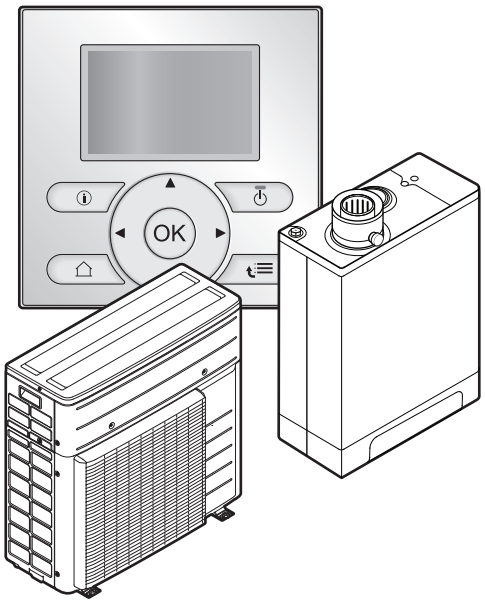
User reference guide

Daikin Altherma Hybrid hydrosplit heat pump



EJHA04AAV3
EHY2KOMB28AA
EHY2KOMB32AA

Table of contents

1 General safety precautions

1.1 About the documentation

- The original documentation is written in English. All other languages are translations.
- The precautions described in this document cover very important topics, follow them carefully.
- The installation of the system, and all activities described in the installation manual and in the installer reference guide MUST be performed by an authorised installer.

1.1.1 Meaning of warnings and symbols

DANGER

Indicates a situation that results in death or serious injury.

DANGER: RISK OF ELECTROCUTION

Indicates a situation that could result in electrocution.

DANGER: RISK OF BURNING/SCALDING

Indicates a situation that could result in burning/scalding because of extreme hot or cold temperatures.

DANGER: RISK OF EXPLOSION

Indicates a situation that could result in explosion.

DANGER: RISK OF POISONING

Indicates a situation that could result in poisoning.

WARNING

Indicates a situation that could result in death or serious injury.

WARNING: PROTECT AGAINST FROST

Indicates a situation that could result in equipment or property damage.

WARNING: FLAMMABLE MATERIAL

CAUTION

Indicates a situation that could result in minor or moderate injury.

NOTICE

Indicates a situation that could result in equipment or property damage.

INFORMATION

Indicates useful tips or additional information.

Symbols used on the unit:

Symbol	Explanation
	Before installation, read the installation and operation manual, and the wiring instruction sheet.
	Before performing maintenance and service tasks, read the service manual.
	For more information, see the installer and user reference guide.
	The unit contains rotating parts. Be careful when servicing or inspecting the unit.

Symbols used in the documentation:

Symbol	Explanation
	Indicates a figure title or a reference to it. **Example:** "1–3 Figure title" means "Figure 3 in chapter 1".
	Indicates a table title or a reference to it. **Example:** "1–3 Table title" means "Table 3 in chapter 1".

1.2 For the user

WARNING

If you are NOT sure how to operate the unit, contact your installer.

WARNING

Children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge can only use this appliance if they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety.

Children MUST NOT play with the appliance.

Cleaning and user maintenance MUST NOT be carried out by children without supervision.

WARNING

To prevent electrical shocks or fire:

- Do NOT rinse the unit.
- Do NOT operate the unit with wet hands.
- Do NOT place any objects containing water on the unit.

CAUTION

- Do NOT place any objects or equipment on top of the unit.
- Do NOT sit, climb or stand on the unit.

- Units are marked with the following symbol:

This means that electrical and electronic products may NOT be mixed with unsorted household waste. Do NOT try to dismantle the system yourself: the dismantling of the system, treatment of the refrigerant, of oil and of other parts must be done by an authorized installer and must comply with applicable legislation.

Units must be treated at a specialized treatment facility for reuse, recycling and recovery. By ensuring this product is disposed of correctly, you will help to prevent potential negative consequences for the environment and human health. For more information, contact your installer or local authority.

- Batteries are marked with the following symbol:

This means that the batteries may NOT be mixed with unsorted household waste. If a chemical symbol is printed beneath the symbol, this chemical symbol means that the battery contains a heavy metal above a certain concentration.

Possible chemical symbols are: Pb: lead (>0.004%).

Waste batteries must be treated at a specialized treatment facility for reuse. By ensuring waste batteries are disposed of correctly, you will help to prevent potential negative consequences for the environment and human health.

2 About this document

Thank you for purchasing this product. Please:

- Read the documentation carefully before operating the user interface to ensure the best possible performance.
- Request the installer to inform you about the settings that he used to configure your system. Check if he has filled in the installer settings tables. If not, request him to do so.
- Keep the documentation for future reference.

Target audience

End users

Documentation set

This document is part of a documentation set. The complete set consists of:

- **General safety precautions:**
  - Safety instructions that you must read before installing
  - Format: Paper (in the box of the outdoor unit)
- **Operation manual:**
  - Quick guide for basic usage
  - Format: Paper (in the box of the outdoor unit)
- **User reference guide:**
  - Detailed step-by-step instructions and background information for basic and advanced usage
  - Format: Digital files on http://www.daikineurope.com/support-and-manuals/product-information/
- **Installation manual – Heat pump module:**
  - Installation instructions
  - Format: Paper (in the box of the outdoor unit)
- **Installation and operation manual – Gas boiler module:**
  - Installation and operation instructions
  - Format: Paper (in the box of the gas boiler)
- **Installer reference guide:**
  - Preparation of the installation, good practices, reference data,…
  - Format: Digital files on http://www.daikineurope.com/support-and-manuals/product-information/
- **Addendum book for optional equipment:**
  - Additional info about how to install optional equipment
  - Format: Paper (in the box of the outdoor unit) + Digital files on http://www.daikineurope.com/support-and-manuals/product-information/

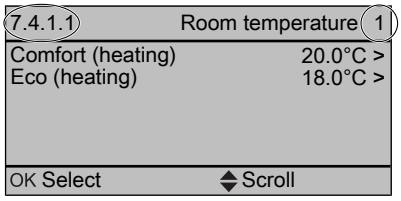
Latest revisions of the supplied documentation may be available on the regional Daikin website or via your installer.

The original documentation is written in English. All other languages are translations.

Available screens

Depending on your system layout and installer configuration, not all screens in this document may be available on your user interface.

Breadcrumbs



Breadcrumbs help you to locate where you are in the menu structure of the user interface. This document also mentions these breadcrumbs.

Example: Go to [7.4.1.1]: ☰ > `User settings` > `Preset values` > `Room temperature` > `Comfort (heating)`

3 About the system

Depending on the system layout, the system can:

- Heat up a space
- Produce domestic hot water

NOTICE

Filling the water circuit. Must be done by the installer to make sure that the system can cold start up.

NOTICE

During holidays. Do NOT turn OFF the power supply. The power is needed for the frost protection functions of the outdoor unit. Use the holiday mode instead.

3.1 About freeze protection

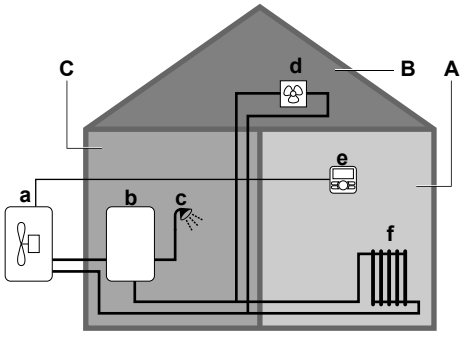
Frost can damage the system. To prevent the hydraulic components from freezing, the heat pump's software is equipped with special frost protection functions. These functions activate the pump, the heat pump and the gas boiler when the temperature becomes too low.

However, in case of a power failure, these functions cannot guarantee protection. Therefore the installer provided extra protection by doing one of the following:

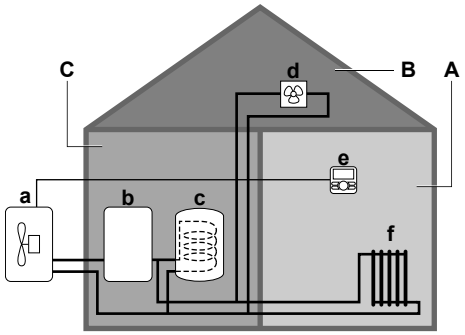
- The installer added glycol to the water circuit. Glycol lowers the freezing point of the water.
- The installer installed freeze protection valves. Freeze protection valves drain the water from the system before it can freeze.

3.2 Components in a typical system layout

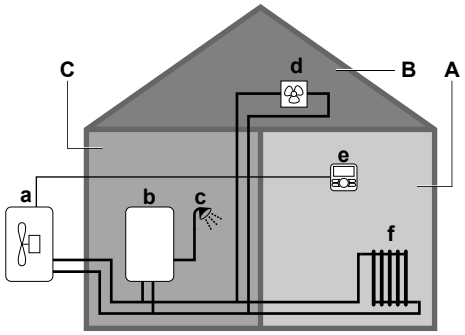
Gas boiler (EHY2KOMB28+32AA) + instant domestic hot water (not for Switzerland)



Gas boiler (EHY2KOMB28+32AA) + domestic hot water tank



Gas boiler (third party) + instant domestic hot water (not for Switzerland)



A Living room.
B Bedroom.
C Technical room. **Example:** Garage.
a Outdoor unit heat pump
b Gas boiler
c Instant domestic hot water or domestic hot water (DHW) tank
d Heat pump convectors or fan coil units
e User interface in the living room, used as room thermostat
f Radiators

4 Operation

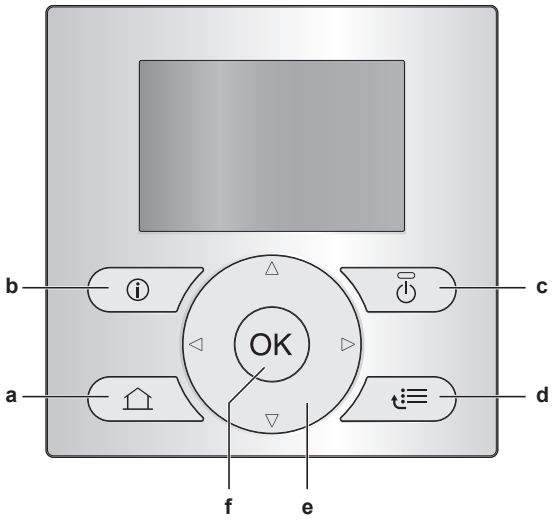
4.1 Overview: Operation

You can operate the system via the user interface. This part describes how to use the user interface:

Part	Description
At a glance	▪ Buttons ▪ Status icons
Basic usage	Information about: ▪ Home pages, where you can read out and change settings that are meant for daily usage ▪ Menu structure, where you can read out and configure settings that are NOT meant for daily usage ▪ ON/OFF controls
Space heating control	How to control space heating: ▪ Setting the space operation mode ▪ Controlling the temperature
Domestic hot water control	▪ How to control domestic hot water in case of instant DHW ▪ How to control domestic hot water in case of tank: - Reheat mode - Scheduled mode - Scheduled + reheat mode
Advanced usage	Information about: ▪ Changing the user permission level ▪ Quiet mode ▪ Holiday mode ▪ Reading out information ▪ Date, time, units of measurement, contrast and backlight ▪ User profile and home pages ▪ Locking and unlocking buttons and functions
Preset values and schedules	▪ How to use preset values ▪ How to select and program schedules ▪ Overview of predefined schedules
Weather-dependent operation	How to set the weather-dependent settings
Menu structure	Overview of menu structure
Installer settings table	Overview of installer settings

4.2 The user interface at a glance

4.2.1 Buttons



a HOME PAGES
- Switches between home pages (when you are on a home page).
- Goes to the default home page (when you are in the menu structure).

b MALFUNCTION INFORMATION

If a malfunction occurs, ⓘ is displayed on the home pages. Press ⓘ to display more information about the malfunction.

c ON/OFF

Turns ON or OFF one of the controls (room temperature, leaving water temperature, DHW tank temperature).

d MENU STRUCTURE/BACK
- Opens the menu structure (when you are on a home page).
- Goes up a level (when you are navigating through the menu structure).
- Goes back 1 step (example: when you are programming a schedule in the menu structure).

e NAVIGATING/CHANGING SETTINGS
- Navigates the cursor on the display.
- Navigates through the menu structure.
- Changes settings.
- Selects a mode.

f OK
- Confirms a selection.
- Enters a submenu in the menu structure.
- Switches between displaying actual and desired values, or between displaying actual and offset values (if applicable) on the home pages.
- Goes to the next step (when you are programming a schedule in the menu structure).
- Enables you to activate or deactivate button lock if pressed for more than 5 seconds on a home page.
- Enables you to activate or deactivate a function lock if pressed for more than 5 seconds in the main menu of the menu structure.

INFORMATION

If you press or while changing settings, the changes will NOT be applied.

4.2.2 Status icons

Icon	Description
	Space operation mode = Heating.
	Not available.
	Heat pump (compressor) operation or boiler operation. This symbol is related to the home page.
	Desired room temperature = preset value (`Comfort`; daytime).
	Desired room temperature = preset value (`Eco`; nighttime).
	▪ On the room temperature home page: Desired room temperature = according to the selected schedule. ▪ On the DHW tank temperature home page: DHW tank mode = Scheduled mode.
	DHW tank mode = Reheat mode.
	DHW tank mode = Scheduled + reheat mode.
	Domestic hot water operation.
	Actual temperature.
	Desired temperature.
	At the next scheduled action, the desired temperature will increase.
	At the next scheduled action, the desired temperature will NOT change.
	At the next scheduled action, the desired temperature will decrease.
	The preset value (`Comfort` or `Eco`) or scheduled value is temporarily overruled.
	The DHW tank booster mode is active or ready to be activated.
	Quiet mode is active.
	Holiday mode is active or ready to be activated.
	Button lock mode and/or function lock mode is active.
	Boiler operation.
	Heat pump (compressor) operation.
	Boiler and heat pump (compressor) operation.
	The disinfection mode is active.
	A malfunction occurred. Press OK to display more information about the malfunction.
	Weather-dependent mode is active.
	User permission level = `Installer`.
	Defrost/oil return mode is active.
	Hot start mode is active.

Icon	Description
⊕	Emergency operation is active.

INFORMATION

When the gas boiler is in maintenance mode, a gas boiler test run is being performed or changes to settings are being saved, the user interface displays **Busy**.

If this is the case, the user interface is temporarily disabled so as not to allow interference with the actions the system is performing at that moment.

INFORMATION

Boiler operation does NOT necessarily imply burner operation. When a heating demand is sent to the boiler, boiler operation (🔥) is continuous, but the burner will ONLY operate alternately.

4.3 Basic usage

4.3.1 Using home pages

About home pages

You can use the home pages to read out and change settings that are meant for daily usage. What you can see and do on the home pages is described where applicable. Depending on your system layout, the following home pages may be possible:

- Room temperature (**Room**)
- Main leaving water temperature (**LWT main**)
- DHW tank temperature (**Tank**)
- Instant DHW (**DHW**)

To go to a home page

1 Press ⌂.

Result: One of the home pages is displayed.

2 Press ⌂ again to display the next home page (if any).

4.3.2 Using the menu structure

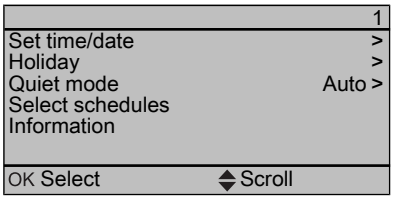
About the menu structure

You can use the menu structure to read out and configure settings that are NOT meant for daily usage. What you can see and do in the menu structure is described where applicable. For an overview of the menu structure, see "4.9 Menu structure: Overview user settings" [▸ 43].

To go to the menu structure

1 From a home page, press ☰.

Result: The menu structure is displayed.



To navigate in the menu structure

Use ▲, ▼, ◀, ▶, OK and ☰.

4.3.3 Turning ON/OFF controls

About turning ON/OFF controls

Before you can control…	You have to turn ON…
Room temperature	Room temperature control (**Room**)
Main leaving water temperature	Main leaving water temperature control (**LWT main**)
DHW tank temperature	Domestic hot water control (**Tank**)
Instant DHW temperature	Instant domestic hot water control (**DHW**)

If you turn ON…	Then…
Room temperature control	Main leaving water temperature control is automatically turned ON.
Main leaving water temperature control	Room temperature control is NOT automatically turned ON.

If you turn OFF…	Then…
Room temperature control	Main leaving water temperature control is NOT automatically turned OFF.
Main leaving water temperature control	Room temperature control is automatically turned OFF.

To check if a control is turned ON or OFF

1 Go to the home page of the control. **Example:** Room temperature home page (**Room**).

2 Check if the LED is ON or OFF. **Note:** If the control is turned OFF, **OFF** is also displayed on the screen. 

To turn ON or OFF the room temperature control

1 Go to the room temperature home page (**Room**).

2 Press ⏻.

To turn ON or OFF the main leaving water temperature control

1 Go to the main leaving water temperature home page (**LWT main**)

2 Press ⏻.

To turn ON or OFF the domestic hot water control

1 Go to the DHW tank temperature home page (**Tank**).

2 Press ⏻.

To turn ON or OFF the instant domestic hot water control

1 Go to the instant DHW temperature home page (DHW).

2 Press ⏻.

4.4 Space heating control

NOTICE

Room frost protection. Even if you turn OFF the leaving water temperature (main + additional) control via the home pages (LWT main + LWT add), room frost protection –if enabled– will remain active.

NOTICE

Water pipe freeze prevention. Even if you turn OFF the leaving water temperature (main + additional) control via the home pages (LWT main + LWT add), water pipe freeze prevention –if enabled– will remain active.

4.4.1 About space heating control

Controlling space heating typically consists of the following stages:

1 Setting the space operation mode

2 Controlling the temperature

Depending on the system layout and installer configuration, you use a different temperature control:

- Room thermostat control (linked or NOT linked to leaving water temperature)
- Leaving water temperature control
- External room thermostat control

4.4.2 Setting the space operation mode

About space operation modes

The heat pump is a heating only model. The system can heat up a space, but NOT cool down a space.

4.4.3 Determining which temperature control you are using

To determine which temperature control you are using (method 1)

Check the installer settings table filled in by the installer.

To determine which temperature control you are using (method 2)

Prerequisite: You switched the permission level to Advanced end user.

1 Check the following:

If...	Then the temperature control is...
	Main zone
Room temperature is listed under: [6.1]: ☰ > Information > Sensor information	Room thermostat control. Go to next step to check if leaving water set point and room temperature set point are linked.

If...	Then the temperature control is...
	Main zone
Thermostat main A is listed under: [6.5]: ☰ > `Information` > `Actuators`	External room thermostat control.
Else	Leaving water temperature control.

2 Only for room thermostat control: Go to the main leaving water temperature home page (`LWT main`) and check the following:

Is ⬍ displayed next to the set point?	Then leaving water set point and room temperature set point are...
Yes	NOT linked. You can set the leaving water set point on the home page.
No	Linked by their preset values. You can set the preset values in the menu structure.

4.4.4 Room thermostat control - About room thermostat control

Room thermostat control means that you control the following:

- Room temperature of the main zone
- Leaving water temperature of the main zone

Room temperature of the main zone

To control the room temperature of the main zone, you can do the following:

You can...	Location
Read out the actual and desired room **temperature**.	Room temperature home page
Temporarily overrule the room temperature **schedule**.	
Change the mode from scheduled to preset value. If you do this, you also have to define (in the menu structure): ▪ Preset values ▪ Overrule period (`Temperature lock`)	Room temperature home page if user profile = `Detailed`
Select which room temperature **schedule** you want to use.	Menu structure
Program schedules.	
Define preset values that are used by the room temperature schedule, and when you change the mode from scheduled to preset value.	

See also:

- "Room thermostat control - Using the room temperature home pages" [▸ 18]
- "To set the overrule period" [▸ 20]
- "4.7 Preset values and schedules" [▸ 37]

Leaving water temperature of the main zone

To control the leaving water temperature of the main zone, you can do the following:

You can...	Location
Read out the desired leaving water **temperature**.	Leaving water temperature home page (main)
Adjust the leaving water **temperature**. Condition: Leaving water set point is NOT linked with the room temperature set point. Only change this if the desired room temperature cannot be reached.	
Define preset values. Condition: Leaving water set point is linked with the room temperature set point. Only change this if the desired room temperature cannot be reached.	Menu structure

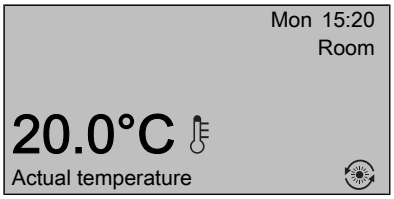
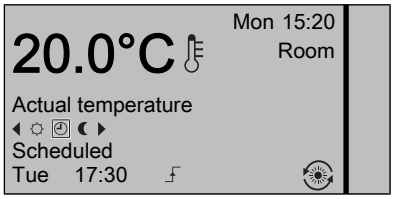
See also:

- "Room thermostat control - Using the leaving water temperature home pages" [▸ 21]
- "4.7 Preset values and schedules" [▸ 37]

4.4.5 Room thermostat control - Using the room temperature home pages

Typical room temperature home pages

Depending on the user profile, the user interface gives you either a basic or a detailed home page. To set the user profile, refer to "Configuring user profile and home pages" [▸ 35].

User profile = `Basic`	User profile = `Detailed`
	

To read out the actual and desired room temperature

1 Go to the room temperature home page (`Room`).

Result: You can read out the actual temperature. 

2 Press OK.

Result: You can read out the desired temperature. 

To temporarily overrule the room temperature schedule

1 Go to the room temperature home page (`Room`).

2 In the detailed home page (user profile = `Detailed`), select the scheduled room temperature mode (☼🕘☾) by pressing ◀ or ▶.

Result: The room temperature follows the scheduled value.

3 Use ▲ or ▼ to adjust the temperature.

Result: The room temperature follows the manually adjusted value (✋), but will return to the scheduled value at the next scheduled action.

To change the mode from scheduled to preset value

Prerequisite: User profile = `Detailed`.

1 Go to the room temperature home page (`Room`).

2 Press ◀ or ▶ to select a preset value (☼ or ☾).

Result: The room temperature follows the preset value (`Comfort` or `Eco`), but will return to the scheduled value after the overrule period (= `Temperature lock`: 2/4/6/8 hours or permanent).

3 If necessary, you can overrule the preset value by using ▲ or ▼ to adjust the temperature.

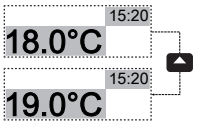
Result: The room temperature follows the manually adjusted value (✋), but will return to the scheduled value after the overrule period (= `Temperature lock`: 2/4/6/8 hours or permanent).

Example: Temporarily overruling the schedule AND changing the mode to preset value

You have configured the following settings:

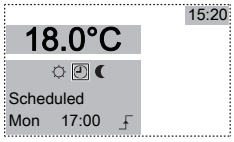
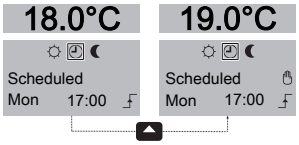
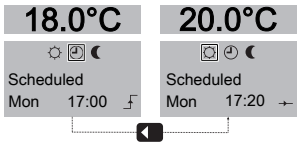
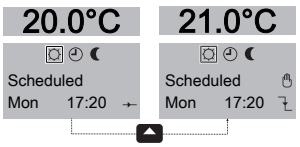
Settings		Description
Preset values	`Comfort (heating)` = 20°C	Desired temperature when you are at home.
	`Eco (heating)` = 18°C	Desired temperature: ▪ When you are away ▪ During the night
Schedule	07:00 `Comfort`	You are at home. Desired temperature = preset value (`Comfort (heating)`).
	09:00 `Eco`	You are away. Desired temperature = preset value (`Eco (heating)`).
	17:00 `Comfort`	You are at home. Desired temperature = preset value (`Comfort (heating)`).
	19:00 21°C	You are at home and want it to be a little warmer. Desired temperature = custom temperature.
	23:00 `Eco`	Desired temperature = preset value (`Eco (heating)`).
Overrule period (`Temperature lock`)	2 `hours`	If you temporarily overrule the schedule by a preset value, after 2 hours the schedule will be used again.

If user profile = `Basic`, then you can **temporarily overrule** the room temperature schedule by pressing ▲ or ▼.

Situation	Description
	15:20 => Scheduled temperature = preset value (`Eco (heating)`) = 18°C. You **temporarily overrule** the schedule. Desired temperature = custom temperature = 19°C. At the next scheduled action (17:00), the schedule will be used again.

If user profile = `Detailed`, then you can:

- **Temporarily overrule** the room temperature schedule by pressing ▲ or ▼ (same as if user profile = `Basic`)
- **Change the mode** from scheduled to a preset value by pressing ◀ or ▶

Situation	Description
	Room temperature **schedule** is used. 15:20 => Desired temperature = preset value (`Eco (heating)`) = 18°C. The next scheduled action is at 17:00 and the desired temperature will then increase.
	You **temporarily overrule** the schedule. Desired temperature = custom temperature = 19°C. At the next scheduled action (17:00), the schedule will be used again.
	You **change the mode** from scheduled to preset value (`Comfort (heating)`). Desired temperature = preset value (`Comfort (heating)`) = 20°C. After 2 hours, the schedule will be used again (17:20 => 20°C).
	Before you have **changed the mode** from scheduled to preset value, and now you **temporarily overrule** the preset value. Desired temperature = custom temperature = 21°C. After 2 hours, the schedule will be used again (17:20 => 20°C).

To set the overrule period

Prerequisite: You switched the permission level to Advanced end user.

1 Go to [7.2]: ☰ > `User settings` > `Temperature lock`.

2 Select a value and press OK:

- `Permanent`
- `hours` (2, 4, 6, 8)

Usage example: You have a party

If you are in the following situation:

- You are using the following room temperature schedule:
  - 17:00 preset value (Comfort) = 20°C
  - 23:00 preset value (Eco) = 18°C
- Tonight you have a party and you want to use the preset value (Comfort) until 02:00.

Then you can do the following:

1. Set the overrule period (Temperature lock) to 6 hours.
2. At 20:00, go to the room temperature home page (Room).
3. Press ◀ to select ☼.

   Result: The preset value (Comfort) will be used until 02:00. After that, the schedule will be used again.

Usage example: You go away for a couple of hours

If you are in the following situation:

- You are using the following room temperature schedule:
  - 08:00 preset value (Comfort) = 20°C
  - 23:00 preset value (Eco) = 18°C
- At 14:00, you go away for 3 hours.

Then you can do the following:

1. Set the overrule period (Temperature lock) to 2 hours.
2. Go to the room temperature home page (Room).
3. Press ▶ to select ☾.

Result: For the next 2 hours, the room will NOT be heated to the scheduled 20°C, but to the preset value (Eco = 18°C). After 2 hours, the room will heat up again to the scheduled 20°C.

Advantage:

You save energy because you do NOT heat the room unnecessary, and by the time you come home the room is warm again.

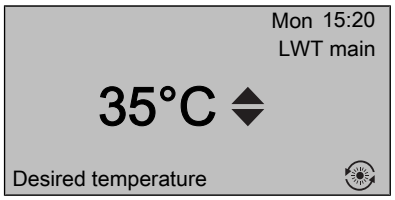
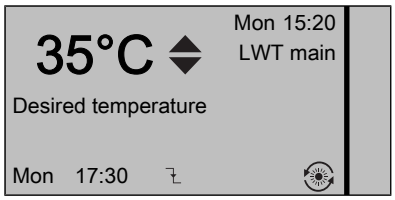
4.4.6 Room thermostat control - Using the leaving water temperature home pages

INFORMATION

The leaving water is the water that is sent to the heat emitters. The desired leaving water temperature is set by your installer in accordance with the heat emitter type. **Example:** Underfloor heating is designed for lower leaving water temperature than radiators and heat pump convectors and/or fan coil units. You only have to adjust leaving water temperature settings in case of problems.

Typical leaving water temperature home pages

Main zone:

User profile = Basic	User profile = Detailed
	

To read out the desired main leaving water temperature

Go to the leaving water temperature home page (`LWT main`).

To adjust/overrule the leaving water temperature (NOT linked to room temperature setpoint)

> **INFORMATION**
>
> To see if the leaving water temperature setpoint is linked to the room temperature setpoint, see "Determining which temperature control you are using" [▸ 16].

To adjust the leaving water temperature (main)

1 Go to the main leaving water temperature home page (`LWT main`).

2 Press ▲ or ▼ to adjust. **Example:** 35°C → 37°C

> **INFORMATION**
>
> In case of weather dependency, an offset value can be modified.

To adjust/overrule the leaving water temperature (linked to room temperature setpoint)

> **INFORMATION**
>
> To see if the leaving water temperature setpoint is linked to the room temperature setpoint, see "Determining which temperature control you are using" [▸ 16].

To set leaving water temperature preset values (main)

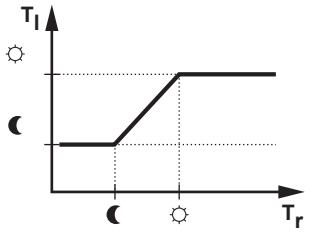
> **INFORMATION**
>
> You cannot adjust/overrule the leaving water temperature (main) for room thermostat control with linked leaving water temperatures. However if necessary, you can adjust the desired leaving water temperature (main) by adjusting preset values.

> **INFORMATION**
>
> Adjusting the leaving water temperature is permanent unless the leaving water temperature is according to a schedule. In that case the overruling is valid until the next scheduled action.

1 Go to [7.4.2]: ☰ > `User settings` > `Preset values` > `LWT main`.

2 Set the `Preset values` according to following graph.

Example: Room thermostat comfort temperature will correspond with leaving water comfort temperature.



- T_r: Room temperature
- T_l: Leaving water temperature

3 Press ▲ or ▼ to adjust/overrule.

4.4.7 Leaving water temperature control - About leaving water temperature control

Leaving water temperature control means that you only control the leaving water temperature. To control the leaving water temperature, you can do the following:

You can...	Location
Read out the desired leaving water **temperature** (main).	Leaving water temperature home pages (main)
Adjust/overrule the leaving water **temperature** (main).	
Select which leaving water temperature **schedule** (main) you want to use.	Menu structure
Program leaving water temperature **schedule** (main).	
Define preset values that are used by the leaving water temperature schedule (main).	

See also:

- "Room thermostat control - Using the leaving water temperature home pages" [▶ 21]
- "4.7 Preset values and schedules" [▶ 37]

4.4.8 Leaving water temperature control - Using leaving water temperature control according to a schedule

To set leaving water temperature preset values (main)

> **INFORMATION**
>
> Adjusting the leaving water temperature is permanent unless the leaving water temperature is according to a schedule. In that case the overruling is valid until the next scheduled action.

1 Go to [7.4.2]: ☰ > `User settings` > `Preset values` > `LWT main`.

2 Press ▲ or ▼ to adjust. **Example:** 35°C 37°C

4.4.9 Leaving water temperature control - Using leaving water temperature control NOT according to a schedule

To adjust the leaving water temperature (main)

1 Go to the main leaving water temperature home page (`LWT main`).

2 Press ▲ or ▼ to adjust. **Example:** 

4.4.10 External room thermostat control - About external room thermostat control

External room thermostat control means that you control the following:

- Room temperature on the external thermostat control
- Leaving water temperature on the user interface (Daikin)

To control the leaving water temperature, you can do the following:

You can...	Location
Read out the desired leaving water **temperature**.	Leaving water temperature home page (main)
Adjust the desired leaving water **temperature.** Only change this if the desired room temperature cannot be reached.	

See also: "Room thermostat control - Using the leaving water temperature home pages" [▶ 21]

4.4.11 External room thermostat control - Using external room thermostat control

To adjust the leaving water temperature (main)

1 Go to the main leaving water temperature home page (`LWT main`).

2 Press ▲ or ▼ to adjust. **Example:** 

4.5 Domestic hot water control

NOTICE

Disinfection mode. Even if you turn OFF domestic hot water operation via the DHW tank temperature home page (`Tank`), disinfection mode will remain active.

4.5.1 About domestic hot water control

Your system layout may or may not contain a domestic hot water tank. When no tank is installed, the boiler provides domestic hot water instantly. When, on the contrary, a tank is installed, domestic hot water control is different depending on the DHW tank mode set by the installer:

- Reheat mode
- Scheduled mode
- Scheduled + reheat mode

4.5.2 Instant DHW (no tank installed)

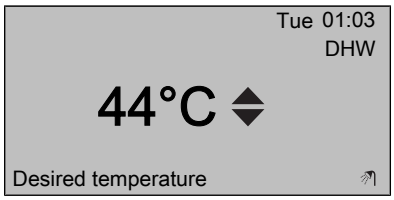
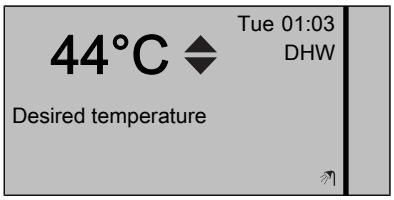
Not applicable for Switzerland

When there is a demand for hot water tapping, the boiler provides DHW instantly.

Using the instant DHW home page

Not applicable for Switzerland

Depending on the user profile, the user interface gives you either a basic or a detailed home page.

User profile = Basic	User profile = Detailed
	

To adjust the instant DHW temperature

1 Go to the instant DHW home page.

2 Press ▲ or ▼ to adjust the instant DHW temperature (DHW).

The instant DHW set point temperature may NOT be below 40°C.

4.5.3 Tank

The following modes are only applicable if a tank is installed and are set by the installer.

To determine which DHW tank mode you are using (method 1)

Check the installer settings table filled in by the installer.

To determine which DHW tank mode you are using (method 2)

Prerequisite: User profile = Detailed.

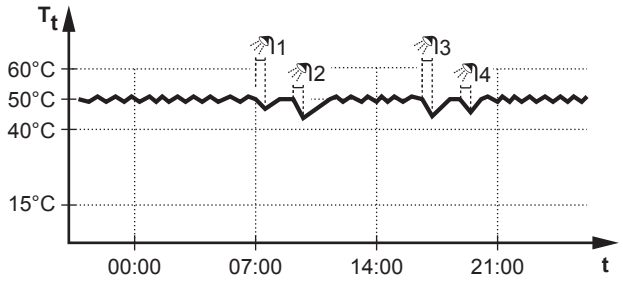
1 Go to the DHW tank temperature home page (Tank).

2 Check which icons are displayed:

If... is displayed	Then the DHW tank mode =...
	Reheat mode
	Scheduled mode
	Scheduled + reheat mode

Reheat mode

In reheat mode (), the DHW tank continuously heats up to the temperature shown on the DHW tank temperature home page (example: 50°C).



T_t Domestic hot water tank temperature
t Time

INFORMATION

There is a risk of a space heating capacity shortage/comfort problem when selecting [6-0D]=0 ([A.4.1] Domestic hot water `Type`=`Reheat only`).

In case of frequent domestic hot water operation, frequent and long space heating interruption will happen.

In reheat mode, you can do the following:

You can...	Location
Read out the desired reheat **temperature.**	DHW tank temperature home page
Adjust the reheat **temperature.** Condition: ⬍ is displayed on the DHW tank temperature home page.	
Activate the DHW tank **booster mode.**	
(Only for field supplied domestic hot water pump for secondary return) **Program a domestic hot water pump schedule** to determine when to turn ON and OFF the pump. When turned ON, the pump runs and makes sure hot water is instantly available at the tap. To save energy, only turn ON the pump during periods of the day when instant hot water is necessary.	Menu structure

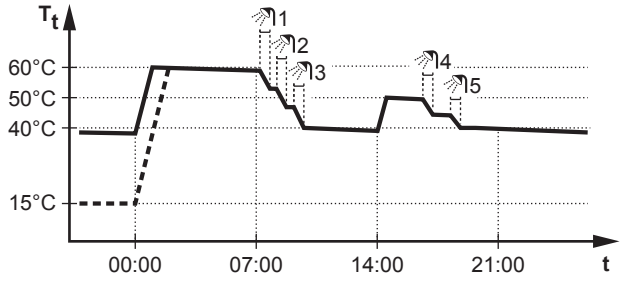
See also:

- "Using the DHW tank temperature home page" [▸ 28]
- "Using the DHW tank booster mode" [▸ 29]
- "4.7 Preset values and schedules" [▸ 37]

Scheduled mode

In scheduled mode (◴), the DHW tank produces hot water corresponding to a schedule. The best time to allow the tank to produce hot water is at night, because the space heating demand is lower.

Example:



T_t Domestic hot water tank temperature
t Time

- Initially, the DHW tank temperature is the same as the temperature of the domestic water entering the DHW tank (example: **15°C**).
- At 00:00 the DHW tank is programmed to heat up the water to a preset value (example: `Storage comfort` = **60°C**).
- During the morning, you consume hot water and the DHW tank temperature decreases.

- At 14:00 the DHW tank is programmed to heat up the water to a preset value (example: `Storage eco` = **50°C**). Hot water is available again.
- During the afternoon and evening, you consume hot water again and the DHW tank temperature decreases again.
- At 00:00 the next day, the cycle repeats.

In scheduled mode, you can do the following:

You can…	Location
Read out the active or next scheduled desired **temperature.**	DHW tank temperature home page
Overrule the active or next scheduled desired **temperature**. Condition: ⬍ is displayed on the DHW tank temperature home page.	
Activate the DHW tank **booster mode.**	
Select a DHW tank temperature **schedule**.	Menu structure
Program a DHW tank temperature **schedule**.	
Define preset values that are used by the DHW tank temperature schedule.	
(Only for field supplied domestic hot water pump for secondary return) **Program a domestic hot water pump schedule** to determine when to turn ON and OFF the pump. When turned ON, the pump runs and makes sure hot water is instantly available at the tap. To save energy, only turn ON the pump during periods of the day when instant hot water is necessary.	

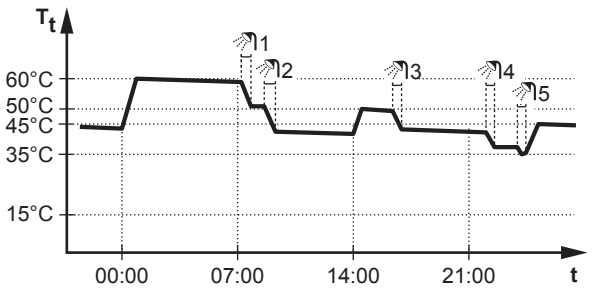
See also:

- "Using the DHW tank temperature home page" [▸ 28]
- "Using the DHW tank booster mode" [▸ 29]
- "4.7 Preset values and schedules" [▸ 37]

Scheduled + reheat mode

In scheduled + reheat mode (⚙ 🕘), the domestic hot water control is the same as in scheduled mode. However, when the DHW tank temperature drops below a preset value (=reheat tank temperature – hysteresis value; example: 35°C), the DHW tank heats up until it reaches the reheat set point (example: 45°C). This ensures that a minimum amount of hot water is available at all times.

Example:



T_t DHW tank temperature
t Time
60°C `Storage comfort`
50°C `Storage eco`

45°C Reheat
35°C Reheat tank temperature – hysteresis value

In scheduled + reheat mode, you can do the following:

You can...	Location
Do the same things as in scheduled mode.	—
Adjust the preset value (Reheat).	Menu structure

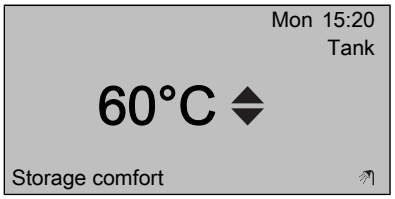
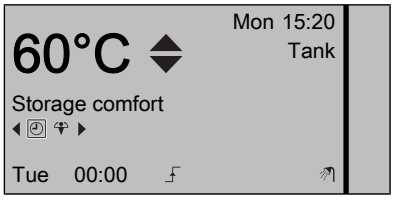
See also:

- "Scheduled mode" [▸ 26]
- "4.7 Preset values and schedules" [▸ 37]

Using the DHW tank temperature home page

Typical DHW tank temperature home pages

Depending on the user profile, the user interface gives you either a basic or a detailed home page. The examples in the illustrations below are in DHW tank mode = Scheduled.

User profile = Basic	User profile = Detailed
	

To read out and adjust the desired reheat temperature (in scheduled and reheat mode)

1 Go to [7.4.3.3]: ☰ > User settings > Preset values > Tank temperature > Reheat.

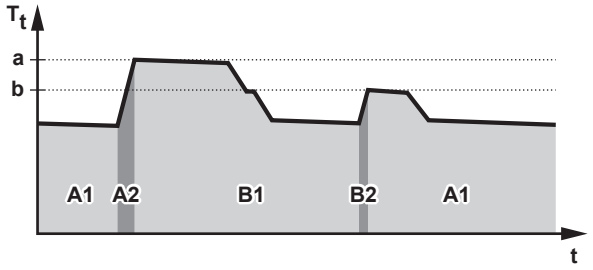
Result: You can read out the desired reheat temperature.

2 Press ▲ or ▼ to adjust.

To read out and overrule the active or next scheduled desired temperature (in scheduled mode or scheduled + reheat mode)

1 Go to the DHW tank temperature home page (Tank).

Result: 60°C ▲▼ is displayed.



T_t DHW tank temperature
t Time

During period...	You can read out...
A1	The next scheduled action (**a**)
A2	The active action (**a**)
B1	The next scheduled action (**b**)

During period...	You can read out...
B2	The active action (**b**)

2 Press ▲ or ▼ to overrule.

Note: If the desired temperature is weather dependent, you cannot change it on the home page.

Usage example: You need more hot water than scheduled

If you are in the following situation:

- Current time = 10:30
- Next scheduled action of the DHW tank = Heat up to the preset value (`Eco`; example: 55°C and sufficient for 2 persons) at 14:00
- This evening you need hot water for 3 persons

Then you can do the following:

1 Go to the DHW tank temperature home page (`Tank`).

2 Overrule the next scheduled action by changing from 55°C to 60°C.

Advantages:

- You will have sufficient hot water (= comfortable).
- You do NOT have to change the schedule (= easy).
- You do NOT have to activate the DHW tank booster mode (= energy saving).

Using the DHW tank booster mode

About the DHW tank booster mode

You can use the DHW tank booster mode to immediately start heating up the water to the preset value (`Storage comfort`). However, this consumes extra energy.

To check if the DHW tank booster mode is active

1 Go to the DHW tank temperature home page (`Tank`).

2 Check the following:

- In user profile = `Basic`: If ↟ is displayed, the DHW tank booster mode is active.
- In user profile = `Detailed`: If ↟ is selected, the DHW tank booster mode is active.

To activate the DHW tank booster mode (user profile = Basic)

1 Go to the DHW tank temperature home page (`Tank`).

2 Press ▶ for more than 5 seconds.

To activate the DHW tank booster mode (user profile = Detailed)

1 Go to the DHW tank temperature home page (`Tank`).

2 Press ▶ to select ↟.

Usage example: You immediately need more hot water

If you are in the following situation:

- You already consumed most of your hot water.
- You cannot wait for the next scheduled action to heat up the DHW tank.

Then you can activate the DHW tank booster mode.

Advantage: The DHW tank immediately starts heating up the water to the preset value (`Storage comfort`).

INFORMATION

When the DHW tank booster mode is active, the risk of space heating and capacity shortage comfort problems is significant. In case of frequent domestic hot water operation, frequent and long space heating interruptions will happen.

4.6 Advanced usage

4.6.1 About changing the user permission level

To set the user permission level to Advanced end user

1 Go to the main menu or any of its submenus: ☰.

2 Press ⓘ for more than 4 seconds.

Result: Your user permission level is now `Adv. end user`. The user interface displays additional information and a "+" is added to the menu title. The user permission level stays in `Adv. end user` until manually set otherwise.

To set the user permission level to End user

1 Press ⓘ for more than 4 seconds.

Result: Your user permission level is now `End user`. The user interface displays the default home page.

4.6.2 Using quiet mode

About quiet mode

You can use quiet mode to decrease the sound of the outdoor unit. However, this also decreases the heating capacity of the system. There are multiple quiet mode levels.

You can:

- Completely deactivate quiet mode
- Manually activate a quiet mode level until the next scheduled action
- Use and program a quiet mode schedule

INFORMATION

If the outdoor temperature is below zero, we recommend to NOT use the most quiet level.

Possible quiet mode levels

Level	Description
`Level 1`	Least quiet. At colder ambient conditions, reduced performance can occur.
`Level 2`	Medium quiet. Under all circumstances, reduced performance is possible.
`Level 3`	Most quiet. Under all circumstances, performance will be reduced.

To check if quiet mode is active

1 Press to go to one of the home pages.

2 If is displayed, quiet mode is active.

To use quiet mode

Prerequisite: You switched the permission level to Advanced end user.

1 Go to [3]: > `Quiet mode`.

2 Do one of the following:

If you want to...	Then...
Completely deactivate quiet mode	Select `Always OFF` and press OK.
Manually activate a quiet mode level	▪ Select `On` and press OK. ▪ Go to [7.4.4]: > `User settings` > `Preset values` > `Quiet level`. ▪ Select a level and press OK.
Use and program a quiet mode schedule	▪ Select `Automatic` and press OK. ▪ Program a schedule. See "Using and programming schedules" [▸ 38].

Usage example: Baby is sleeping in the afternoon

If you are in the following situation:

- You have programmed a quiet mode schedule:
  - During the night: `Level 3` (= most quiet).
  - During the day: `OFF` to ensure the heating capacity of the system.
- However, during the afternoon the baby is sleeping and you want it to be quiet.

Then you can do the following:

Prerequisite: You switched the permission level to Advanced end user.

1 Go to [3]: > `Quiet mode`.

2 Select `On` and press OK.

3 Go to [7.4.4]: > `User settings` > `Preset values` > `Quiet level`.

4 Select `Level 3` and press OK.

Advantage:

The outdoor unit runs in its most quiet level.

4.6.3 Using holiday mode

About holiday mode

During your holiday, you can use the holiday mode to deviate from your normal schedules without having to change them. You can only use holiday mode if temperature control = room thermostat control. See also "Determining which temperature control you are using" [▸ 16].

Using holiday mode typically consists of the following stages:

1 Configuring the holiday for one of the following situations:

Situation	Then...
You stay at home during your holiday	You have to select a day: space heating will be according to the desired room temperature of the selected day.
You go away during your holiday	You have to configure space heating settings. ▪ Space heating will be according to these settings. ▪ Domestic hot water operation can be turned ON or OFF. If you decide to turn it OFF, disinfection mode will remain active.

2 Activating the holiday mode.

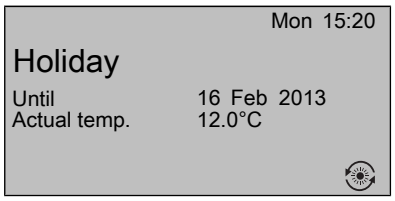
- If you do NOT activate, the configured holiday settings will NOT be used.
- If you activate:

Period	Then...
Before and after your holiday	Your normal schedules will be used.
During your holiday	The configured holiday settings will be used.

To check if holiday mode is activated and/or running

1 Press ⌂ to go to one of the home pages.

2 Check the following:

If... is displayed	Then...
	One of the following holiday modes is activated: ▪ Holiday mode (**Away**) is activated, but NOT running yet. ▪ Holiday mode (**Home**) is activated. You cannot see if the holiday mode is already running.
	Holiday mode (**Away**) is activated and running.

To configure the holiday (when you stay at home)

Prerequisite: You switched the permission level to Advanced end user.

1 Go to [2.2]: ☰ > `Holiday` > `Holiday mode`.

2 Select **Home**.

3 Configure the holiday mode settings (when you stay at home).

4 Activate the holiday mode.

Possible holiday mode settings (when you stay at home)

Setting	Description
`From` and `Until`	First and last day of your holiday.

Setting	Description
Use day schedule	Day schedule used during your holiday. **Example:** Saturday

INFORMATION

Switch to Adv. end user if you want to change the Use day schedule setting.

To configure the holiday (when you go away)

Prerequisite: You switched the permission level to Advanced end user.

1. Go to [2.2]: ☰ > Holiday > Holiday mode.
2. Select Leave.
3. Configure the holiday mode settings (when you go away).
4. Activate the holiday mode.

Possible holiday mode settings (when you go away)

Setting	Description
From and Until	First and last day of your holiday.
Operation mode	Operation mode used during your holiday.
Heating	Set point used during your holiday when the unit is operating in heating mode.
DHW	Turn ON or OFF domestic hot water operation during your holiday.

INFORMATION

You can only change the From and Until settings in the End user level. For changing the other settings, you have to switch to Adv. end user level.

To activate or deactivate the holiday mode

Prerequisite: You have configured the holiday.

1. Go to [2.1]: ☰ > Holiday > Holiday.
2. Do one of the following:
   - To activate, select Yes and press OK.
   - To deactivate, select No and press OK.

Usage example: You go away during the winter

If you are in the following situation:

- In 2 days, you go away for 2 weeks during the winter.
- You want to save energy, but prevent your house from freezing.

Then you can do the following:

Prerequisite: You switched the permission level to Advanced end user.

1. Configure the holiday. Go to [2]: ☰ > Holiday, and configure the following settings:

Setting	Value
Holiday mode	Away
From	2 February 2014

Setting	Value
Until	16 February 2014
Operation mode	Heating
Heating	12°C

2 Activate the holiday mode.
- Go to [2.1]: ☰ > Holiday > Holiday.
- Select Yes and press OK.

Advantage:
- Before and after your holiday, your normal schedule will be used.
- During your holiday, you save energy and prevent your house from freezing.

Usage example: You come home during your holiday

If you are in the following situation:
- You configured and activated the holiday mode (Away).
- During your holiday, you come home for a few hours and want to use your normal schedule.

Then you can do the following:
1 Deactivate the holiday mode.
2 When you go away again, activate the holiday mode again.

Advantage:

You do NOT have to change your schedule or holiday configuration.

4.6.4 Reading out information

To read out information

Prerequisite: You switched the permission level to Advanced end user.

1 Go to [6]: ☰ > Information.

Possible read-out information

In menu...	You can read out...
[6.1] Sensor information	Room, tank or DHW, outside, and leaving water temperature. (If applicable)
[6.2] Energy metering	Consumed electricity, and consumed gas.
[6.3] Error handling	Error history and contact/helpdesk number.
[6.4] User permission level	Current user permission level.
[6.5] Actuators	Status/mode of each actuator. **Example:** Domestic hot water pump ON/OFF.
[6.6] Operation modes	Current operation mode. **Example:** Defrost/oil return mode.
[6.7] Running hours	Running hours of the system.
[6.8] Version	Version information about the system.

4.6.5 Configuring date, time, units of measurement, contrast and backlight

To configure time and date

Prerequisite: You switched the permission level to Advanced end user.

1 Go to [1]: ☰ > `Set time/date`.

> **INFORMATION**
> Switch to `Adv. end user` to change daylight saving time and 12/24h notation.

To configure units of measurement

Prerequisite: You switched the permission level to Advanced end user.

1 Go to [7.6]: ☰ > `User settings` > `Unit of measurement`.

Possible units of measurement settings

Setting	Possible units of measurement
`Decimal point`	▪ `Dot` ▪ `Comma`
`Temperature`	▪ `°C` ▪ `°F`
`Consumed gas`	▪ `m³` ▪ `ft³` ▪ `kWh` For correct operation, only use `kWh`. Do NOT use `m³` or `ft³`.

To configure the contrast of the user interface

Prerequisite: You switched the permission level to Advanced end user.

1 Go to [7.1.1]: ☰ > `User settings` > `Display` > `Contrast`.

To configure the backlit LCD time of the user interface

Prerequisite: You switched the permission level to Advanced end user.

1 Go to [7.1.2]: ☰ > `User settings` > `Display` > `Backlit LCD time`.

4.6.6 Configuring user profile and home pages

To set a user profile

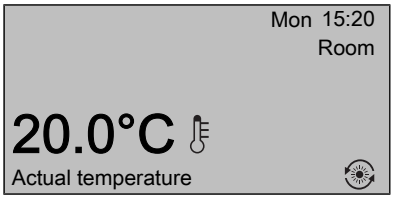
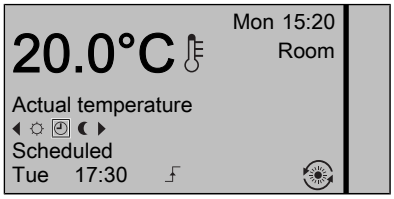
Prerequisite: You switched the permission level to Advanced end user.

1 Go to [7.1.3]: ☰ > `User settings` > `Display` > `User profile`.

2 Select a user profile and press OK.

Possible user profiles

If user profile = `Detailed`, you can see and do more on the home pages.

User profile = Basic	User profile = Detailed
	

To configure which home pages are made available to the end user

Prerequisite: You switched the permission level to Advanced end user.

1. Go to [7.1.4]: ☰ > `User settings` > `Display` > `Available home pages`.
   Result: The home pages that are possible for your system layout are listed.
2. Select a home page and press OK.
3. Do one of the following:
   - To display the home page, select `Yes` and press OK.
   - To hide the home page, select `No` and press OK.

4.6.7 Locking and unlocking buttons and functions

About locking and unlocking

You can use the following locking modes:

- Button lock: Locks all buttons to prevent children from changing settings.
- Function lock: Locks a specific function to prevent people from changing its settings.

Possible function locks

Lock	If active, people cannot...
`Room On/OFF`	Turn ON or OFF the room temperature control.
`LWT On/OFF`	Turn ON or OFF the main leaving water temperature control.
`Tank On/OFF`	Turn ON or OFF the domestic hot water control.
`Temperature up/down`	Adjust temperatures.
`Quiet mode`	Use quiet mode.
`Holiday`	Use holiday mode.
`User settings`	Change settings in [7]: ☰ > `User settings`.
`DHW On/OFF`	Turn ON or OFF the instant hot water control.

To check if locking is active

1. Press ⌂ to go to one of the home pages.
2. If 🔒 is displayed, button lock is active.

Note: If you are on a home page and try to use a function that is locked, 🔒 is displayed for 1 second.

To activate or deactivate button lock

1 Press ⌂ to go to one of the home pages.

2 Press OK for more than 5 seconds.

To activate or deactivate a function lock

1 Press ☰ to go to the menu structure.

2 Press OK for more than 5 seconds.

3 Select a function and press OK.

4 Select `Lock` or `Unlock`, and press OK.

4.7 Preset values and schedules

4.7.1 Using preset values

About preset values

You can define preset values for multiple controls. Preset values make it easy to use the same value in many places (schedules and room temperature home page (☼ and ◖)). If you later want to change the value, you only have to do it in one place.

To define preset values

1 Go to [7.4]: ☰ > `User settings` > `Preset values`.

2 Select for which control you want to define a preset value. **Example:** `Room temperature`.

3 Select a preset value and press OK. **Example:** `Comfort (heating)`.

4 Select a temperature and press OK.

Possible preset values

Control	Preset value	Where used
`Room temperature`	`Comfort`	▪ Room temperature schedules ▪ Room temperature home page (☼ and ◖) if user profile = `Detailed`
	`Eco`	
`LWT main`	`Comfort`	Main leaving water temperature schedules
	`Eco`	
`Tank temperature`	`Storage comfort`	DHW tank temperature schedule if DHW tank mode is ▪ Scheduled ▪ Scheduled + reheat
	`Storage eco`	
	`Reheat`	DHW tank temperature schedule if DHW tank mode = Scheduled + reheat
`Quiet level`		Used when quiet mode is set to `On`

Control	Preset value	Where used

`Elec price`	`High`
	`Medium`
	`Low`
		Used when the savings mode (installer setting) is set to `Economical`.

`Fuel price`		Used when the savings mode (installer setting) is set to `Economical`.

4.7.2 Using and programming schedules

About schedules

Depending on your system layout and installer configuration, schedules (predefined and/or user-defined) for multiple controls may be available.

You can:

- Select which schedules you currently want to use.
- Program your own schedules if the predefined schedules are not satisfactory. The actions you can program are control specific.

Possible actions per control

Control	Possible actions
Room temperature	Program when to heat up a space: ▪ `Comfort` (preset value) ▪ `Eco` (preset value) ▪ [Custom temperature]
Main leaving water temperature	
DHW tank temperature	Program when to heat up the DHW tank: ▪ `Storage comfort` (preset value)[a] ▪ `Storage eco` (preset value)[a] ▪ `Storage stop`[b]
Quiet mode	Program when the unit has to use which quiet mode level: ▪ `Level 1` ▪ `Level 2` ▪ `Level 3` ▪ `OFF`
(Only for field supplied domestic hot water pump for secondary return) Domestic hot water pump	Program when the domestic hot water pump is turned ON and OFF.
Electricity price	Program when a certain electricity tariff is valid.

(a) Start heating up until the desired setpoint (`Comfort`/`Eco`) is reached.
(b) Stop heating, even if the desired temperature is not reached yet; example: if electric tariffs are higher during the day, you can program a stop at 06:00.

To select which schedule you currently want to use

1 Go to [5]: ☰ > `Select schedules`.

2 Select for which control you want to use a schedule. **Example:** [5.1] `Room temperature`.

3 Select for which operation mode you want to use a schedule. **Example:** [5.1.1] `Heating` .

4 Select a predefined or user-defined schedule and press OK.

To program a schedule

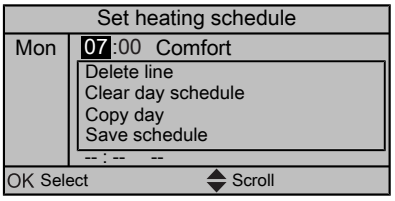
1 Go to [7.3]: ☰ > `User settings` > `Set schedules`.

2 Open an empty, predefined or user-defined schedule.

3 Change it.

4 Save it.

Guidelines when programming



You can:

- Delete lines from the schedule
- Clear a day schedule
- Copy from one day to others

Usage example: You work in a 3-shift system

If you work in a 3-shift system, you can do the following:

1 Program 3 room temperature schedules and give them appropriate names. **Example:** EarlyShift, DayShift and LateShift

2 Select the schedule that you currently want to use.

4.7.3 Schedules: Example

INFORMATION

The procedures to program other schedules are similar.

In this example:

- Room temperature schedule in heating mode
- Monday = Tuesday = Wednesday = Thursday = Friday
- Saturday = Sunday

To program the schedule

1 Go to [7.3.1.1]: ☰ > `User settings` > `Set schedules` > `Room temp.` > `Set heating schedule`.

2 Select `Empty` and press OK.

3 Program the schedule for Monday. See below for more details.

4 Copy from Monday to Tuesday, Wednesday, Thursday and Friday. See below for more details.

5 Program the schedule for Saturday.

6 Copy from Saturday to Sunday.

7 Save the schedule and give it a name. See below for more details.

To program the schedule for Monday

1 Use ▲ and ▼ to select Monday.

2 Press ▶ to enter the schedule for Monday.

3 Program the schedule for Monday:

- Use ◀ and ▶ to select an entry.
- Use ▲ and ▼ to change the value of an entry.

To copy from one day to another

1 Select the day from which you want to copy and press OK. **Example:** Monday.

2 Select `Copy day` and press OK.

3 Set the days you want to copy to `Yes` and press OK. **Example:** Tuesday = `Yes`, Wednesday = `Yes`, Thursday = `Yes` and Friday = `Yes`.

To save the schedule

1 Press OK, select `Save schedule` and press OK.

2 Select `User defined 1`, `User defined 2` or `User defined 3` and press OK.

3 Change the name and press OK. (Only applicable for room temperature schedules). **Example:** MyWeekSchedule

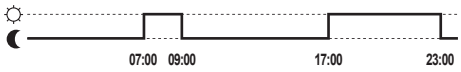
4.7.4 Predefined schedules: Room temperature + leaving water temperature (main)

☼: Desired temperature = Preset value (`Comfort`)

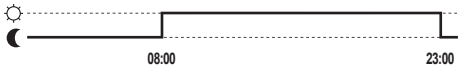
☾: Desired temperature = Preset value (`Eco`)

Predefined 1

`Mon - Fri`

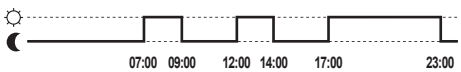


`Sat - Sun`

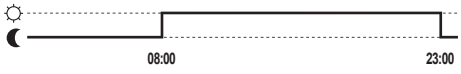


Predefined 2

`Mon - Fri`

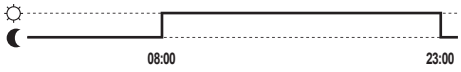


`Sat - Sun`



Predefined 3

`Mon - Sun`



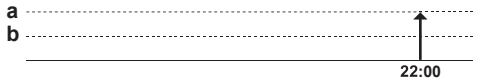
4.7.5 Predefined schedules: DHW tank temperature

a : Start production of domestic hot water. Desired DHW tank temperature = Preset value (`Storage comfort`)

b : Start production of domestic hot water. Desired DHW tank temperature = Preset value (`Storage eco`)

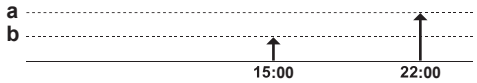
Predefined 1

Mon - Sun



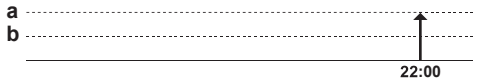
Predefined 2

Mon - Sun

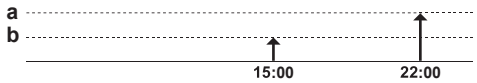


Predefined 3

Mon - Fri



Sat - Sun



4.8 Weather dependent operation

In space heating control, the leaving water temperature setpoint mode can be:

- Fixed
- Weather-dependent (the leaving water temperature is determined automatically depending on the outdoor temperature)

To select the setpoint mode, see the installer reference guide.

To set the parameters for the weather-dependent curve, see below.

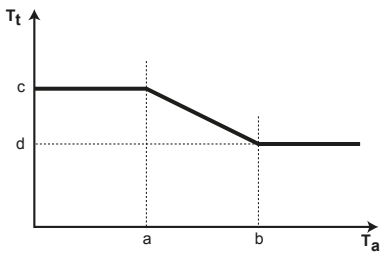
4.8.1 To set the weather dependent settings

Prerequisite: You switched the permission level to Advanced end user.

1 Go to [7.7]: ☰ > `User settings` > `Set weather dependent`.

2 For main leaving water temperature zone [7.7.1], modify with ◀, ▶, ▲, ▼, and confirm with OK.

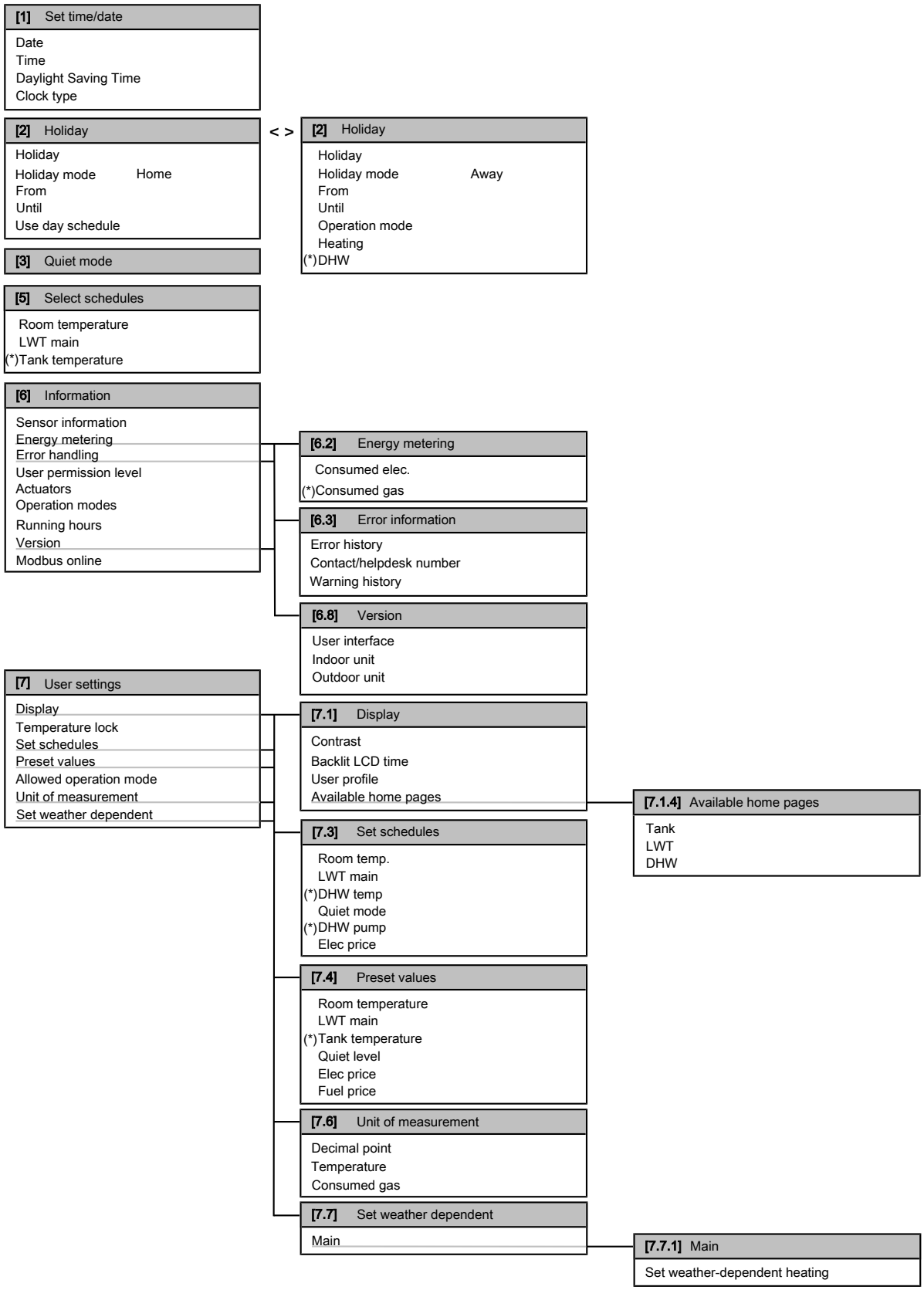
`Set weather-dependent heating`



T_t Target leaving water temperature

T_a Outdoor temperature
a Low outdoor ambient temperature
b High outdoor ambient temperature
c Desired leaving water temperature when the outdoor temperature equals or drops below the low ambient temperature. **Note:** in heating, this value should be higher than (d) as for low outdoor temperatures warmer water is required.
d Desired leaving water temperature when the outdoor temperature equals or rises above the high ambient temperature. **Note:** in heating, this value should be lower than (c) as for high outdoor temperatures less warm water is required.

4.9 Menu structure: Overview user settings



(*) Only applicable in case of EHY2KOMB28+32AA gas boiler

INFORMATION

Depending on the selected installer settings and unit type, settings will be visible/ invisible.

4.10 Installer settings: Tables to be filled in by installer

4.10.1 Quick wizard

Setting		Fill in...
Space heating settings [A.2.1]		
	Unit control method	
	Pump operation mode	
	User interface location	
	Glycol present	
Domestic hot water settings [A.2.2](*)		
	DHW operation(*)	
	DHW pump(*)	
Thermostats [A.2.2]		
	Contact type main	
	External sensor	

(*) Only applicable in case of EHY2KOMB28+32AA gas boiler

4.10.2 Space heating control

Setting		Fill in...	
Leaving water temperature: Main zone [A.3.1.1]			
	LWT setpoint mode		
Leaving water temperature: Modulation [A.3.1.1.5]			
	Modulated LWT		
Leaving water temperature: Emitter type [A.3.1.1.7]			
	Emitter type		
Savings mode [A.6.7]			
	Savings mode		
Electricity price [7.4.5]			
	Elec price	High	
		Medium	
		Low	
Fuel price [7.4.6]			
	Fuel price		

4.10.3 Domestic hot water control [A.4]

Setting	Fill in...
Type(*)	
Maximum setpoint(*)	

(*) Only applicable in case of EHY2KOMB28+32AA gas boiler

INFORMATION

There is a risk of a space heating capacity shortage/comfort problem when selecting [6-0D]=0 ([A.4.1] Domestic hot water Type=Reheat only).

In case of frequent domestic hot water operation, frequent and long space heating interruption will happen.

INFORMATION

When the DHW tank booster mode is active, the risk of space heating and capacity shortage comfort problems is significant. In case of frequent domestic hot water operation, frequent and long space heating interruptions will happen.

4.10.4 Contact/helpdesk number [6.3.2]

Setting	Default	Fill in...
Contact/helpdesk number	—	

5 Setting the energy prices

If your system's savings mode is set to `Economical`, it allows you to set:

- a fixed gas price
- 3 electricity price levels
- a weekly schedule timer for electricity prices.

The savings mode is set by the installer and can be either ecological or economical. In ecological mode, the primary energy use is minimised; in economical mode, the running costs. Discuss with the installer which savings mode is preferred. Refer to the installation manual for more information.

Example: How to set the energy prices on the user interface?

Price	Value in breadcrumb
Gas: 5.3 euro cent/kWh	[7.4.6]=5.3
Gas: 4.8 pence/kWh	[7.4.6]=4.8
Electricity: 12 euro cent/kWh	[7.4.5.1]=12
Electricity: 12.49 pence/kWh	[7.4.5.1]=12

5.1 To set the fuel price

1. Go to [7.4.6]: ☰ > `User settings` > `Preset values` > `Fuel price`.
2. Use ▲ and ▼ to set the correct price.
3. Press OK to confirm.

INFORMATION

- Price value ranging from 0.00~290 valuta/MBtu (with 2 significant values).
- Price value ranging from 0.00~990 valuta/kWh (with 2 significant values).

5.2 To set the electricity price

1. Go to [7.4.5]: ☰ > `User settings` > `Preset values` > `Elec price`.
2. Use ▲ and ▼ to set the correct prices for `High`, `Medium` and `Low`, according to your electricity tariff.
3. Press OK to confirm.

INFORMATION

Price value ranging from 0.00~990 valuta/kWh (with 2 significant values).

INFORMATION

If no schedule is set, the `Elec price` for `High` is taken into account.

INFORMATION

Solar panels. If solar panels are used, set the electricity price value very low to promote the use of the heat pump.

5.3 To set the electricity price schedule timer

1 Go to [7.3.8]: ☰ > `User settings` > `Set schedules` > `Elec price`.

2 Program the schedule according to the `High`, `Medium` and `Low` electricity prices for each time interval.

3 Press OK to save the schedule.

INFORMATION

The values for `High`, `Medium` and `Low` correspond with the electricity price values for `High`, `Medium` and `Low` previously set. If no schedule is set, the electricity price for `High` is taken into account.

5.4 About energy prices in case of an incentive per kWh renewable energy

An incentive can be taken into account when setting the energy prices. Although the running cost can increase, the total operation cost, taking into account the reimbursement will be optimized.

NOTICE

Make sure to modify the setting of the energy prices at the end of the incentive period.

5.4.1 To set the fuel price in case of an incentive per kWh renewable energy

Prerequisite: Calculate the value for the fuel price with the following formula: actual fuel price+(incentive/kWh×0.9)

1 Go to [7.4.6]: ☰ > `User settings` > `Preset values` > `Fuel price`.

2 Use ▲ and ▼ to set the correct price.

3 Press OK to confirm.

5.4.2 To set the electricity price in case of an incentive per kWh renewable energy

Prerequisite: Calculate the value for the electricity price with following formula: actual electricity price+incentive/kWh.

1 Go to [7.4.5]: ☰ > `User settings` > `Preset values` > `Elec price`.

2 Use ▲ and ▼ to set the correct prices for `High`, `Medium` and `Low`, according to your electricity tariff.

3 Press OK to confirm.

INFORMATION

Solar panels. If solar panels are used, set the electricity price value very low to promote the use of the heat pump.

5.4.3 Example

This is an example and the prices and/or values used in this example are NOT accurate.

Data	Pence/kWh
Gas price	4.08
Electricity price	12.49
Renewable heat incentive per kWh	5

Calculation of the gas price:

Gas price=Actual gas price+(incentive/kWh×0.9)

Gas price=4.08+(5×0.9)

Gas price=8.58

Calculation of the electricity price:

Electricity price=Actual electricity price+incentive/kWh

Electricity price=12.49+5

Electricity price=17.49

Price	Value in breadcrumb
Gas: 4.08 pence/kWh	[7.4.6]=8.58
Electricity: 12.49 pence/kWh	[7.4.5]=17.49

6 Energy visualisation

The user interface is able to graphically display energy statistics for:

- consumed electricity: calculated by the interface itself based on an internal calculation.
- consumed gas (only in case of EHY2KOMB28+32AA gas boiler): calculated by the interface itself based on an internal calculation.

6.1 To view the energy statistics

Prerequisite: You switched the permission level to Advanced end user.

1. Go to [6.2]: ☰ > `Information` > `Energy metering`.
2. Select `Consumed elec.` or `Consumed gas`.
3. Use the ◀ and ▶ buttons to toggle between views of the current month, the previous month, the last 12 months and a general overview.
4. Use the ▲ and ▼ buttons to toggle between different modes (if applicable).

7 Energy saving tips

Tips about room temperature

- Make sure the desired room temperature is NEVER too high, but ALWAYS according to your actual needs. Each saved degree can save up to 6% of heating costs.
- Do NOT increase the desired room temperature to speed up space heating. The space will NOT heat up faster.
- When your system layout contains slow heat emitters (example: underfloor heating), avoid large fluctuation of the desired room temperature and do NOT let the room temperature drop too low. It will take more time and energy to heat up the room again.
- Use a weekly schedule for your normal space heating needs. If necessary, you can easily deviate from the schedule:
  - For shorter periods: You can overrule the scheduled room temperature. **Example:** When you have a party, or when you are leaving for a couple of hours.
  - For longer periods: You can use the holiday mode. **Example:** When you stay at home during your holiday, or when you go away during your holiday.

Tips about leaving water temperature

- In heating mode, a lower desired leaving water temperature results in lower energy consumption and better performance.
- Set the desired leaving water temperature in accordance with the heat emitter type. **Example:** Underfloor heating is designed for lower leaving water temperature than radiators and heat pump convectors.

Tips about DHW tank temperature

- Use a weekly schedule for your normal domestic hot water needs (only in scheduled mode).
  - Program to heat up the DHW tank to a preset value (`Storage comfort` = higher DHW tank temperature) during the night, because then space heating demand is lower.
  - If heating up the DHW tank once at night is not sufficient, program to additionally heat up the DHW tank to a preset value (`Storage eco` = lower DHW tank temperature) during the day.
- Make sure the desired DHW tank temperature is NOT too high. **Example:** After installation, lower the DHW tank temperature daily by 1°C and check if you still have enough hot water.
- Program to turn ON the domestic hot water pump only during periods of the day when instant hot water is necessary. **Example:** In the morning and evening.

8 Maintenance and service

8.1 Overview: Maintenance and service

The installer has to perform a yearly maintenance. You can find the contact/ helpdesk number via the user interface.

As end user, you have to:

- Keep the area around the unit clean.
- Keep the user interface clean with a soft damp cloth. Do NOT use any detergents.
- Regularly check if the water pressure indicated on the gas boiler is above 1 bar. Switch off the boiler to see the pressure on the main display of the gas boiler. Ignore the error that appears on the user interface. When you turn the gas boiler back on, the error will disappear.
- Make sure that electricity and gas prices defined in the user interface are up-to-date.

Refrigerant

This product contains fluorinated greenhouse gases. Do NOT vent gases into the atmosphere.

Refrigerant type: R32

Global warming potential (GWP) value: 675

NOTICE

Applicable legislation on **fluorinated greenhouse gases** requires that the refrigerant charge of the unit is indicated both in weight and CO_2 equivalent.

Formula to calculate the quantity in CO_2 equivalent tonnes: GWP value of the refrigerant × total refrigerant charge [in kg] / 1000

Please contact your installer for more information.

WARNING: FLAMMABLE MATERIAL

The refrigerant inside this unit is mildly flammable.

WARNING

The appliance shall be stored in a room without continuously operating ignition sources (example: open flames, an operating gas appliance or an operating electric heater).

WARNING

- Do NOT pierce or burn refrigerant cycle parts.
- Do NOT use cleaning materials or means to accelerate the defrosting process other than those recommended by the manufacturer.
- Be aware that the refrigerant inside the system is odourless.

WARNING

The refrigerant inside the unit is mildly flammable, but normally does NOT leak. If the refrigerant leaks in the room and comes in contact with fire from a burner, a heater, or a cooker, this may result in fire, or the formation of a harmful gas.

Turn off any combustible heating devices, ventilate the room, and contact the dealer where you purchased the unit.

Do NOT use the unit until a service person confirms that the part from which the refrigerant leaked has been repaired.

8.2 To find the contact/helpdesk number

Prerequisite: You switched the permission level to Advanced end user.

1 Go to [6.3.2]: ☰ > `Information` > `Error handling` > `Contact/helpdesk number`.

9 Troubleshooting

If a malfunction occurs, ⓘ is displayed on the home pages. You can press ⓘ to display more information about the malfunction.

For the symptoms listed below, you can try to solve the problem yourself. For any other problem, contact your installer. You can find the contact/helpdesk number via the user interface.

9.1 Overview: Troubleshooting

If a malfunction occurs, ⓘ is displayed on the home pages. You can press ⓘ to display more information about the malfunction.

For the symptoms listed below, you can try to solve the problem yourself. For any other problem, contact your installer. You can find the contact/helpdesk number via the user interface.

9.2 To check the error history

Prerequisite: Only available if ⓘ is displayed on the home pages.

1 Go to [6.3.1]: ☰ > `Information` > `Error handling` > `Error history`.

9.3 To check the warning history

Prerequisite: Only available if ⓘ is displayed on the home pages.

1 Go to [6.3.1]: ☰ > `Information` > `Error handling` > `Warning history`.

9.4 Symptom: You are feeling too cold (hot) in your living room

Possible cause	Corrective action
The desired room temperature is too low (high).	Increase (decrease) the desired room temperature. See "Room thermostat control - Using the room temperature home pages" [▸ 18]. If the problem recurs daily, do one of the following: ▪ Increase (decrease) the room temperature preset value. See "Using preset values" [▸ 37]. ▪ Adjust the room temperature schedule. See "Using and programming schedules" [▸ 38] and "Schedules: Example" [▸ 39].

Possible cause	Corrective action
The desired room temperature cannot be reached.	Increase the desired leaving water temperature in accordance with the heat emitter type. See "Room thermostat control - Using the leaving water temperature home pages" [▸ 21].
The weather-dependent curve is set incorrectly.	Adjust the weather-dependent curve. See "4.8 Weather dependent operation" [▸ 41].
In case of third-party gas boiler: The heat pump cannot reach the desired room temperature, and the gas boiler is not allowed to work because of an installer setting.	Ask your installer to increase the equilibrium temperature [5-01]. **Note:** ▪ When the outdoor temperature is higher than the equilibrium temperature [5-01], the gas boiler is not allowed to work. ▪ Do not set the equilibrium temperature [5-01] too high, because this would result in much less heat pump operation.

9.5 Symptom: The water at the tap is too cold

Possible cause	Corrective action
Your tank ran out of domestic hot water because of unusual high consumption.	If you immediately need domestic hot water, activate the DHW tank booster mode. However, this consumes extra energy. See "Using the DHW tank booster mode" [▸ 29]. If you can wait, overrule (increase) the active or next scheduled desired temperature so that more hot water will be produced exceptionally. See "To read out and overrule the active or next scheduled desired temperature (in scheduled mode or scheduled + reheat mode)" [▸ 28]. If the problems recurs daily, do one of the following: ▪ Increase the DHW tank temperature preset value. See "Using preset values" [▸ 37]. ▪ Adjust the DHW tank temperature schedule. **Example:** Program to additionally heat up the DHW tank to a preset value (`Storage eco` = lower tank temperature) during the day. See "Using and programming schedules" [▸ 38] and "Schedules: Example" [▸ 39].
The desired DHW tank temperature is too low.	
The instant DHW temperature is too low. (Only applicable when no tank is installed).	Increase the instant DHW set point temperature. See "To adjust the instant DHW temperature" [▸ 25].

9.6 Symptom: Heat pump failure

When the heat pump fails to operate, the gas boiler can serve as an emergency back-up heater and either automatically or non-automatically take over the entire heat load.

- When auto emergency is **activated** and a heat pump failure occurs, the boiler will automatically take over the heat load.
- When auto emergency is **not activated** and a heat pump failure occurs, the domestic hot water and space heating operations will stop and need to be recovered manually. The user interface will then ask you to confirm whether the boiler can take over the entire heat load or not.

When the heat pump fails, ⓘ will appear on the user interface.

Possible cause	Corrective action
Heat pump is damaged.	▪ Press ⓘ to view a description of the problem. ▪ Press ⓘ again. ▪ Select OK to allow the gas boiler to take over the entire heat load. ▪ Call your local dealer to get the heat pump fixed.

INFORMATION

When the gas boiler takes over the entire heat load, gas consumption will be considerably higher.

9.7 Symptom: The system is making gurgling noises after commissioning

Possible cause	Corrective action
There is air in the system.	Purge air from the system.[a]
Various malfunctions.	Check if ⓘ is displayed on the home pages of the user interface. You can press ⓘ to display more information about the malfunction.

[a] We recommend to purge air with the air purge function of the unit (to be performed by the installer). If you purge air from the heat emitters or collectors, mind the following:

WARNING

Air purging heat emitters or collectors. Before you purge air from heat emitters or collectors, check if an error or ⓘ is displayed on the home pages of the user interface.

- If not, you can purge air immediately.
- If yes, make sure that the room where you want to purge air is sufficiently ventilated. **Reason:** Refrigerant might leak into the water circuit, and subsequently into the room when you purge air from the heat emitters or collectors.

10 Relocation

10.1 Overview: Relocation

If you want to relocate parts of your system, contact your installer. You can find the contact/helpdesk number via the user interface.

11 Disposal

NOTICE

Do NOT try to dismantle the system yourself: dismantling of the system, treatment of the refrigerant, oil and other parts MUST comply with applicable legislation. Units MUST be treated at a specialised treatment facility for reuse, recycling and recovery.

12 Glossary

DHW = Domestic hot water
Hot water used, in any type of building, for domestic purposes.

LWT = Leaving water temperature
Water temperature at the water outlet of the unit.

Dealer
Sales distributor for the product.

Authorised installer
Technical skilled person who is qualified to install the product.

User
Person who is owner of the product and/or operates the product.

Applicable legislation
All international, European, national and local directives, laws, regulations and/or codes that are relevant and applicable for a certain product or domain.

Service company
Qualified company which can perform or coordinate the required service to the product.

Installation manual
Instruction manual specified for a certain product or application, explaining how to install, configure and maintain it.

Operation manual
Instruction manual specified for a certain product or application, explaining how to operate it.

Accessories
Labels, manuals, information sheets and equipment that are delivered with the product and that need to be installed according to the instructions in the accompanying documentation.

Optional equipment
Equipment made or approved by Daikin that can be combined with the product according to the instructions in the accompanying documentation.

Field supply
Equipment NOT made by Daikin that can be combined with the product according to the instructions in the accompanying documentation.

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