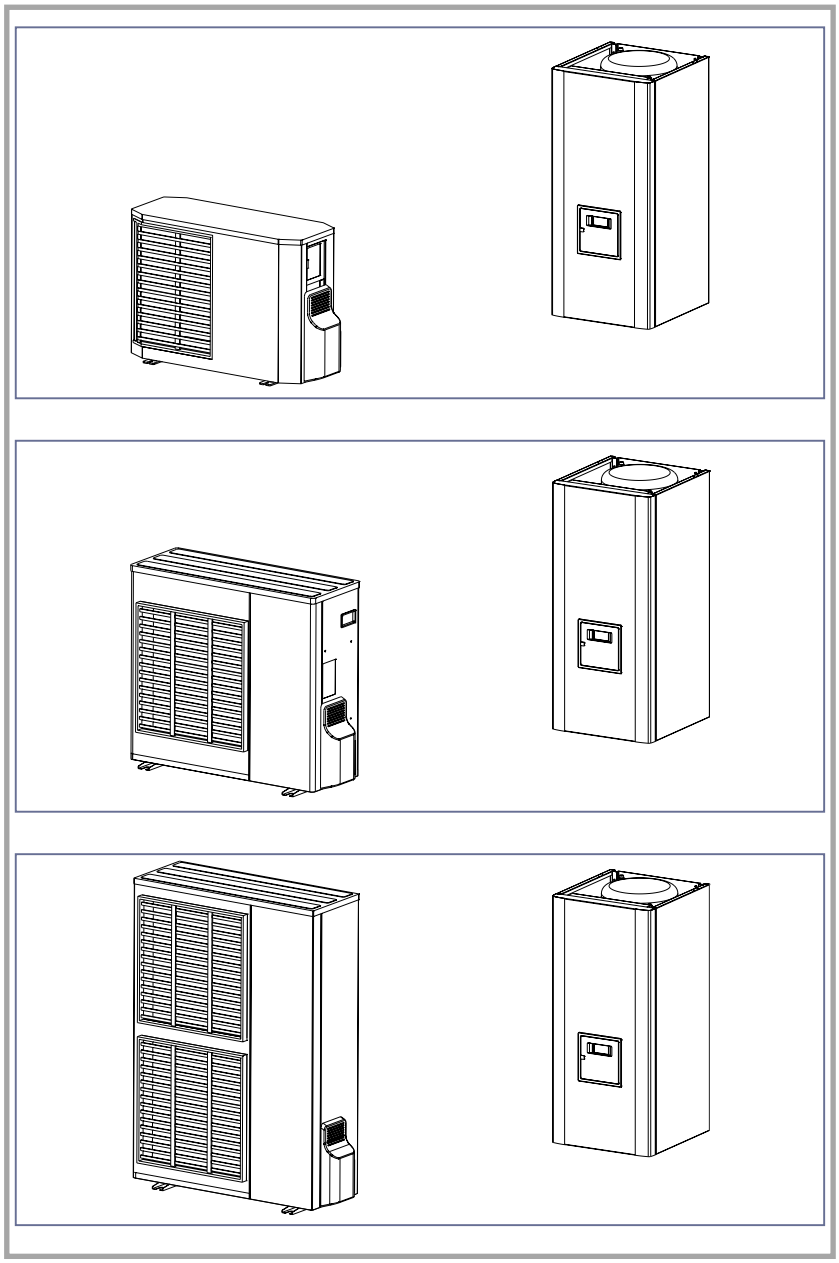
Document n° 1353-2 ~ 15/01/2009

FR EN NL DE IT

# Heat pump air/water split, single service



## Operation manual

**intended for professionals and end users.**

To be saved

for future consultation

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## Contents

# 1 Instructions to be read before using the equipment.

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

## 1.1 Safety instructions

### 1.1.1 Start-up

- ☞ **Do not switch the appliance on until every fillings have been done.**
- ☞ **Do not try to install this appliance yourself.**
- ☞ **This heat pump requires an appropriately qualified person to install it.**
- ☞ **The installation must always be connected to the Earth and fitted with a protective circuit breaker.**
- ☞ **Do not modify the electricity supply.**
- ☞ **The appliances are not fireproof and should therefore not be installed in a potentially explosive atmosphere.**

### 1.1.2 Use

- ☞ **Do not let children insert foreign bodies into the fan protection grill or climb on top of the outside unit. The fins on the air exchanger are extremely fine and cause cuts.**
- ☞ **Nothing should obstruct the air circulation through the evaporator and from the fan.**
- ☞ **Do not climb on the top of the outside unit.**
- ☞ **The room in which the appliance is operating must be correctly ventilated in order to prevent any loss of oxygen if there is an escape of refrigerant gas.**
- ☞ **Consult your Installer before making any changes or modifications to the premises where the appliance is installed.**
- ☞ **Do not place any heat source under the remote control.**

### 1.1.3 Maintenance

- ☞ **Do not try to repair this appliance yourself.**
- ☞ **This appliance does not contain any components capable of being repaired by the user himself. Removing one or other 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 (capacitors)**
- ☞ **Do not open the outside unit or the hydraulic unit while they are operating.**
- ☞ **Switch off the power supply if there are any abnormal noises, smells or smoke coming from the appliance and contact your installer.**
- ☞ **Switch off the power to the appliance before you clean it.**
- ☞ **Do not use aggressive cleaning liquid or solvents to clean the body work.**
- ☞ **Do not use a pressure washer to clean the outside unit. This could damage the air exchanger and the water might penetrate into the electrical circuits.**

## 1.2 Precautions and warnings regarding your installation.

### 1.2.1 The outside unit

The outside unit contains the equipment for capturing energy from the ambient air.

Your installer has placed this unit in a location that enables it to operate in an optimum manner.

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

The ambient air is cooled in the outside unit in contact with an exchanger. The water that the air contains condenses and flows from the outdoor unit.

In cold periods, this water freezes in contact with the exchanger and is drained away by regular defrosting cycles. The control system automatically controls the defrosting cycle, whose operation can lead to the quite normal emission of steam.

### 1.2.2 The hydraulic unit

The hydraulic unit contains the heat pump complete control system, in charge of controlling the heating comfort level and the production of domestic hot water (if a DHW tank is connected).

The hydraulic module is equipped with an electric back-up system, which is designed to provide additional heat during the coldest periods.

### 1.2.3 Control system

Your installer has carefully adjusted your installation. Do not modify setting parameters without his agreement. If in doubt, do not hesitate to contact him.

The control system for your heating system is designed:

- either as a fixed flow temperature for the water (only for low temperature radiators with thermostatic valve controls).
- Or as a flow temperature for the water based on the external temperature (water control) with the installation of an ambient air sensor (option).

This second solution (water control) is the only one usable for Floor-heating systems. It is also very effective for thermostatically controlled radiators.

### 1.2.4 Floor-heating systems

- New floor-heating systems require to be initially heated slowly to avoid any problems with cracking. Check with your installer that this initial heating procedure has indeed been performed before using your heating system freely.
- To be efficient, floor-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.
- The great stability in a regulation system for floor-heating systems avoids sharp differences in temperature. However, this stability involves a reaction time of the order of several hours, (approx 6 hours).
- Any changes to the setting must be made slowly, leaving the installation time to react. Adjusting the system to exaggerated setting or in an untimely manner always results in significant temperature fluctuations during course of the day.
- Similarly if your dwelling has a floor-heating system, do not reduce the heating or switch it off if you will be absent for a short period. The reheating period is always quite long (approx 6 hours).

### 1.2.5 Domestic hot water (DHW)

This function is designed as an option through the use of a DHW tank with electrical backup heating.

When the DHW production is required, the heat pump adapts to this demand as a priority.

No space heating is produced while the domestic hot water is being prepared.

The heat pump produces the domestic hot water, which is then supplemented, if required, by electrical backup heating inside the tank.

The electrical backup heating enables anti-legionella cycles to be conducted efficiently.

# 2 Overall view of the installation

Your heat pump has been configured by your installer. It is composed of the following main elements:

- The outside unit is positioned, as its name indicates, outside your dwelling and extracts energy from the outside air.
- The hydraulic unit positioned in your boiler room, cellar, garage or even your kitchen, transfers the energy to the heating circuit (and the domestic hot water).
- The outdoor sensor detects the outside temperature.

*Optional equipment:*

- Room thermostat
- Remote control

Heat pumps are systems that can be connected to any form of low temperature heat distribution systems: the heat captured by the heat pump can therefore be used in different ways:

- Floor-heating systems
- Radiators or warm fan coil heaters
- Domestic hot water (DHW)

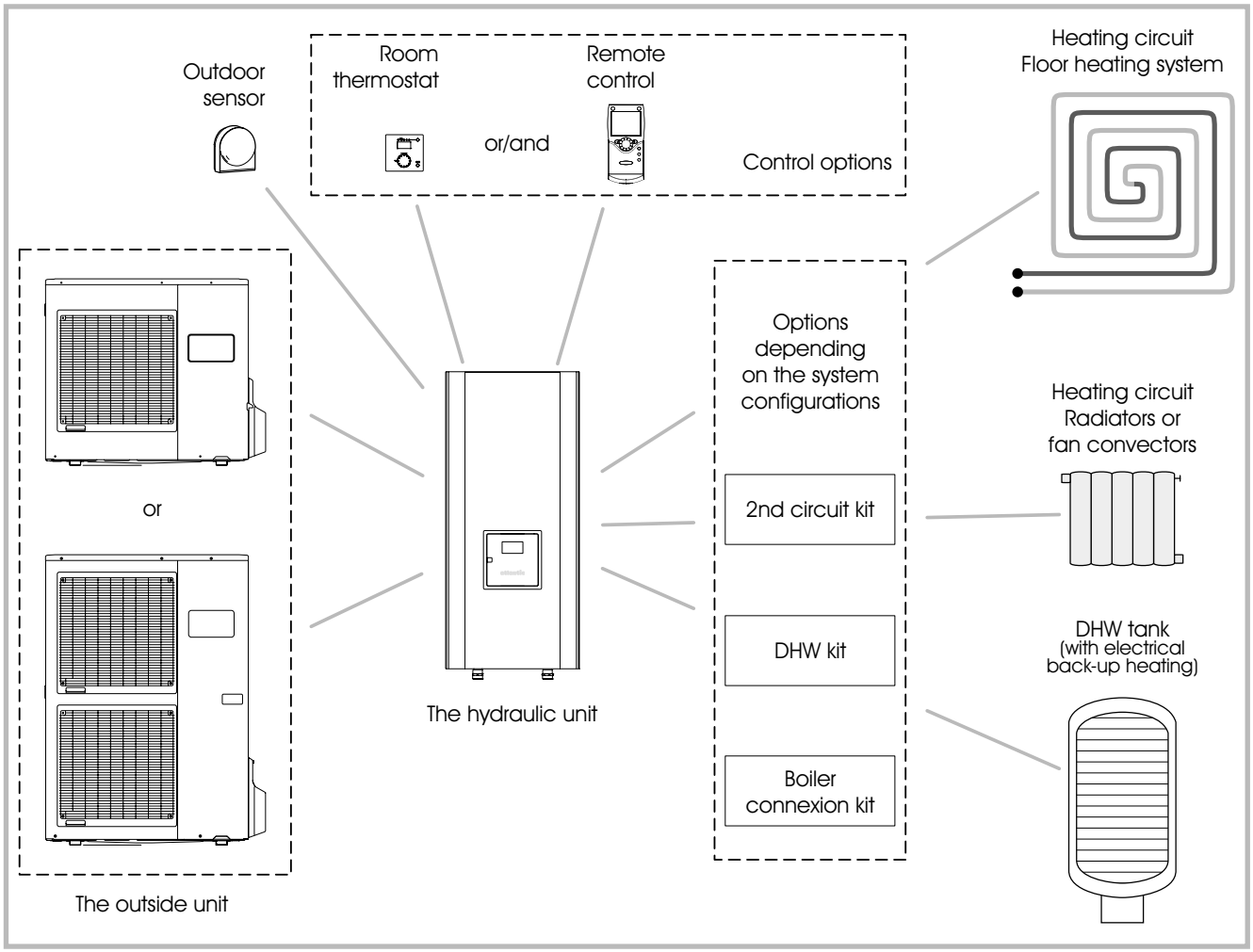
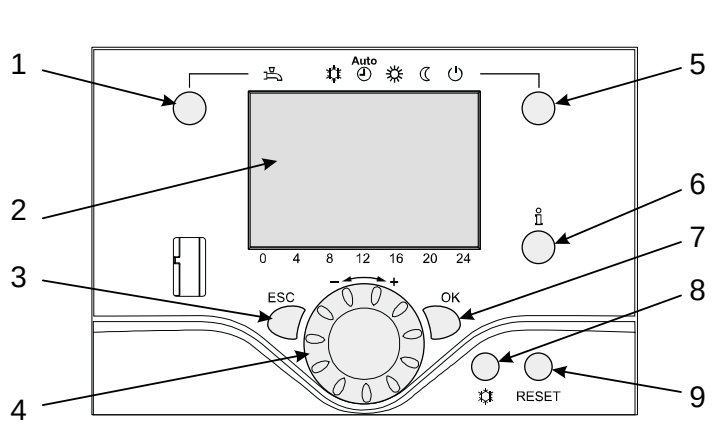


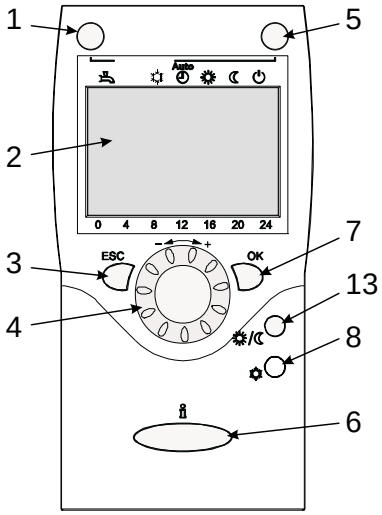

*Figure 1 - Overall view of the configuration of a complete installation*

# 3 Operation of the installation

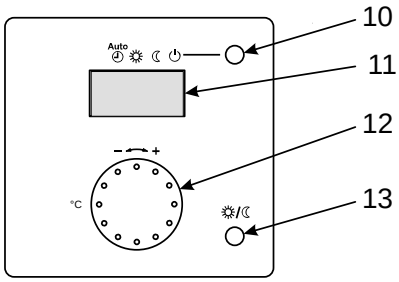
## 3.1 User interface




User interface



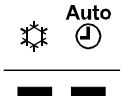

Remote control (option)




Room thermostat (option)

*Figure 2*

| Ref. | **Function** | - **Definitions** |
|---|---|---|
| 1 | Selection of the DHW operating mode (Domestic hot water)<br>ON<br>Off | - If the installation is fitted with a DHW tank.<br>- ON: Production of DHW according to the time program.<br>- Off: No domestic hot water heating, anti-frost function is active.<br>- Boost: Hold down the DHW key for 3 seconds. Immediate DHW operation after use of the electrical back-ups until the DHW comfort setting has been reached |
| 2 | Digital display | - Operating control. Readout of the current temperature, of the heating mode and of any faults .<br>- View the settings |
| 3 | Exit "ESC" | - Quit the menu. |
| 4 | Navigation and setting | - Selecting the menu.<br>- Setting parameters.<br>- Adjusting the ambient temperature setpoint. |

| Ref. | **Function** | - **Definitions** |
|---|---|---|
| 5 | Selecting the heating mode | - Auto Heating operating according to the heating programme (Summer/winter mode switchover is automatic).<br>- Constant comfort temperature.<br>- Constant reduced temperature.<br>- Stand-by mode with anti-frost protection (Provided that the heat pump's electrical power supply is not interrupted). |
| 6 | Information display | - Various data (please see page 15).<br>- Reading error codes.<br>- Information concerning maintenance, special mode. |
| 7 | Confirm "OK" | - Input into the selected menu.<br>- Confirmation of the parameter settings.<br>- Confirmation of the adjustment to the comfort temp. setting. |
| 8 | Selecting cooling mode<br>  | - If the installation is fitted with the cooling kit:<br>- Cooling operating according to the heating programme (Summer/winter mode switchover is automatic). |
| 9 | RESET button<br>(Hold down the "RESET" key for 3 seconds). | - Reinitialising the parameters and cancelling error messages. **Do not use during normal operation.** |
| 10 | Selecting the heating mode | - Auto Heating operating according to the heating programme (Summer/winter mode switchover is automatic).<br>- Constant comfort temperature.<br>- Constant reduced temperature.<br>- Stand-by mode with anti-frost protection (Provided that the heat pump's electrical power supply is not interrupted). |
| 11 | Digital display | - Operating control. Readout of the current temperature, of the heating mode and of any faults . |
| 12 | Control knob | - Adjusting the ambient temperature setpoint |
| 13 | Occupancy key | - Comfort / Reduced switchover |

## 3.2 Appliance start up.

- The installation and 1st start up of the appliance must be done by a qualified installer. That person will also give you instructions on starting and running the appliance.
- Ensure that the installation is fully filled with water and has been correctly bled and that there is a sufficient pressure of 1.5 to 2 bars on the manometer (Ref. 2, fig. 4).
- Close the installation's main circuit breaker.

  In winter, so that the compressor can be preheated, close the installation's main circuit breaker (outside unit's power supply) some hours before pressing the on/off button.

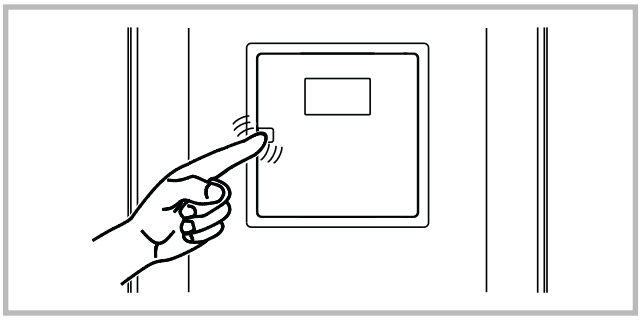


*Figure 3 - Opening the door*

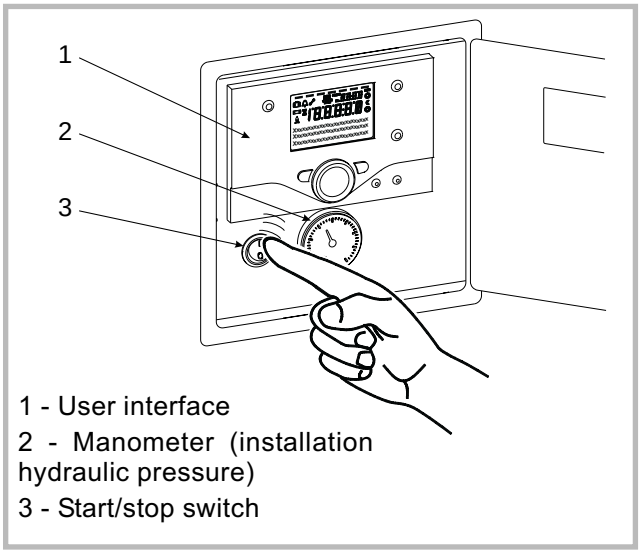



*Figure 4 - Start-up*

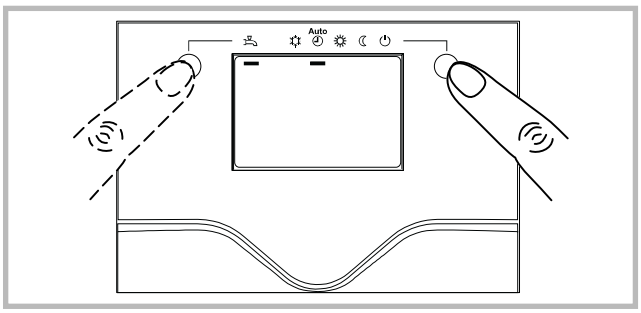



*Figure 5 - Selecting the heating mode (AUTO) and selecting the DHW operating mode (domestic hot water)*

## 3.3 Quick start-up

Once your installer has started your installation for the first time:

- Engage the heat pump's ON/OFF button.

  During the regulator initialisation phase, the display shows all the symbols and then "Data, update" and then "State heat pump".
- Select the "AUTO" heating mode (Fig. 5).
- Select the DHW mode (Fig. 5) if the installation is fitted with a DHW tank with electrical back-up heating.
- Set the current date and time (Fig. 6).

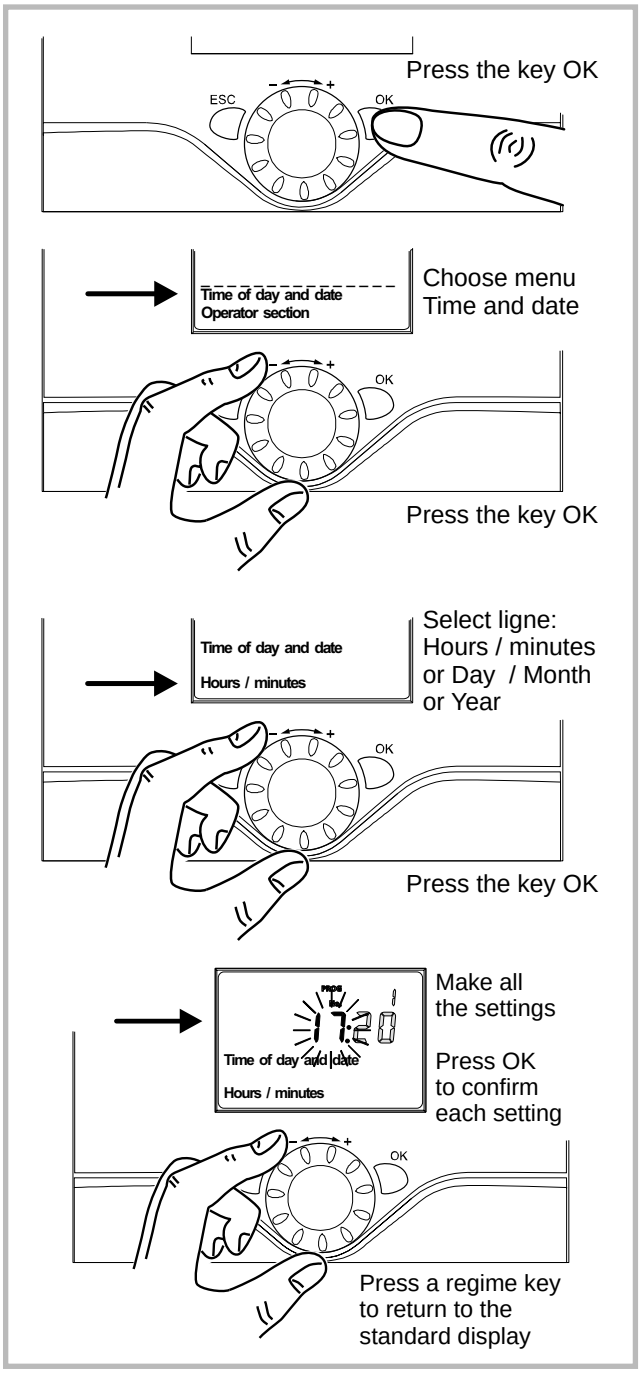



*Figure 6 - Setting the time and the date*

## 3.4 Programming examples

### Setting the time

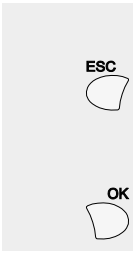
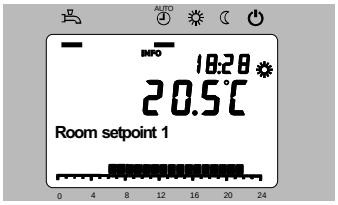
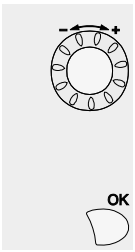
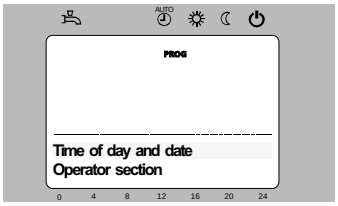
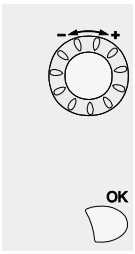
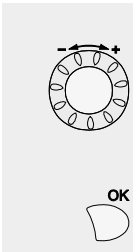
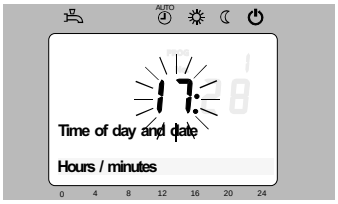
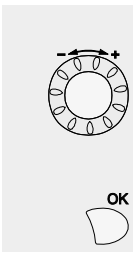
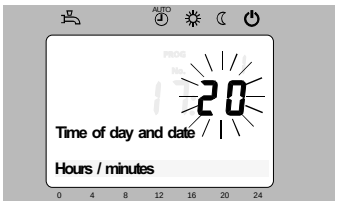
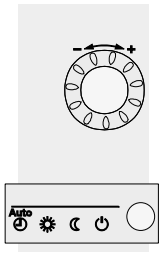
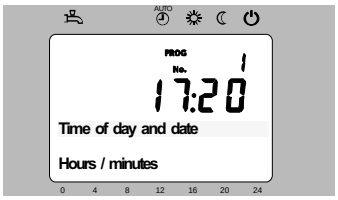
| | Keys | Display example | Description |
|---|---|---|---|
| 1 |  |  | Basic display<br>If the basic display is not shown, press ESC to return to it.<br>Press the key OK. |
| 2 |  |  | Turn the knob, choose menu: Time and date,<br>Press OK to confirm. |
| 3 |  |  | Turn the knob, select line 1: Hours / minutes,<br>Press OK to confirm. |
| 4 |  |  | The hour display flashes<br>Turn the knob to set the time,<br>Press the key OK. |
| 5 |  |  | The minutes display flashes<br>Turn the knob to set the minutes,<br>Press the key OK. |
| 6 |  |  | The setting are recorded<br>Turn the knob to make other settings<br>or<br>Press a regime key to return to the standard display. |

*Figure 7*

## 3.5 Structure of the “End user” control menu

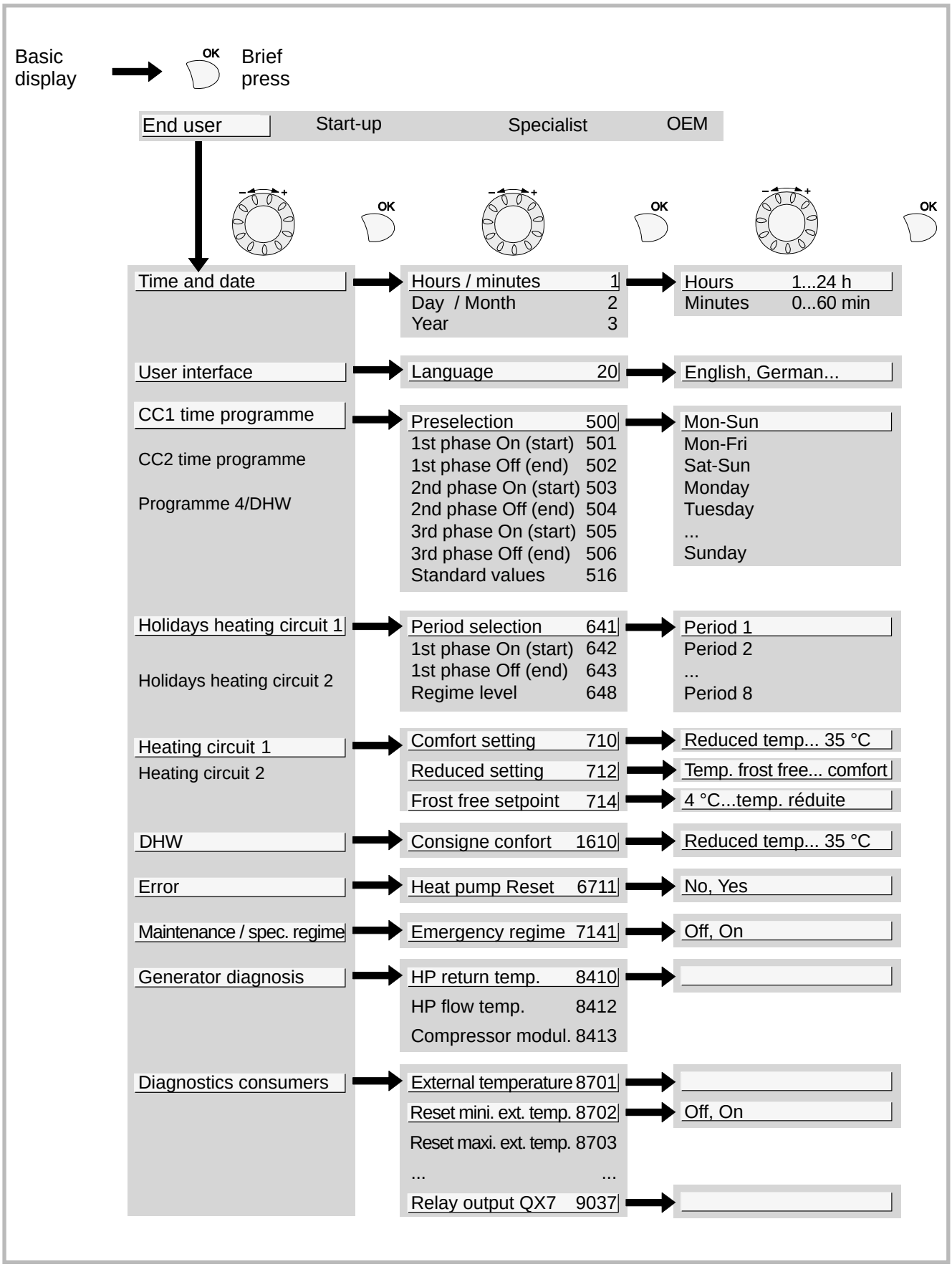



*Figure 8*

## 3.6 Parametering the setting

### 3.6.1 General

• Only the parameters accessible to levels:
End user
are described in this document.

• The parameters accessible at level:
Initial start-up
Specialist
… are described in the document reserved for these professional specialists. **Do not make any modifications to these parameters without advice from these professional specialists.**

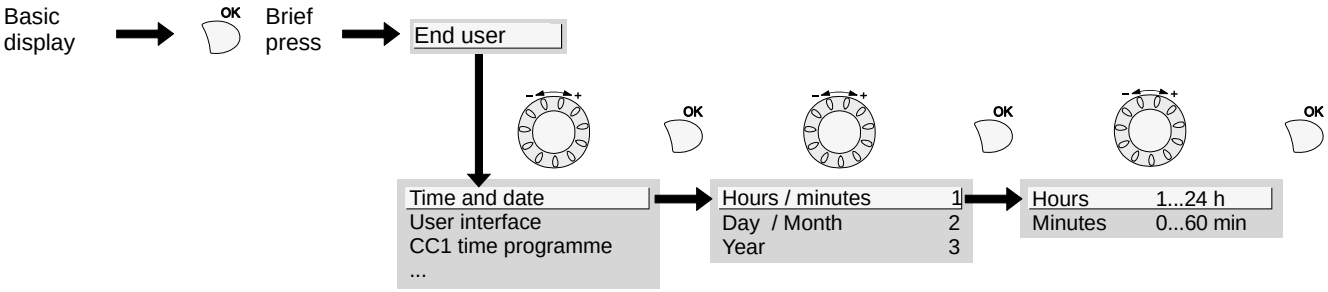
### 3.6.2 Setting parameters

With the screen on basic display
- Press the key

Once in "End user" level
- Scroll the menu list.
- Choose the desired menu.
- Scroll the function lines.
- Choose the desired line.
- Adjust the parameter
- Check the setting by pressing OK

- To return the menu, press ESC

If no setting is made for 8 minutes, the screen returns automatically to the basic display.




### 3.6.3 List of "Consumer" settings

| Line | Function | Setting range or display | Setting increment | Basic setting |
|---|---|---|---|---|
| **Date and time** | | | | |
| 1 | Hours / minutes | 00:00… 23:59 | 1 | |
| 2 | Day / Month | 01.01… 31.12 | 1 | |
| 3 | Year | 1900… 2099 | 1 | |
| **User interface** | | | | |
| 20 | Language | English, Français, Italiano, Nederlands... | | |
| **Heating time programme, circuit 1** | | | | |
| 500 | Pre-selection (day / week)<br>Mon-Sun Mon-Fri Sat-Sun Monday Tuesday… | | | **Mon-Sun** |
| 501 | 1st phase On (start) | 00 : 00… - -:- - | 10 min | **6 : 00** |
| 502 | 1st phase Off (end) | 00 : 00… - -:- - | 10 min | **22 : 00** |
| 503 | 2nd phase On (start) | 00 : 00… - -:- - | 10 min | **- -:- -** |
| 504 | 2nd phase Off (end) | 00 : 00… - -:- - | 10 min | **- -:- -** |
| 505 | 3rd phase On (start) | 00 : 00… - -:- - | 10 min | **- -:- -** |
| 506 | 3rd phase Off (end) | 00 : 00… - -:- - | 10 min | **- -:- -** |
| 516 | Standard values, Circuit 1 | no, yes | | **no** |
| | Yes + OK: The standard values memorised in the regulator replace and cancel the customised heating programmes. Your customised settings are therefore lost. | | | |

| Line | Function | Setting range or display | Setting increment | Basic setting |
|---|---|---|---|---|
| **Heating time programme, circuit 2** | | | | |
| | If the installation consists of 2 heating circuits (only with the 2nd circuit kit option) | | | |
| 520 | Pre-selection (day / week)<br>Mon-Sun Mon-Fri Sat-Sun Monday Tuesday… | | | **Mon-Sun** |
| 521 | 1st phase On (start) | 00 : 00… - -:- - | 10 min | **6 : 00** |
| 522 | 1st phase Off (end) | 00 : 00… - -:- - | 10 min | **22 : 00** |
| 523 | 2nd phase On (start) | 00 : 00… - -:- - | 10 min | **- -:- -** |
| 524 | 2nd phase Off (end) | 00 : 00… - -:- - | 10 min | **- -:- -** |
| 525 | 3rd phase On (start) | 00 : 00… - -:- - | 10 min | **- -:- -** |
| 526 | 3rd phase Off (end) | 00 : 00… - -:- - | 10 mn | **- -:- -** |
| 536 | Standard values, Circuit 2 | no, yes | | **no** |
| | Yes + OK: The standard values memorised in the regulator replace and cancel the customised heating programmes. Your customised settings are therefore lost. | | | |
| **Time programme 4 / DHW** | | | | |
| | If the installation is fitted with a tank (only with the DWH kit option) | | | |
| 560 | Pre-selection (day / week)<br>Mon-Sun Mon-Fri Sat-Sun Monday Tuesday… | | | **Mon-Sun** |
| 561 | 1st phase On (start) | 00 : 00… - -:- - | 10 min | **00 : 00** |
| 562 | 1st phase Off (end) | 00 : 00… - -:- - | 10 min | **05: 00** |
| 563 | 2nd phase On (start) | 00 : 00… - -:- - | 10 min | **- -:- -** |
| 564 | 2nd phase Off (end) | 00 : 00… - -:- - | 10 min | **- -:- -** |
| 565 | 3rd phase On (start) | 00 : 00… - -:- - | 10 min | **- -:- -** |
| 566 | 3rd phase Off (end) | 00 : 00… - -:- - | 10 min | **- -:- -** |
| 576 | Standard values | no, yes | | **no** |
| | Yes + OK: The standard values memorised in the regulator replace and cancel the customised heating programmes. Your customised settings are therefore lost. | | | |
| **Time programme 5 / Cooling** | | | | |
| | If the installation is fitted with the cooling kit (only with the cooling kit option) | | | |
| 600 | Pre-selection (day / week)<br>Mon-Sun Mon-Fri Sat-Sun Monday Tuesday… | | | **Mon-Sun** |
| 601 | 1st phase On (start) | 00 : 00… - -:- - | 10 min | **6 : 00** |
| 602 | 1st phase Off (end) | 00 : 00… - -:- - | 10 min | **22 : 00** |
| 603 | 2nd phase On (start) | 00 : 00… - -:- - | 10 min | **- -:- -** |
| 604 | 2nd phase Off (end) | 00 : 00… - -:- - | 10 min | **- -:- -** |
| 605 | 3rd phase On (start) | 00 : 00… - -:- - | 10 min | **- -:- -** |
| 606 | 3rd phase Off (end) | 00 : 00… - -:- - | 10 min | **- -:- -** |
| 616 | Standard values | no, yes | | **no** |
| | Yes + OK: The standard values memorised in the regulator replace and cancel the customised heating programmes. Your customised settings are therefore lost. | | | |

| Line | Function | Setting range or display | Setting increment | Basic setting |
|---|---|---|---|---|
| **Holidays programme, circuit 1** | | | | |
| 641 | Preselection | Period 1 to 8 | | **Period 1** |
| 642 | Date holidays start (Day / Month) | 01.01… 31.12 | 1 | |
| 643 | Date holidays end (Day / Month) | 01.01… 31.12 | 1 | |
| 648 | Heating schedule during the holidays | Frost protection, Reduced | | **Frost protection** |
| **Holidays programme, circuit 2** | | | | |
| | If the installation consists of 2 heating circuits (only with the 2nd circuit kit option) | | | |
| 651 | Preselection | Period 1 to 8 | | **Period 1** |
| 652 | Date holidays start (Day / Month) | 01.01… 31.12 | 1 | |
| 653 | Date holidays end (Day / Month) | 01.01… 31.12 | 1 | |
| 658 | Heating schedule during the holidays | Frost protection, Reduced | | **Frost protection** |
| **Heating adjustment, circuit 1** | | | | |
| 710 | Comfort ambient temperature setpoint | from reduced temperature to 35°C | 0,5 °C | **20 °C** |
| 712 | Reduced ambient temperature setpoint | from frost-free temp… to comfort temperature | 0,5 °C | **18 °C** |
| 714 | Frost-free ambient temperature setpoint | from 4°C… to reduced temperature | 0,5 °C | **8 °C** |
| **Cooling adjustment circuit 1** | | | | |
| | If the installation is fitted with the cooling kit (only with the cooling kit option) | | | |
| 901 | Operating mode | Off, Automatic | | **Off** |
| 902 | Comfort ambient temperature setpoint | 17...40 °C | 0,5 °C | **24 °C** |
| 907 | Release | 24h/day, Time programme HC, Time programme 5 / Refresh | | **24h/day** |
| **Heating adjustment, Circuit 2** | | | | |
| | If the installation consists of 2 heating circuits (only with the 2nd circuit kit option) | | | |
| 1010 | Comfort ambient temperature setpoint | from reduced temperature to 35°C | 0,5 °C | **20 °C** |
| 1012 | Reduced ambient temperature setpoint | from frost-free temp… to comfort temperature | 0,5 °C | **18 °C** |
| 1014 | Frost-free ambient temperature setpoint | from 4°C… to reduced temperature | 0,5 °C | **8 °C** |
| **DHW setting (domestic hot water) (only with the DWH kit option)** | | | | |
| 1610 | Comfort setting | reduced setting (line 1612)… to 65 °C | 1 | **60 °C** |
| | The backup electrical system is required to reach this level. | | | |
| 1612 | Reduced setting | 8 °C...to comfort setting (line 1610) | 1 | **40 °C** |

| Line | Function | Setting range or display | Setting increment | Basic setting |
|---|---|---|---|---|
| **Swimming pool (Only with swimming pool kit option)** | | | | |
| 2056 | Generator heating setting | 8... 35 °C | | **22 °C** |
| **Error** | | | | |
| 6711 | Heat pump Reset | No, yes | | **No** |
| **Maintenance / special mode** | | | | |
| 7141 | Emergency operation | Off, ON | | **Off** |
| | Off: The heat pump does not use the backup electrical heating system or the boiler connection when a fault occurs (error 370)<br>ON: The heat pump uses the backup electrical system or the boiler connection when a fault occurs (error 370). In the "ON" position, the energy costs can be huge if the error is not eliminated. | | | |
| **Diagnostics heat generation** | | | | |
| 8410 | Heat pump return temperature | 0 … 140 °C | | |
| | Setpoint (flow) HP | 0 … 140 °C | | |
| 8412 | Heat pump flow temperature | 0 … 140 °C | | |
| | Setpoint (flow) HP | 0 … 140 °C | | |
| 8413 | Compressor modulation | 0 … 100% | | |
| **Diagnostics consumers** | | | | |
| 8700 | External temperature | -50 .. 50 °C | | |
| 8701 | Minimum external temperature<br>Reset ? (no, yes) | -50 .. 50 °C | | |
| 8702 | Maximum external temperature<br>Reset ? (no, yes) | -50 .. 50 °C | | |
| 8721 | Room temperature | 0 .. 50 °C | | |
| 8740 | Room temperature 1 | 0 … 50 °C | | **20 °C** |
| | Ambient temperature setting 1 | 4 … 35 °C | | **20** |
| 8743 | Flow temperature 1 | 0 … 140 °C | | **50** |
| | Flow temperature setpoint 1 | 0 … 140 °C | | **50** |
| 8756 | Cooling flow temperature 1 | 0 … 140 °C | | **0** |
| | Cooling flow temperature setpoint 1 | 0 … 140 °C | | **0** |
| 8770 | Room temperature 2 | 0 … 50 °C | | **20** |
| | Ambient temperature setpoint 2 | 4 … 35 °C | | **20** |
| 8773 | Flow temperature 2 | 0 … 140 °C | | **50** |
| | Flow temperature setpoint 2 | 0 … 140 °C | | **50** |
| 8830 | DHW (domestic hot water) temperature | 0 … 140 °C | | |
| | DHW temperature setpoint | 5 … 80 °C | | **50** |
| 8900 | Swimming pool temperature | 0 … 140 °C | | |
| | Swimming pool temperature setpoint | 0 … 80 °C | | **24** |

## 3.7 Information display

Various data can be displayed by pressing the info button.

Depending on the type of unit, configuration and operating state, some of the info lines listed below may not appear.

- Possible error messages from the error code list. The display shows the “Bell” symbol .
  - Consult your heating technician
- Possible service messages from the maintenance code list. The display shows the “Key” symbol .
  - Consult your heating technician
- Possible special mode messages. The display shows the “Key” symbol .
  - Consult your heating technician

Various data (see below).

| Designation | Line |
|---|---|
| Floor drying current setpoint | - |
| Current drying day | - |
| Terminated drying days | - |
| Room temperature | 8721 |
| State heat pump | 8006 |
| State supplementary source | 8022 |
| State DHW | 8003 |
| State swimming pool | 8011 |
| State heating circuit 1 | 8000 |
| State cooling circuit 1 | 8001 |
| State heating circuit 2 | 8004 |
| External temperature | 8700 |
| Room setpoint 1 | 8740 |
| Flow temperature 1 | 8743 |
| Flow temp setpoint 1 | |
| Room setpoint 2 | 8771 |
| Flow temperature 2 | 8773 |
| Flow temp setpoint 2 | |
| DHW temperature | 8830 |
| Heat pump return temperature | 8410 |
| Setpoint HP (flow) | |
| Heat pump flow temperature | 8412 |
| Setpoint HP (flow) | |
| Swimming pool temperature | 8900 |
| Swimming pool temperature setpoint | |

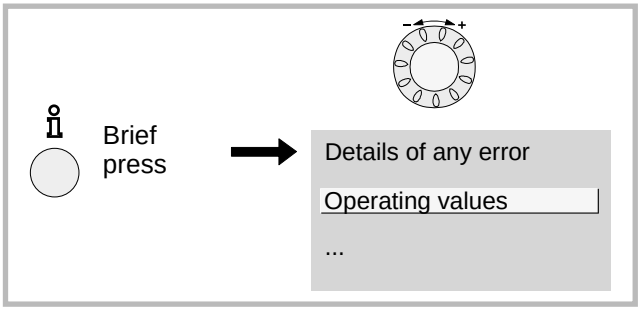



*Figure 9 - Information key*

## 3.8 Details

If the electrical power supply has been cut off while the heat pump is operating (electrical power failure or unprogrammed pressing of the on/off switch on the hydraulic unit) the display will show error 370 when the appliance restarts. Do not be concerned, the communication between the outdoor and hydraulic units will re-establish itself in a few moments.

## 3.9 Operation of the DHW system

The key (figure 10) enables you to switch the DHW (domestic hot water) mode on and off if the installation is fitted with a DHW tank with electrical back-up heating. The selection is shown by a bar, which appears under the corresponding symbol.

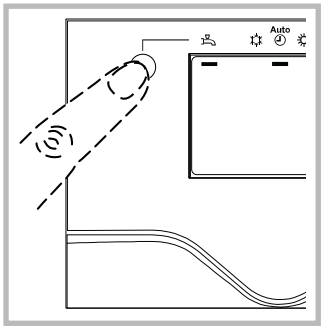



*Figure 10 - Selecting the DHW operating mode (domestic hot water)*

Press the info key to obtain the details on the DHW (temperature setting operation).

## 3.10 Selecting cooling mode

If the installation is fitted with the cooling kit.

The key (figure 11 ) enables you to switch the cooling mode on and off.

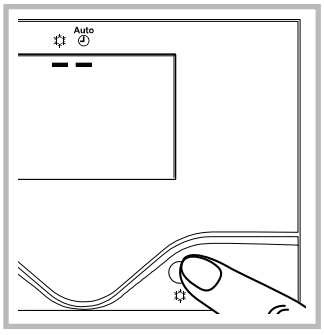



*Figure 11 - Selecting cooling mode*

### 3.11 Configuring remote control (option)

Installation equipped with a remote control.

During commissioning, after an initialisation period of approx. 3 minutes, the user's language must be set:

- Press the key
- Choose menu "Bedieneinheit"
- Choose language "Sprache" English.

# 4 Maintenance

In order to insure your appliance operates correctly for many years, the maintenance operations described below are required at the start of each heating season. Generally, these are performed as part of a service contract.

### 4.1 Checking that the floor system is full

The pressure in the floor system when it is cold and when it has stopped must be 1.5 bars.

If filling and re-pressurisation are required, check what type of fluid has been used initially.

If in any doubt, contact your installer.

Warning, if frequent filling is required, have the installation's sealing checked.

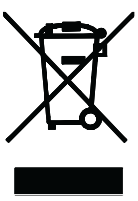
### 4.2 Checking the outside unit

Dust off the exchanger if necessary, being careful not to damage the fins.

Check that there is nothing obstructing the passage of air.

### 4.3 Checking the refrigeration circuit

When the coolant fluid charge is in excess of 2kg (095, 128, and 155 models), it is compulsory to have an approved after sales service check the refrigeration circuit every year. Consult your heating technician.



This appliance is marked with this symbol. This means that electrical and electronic products shall not be mixed with general household waste.
European Community countries(*), Norway, Iceland and Liechtenstein should have a dedicated collection system for these products.
Do not try to dismantle the system yourself as this could have harmful effects on your health and on the environment.
The dismantling and treatment of refrigerant, oil and other parts must be done by a qualified installer in accordance with relevant local and national regulations.
This appliance must be treated at a specialized treatment facility for re-use, recycling and other forms of recovery and shall not be disposed of in the municipal waste stream.
Please contact the installer or local authority for more information.
* subject to the national law of each member state