENDATIONS

9.1 Safety Rules

- It is forbidden to block or reduce the ventilation openings of the installation room or of the appliance.
- Never obstruct the air heater's intake or discharge grilles.
- Never spray water on the appliance or handle it with wet hands or feet.
- Never touch hot parts or the fan's moving components while the appliance is operating.
- Do not place, hang, or attach anything on the air heater or its mounting brackets.
- Before any intervention (cleaning, maintenance, disassembly), disconnect the appliance's electrical supply via the circuit breaker.
- Do not modify the settings, wiring, or safety devices.
- Do not open the electrical compartment; always contact a qualified professional.
- Do not attempt to repair the appliance without the appropriate technical skills.
- If the appliance will not be used for an extended period, disconnect its electrical supply via the circuit breaker.
- When putting the appliance back into service, it is recommended to call a qualified technician.

9.2 In case of anomaly or malfunction

Observed Issue	Actions to Take
The air heater does not start	Check that the thermostat is set to "Auto" or "Comfort." Also ensure that the appliance is properly powered. If the problem persists, contact a qualified technician to check the power supply and connections.
No heating	Check the thermostat setpoint or verify that the "Auto" or "Comfort" mode is selected. If the appliance remains cold, have a technician inspect the overheat safety device.
Frequent tripping of the circuit breaker	Contact a qualified technician to check the electrical installation and the contracted power capacity.
Abnormal ventilation	Switch off the appliance using the circuit breaker, then check that no obstacle is blocking the fan. If the noise persists, call a qualified technician.
Error message on the thermostat	Refer to the "Troubleshooting" chapter for the relevant checks. If the fault persists, contact technical support.

9.3 In case of a serious problem

Disconnect the appliance from the electrical supply immediately by switching off the circuit breaker.
Contact the installer or a qualified professional.



1, avenue de l'Épinette
77100 MEAUX
Site : www.yahtec.com