

# **Operation manual**

# Daikin Altherma R Hybrid



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#### 1 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 operating your system
- 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/supportand-manuals/product-information/

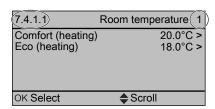
Latest revisions of the supplied documentation may be available on the regional Daikin website or via your installer.

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)

### 2 About the system

Depending on the system layout, the system can:

- Heat up a space
- Produce domestic hot water

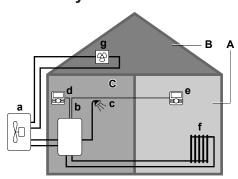


#### INFORMATION

The purpose of hybrid for multi indoor unit in combination with multi outdoor unit is for heating only (space heating and DHW (by boiler only)). The target use of the direct expansion indoor unit (DX) in such a system is for cooling only. A combination of hybrid and DX, both in heating operation is NOT the main objective of such a system and hence, the heating comfort or continuous operation of the DX cannot be guaranteed over the complete operation range.

2

# 2.1 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 Instant domestic hot water or domestic hot water (DHW) tank
- d User interface at the indoor unit
- e User interface in the living room, used as room thermostat
- f Radiators
- g Direct expansion indoor unit

#### 3 Operation

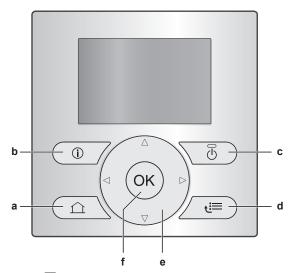
#### 3.1 Overview: Operation

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
Space heating control	How to control space heating:
	Controlling the temperature
Domestic hot water	How to control domestic hot water:
control	Reheat mode
	Scheduled mode
	Scheduled + reheat mode
Schedules	How to select and program schedules
Menu structure	Overview of menu structure
Installer settings table	Overview of installer settings

#### 3.2 The user interface at a glance

#### 3.2.1 Buttons



#### 

- 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, ① is displayed on the home pages. Press ⑥ 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 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.

#### 3.2.2 Status icons

Icon	Description
	Space operation mode = Heating.
*	Not applicable.

#### 3 Operation

Icon	Description
0	Heat pump (compressor) operation or boiler
	operation. This symbol is related to the home page.
Ф 	Desired room temperature = preset value (Comfort; daytime).
(	Desired room temperature = preset value (Eco; nighttime).
<b>(</b>	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.
<b>P</b>	DHW tank mode = Reheat mode.
<b>(1)</b>	DHW tank mode = Scheduled + reheat mode.
<i>₹</i> ¶	Domestic hot water operation.
Ĵ	Actual temperature.
<b>*</b>	Desired temperature.
<u>_</u>	At the next scheduled action, the desired temperature will increase.
<b>—</b>	At the next scheduled action, the desired temperature will NOT change.
7	At the next scheduled action, the desired temperature will decrease.
<b>6</b>	The preset value (Comfort or Eco) or scheduled value is temporarily overruled.
The DHW tank booster mode is active or ready to activated.	
Quiet mode is active.	
Holiday mode is active or ready to be activated.	
a	Button lock mode and/or function lock mode is active.
۵	Boiler operation.
φ	Heat pump (compressor) operation.
60	Boiler and heat pump (compressor) operation.
(X)	The disinfection mode is active.
i	A malfunction occurred. Press  to display more information about the malfunction.
Weather-dependent mode is active.	
Je	User permission level = Installer.
<b>*</b>	Defrost/oil return mode is active.
<b>~</b>	Not applicable.
•	Emergency operation is active.



#### **INFORMATION**

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



#### **INFORMATION**

When operation symbol is blinking, then this means that the outdoor unit is operation in cooling or dry operation. In this case the gas boiler will take over to heat up the water circuit if required.

#### 3.3 Space heating control



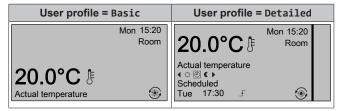
#### NOTICE

**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.

### 3.3.1 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 in the user reference guide.



### 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 (▷② ⑤) by pressing ⑥ or ⑥

Result: The room temperature follows the scheduled value.

3 Use ☐ or ☐ to adjust the temperature.

Result: The room temperature follows the manually adjusted value (6), 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 **ℂ**).

**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).

#### 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)

### 3.3.2 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.

For more information about the leaving water temperature, see the user reference guide.

#### 3.4 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.

#### 3.4.1 Instant DHW (no tank installed)

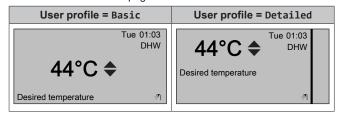
#### Not applicable for Switzerland

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.



#### To adjust the instant DHW temperature

- 1 Go to the instant DHW home page.
- 2 Press ☐ or ☐ to adjust the instant DHW temperature (DHW).

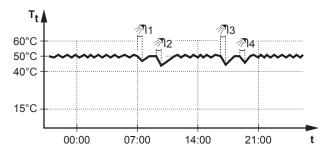
The instant DHW set point temperature may NOT be below 40°C.

#### 3.4.2 Tank

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

#### Reheat mode

In reheat mode ( $\odot$ ),the DHW tank continuously heats up to the temperature shown on the DHW tank temperature home page (example:  $50^{\circ}$ C).



T<sub>t</sub> Domestic hot water tank temperature

t Time

### i

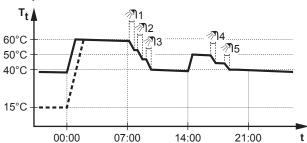
#### **INFORMATION**

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 function is regularly interrupted.

#### Scheduled mode

In scheduled mode (0), 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:



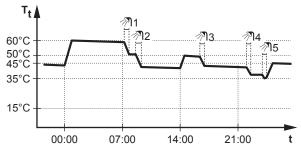
T<sub>t</sub> Domestic hot water tank temperature

#### **t** Tin

#### Scheduled + reheat mode

In scheduled + reheat mode (® ②), 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<sub>t</sub> DHW tank temperature

t Time

**60°C** Storage comfort

50°C Storage eco

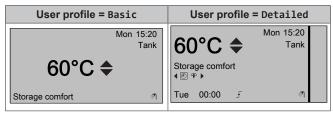
45°C Reheat

35°C Reheat tank temperature – hysteresis value

#### 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.



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

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

Result: You can read out the desired reheat temperature.

### 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.

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

#### Using the DHW tank booster mode

#### 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 

  •.

#### 3.5 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]: Set 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

- 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

- Select the day from which you want to copy and press S. Example: Monday.
- 2 Select Copy day and press OK.
- 3 Set the days you want to copy to Yes and press . Example: Tuesday = Yes, Wednesday = Yes, Thursday = Yes and Friday = Yes.

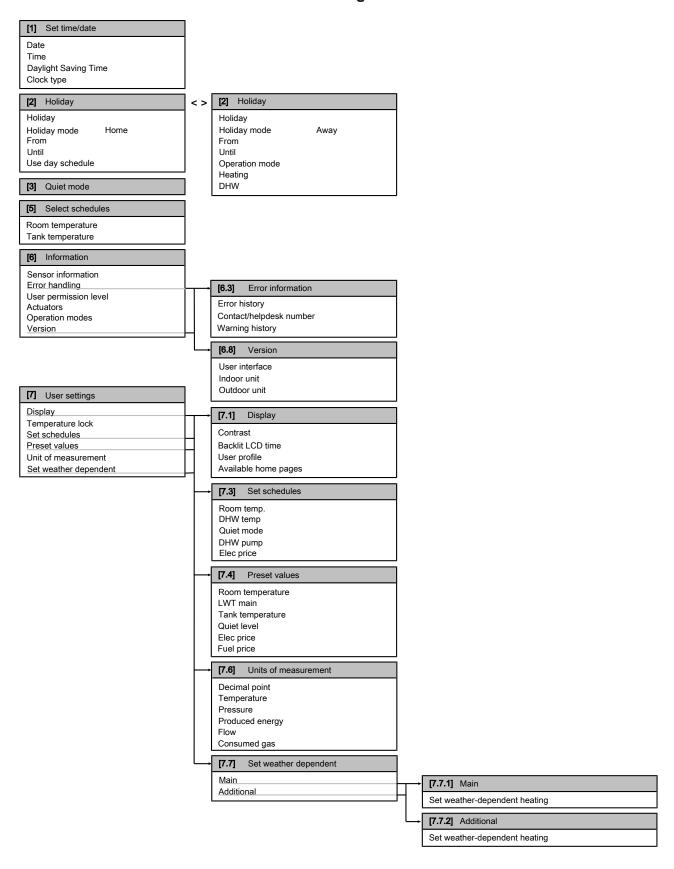
#### To save the schedule

- 1 Press OK, select Save schedule and press OK.
- 2 Select User defined 1, User defined 2 or User defined 3 and press 3.
- 3 Change the name and press . (Only applicable for room temperature schedules). Example: MyWeekSchedule

#### 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.

#### 3.6 Menu structure: Overview user settings





#### INFORMATION

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

# 3.7 Installer settings: Tables to be filled in by installer

#### 3.7.1 Quick wizard

	Setting	Default	Fill in
F	orced off contact [A.2.1.6]		
	Forced off contact	0 (No)	
Sı	pace heating settings [A.2.1]		
	Unit control method	2 (RT control)	
	User interface location	1 (In room)	
	Number of LWT zones	0 (1 LWT zone)	
	Pump operation mode	2 (Request)	
D	omestic hot water settings [A.2.	2]	
	DHW operation	Depends on model	
	DHW pump	0 (No)	
TI	nermostats [A.2.2]		
	Contact type main	2 (H/C request)	
	Contact type add.	2(H/C request)	
	External sensor	0 (No)	
Di	gital I/O PCB [A.2.2.6]		
	Solar kit	0 (No)	
	Alarm output	0 (Normally open)	_

#### 3.7.2 Space heating control

	2	D 6 11			
	Setting	Default	Fill in		
Le	Leaving water temperature: Main zone [A.3.1.1]				
	LWT setpoint mode	1 (Weather dep.)			
Le	eaving water temperature: A	Additional zone [A.3.1.2	:]		
	LWT setpoint mode	0 (Fixed)			
Le	eaving water temperature: I	Modulation [A.3.1.1.5]			
	Modulated LWT	1 (Yes)			
Le	eaving water temperature: I	Emitter type [A.3.1.1.7]			
	Emitter type	0 (Quick)			
S	avings mode [A.6.7]				
	Savings mode	0 (Economical)			
E	ectricity price [7.4.5]	·			
	Elec price	20/kWh (High)			
		20/kWh (Medium)			
		15/kWh (Low)			
Fı	uel price [7.4.6]				
	Fuel price	8.0/kWh			

#### 3.7.3 Domestic hot water control [A.4]

Setting	Default	Fill in
7.	2 (Scheduled only)	
Maximum setpoint	Depends on model	



#### 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.

#### 3.7.4 Contact/helpdesk number [6.3.2]

Setting	Default	Fill in
Contact/helpdesk number	_	

#### 3.8 Advanced usage

#### 3.8.1 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 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

#### 4.1 To set the gas price

- 1 Go to [7.4.6]: 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).

#### 4.2 To set the electricity price

- 1 Go to [7.4.5]: S > 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

# 4.3 To set the electricity price schedule timer

- 1 Go to [7.3.8]: 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.

# 4.4 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.

### 4.4.1 To set the gas price in case of an incentive per kWh renewable energy

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

- 1 Go to [7.4.6]: Settings > Preset values > Fuel price.
- 2 Use ☐ and ☐ to set the correct price.
- 3 Press OK to confirm.

## 4.4.2 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 ox to confirm.

#### 4.4.3 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

### 5 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 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 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<sub>2</sub> 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

- 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.



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#### 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 regained

# 6.2 To find the contact/helpdesk number

Prerequisite: You switched the permission level to Advanced end

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

#### 7 Troubleshooting

If a malfunction occurs,  $\bar{\mathbb{O}}$  is displayed on the home pages. You can press  $\boxed{0}$  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 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 "3.3.1 Room thermostat control - Using the room temperature home pages" [> 4].
	If the problem recurs daily, do one of the following:
	Increase (decrease) the room temperature preset value. See the user reference guide.
	Adjust the room temperature schedule. See "3.5 Schedules: Example" [• 6].
The desired room temperature cannot be reached.	Increase the desired leaving water temperature in accordance with the heat emitter type. See "3.3.2 Room thermostat control - Using the leaving water temperature home pages" [> 5].
The weather-dependent curve is set incorrectly.	Adjust the weather-dependent curve. See the user reference guide.

# 7.2 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.  The desired DHW tank	If you immediately need domestic hot water, activate the DHW tank booster mode. However, this consumes extra energy.
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.
	If the problems recurs daily, do one of the following:
	<ul> <li>Increase the DHW tank temperature preset value.</li> </ul>
	<ul> <li>Adjust the DHW tank temperature schedule.</li> <li>Example: Program to additionally heat up the DHW tank to a preset value (Storage eco = lower tank temperature) during the day.</li> </ul>
The instant DHW temperature is too low. (Only applicable when no tank is installed).	Increase the instant DHW set point temperature.

#### 7.3 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, ① will appear on the user interface.

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



#### INFORMATION

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

# 7.4 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 ① is displayed on the home pages of the user interface. You can press ⑥ 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 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.

### 9 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.



