DAIKIN

User reference guide

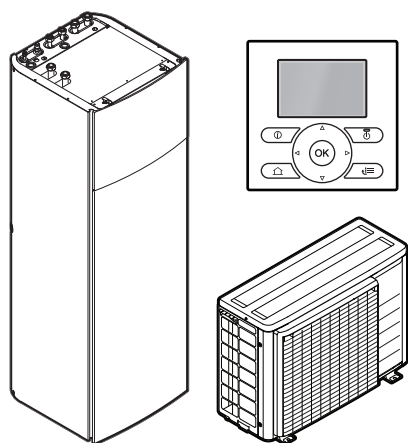# Daikin Altherma 3 R F

EHFZ03S18DJ3V

Table of contents

1 About this document

> **ⓘ INFORMATION**
>
> This unit is a heating only model. Therefore, all references to cooling in this document are NOT applicable.

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 indoor unit)
- **Operation manual:**
  - Quick guide for basic usage
  - Format: Paper (in the box of the indoor 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 – Outdoor unit:**
  - Installation instructions
  - Format: Paper (in the box of the outdoor unit)
- **Installation manual – Indoor unit:**
  - Installation instructions
  - Format: Paper (in the box of the indoor unit)
- **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 indoor 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.

Breadcrumbs

```
┌─────────────────────────────────────┐
│ 7.4.1.1         Room temperature  1  │
├─────────────────────────────────────┤
│ Comfort (heating)         20.0°C >   │
│ Eco (heating)             18.0°C >   │
│ Comfort (cooling)         22.0°C >   │
│ Eco (cooling)             24.0°C >   │
│                                      │
├─────────────────────────────────────┤
│ OK Select            ◆ Scroll        │
└─────────────────────────────────────┘
```

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)`

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.

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

🔥	**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.

ℹ	**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".

2 User safety instructions

Always observe the following safety instructions and regulations.

2.1 General

> ⚠️ **WARNING**
>
> If you are NOT sure how to operate the unit, contact your installer.

> ⚠️ **WARNING**
>
> This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
>
> Children SHALL NOT play with the appliance.
>
> Cleaning and user maintenance SHALL NOT be made 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 authorised installer and MUST comply with applicable legislation.

Units MUST be treated at a specialised 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 specialised 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.

2.2 Instructions for safe operation

> **WARNING: MILDLY FLAMMABLE MATERIAL**
> The refrigerant inside this unit is mildly flammable.

> **WARNING**
> The appliance shall be stored so as to prevent mechanical damage and in a well-ventilated 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.

> ⚠️ **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.

3 About the system

Depending on the system layout, the system can:

- Heat up a space
- Cool down a space
- Produce domestic hot water

> **ℹ INFORMATION**
>
> This unit is a heating only model. Therefore, all references to cooling in this document are NOT applicable.

> **ℹ INFORMATION**
>
> If underfloor heating is installed in the main zone, then in cooling mode the main zone can only provide refreshment. Real cooling is then NOT allowed.

3.1 Components in a typical system layout
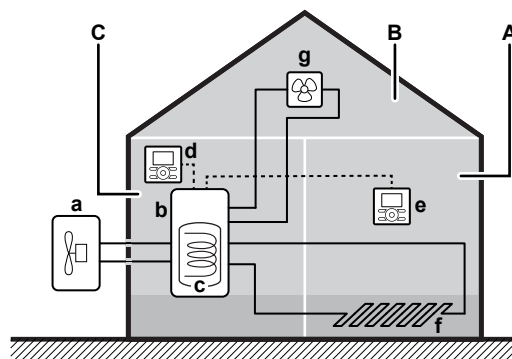
A	Main zone. **Example:** Living room.
B	Additional zone. **Example:** Bedroom.
C	Technical room. **Example:** Garage.
a	Outdoor unit heat pump
b	Indoor unit heat pump
c	Domestic hot water (DHW) tank
d	User interface of the indoor unit
e	User interface used as room thermostat
f	Underfloor heating
g	Radiators, heat pump convectors, or fan coil units

4 Operation

> **i** **INFORMATION**
>
> This unit is a heating only model. Therefore, all references to cooling in this document are NOT applicable.

4.1 User interface: Overview

4.1.1 Buttons

Overview
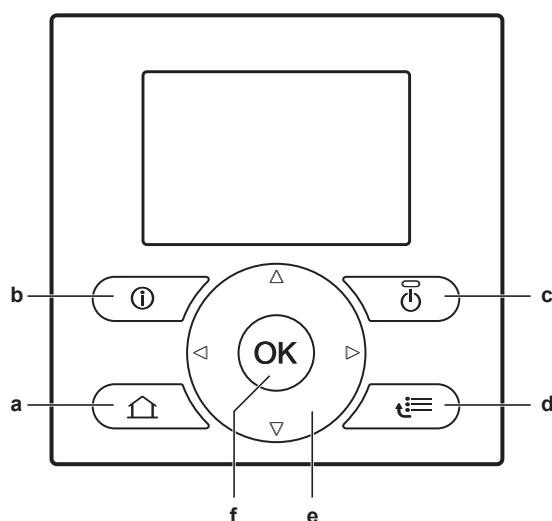
a Home pages
b Malfunction information
c On/Off
d Menu structure/Back
e Navigating/Changing settings
f OK

Home pages — ⌂

▪ If you are on a home page, press to switch to another home page.

▪ If you are in a menu structure, press to go to the default home page.

Malfunction information — ⓘ

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

On/Off — ⏻

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

Menu structure/Back — ☰

▪ If you are on a home page, press to open the menu structure.

▪ If you are navigating through a menu structure, press to go up 1 level.

▪ Press to go back 1 step, for example when you are programming a schedule.

Navigation/Change of settings — ▲ ▼ ◀ ▶

- Navigate the cursor on the display.
- Navigate through the menu structure.
- Change the value of a setting.
- Select a mode.

OK — OK

- Confirm a selection.
- If you are on a home page:
  - press to switch between displaying actual and desired values, or (if applicable) between actual and offset values.
  - press for more than 5 seconds to activate or deactivate button lock.
- If you are in a menu structure, press to enter a submenu.
- If you are in the main menu of a menu structure, press for more than 5 seconds to activate or deactivate a function lock
- If you are programming a schedule, go to the next step.

> **i** **INFORMATION**
> If you press 🏠 or 🗏 while changing settings, the changes will NOT be applied.

4.1.2 Status icons

Icon	Description
☀	Space operation mode = Heating.
❄	Space operation mode = Cooling.
↻	Unit is operating.
☼	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.

Icon	Description
✋	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.
♨	An external heat source is active. **Example:** Gas burner.
⊠	The disinfection mode is active.
ⓘ	A malfunction occurred. Press 🔘 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.
✚	Emergency operation is active.

4.1.3 User Permission level

The amount of information you can read out and edit in the menu structure depends on your user permission level:

- End user: Default user mode.
- Adv. end user: As an advanced end user, you can read out and edit more information.

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.

4.2 Menu structure: Overview user settings

[1] Set time/date
Date
Time
Daylight Saving Time
Clock type

[2] Holiday		< >	[2] Holiday	
Holiday			Holiday	
Holiday mode	Home		Holiday mode	Away
From			From	
Until			Until	
Use day schedule			Operation mode	
			Heating	
			Cooling	
			DHW	

[3] Quiet mode

[4] Operation mode

[5] Select schedules
Room temperature
LWT main
LWT additional
Tank temperature

[6] Information
Sensor information
Energy metering
Error handling
User permission level
Actuators
Operation modes
Running hours
Version

[6.2] Energy metering
Consumed elec.
Produced energy

[6.3] Error information
Error history
Contact/helpdesk number
Warning history

[6.8] Version
User interface
Indoor unit
Outdoor unit

[7] User settings
Display
Temperature lock
Set schedules
Preset values
Allowed operation mode
Unit of measurement
Set weather dependent

[7.1] Display
Contrast
Backlit LCD time
User profile
Available home pages

[7.3] Set schedules
Room temp.
LWT main
LWT additional
DHW temp
Quiet mode
DHW pump

[7.4] Preset values
Room temperature
LWT main
Tank temperature
Quiet level

[7.7] Set weather dependent
Main
Additional

[7.7.1] Main
Set weather-dependent heating
Set weather-dependent cooling

[7.7.2] Additional
Set weather-dependent heating
Set weather-dependent cooling

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

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`)
- Additional leaving water temperature (`LWT add`)
- DHW tank temperature (`Tank`)

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 "4.2 Menu structure: Overview user settings" [▶ 14].

To go to the menu structure

1   From a home page, press 📖.

Result: The menu structure is displayed.

```
                                 1
Set time/date                    >
Holiday                          >
Quiet mode                Auto >
Operation mode          Heating >
Select schedules
Information
OK Select            ⬍ Scroll
```

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 (+ additional) leaving water temperature	Main (+ additional) leaving water temperature control (`LWT main` and `LWT add`) Main and additional leaving water temperature control are always turned ON or OFF together.
DHW tank temperature	Domestic hot water control (`Tank`)

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

If you turn OFF…	Then…
Room temperature control	Main (+ additional) leaving water temperature control is NOT automatically turned OFF.
Main (+ additional) 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 leaving water temperature (main + additional) control

1   Go to one of the following the home pages:
    ▪ Main leaving water temperature home page (`LWT main`)
    ▪ Additional leaving water temperature home page (`LWT add`)

2   Press .

To turn ON or OFF the domestic hot water control

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

2   Press .

4.4 Space heating/cooling 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.

4.4.1 About space heating/cooling control

Controlling space heating/cooling 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

> **(i) INFORMATION**
>
> This unit is a heating only model. Therefore, all references to cooling in this document are NOT applicable.

Depending on your heat pump model, you have to tell the system which space operation mode to use: heating or cooling.

If a… heat pump model is installed	Then…
Heating/cooling	The system can heat up and cool down a space. You have to tell the system which space operation mode to use.
Heating only	The system can heat up a space, but NOT cool down a space. You do NOT have to tell the system which space operation mode to use.

To tell the system which space operation to use, you can do the following:

You can…	Location
Check which space operation mode is **currently used**.	Home pages: - Room temperature - Leaving water temperature (main + additional)
Set the space operation **mode**.	Menu structure
Restrict when **automatic changeover** is possible.	

To determine if a heating/cooling heat pump model is installed

1 Press ▤ to go to the menu structure.

2 Check if [4] `Operation mode` is listed. If so, a heating/cooling heat pump model is installed.

To check which space operation mode is currently used

1 Go to one of the following the home pages:
- Room temperature home page (`Room`)
- Main leaving water temperature home page (`LWT main`)
- Additional leaving water temperature home page (`LWT add`)

2 Check the status icon:

If you see…	Then…
☀	Operation mode = heating. Unit is NOT heating up your space. However, the DHW tank can be heating up.
☀↻	Operation mode = heating. Unit is heating up your space at this moment.
❄	Operation mode = cooling. Unit is NOT cooling down your space. However, the DHW tank can be heating up.
❄↻	Operation mode = cooling. Unit is cooling down your space at this moment.

To set the space operation mode

1 Go to [4]: 🗉 > `Operation mode`.

2 Select one of the following options and press `OK`:

If you select…	Then the space operation mode is…
`Heating`	Always heating mode.
`Cooling`	Always cooling mode.
`Automatic`	Automatically changed by the software based on the outdoor temperature (and depending on installer settings also the indoor temperature), and taking monthly restrictions into account. **Note:** Automatic changeover is only possible under certain conditions.

To restrict automatic changeover operation mode

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

Prerequisite: You switched the space operation mode to automatic.

1 Go to [7.5]: 🗉 > `User settings` > `Allowed operation mode`.

2 Select a month and press `OK`.

3 Select `Heating only`, `Cooling only` or `Heating/Cooling`, and press `OK`.

Typical automatic changeover restrictions

When	Restriction
During cold season. **Example:** October, November, December, January, February and March.	`Heating only`
During warm season. **Example:** June, July and August.	`Cooling only`
In-between. **Example:** April, May and September.	`Heating/Cooling`

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)
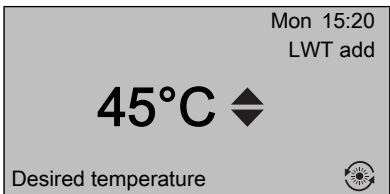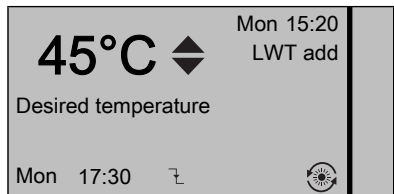
If you have 2 user interfaces, perform the following procedure on the user interface at the indoor unit.

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

1 Press ⌂ multiple times to switch between home pages, and check if the additional leaving water temperature home page (`LWT add`) is available:

If …	Then you have…
Available	A main zone and an additional zone
NOT available	Only a main zone

Typical additional leaving water temperature home page:	
User profile = `Basic`	User profile = `Detailed`
Mon 15:20 LWT add **45°C** ⬍ Desired temperature	Mon 15:20 LWT add **45°C** ⬍ Desired temperature Mon 17:30

2 Check the following:

If…	Then the temperature control is…	
	Main zone	**Additional zone (if any)**
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.	External room thermostat control.

If…	Then the temperature control is…	
	Main zone	**Additional zone (if any)**
Thermostat main A is listed under: [6.5]: 🗐 > `Information` > `Actuators`	External room thermostat control.	
Else	Leaving water temperature control.	

3 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:

▪ "4.7 Preset values and schedules" [▶ 40]

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
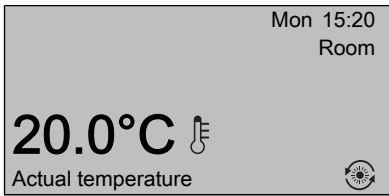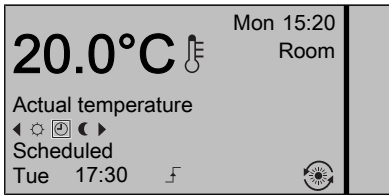
See also:

▪ "4.4.6 Room thermostat control - Using the leaving water temperature home pages" [▶ 25]

▪ "4.7 Preset values and schedules" [▶ 40]

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 "4.6.5 Configuring user profile and home pages" [▶ 39].

User profile = Basic	User profile = Detailed
Mon 15:20 Room **20.0°C** 🌡 Actual temperature	**20.0°C** 🌡 Mon 15:20 / Room Actual temperature ◄ ☼ 🕐 ◖ ► Scheduled Tue 17:30

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. **20.0°C** 🌡 Actual temperature

2 Press **OK**.

Result: You can read out the desired temperature. **22.0°C** ⬍ 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).
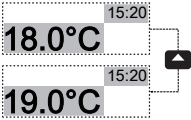
Example: Temporarily overruling the schedule AND changing the mode to preset value

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)`).
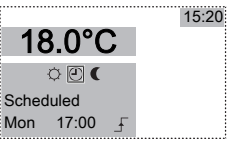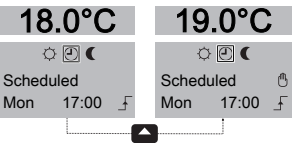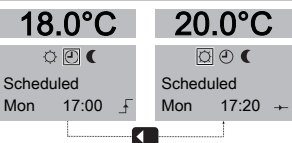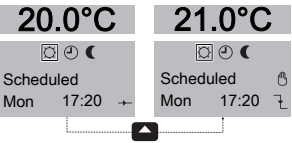
Settings		Description
Overrule period (`Temperature lock`)	2 `hours`	If you temporarily overrule the schedule by a preset value, after 2 hours the schedule will be used again.

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

Situation	Description
 15:20 **18.0°C** 15:20 **19.0°C** ▲	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
18.0°C 15:20 ☼ ⏲ ☾ Scheduled Mon 17:00	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.
18.0°C **19.0°C** ☼ ⏲ ☾ ☼ ⏲ ☾ Scheduled Scheduled Mon 17:00 Mon 17:00 ▲	You **temporarily overrule** the schedule. Desired temperature = custom temperature = 19°C. At the next scheduled action (17:00), the schedule will be used again.
18.0°C **20.0°C** ☼ ⏲ ☾ ⏲ ⏲ ☾ Scheduled Scheduled Mon 17:00 Mon 17:20 ◄	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).
20.0°C **21.0°C** ⏲ ⏲ ☾ ⏲ ⏲ ☾ Scheduled Scheduled Mon 17:20 Mon 17:20 ▲	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 🆗:
   - `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

> **i** **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:** A home screen is available for both temperature zones: the main zone and the additional zone. You only have to adjust the leaving water temperature settings in case of problems.

Typical leaving water temperature home pages

Main zone:

User profile = Basic	User profile = Detailed
Mon 15:20 LWT main **35°C** ⬍ Desired temperature	**35°C** ⬍ Mon 15:20 LWT main Desired temperature Mon 17:30

Additional zone:

User profile = Basic	User profile = Detailed
Mon 15:20 LWT add **45°C** ⬍ Desired temperature	**45°C** ⬍ Mon 15:20 LWT add Desired temperature Mon 17:30

To read out the desired leaving water temperature (main + additional)

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

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

> **i** **INFORMATION**
>
> To see if the leaving water temperature setpoint is linked to the room temperature setpoint, see "4.4.3 Determining which temperature control you are using" [▶ 19].

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

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

To adjust the leaving water temperature (additional)

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

2 Press ⬆ or ⬇ to adjust. **Example:** 45°C 47°C

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

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

> **i INFORMATION**
>
> To see if the leaving water temperature setpoint is linked to the room temperature setpoint, see "4.4.3 Determining which temperature control you are using" [▶ 19].

To set leaving water temperature preset values (main)

> **i 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.

> **i 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.
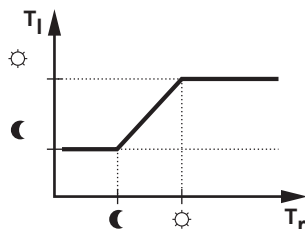
- T_r: Room temperature
- T_l: Leaving water temperature

3 Press ⬆ or ⬇ to adjust/overrule.

To adjust the leaving water temperature (additional)

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

2 Press ⬆ or ⬇ to adjust. **Example:** 45°C 47°C ⬆

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

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 + additional).	Leaving water temperature home pages (main + additional)
▪ **Adjust/overrule** the leaving water **temperature** (main). ▪ **Adjust** the leaving water **temperature** (additional).	
Select which leaving water temperature **schedule** (main + additional) you want to use.	Menu structure
Program leaving water temperature **schedule** (main + additional).	
Define preset values that are used by the leaving water temperature schedule (main).	

See also:

▪ "4.4.6 Room thermostat control - Using the leaving water temperature home pages" [▶ 25]

▪ "4.7 Preset values and schedules" [▶ 40]

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

To set leaving water temperature preset values (main)

> **i** **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

To adjust the leaving water temperature (additional)

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

2 Press ▲ or ▼ to adjust. **Example:** 45°C 47°C

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

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:** 35°C 37°C

To adjust the leaving water temperature (additional)

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

2   Press ▲ or ▼ to adjust. **Example:**   45°C 47°C

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

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 pages (main + additional)
Adjust the desired leaving water **temperature.** Only change this if the desired room temperature cannot be reached.	

See also: "4.4.6 Room thermostat control - Using the leaving water temperature home pages" [▸ 25]

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:**   35°C 37°C

To adjust the leaving water temperature (additional)

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

2   Press ▲ or ▼ to adjust. **Example:**   45°C 47°C

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

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

Depending on the DHW tank mode (installer setting), you use a different domestic hot water control:

▪ Reheat mode

▪ Scheduled mode

▪ Scheduled + reheat mode

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

4.5.2 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
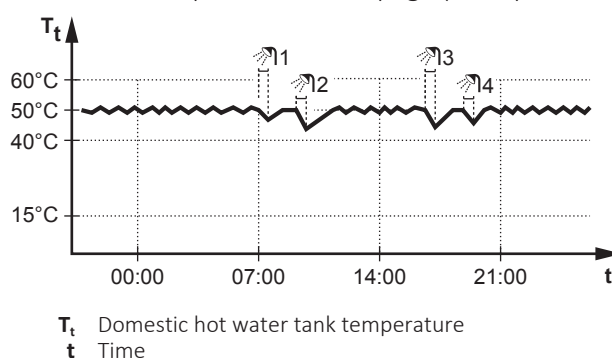
> **i**   **INFORMATION**
>
> When the DHW tank mode is reheat, the risk for capacity shortage and comfort problem is significant. In case of frequent reheat operation, space heating/cooling function is regularly interrupted.

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.**	

You can...	Location
(Only for field supplied domestic hot water pump for secondary return)	Menu structure
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:

- "4.5.5 Using the DHW tank temperature home page" [▸ 32]
- "4.5.6 Using the DHW tank booster mode" [▸ 33]
- "4.7 Preset values and schedules" [▸ 40]

4.5.3 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
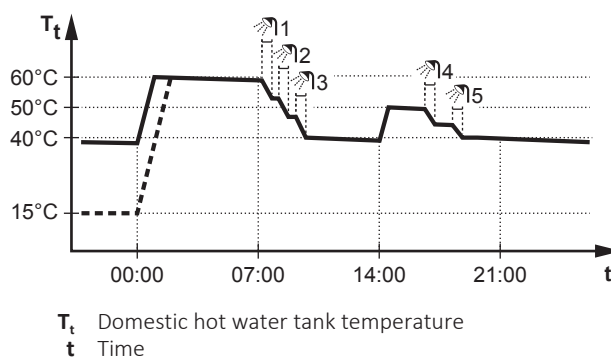
- Initially, the DHW tank temperature is the same as the temperature of the domestic water entering the DHW tank (example: **15°C**).
- At 00:00 the DHW tank is programmed to heat up the water to a preset value (example: `Storage comfort` = **60°C**).
- During the morning, you consume hot water and the 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:

4 | Operation

| 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:

▪ "4.5.5 Using the DHW tank temperature home page" [▶ 32]

▪ "4.5.6 Using the DHW tank booster mode" [▶ 33]

▪ "4.7 Preset values and schedules" [▶ 40]

4.5.4 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 Domestic hot water tank temperature
t Time
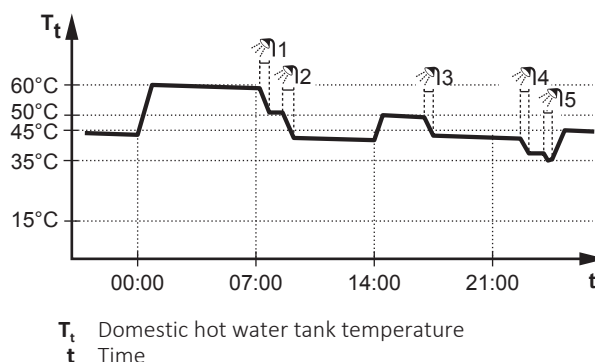
In scheduled + reheat mode, you can do the following:

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

See also:

EHFZ03S18DJ3V
Daikin Altherma 3 R F
4P596825-1A – 2021.10

🟦 **DAIKIN**

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4.5.5 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`
Mon 15:20 Tank **60°C** ⬍ Storage comfort 📶	Mon 15:20 Tank **60°C** ⬍ Storage comfort ◀ 🕐 🚿 ▶ Tue 00:00 ⌐ 📶

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.
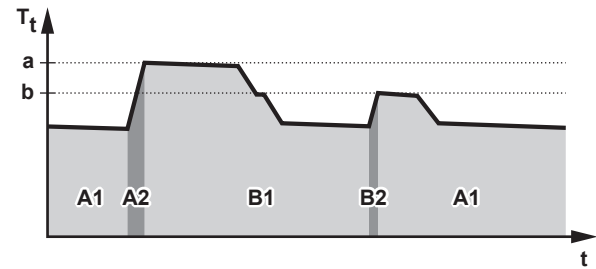
T_t	DHW tank temperature
t	Time

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

4.5.6 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`).

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

4.6 Advanced usage

4.6.1 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/cooling 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

> **ℹ 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 "4.7.2 Using and programming schedules" [▶ 41].

✈ DAIKIN

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/cooling 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 🆗.

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

4   Select `Level 3` and press 🆗.

Advantage:

The outdoor unit runs in its most quiet level.

4.6.2   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 "4.4.3 Determining which temperature control you are using" [▶ 19].

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/cooling will be according to the desired room temperature of the selected day.
You go away during your holiday	You have to configure space heating/cooling settings. ▪ Space heating/cooling 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.
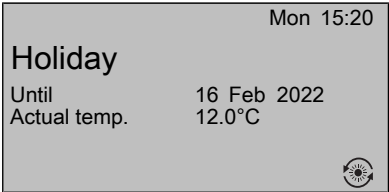
2   Activating the holiday mode.

    ▪ 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.
Mon 15:20 Holiday Until 16 Feb 2022 Actual temp. 12.0°C	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.
`Use day schedule`	Day schedule used during your holiday. **Example:** Saturday

> **ℹ 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.
`Cooling`	Set point used during your holiday when the unit is operating in cooling mode.

Setting	Description
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 2022
`Until`	16 February 2022
`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.

4.6.3   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`	Produced energy, 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.

4.6.4   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`

Setting	Possible units of measurement
Produced energy	▪ kWh ▪ MBtu
Flow	▪ l/min ▪ GPM

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.

4.6.5   Configuring user profile and home pages
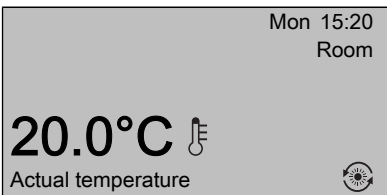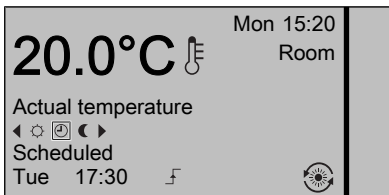
To set a user profile

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
Mon 15:20 Room 20.0°C 🌡 Actual temperature	Mon 15:20 Room 20.0°C 🌡 Actual temperature ◀ ☼ 🕐 ◖ ▶ Scheduled Tue 17:30

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.

4.6.6   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 leaving water temperature (main + additional) 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.
Operation mode	Set the space operation mode.
User settings	Change settings in [7]: 🗐 > User settings.

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 🆗 for more than 5 seconds.

To activate or deactivate a function lock

1   Press 🗐 to go to the menu structure.

2   Press 🆗 for more than 5 seconds.

3   Select a function and press 🆗.

4   Select Lock or Unlock, and press 🆗.

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 🆗. **Example:** Comfort (heating).

4 Select a temperature and press `OK`.

Possible preset values

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

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 or cool down a space:
Main leaving water temperature	▪ `Comfort` (preset value)
	▪ `Eco` (preset value)
	▪ [Custom temperature]
Additional leaving water temperature	Program when the additional leaving water temperature is turned ON and OFF.
DHW tank temperature	Program when to heat up the DHW tank. The possible actions depend on an installer setting.
	Possible actions 1:
	▪ `Storage comfort` (preset value)[a]
	▪ `Storage eco` (preset value)[a]
	▪ `Storage stop`[b]

Control	Possible actions
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.

(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 ⏎.

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

```
           Set heating schedule
  Mon   │ 07 :00  Comfort
        │ Delete line
        │ Clear day schedule
        │ Copy day
        │ Save schedule
        │ -- : --   --
  OK Select              ⬍ Scroll
```
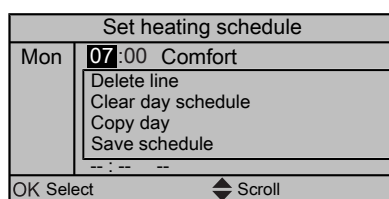
You can:

▪ 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

> **ℹ 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 🆗.

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 🆗. **Example:** Monday.

2   Select `Copy day` and press 🆗.

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

To save the schedule

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

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

3   Change the name and press 🆗. (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

07:00 09:00   17:00   23:00

Sat - Sun

08:00   23:00

Predefined 2

Mon - Fri

07:00 09:00 12:00 14:00 17:00   23:00

Sat - Sun

08:00   23:00

Predefined 3

Mon - Sun

08:00   23:00
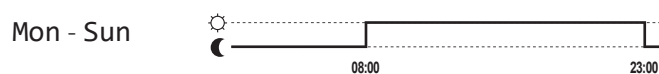
4.7.5 Predefined schedules: Leaving water temperature (additional)

I : Additional zone = **On**

O: Additional zone = **OFF**

Predefined 1

Mon - Fri

07:00 09:00   17:00   23:00

Sat - Sun

08:00   23:00

Predefined 2

Mon - Fri

07:00 09:00 12:00 14:00 17:00   23:00

Sat - Sun

08:00   23:00

Predefined 3

Mon - Sun

08:00   23:00
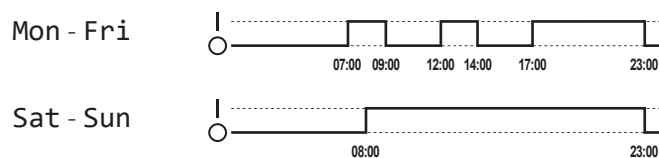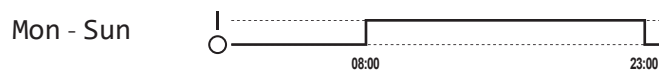
4.7.6 Predefined schedules: DHW tank temperature

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

22:00

Predefined 2

Mon - Sun

15:00   22:00

Predefined 3

Mon - Fri

22:00

Sat - Sun

15:00   22:00
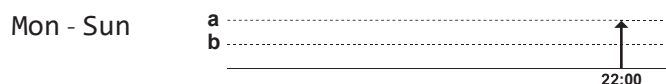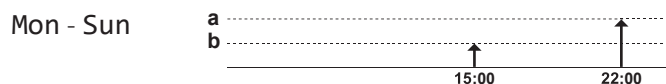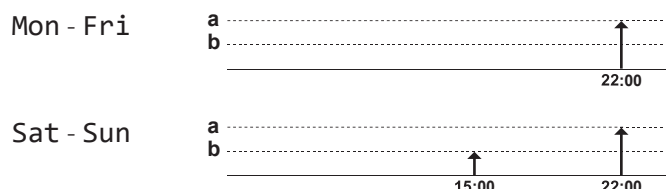
4.8 Weather-dependent curve

4.8.1 What is a weather-dependent curve?

Weather-dependent operation

The unit operates 'weather dependent' if the desired leaving water or tank temperature is determined automatically by the outdoor temperature. It therefore is connected to a temperature sensor on the North wall of the building. If the outdoor temperature drops or rises, the unit compensates instantly. Thus, the unit does not have to wait for feedback by the thermostat to increase or decrease the temperature of the leaving water or tank. Because it reacts more quickly, it prevents high rises and drops of the indoor temperature and water temperature at tap points.

Advantage

Weather-dependent operation reduces energy consumption.

Weather-dependent curve

To be able to compensate for differences in temperature, the unit relies on its weather-dependent curve. This curve defines how much the temperature of the tank or leaving water must be at different outdoor temperatures. Because the slope of the curve depends on local circumstances such as climate and the insulation of the house, the curve can be adjusted by an installer or user.

Availability

The weather-dependent curve is available for:
- Main zone - Heating
- Main zone - Cooling
- Additional zone - Heating
- Additional zone - Cooling
- Tank

> **i** **INFORMATION**
>
> To operate weather dependent, correctly configure the setpoint of the main zone, additional zone or tank. See "4.8.3 Using weather-dependent curves" [▶ 46].

4.8.2 2-points curve

Define the weather-dependent curve with these 2 setpoints:

- Setpoint (X1, Y2)
- Setpoint (X2, Y1)

Example
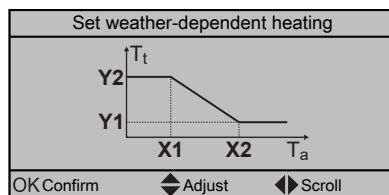
X1, X2	Examples of outdoor ambient temperature
Y1, Y2	Examples of desired tank temperature or leaving water temperature

4.8.3 Using weather-dependent curves

Configure weather-dependent curves as following:

To define the setpoint mode

To use the weather-dependent curve, you need to define the correct setpoint mode:

Go to setpoint mode …	Set the setpoint mode to …
Main zone – Heating/Cooling	
[A.3.1.1.1] `Main` > `LWT setpoint mode`	`Weather dep.` OR `WD/scheduled`
Additional zone – Heating/Cooling	
[A.3.1.2.1] `Additional` > `LWT setpoint mode`	`Weather dep.` OR `WD/scheduled`
Tank	
[A.4.6] `Domestic hot water (DHW)` > `SP mode`	`Weather dep.`

To change the weather-dependent curve

Zone	Go to …
Main zone – Heating	[7.7.1.1] `Main` > `Set weather-dependent heating`
Main zone – Cooling	[7.7.1.2] `Main` > `Set weather-dependent cooling`
Additional zone – Heating	[7.7.2.1] `Additional` > `Set weather-dependent heating`
Additional zone – Cooling	[7.7.2.2] `Additional` > `Set weather-dependent cooling`

Zone	Go to …
Tank	[A.4.7] `Domestic hot water (DHW)` `>Weather-dependent curve`

> **ℹ INFORMATION**
>
> **Maximum and minimum setpoints**
>
> You cannot configure the curve with temperatures that are higher or lower than the set maximum and minimum setpoints for that zone or for the tank. When the maximum or minimum setpoint is reached, the curve flattens out.

To fine-tune the weather-dependent curve

The following table describes how to fine-tune the weather-dependent curve of a zone or tank:

You feel …		Fine-tune with setpoints:			
At regular outdoor temperatures …	At cold outdoor temperatures …	Y2[a]	Y1[a]	X1[a]	X2[a]
OK	Cold	↑	—	↑	—
OK	Hot	↓	—	↓	—
Cold	OK	—	↑	—	↑
Cold	Cold	↑	↑	↑	↑
Cold	Hot	↓	↑	↓	↑
Hot	OK	—	↓	—	↓
Hot	Cold	↑	↓	↑	↓
Hot	Hot	↓	↓	↓	↓

[a] See "4.8.2 2-points curve" [▶ 46].

5 Energy saving tips

Tips about room temperature

- Make sure the desired room temperature is NEVER too high (in heating mode) or too low (in cooling mode), but ALWAYS according to your actual needs. Each saved degree can save up to 6% of heating/cooling 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 or cooling 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. In cooling, the opposite is valid.

- 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.

6 Maintenance and service

6.1 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 is above 1 bar.

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: MILDLY 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.

6.2 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`.

7 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.

7.1 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.

7.2 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.

7.3 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 "4.4.5 Room thermostat control - Using the room temperature home pages" [▶ 21]. If the problem recurs daily, do one of the following: ▪ Increase (decrease) the room temperature preset value. See "4.7.1 Using preset values" [▶ 40]. ▪ Adjust the room temperature schedule. See "4.7.2 Using and programming schedules" [▶ 41] and "4.7.3 Schedules: Example" [▶ 43].
The desired room temperature cannot be reached.	Increase the desired leaving water temperature in accordance with the heat emitter type. See "4.4.6 Room thermostat control - Using the leaving water temperature home pages" [▶ 25].
The weather-dependent curve is set incorrectly.	Adjust the weather-dependent curve. See "4.8 Weather-dependent curve" [▶ 45].

7.4 Symptom: The water at the tap is too cold

Possible cause	Corrective action
You ran out of domestic hot water because of unusually high consumption.	If you immediately need domestic hot water, activate the DHW tank booster mode. However, this consumes extra energy. See "4.5.6 Using the DHW tank booster mode" [▶ 33].
The desired DHW tank temperature is too low.	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)" [▶ 32]. If the problems recurs daily, do one of the following: ▪ Increase the DHW tank temperature preset value. See "4.7.1 Using preset values" [▶ 40]. ▪ 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 "4.7.2 Using and programming schedules" [▶ 41] and "4.7.3 Schedules: Example" [▶ 43].

7.5 Symptom: Heat pump failure

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

▪ When auto emergency is **activated** and a heat pump failure occurs, the backup heater 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 backup heater can take over the 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 oĸ to allow the backup heater to take over the heat load. ▪ Call your local dealer to get the heat pump fixed.

> **ℹ INFORMATION**
>
> When the backup heater takes over the heat load, electricity consumption will be considerably higher.

7.6 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]
Incorrect hydraulic balance.	To be performed by the installer: 1 Perform hydraulic balancing to assure that the flow is correctly distributed between the emitters. 2 If hydraulic balancing is not sufficient, change the pump limitation settings ([9-0D] and [9-0E] if applicable).
Various malfunctions.	Check if ① 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 ① 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.

8 Relocation

8.1 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.

9 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.

10 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.

11 Installer settings: Tables to be filled in by installer

11.1 Quick wizard

Setting	Fill in...
Forced off contact [A.2.1.6]	
Forced off contact	
Space heating settings [A.2.1]	
Unit control method	
User interface location	
Number of LWT zones	
Pump operation mode	
Domestic hot water settings [A.2.2]	
DHW operation	
DHW tank type	
DHW pump	
Thermostats [A.2.2]	
Contact type main	
Contact type add.	
External sensor	
Digital I/O PCB [A.2.2.6]	
Ext. backup heat src	
Alarm output	
Bottom plate heater	
Demand PCB [A.2.2.7]	
Demand PCB	
Energy metering [A.2.2]	
External kWh meter 1	
External kWh meter 2	
Capacities (energy metering) [A.2.3]	
BUH: step 1	

11.2 Space heating/cooling control

Setting	Fill in...
Leaving water temperature: Main zone [A.3.1.1]	

Setting	Fill in…
LWT setpoint mode	
Leaving water temperature: Additional zone [A.3.1.2]	
LWT setpoint mode	
Leaving water temperature: Delta T source [A.3.1.3]	
Heating	
Cooling	
Leaving water temperature: Modulation [A.3.1.1.5]	
Modulated LWT	
Leaving water temperature: Emitter type [A.3.1.1.7]	
Emitter type	

11.3 Domestic hot water control [A.4]

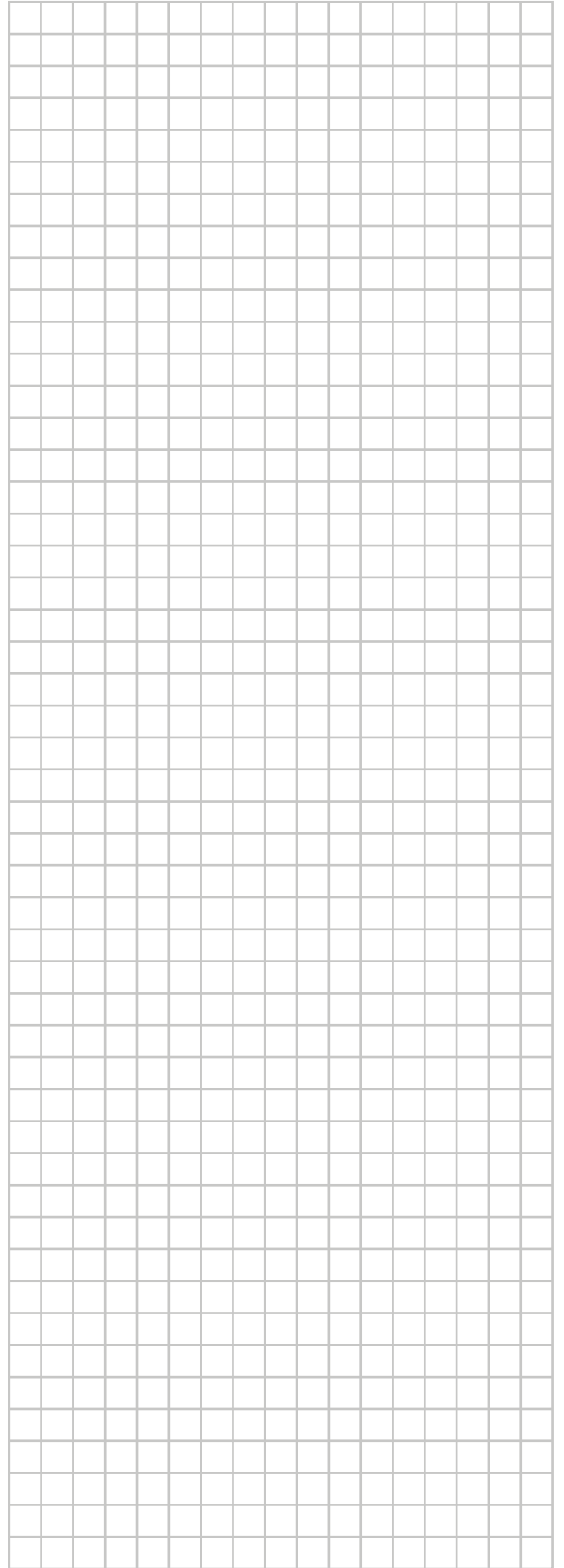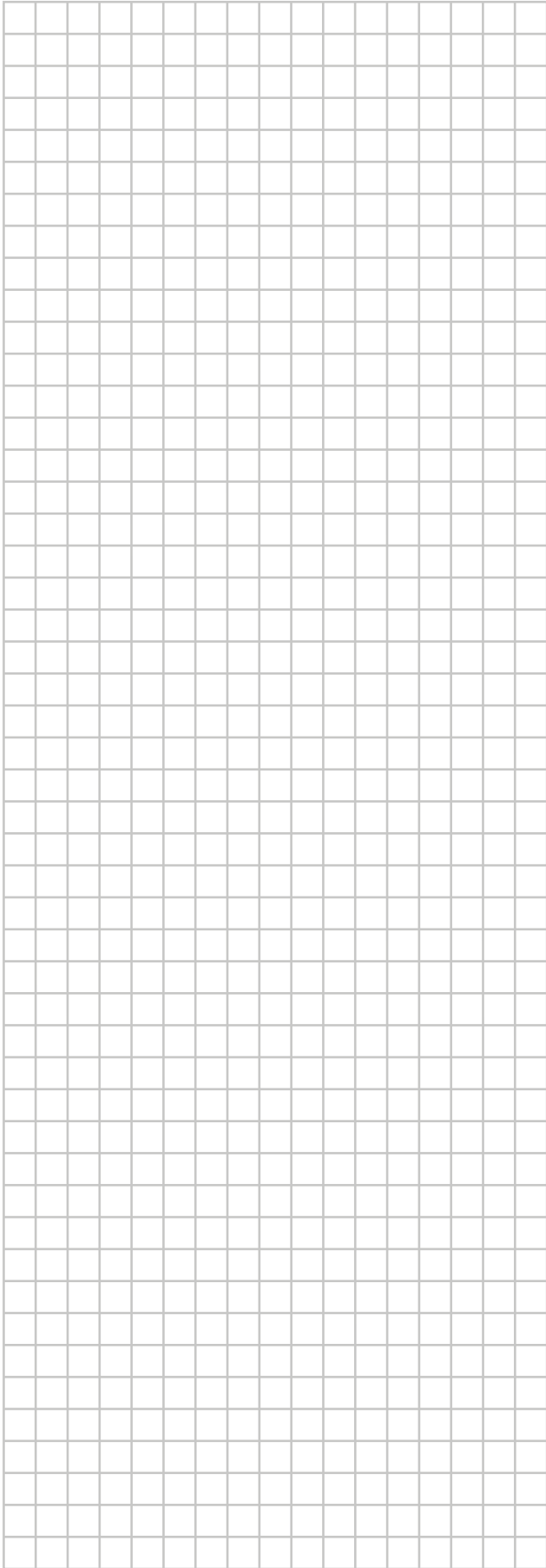| Setting	Fill in…
Type	
Maximum setpoint	

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

11.4 Contact/helpdesk number [6.3.2]

Setting	Fill in…
Contact/helpdesk number	

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