atlantic

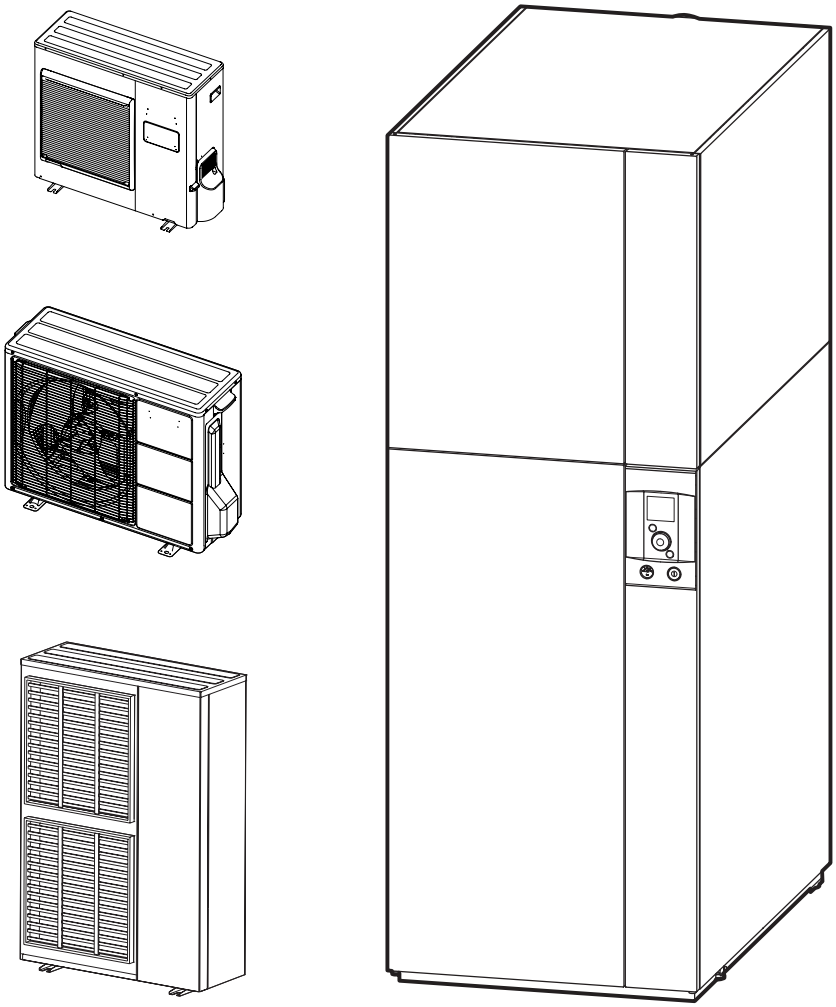
Home solutions
Pompes à chaleur & chaudières

USE

EN

Alfea Hybrid Duo Oil A.I.

Hybrid air/water Split Inverter heat pump
High temperature with oil backup and integrated DHW



U0644594_1927_EN_2
07/03/2019

Intended for professionals.
To be kept by the user for future reference

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Safety instructions

Please comply with the following instructions in order to avoid any risk of injury or inappropriate use of the appliance.

Commissioning

Do not switch the appliance ON until every filling operation has been performed.

Do not attempt to install this appliance yourself. This heat pump must be installed by qualified personnel holding a certificate of competence.

The installation must always be properly earthed and fitted with a safety circuit breaker.

Do not modify the power supply.

The appliances are not fireproof and therefore must not be installed in an explosive environment.

Use

This appliance can be used by children aged 8 years old at a minimum and by people with reduced physical, sensory or mental capabilities or with no experience or knowledge, if they are properly monitored or if they have been given instructions on how to use the appliance safely and if the potential risks have been understood. Children must not play with the appliance. Cleaning or maintenance work shall not be performed by children without supervision.

Do not let children insert foreign bodies inside the fan protection grill or climb on top of the outdoor unit. The fins of the air heat exchanger are extremely thin and can cause cuts.

Nothing should obstruct air circulation through the evaporator and out from the fan.

Do not climb on top of the outdoor unit.

The appliance must be installed in an appropriate and well-ventilated room.

If your installation location already meets safety standards, do not carry out any modifications (ventilation, flue gas evacuation, openings, etc.) without the advice of your installation engineer.

Avoid making excessive amounts of dust in proximity to the burner, especially when it is in operation.

Do not insert anything into the burner fan.

Do not place any heat source under the remote control.

Maintenance

Do not try to repair the appliance yourself.

This appliance does not contain any components which can be repaired by the user. Removing either of the covers can expose you to dangerous electrical voltages.

In any case, switching off the current is not sufficient to protect you from any external electrical shocks (condensers).

Do not open the outdoor unit or the hydraulic unit while they are in operation.

If you hear unusual noises, smell smoke or other odours coming from the appliance, turn off the power and contact your installation engineer.

Any modification of a sealed component is forbidden.

This appliance requires:

Qualified personnel possessing a certificate of competence for handling refrigerants are required for performing maintenance work on the outdoor unit and checking the refrigeration circuit.

A heating installer is required for maintenance of the burner and the chimney (or room-sealed pipe).

Before starting any cleaning, turn off the power to the appliance.

Do not use aggressive cleaning liquids or solvents to clean the body work.

Do not use a pressure hose to clean the outdoor unit. You may damage the air exchanger and get water inside the electrical circuits.

Overview of the installation

Overview of the installation

Your heat pump has been configured by your installation engineer. It is made up of the following main parts:

- The outdoor unit, as its name suggests, is placed outside your dwelling, and extracts energy from the outside air.
- The hybrid hydraulic unit is located in your boiler room, cellar or garage, and transfers energy to the heating and domestic hot water circuits.
- The outdoor sensor monitors the outdoor temperature.

Optional:

- Room sensor(s).
- Room control unit or wireless remote control.

Hybrid heat pumps are systems which can be connected to any type of radiator, and the heat captured by the heat pump can be used in different ways:

- Radiators (high, medium, low temperature) or fan-coils.
- Underfloor heating system.

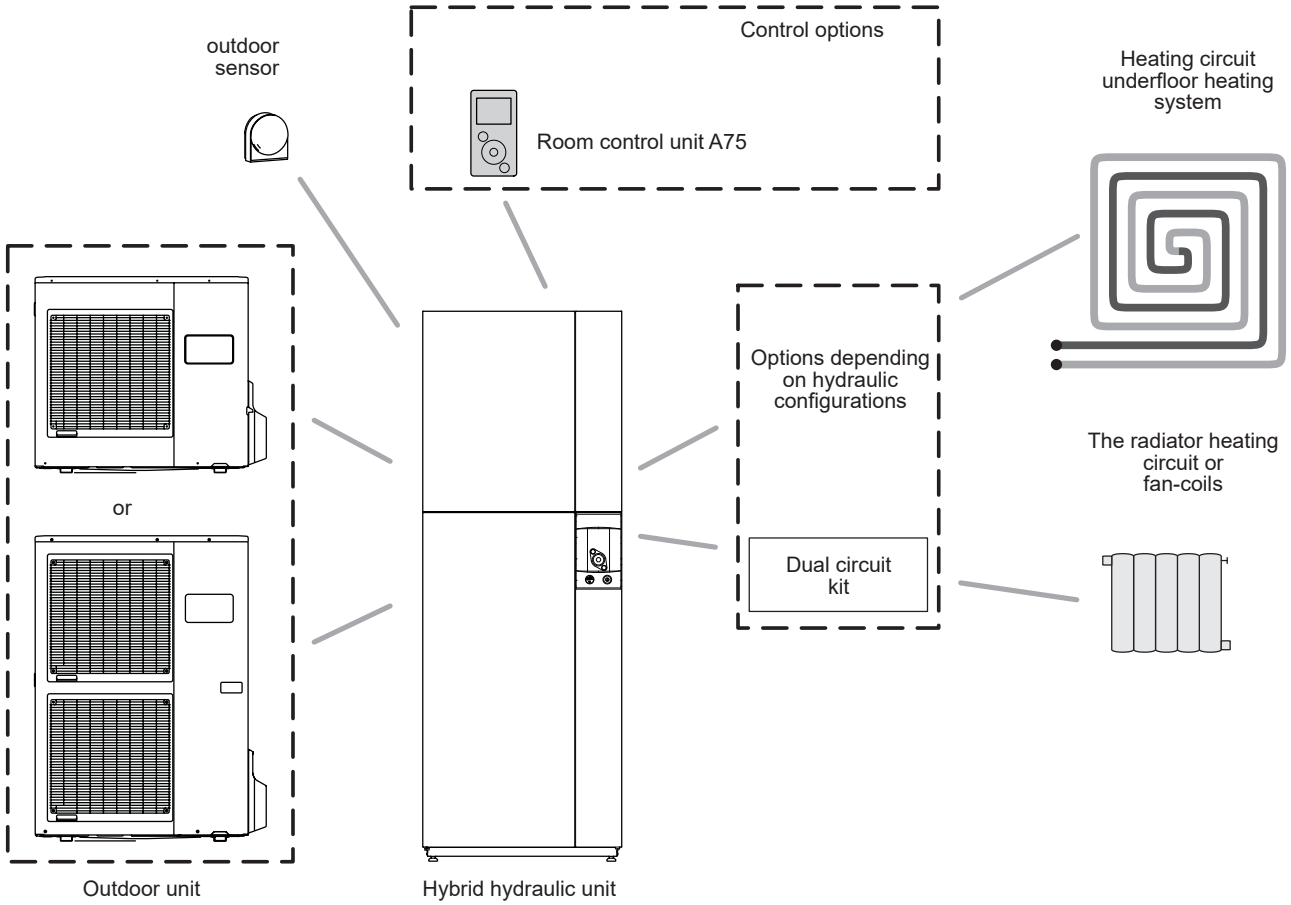


fig. 1 - Overview of complete installation configuration

▶ Precautions and warnings about your installation

▼ Outdoor unit

This unit was installed by your installer in a location where it is able to operate most efficiently.

Nothing should obstruct air circulation through the evaporator and out from the fan.

In the outdoor unit, the surrounding air is cooled through contact with an exchanger. The water contained in the air may condense and flow out of the outdoor unit. The outdoor unit can generate a large volume of water called condensate.

In cold weather, this water freezes on contact with the exchanger and must be regularly removed using the defrosting cycles. The defrosting cycle is managed automatically by the control system and can produce steam emissions which are completely normal.

▼ Hydraulic unit

The hydraulic unit contains the appliance's control system which manages the room temperature and the production of domestic hot water.

The hydraulic unit is dual energy (air/water heat pump and integrated fuel oil boiler).

Oil: Your appliance is equipped with a burner which uses domestic oil (heating fuel oil). The oil must be free of impurities and of water.

▼ Control system

Your installer has carefully adjusted your installation. Do not change the settings without their consent. If in doubt, do not hesitate to contact them.

Your heating system is controlled by adjustment in relation to the outdoor temperature (temperature control).

The installation of a room sensor (optional) makes it possible to improve the operation of the control system (influence of the room temperature is taken into account).

▼ Fan-coils with integrated control system

Do not use a room sensor in the area in question.

▼ Radiators

If the radiators are equipped with thermostatic valves, they must be fully open.

▼ Underfloor heating system

- A new underfloor heating system must initially be heated slowly to avoid any problems of cracking. Check with your installer that this initial heating procedure has indeed been performed before freely using your heating system.
- To be efficient, underfloor heating systems do not need to be very hot and never should be. At most, the systems should be warm to the touch in cold weather.
- An underfloor heating system's significant heat inertia prevents sudden room temperature differences. However, this intertia involves a reaction time of several hours (approx 6 hours).

Any changes to the setting must be made slowly, leaving the installation sufficient time to react. Any exaggerated or abrupt adjustments to the settings always result in significant temperature fluctuations during the day.

- Similarly, if your dwelling has an underfloor heating system, do not reduce the heating or switch it off if you will be absent for only short periods. The reheating period is always quite long (approx 6 hours).

▼ Domestic Hot Water (DHW)

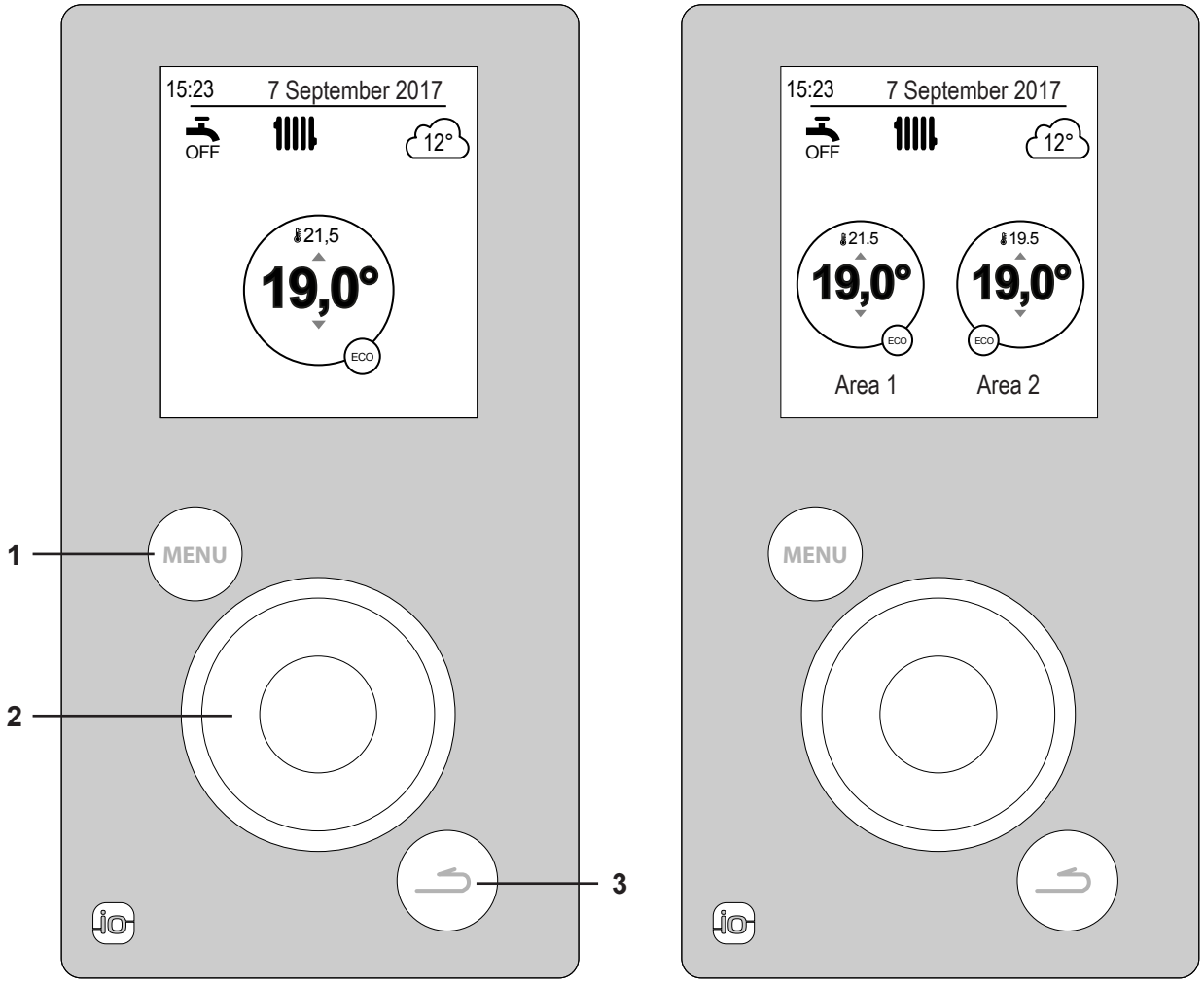
When hot water is required, the heat pump adapts its priority to meet the demand. No space heating is produced during the preparation of domestic hot water.

The HP produces the DHW, which is then additionally heated, if required, by the boiler.

The boiler allows Legionella cycles to be run effectively (ask your engineer if this function is activated).

Carrying out the installation

▶ User Interface

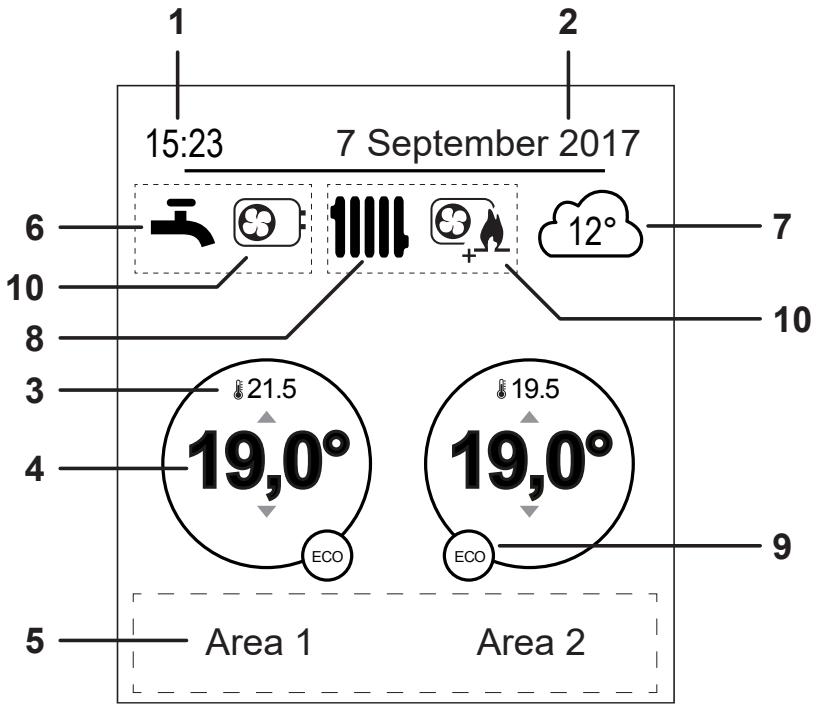


1 heating circuit version
+ domestic hot water (DHW)

2 heating circuit version
+ domestic hot water (DHW)

N°	Description
1	Menu button
2	Navigation knob (rotate knob), accept (press knob).
3	Back button

▶ Display Description



N°	Symbols	Definitions
1	15:23	Time
2	7 September 2017	Date
3	21.5	Temperature measured by the room sensor*
4	19,0°	Room temperature setpoint
5		Information (zone names, emergency mode, test mode, error display, etc.)
6	**Domestic Hot Water (DHW)*:**	
		Activated
	BOOST	Boosting in progress
	OFF	Deactivated
7	12°	Temperature measured by the outdoor sensor
8	**Operation**	
		Heating
		Cooling*

N°	Symbols	Definitions
9	**Mode**	
		Comfort
		Manual (exemption)
	ECO	ECO
		Absence
		Floor drying
		Stop (except frost)
10	**Production via ...**	
		HP
		HP + Fuel oil
		Fuel oil

* Options

▶ Navigating the Menus

To ...	Action:
Access the menu	Press MENU.
Choose a menu item	Turn the knob to highlight your choice. Press the knob to accept.
Return to the previous menu	Press ⮌.
Return to the main menu	Press MENU twice.
Return to the welcome screen	Press MENU or ⮌ on the main menu.

Note: *Some settings (or menus) might not be displayed. They are dependent on the installation's configuration (and installed options).*

▶ Modifying Settings

- Turn the knob to highlight the setting you wish to change.
- Press the knob to accept the change.
- Turn the knob to adjust the setting.
- Press the knob to accept your choice.

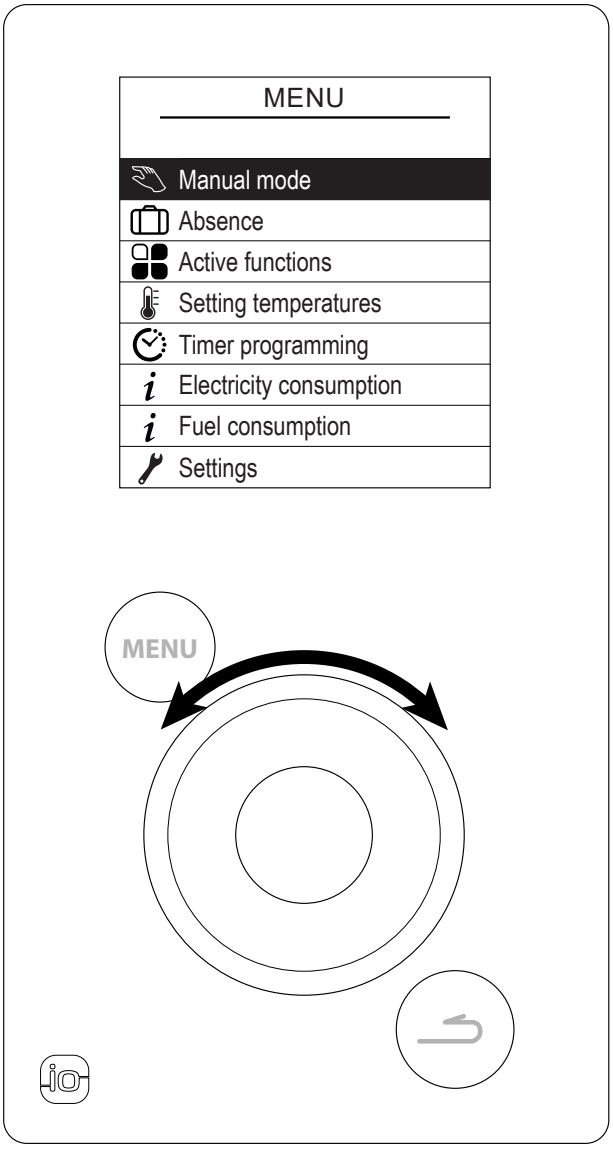


fig. 2 - Navigation

Menu Structure

Some settings (or menus) might not be displayed. They are dependent on the installation's configuration (and installed options).

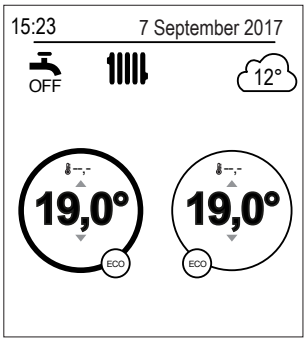
▶ Manual mode

▼ Exemption from timer program

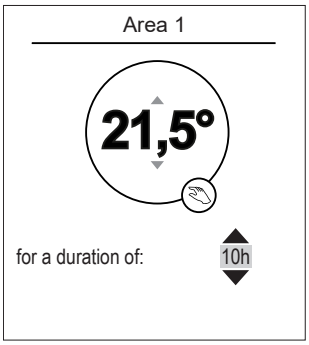
When a timer program is active (advanced menu), an exemption allows you to force the appliance into operation ("Heating" or "Cooling") at the desired temperature for a certain duration.

■ From the welcome screen

Select the zone using the knob (the selected zone's circle is thicker).

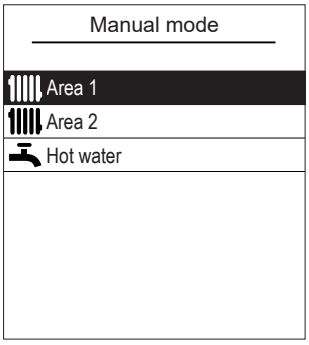


Set the required temperature, then the duration of the exemption.

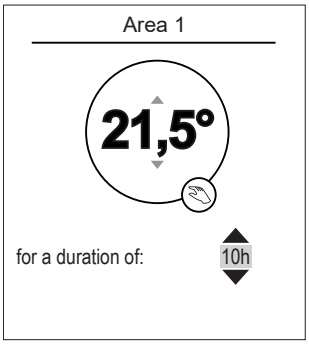


■ From the menu

Choose the zone from the menu:
"Manual mode".



Set the required temperature, then the duration of the exemption.

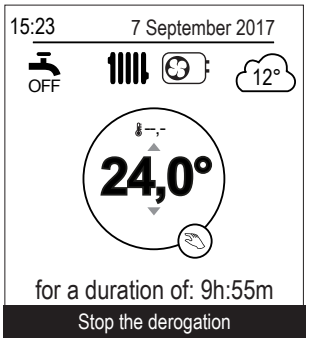


Some settings (or menus) might not be displayed. They are dependent on the installation's configuration (and installed options).

▼ Cancelling an exemption from timer program

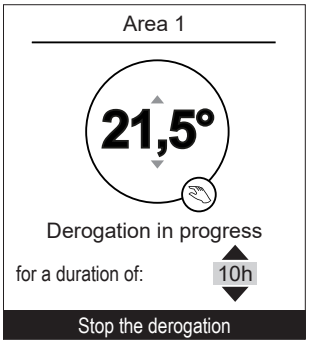
■ Cancelling an exemption with 1 heating zone

From the welcome screen, select:
"Stop the derogation".



■ Cancelling an exemption with 2 heating zones

Choose the zone from the menu:
"Manual mode".
Press the knob to cancel the exemption.

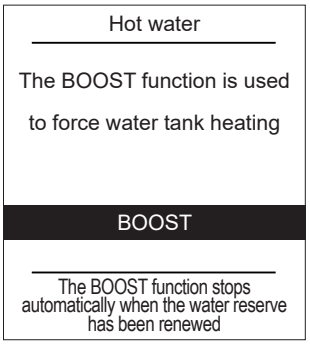


▼ Domestic hot water boost

The domestic hot water (DHW) boost function heats the tank up to the Comfort temperature.

Go to the menu:
"Manual mode" > "Hot water".
Press the knob to activate the "*BOOST*" function.

When hot water is required, the heat pump adapts its priority to meet the demand.
No space heating is produced during the preparation of domestic hot water.



Some settings (or menus) might not be displayed. They are dependent on the installation's configuration (and installed options).

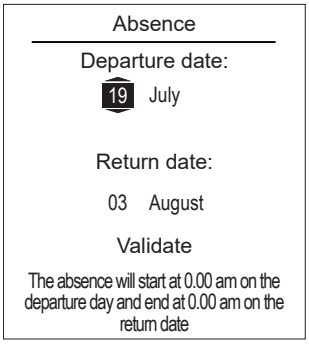
▶ Absence

In the event of a prolonged absence, you can set a period in which the heating operates at a reduced temperature (except for frost) and the production of domestic hot water (DHW) is stopped.

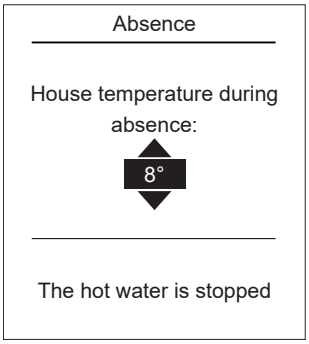
▼ Programming absence mode

Set the absence start and end dates and accept.

- To return to the previous setting (e.g. from month to day), press the ⮌ button.

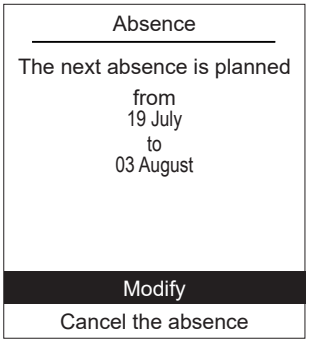


Set the temperature for the dwelling during the absence.

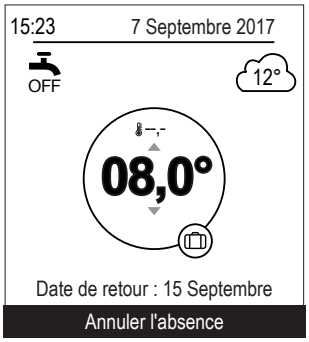


▼ Viewing, modifying and cancelling the next absence period

You can view, modify and cancel the next absence period by going into the menu: *"Absence"*.



You can cancel a currently active absence period from the welcome screen.



Some settings (or menus) might not be displayed. They are dependent on the installation's configuration (and installed options).

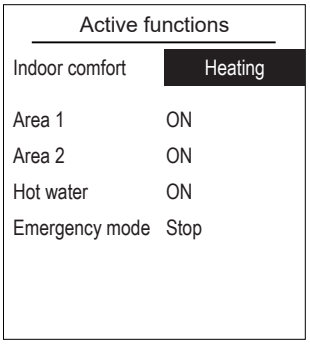
Active functions

The "*Active functions*" page tells you which services are operating and allows you to change their status.

- "*Indoor comfort*" : *Heating / Cooling / Stop.*
- *"Area 1" / "Area 2" / "Hot water" / "Emergency mode" ** : *ON / Stop.*

If "Indoor comfort" is set to "Stop", Zones 1 and 2 cannot be modified.

"Emergency mode" : Activate only in case of error "370: Thermodynamic Generator". The appliance operates only from the fuel unit.

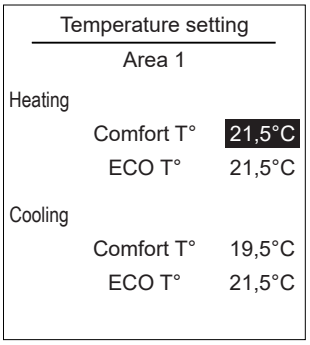


Temperature setting

The "Temperature setting" page allows you to set temperature setpoints for Comfort and ECO periods (heating and cooling). Settings must be recorded for each zone.

Heating temperatures factory settings:
Comfort 20°C, ECO 19°C.

Cooling temperatures factory settings:
Comfort 24°C, ECO 26°C.



Some settings (or menus) might not be displayed. They are dependent on the installation's configuration (and installed options).

▶ Programming

A timer program allows you to define the appliance's automatic operation periods (Comfort ↔ ECO) Each day can be set independently.

▼ Creating a timer program

1 - Choose *"Heating" or "Cooling"* as well as the appropriate zone by accessing the menu: *"Programmation" > "Heating" / "Cooling" > "Zone 1" / "Zone 2".*

2 - Select the day.

3 - Adjust the Comfort period start and end times.

If 2 or 3 Comfort periods are not required, click on "---".

- To return to the previous setting (e.g. end of 1st heating period to start of 1st heating period), press the ⮌ button.

• To copy the program to other days:

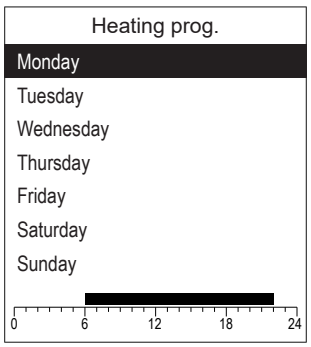
4 - Select "*Validate and copy*".

5 - Set the required days to "*Yes*" and then select "*Complete*".

• Else "*Validate*".

Heating / cooling period factory setting: 06:00 - 22:00.

2



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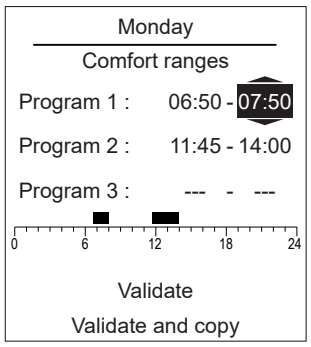

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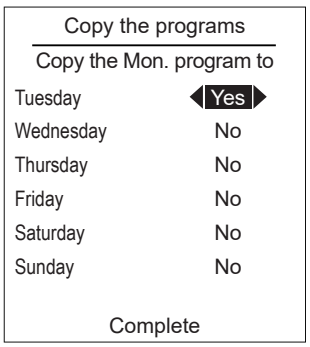
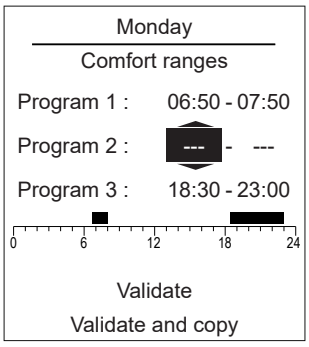


▼ Deleting a Comfort period

To delete a Comfort period, set its start and end times to the same value.
When accepting a setting, the screen displays:

Program X : --- - ---

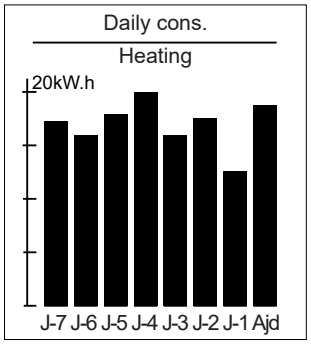


Some settings (or menus) might not be displayed. They are dependent on the installation's configuration (and installed options).

▶ *i* Power consumption

Electricity consumption can be displayed per usage:
- Heating (Zones 1 and 2).
- Cooling.
- Domestic Hot Water (DHW).
- Total (Heating + Cooling + Hot Water).

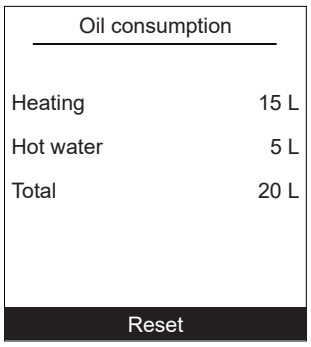
This information is available for:
- the last 8 days: daily consumption (Ajd = Today, J-1 = yesterday, etc.).
- the last 12 months: monthly consumption (Initial letter of month. e.g. J = January, etc.).
- the last 10 years: Annual consumption (last 2 digits. e.g. 16 = 2016).



Example for daily consumption of the heating system.

▶ *i* Oil consumption

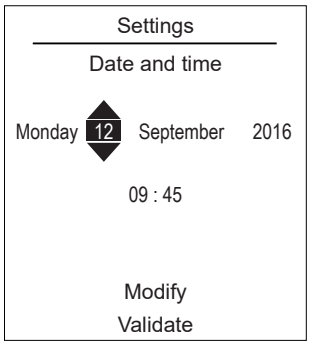
Fuel oil consumption can be displayed per usage:
- Heating (Zones 1 and 2).
- Domestic Hot Water (DHW).
- Total (Heating + Hot Water).



▶ Settings

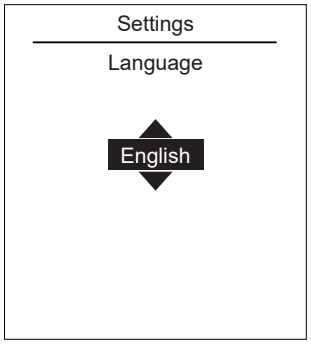
▼ Date and time

To set the appliance's date and time, access the menu:
"Settings" > "Date and time".



▼ Language

To change the language, access the menu:
"Settings" > "Language".



Some settings (or menus) might not be displayed. They are dependent on the installation's configuration (and installed options).

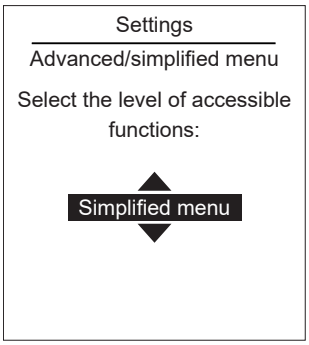
▼ Advanced/simplified menu

Two display modes for menus and appliance functions are available:

- **Advanced menu**:
  - The appliance follows the timer programming defined in paragraph " Programming", page 16.
- **Simplified menu***:
  - The appliance operates at a constant temperature set directly by the user.
  - Some functions are no longer accessible.

* The "*Simplified menu*" setting is not compatible with the Cozytouch application.

Choose the display mode from the menu:
"Settings" > "Advanced/simplified menu".



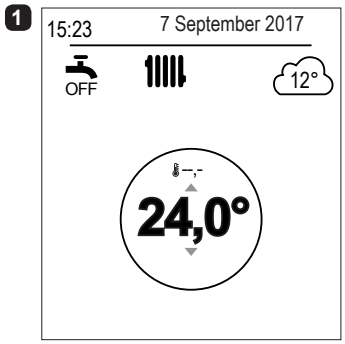
Setting the temperature in the Simplified Menu

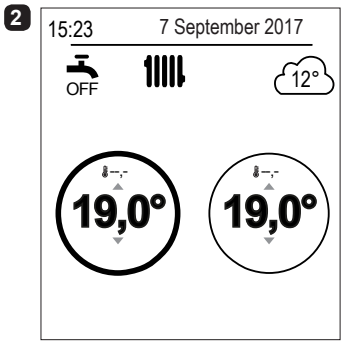
- 1 zone

1 - Turn the knob to adjust the temperature **directly**.

- 2 zones

2 - Select the zone. Accept.
- Set the temperature using the knob. Accept.

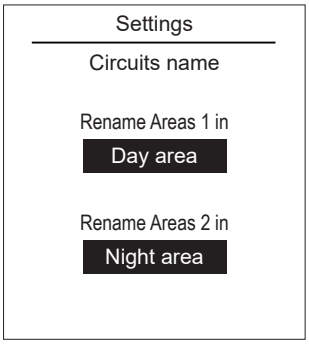




▼ Areas name

You can customise the zone names from the menu:
"Settings" > "Areas name".

Available names : "*Areas 1*" / "*Areas 2*" / "*Day area*" / "*Night area*" / "*1st floor*" / "*Lounge*" / "*G. floor*" / "*Bedroom*" / "*Floor*" / "*Radiator*".



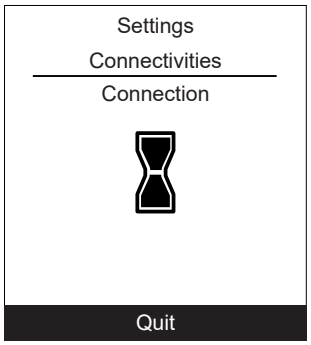
Some settings (or menus) might not be displayed. They are dependent on the installation's configuration (and installed options).

▼ Connectivities

- Pairing a room sensor:

To connect a room sensor, go to the menu:
"Settings" > "Connectivities" > "Connection".
The appliance waits for pairing for 10 minutes.
See the room sensor's installation instructions.

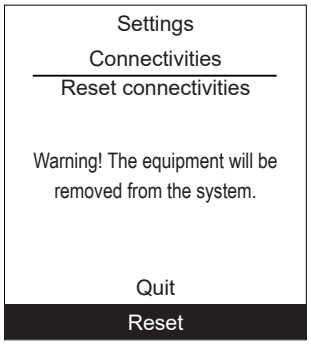
The "*Connection*" menu is no longer accessible if a thermostat has already paired.



- Resetting connections

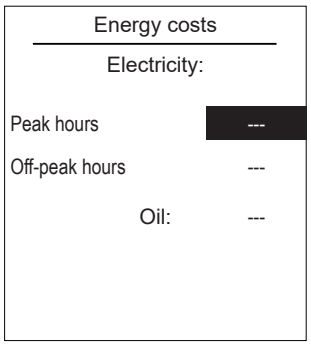
⚠ Resetting will cancel all pairings.

Select "Reset" in the menu:
"Settings" > "Connectivities" > "Reset connectivities".



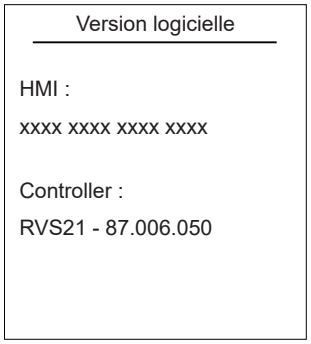
▼ Energy costs

- "*Peak hours*" / "Off-peak hours" : *xx cts/kWh*
- "*Oil*" : *xx cts/l*



▼ Software version

Show the display (HMI) and controller software versions.



Some settings (or menus) might not be displayed. They are dependent on the installation's configuration (and installed options).

Maintenance

Maintenance operations must be done regularly to ensure the appliance operates in total safety.

Depending on the operating conditions, boiler and burner must be cleaned and inspected once or twice a year.

The room-sealed pipe should be checked and cleaned regularly by a specialist (once per year).

These operations must be performed by a specialist who will also check the boiler's safety devices and installation.

Clean all the enamelled panels of the casing with a dry or slightly damp soft cloth.

Do not use abrasive cleaners.

▶ Regular checks

The burner should always be switched on.

No flue gases from the boiler and the chimney should be released into the boiler room when the burner is in operation.

Fuel oil consumption and tank condition should be monitored in order to detect any leaks immediately.

Every year, clean the filter installed on the burner’s oil supply.

In case of an incident, switch off the main power supply as well as the oil valve and call your heating engineer.

▶ Boiler room, hydraulic unit and heating system

▼ Hydraulic unit

The boiler and the burner should be cleaned and checked once a year.

These operations must be performed by a specialist who will also monitor the safety devices of the hydraulic unit and installation.

▼ Hot water tank

Maintenance on the tank must be carried out annually (frequency may vary according to water hardness).

Consult your heating engineer.

▼ Verification of installation filling

The pressure when cold and when stopped must be 1.5 bars.

If the pressure is below 0.5 bar, increase the pressure by operating the filling valve.

If refilling and a pressure reset are necessary, check what type of fluid was used initially.

If in doubt, contact your installer.

⚠ If frequent refills are required it is absolutely essential that you check for any leaks.

▶ Outdoor unit and refrigeration circuit

▼ Checking the outdoor unit

Remove any dust from the exchanger, if necessary, while making sure not to damage the blades.

Check that there is nothing blocking the air flow.

▼ Checking the refrigeration circuit

If the amount of refrigerant in the system exceeds 2 kg (models > 10 kW), the refrigeration circuit must be checked annually by an approved engineer (they must have a certificate of competence for the handling of refrigerants). Consult your heating engineer.

▶ End-of-life of the appliance

The appliances must be dismantled and recycled by a specialised service. The appliances must not, under any circumstances, be thrown out with household waste, bulky waste or at a tip.

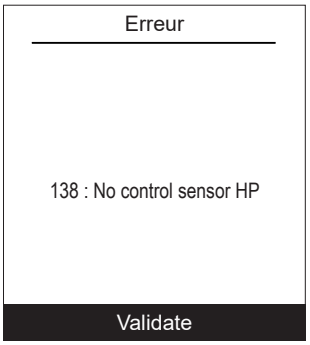
At the end of its service life, please contact your installer or local representative to proceed with its dismantling and recycling.

▶ Error messages

If a fault occurs, the error number appears on the welcome screen.

To obtain the error's designation, select it using the knob.

In the event of an error, note down the number and consult your heating engineer.



In case of error "**370: Thermodynamic Generator**", activate "**Emergency Mode**" (see *page 15*) and consult your heating engineer.

This appliance is marked with this symbol. It means that all electrical and electronic products must be strictly separated from household waste.
A specific recovery system for this type of product is in place in the countries of the European Union (*), Norway, Iceland and Liechtenstein.
Do not attempt to dismantle this product yourself. This can have adverse effects on your health and on the environment.
Refrigerant, oil and other parts must be reprocessed by a qualified installer in accordance with applicable local and national laws.
In terms of recycling, this appliance must be processed by a specialised service and must not, under any circumstances, be thrown out with household waste, bulky waste or at a tip.
Please contact your heating technician or After Sales service for further information.

* Depending on the national regulations of each member state.

Commissioning date:

Contact details of your heating engineer or After Sales service.

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