M8004 2319EN
5 June 2023

Operation manual
Heat pumps with EasyAce control

Read these instructions carefully before installation, use, or maintenance

Contents

7 Troubleshooting

1 Introduction

1.1 EasyAce heat pumps

EasyAce heat pumps feature wireless connectivity, allowing you to manage and monitor your heat pump both locally and remotely. In addition to the wireless touch screen provided with the heat pump, you can connect to the EasyAce system by downloading the simple-to use EasyAce app to your mobile device.

This manual provides comprehensive instructions for how to use your heat pump. This includes instructions on how to connect your heat pump to a mobile device.

NOTICE	Using the tablet for any other purpose may cause slowdowns or interference in the use of the unit's automation system, or prevent the system from being used altogether.

1.2 Instructions and diagrams

Document	Designation (item code)
EasyAce Quick guide	M8007 (34793602*)
EasyAce User manual	M8004 (34793603*)

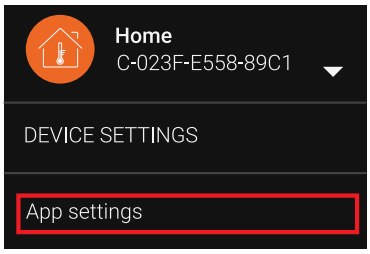
*Finnish version only.

1.3 Basic concepts

Buffer tank	Heating circuit's storage tank.
Brine	Liquid that circulates in the brine circuit (evaporator circuit), usually a mixture of water and ethanol.
Brine circuit	The brine circuit is a long loop of pipe embedded in the earth filled with brine, a cold mixture of ethanol and water. The brine circuit extracts heat from the ground.
Brine pump	The brine pump circulates brine inside and between the brine circuit and the heat pump.
Coefficient of Performance, COP	Ratio between the electricity used by the heat pump and the heating provided. If a heat pump's COP is 3.5, it will generate 3.5 watts of heating for every watt of electricity.
Condenser pump	Pump that circulates heat-transfer fluid (heating water) to the condenser to warm up and from the condenser to the heating circulation.

Degree minutes	The heat pump has a degree minute counter that determines when functions are activated and how long they remain active. The more a measured value differs from a setpoint, the faster the related function will be activated. ● Example: The start delay for the in-line heater is 90 °Cmin. Flow setpoint is 60 °C, and measured flow temperature is 45 °C. This gives a temperature difference of 15 °C. Each minute, 15 °Cmin is deducted from the counter. The in-line heater will switch on in 6 minutes.
Domestic hot water	Hot tap water.
Electric immersion heater	A heating cartridge built into a domestic hot water tank or heating circuit buffer tank. Provides supplementary heating or acts as a backup heater.
Flow	In heating circuits, 'flow' refers to water that has been heated up by the heat pump and fed into the heating circuit. In the brine circuit, 'flow' refers to brine returning from the heat pump to the brine circuit.
Flow temperature	Temperature in a fluid fed into a circuit (water in heating circuits, brine in the brine circuit).
Heating circuit	A circuit that transfers the heat generated by the heat pump to radiators or floor heating pipes. A building can have several heating circuits – one for living areas and another for wet spaces, for example.
Heating curve	A six-point curve that determines the heating provided by the heat pump at different outdoor temperatures.
Heating water	Water heated up by the heat pump and used for heating the domestic hot water tank or a heating circuit buffer tank. If the heat pump is connected directly to a heating circuit (without a buffer tank), heating water is used to heat the heating circuit (as 'flow' water).
In-line heater	An electric heater cartridge built into or connected to a fluid line. In Oilon heat pumps, an in-line heater is often built into the condenser flow pipe to provide supplementary heating or to act as a backup heater.
Outdoor temperature	Outdoor temperature is the primary control variable in space heating; it determines how much heating will the heat pump provide.
Room optimization	A feature that adjusts the heat pump's operation based on measured room temperature. Heat pump operation is still dependent on outdoor temperature and heating curves.

1.4 How to change the language

<table>
<tr><td></td><td>2. From the menu, select App settings.</td></tr>
<tr><td></td><td> 
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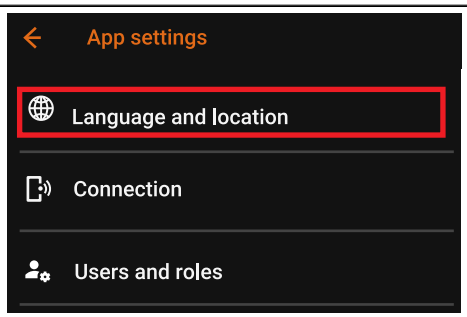
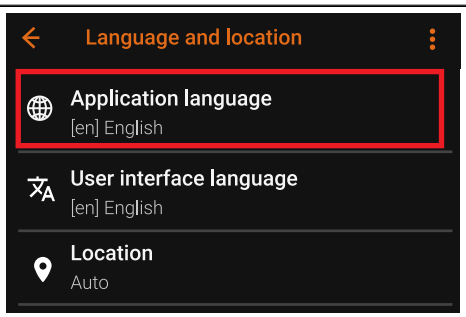
<tr><td>3. Select Language and location.</td><td>4. Select Application language.</td></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><td>5. Select the language from the list.</td><td>6. Check that the language in the User interface menu is also correct.</td></tr>
</table>

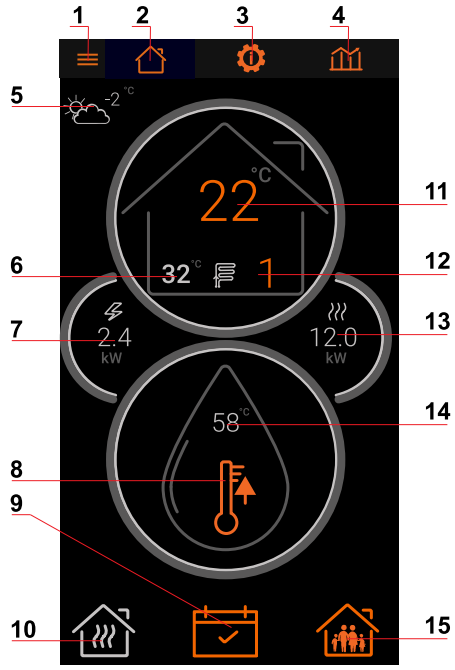
Screen texts in different languages

English	App settings → Language and location →	Application language	User interface language
Finnish	Sovellusasetukset → Kieli ja sijainti	Sovelluksen kieli	Käyttöliittymän kieli
Swedish	Appinställningar → Språk och position	Applikationens språk	Användargränssnittets språk
Estonian	Rakenduse seaded → Keel ja asukoht	Rakenduse keel	Kasutajaliidese keel

2 Home view

2.1 Home view – Overview

1	App settings
2	Home view
3	Settings and status view
4	Trends
5	Outdoor temperature
6	Selected heating circuit's flow water temperature
7	Estimated power consumption
8	Domestic hot water boost
9	Schedules
10	Heat pump status



EasyAce Home view ver. 2

11	Contextual setting (**Room temperature**, **Increase or decrease**). • Tap to access the relevant setting.
12	Selected heating circuit. Tap to open circuit selection.
13	Estimated heating capacity
14	Domestic hot water tank temperature
15	Home or Away function.

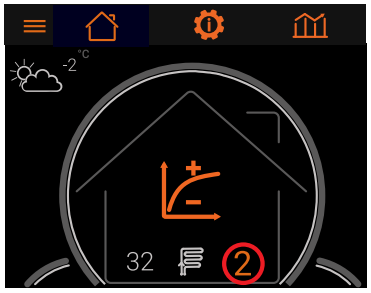
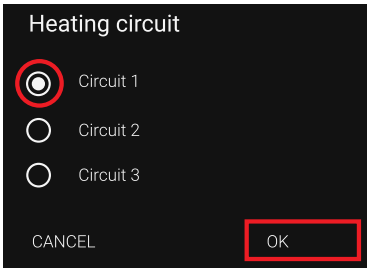
Color codes for operating modes	
Operating mode	**Color**
Reduced	Green
Normal	Grey
Boost	Red

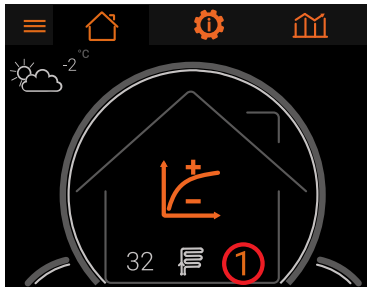
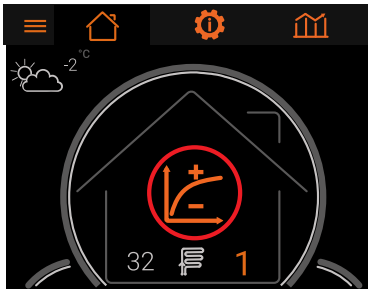
Icons used in the Home view

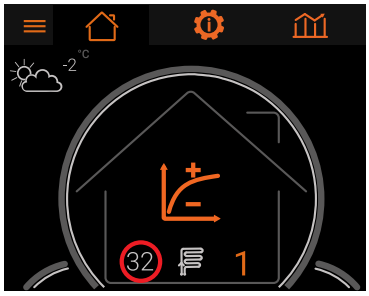
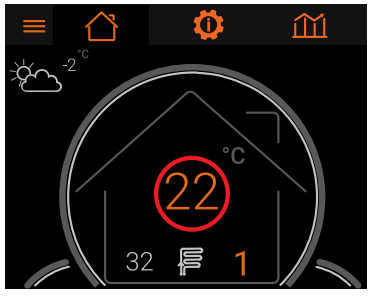
Space heating	Domestic hot water heating	The unit is on standby and ready to start
		
In-line heater on	Increase or decrease heating	Error condition
		
In case of an error, check the alarms by tapping the Error icon. If necessary, contact a repair service or Oilon customer services.		

2.2 Heating

Heating circuits and their temperature

To change the heating circuit displayed in the **Home** view, tap the circuit's number.	The **Heating circuit** window appears. Select another circuit, and tap **OK.**
	

Circuit 1 is now displayed in the **Home** view.	If the heating circuit has no room temperature measurement available, the display shows the icon for increasing and decreasing heating (see sub-section *Increase or decrease heating*).
	

If the heating circuit's **flow temperature measurement** is enabled, the flow water temperature is displayed next to the circuit number.	If the heating circuit's **room temperature measurement** is enabled, the relevant room temperature will be displayed instead.
	

Increase or decrease heating

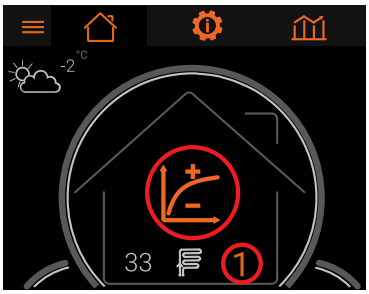
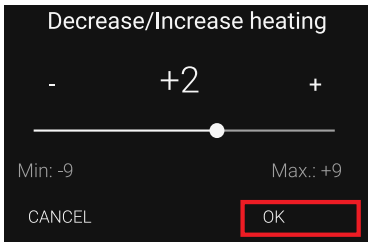
The **Home** view includes an icon for increasing or decreasing heating in the selected circuit. This icon will not be displayed, if the circuit has no room temperature measurement available (or room temperature optimization has been disabled).

When active, the setting moves the circuit's heating curve by moving each of the curve's points up or down by the selected value. This has the same effect as moving the curve sideways. If you change the curve manually, the increase or decrease in heating will be reset.

As changes in room temperature are slow, change the setting by one or two degrees at a time. Wait for one or two days for the change to become noticeable.

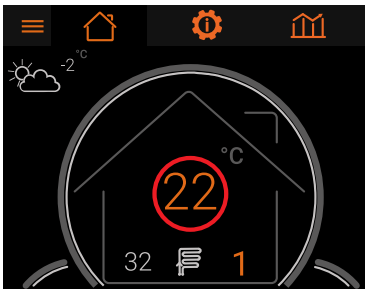
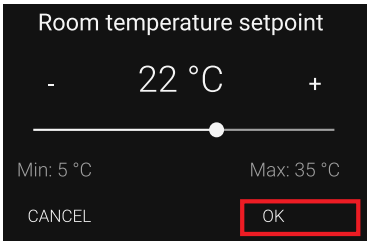
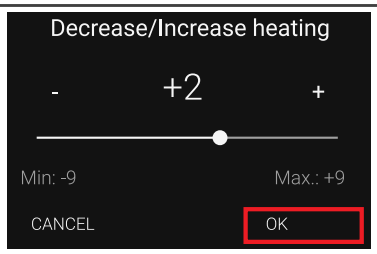
Use cases
Too cold → Increase heating (+) Too hot → Decrease heating (–)

Radiator heating, guideline values	Floor heating, guideline values
Room temperature +1 °C → Increase by 6 (+6) Room temperature −1 °C → Decrease by 6 (−6)	Room temperature +1 °C → Increase by 3 (+3) Room temperature −1 °C → Decrease by 3 (−3)

1. Tap the icon in the middle of the house. The change will apply only to the selected heating circuit. • In the figure, **Circuit 1** has been selected.	2. Increase or decrease the setting, and tap **OK**.
	

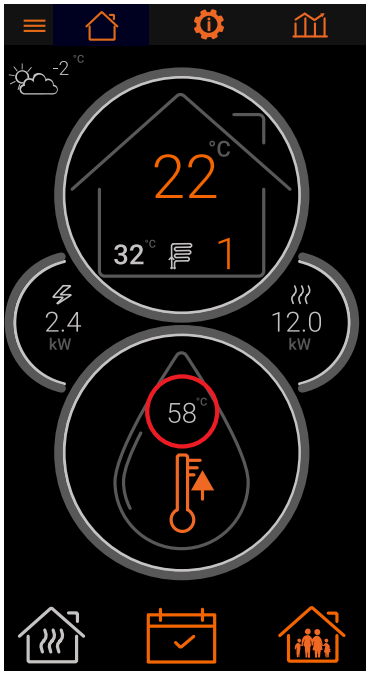
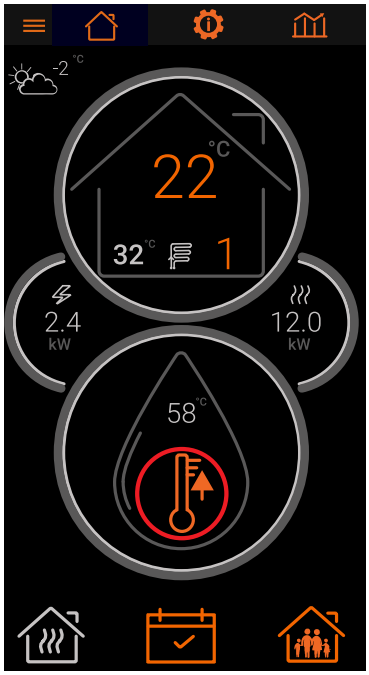
Heating circuits with room temperature measurement

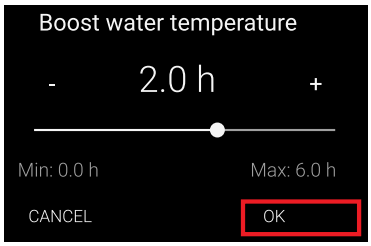
If a heating circuit has room temperature measurement available, the circuit's room temperature setting will be displayed in the **Home** view. If room temperature optimization is also enabled, you can change the **Room temperature setpoint** (target value). This setting will change the circuit's flow temperature indirectly.

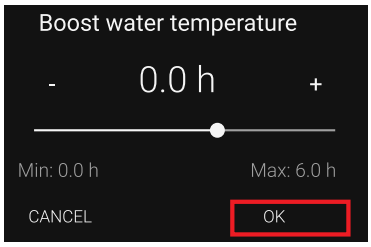
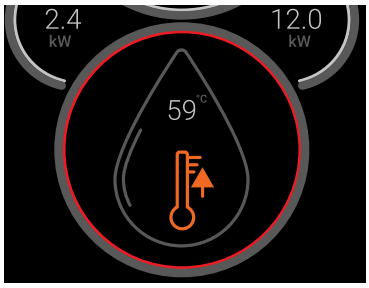
1. Tap the temperature value in the middle of the house icon. • The change will apply only to the selected heating circuit.	2. Change the setting, and tap **OK**. In the figure, the target temperature value has been set to +22 °C. • To only check the setting, simply open the setting window but leave the setting unaltered.
	
If room temperature optimization is disabled, the **Increase or decrease heating** option will be displayed instead (see sub-section *Increase or decrease heating*).	
	

2.3 The domestic hot water display and the boost function

The domestic hot water boost function will raise domestic hot water temperature to a set target temperature and keep it there for a set time. The boost function increases the supply of domestic hot water. After the boost period, the target temperature will return back to its original level.

The value at the top of the water drop shows the domestic hot water tank's measured temperature.	1. To activate the domestic hot water boost function, tap the thermometer icon.
	

2. Select for how long hot water production will be boosted, and tap **OK**.	To check the remaining time, tap the boost function icon. • Exit the setting window by tapping **Cancel**.
	

To stop the boost function before this time has elapsed, set the time at 0 hours and tap **OK**.	When the boost function is active, the domestic hot water area will be marked with a red circle.
	

2.4 Home or Away function and Schedules

There are three operating modes for space heating and domestic hot water heating: **Normal**, **Boost**, and **Reduced**.

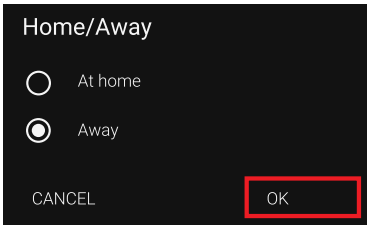
The **Home/Away** function allows you to select between the **Normal** mode and the **Reduced** mode. With the Schedule function, you can schedule the system to switch between the **Normal**, **Reduced**, and the **Boost** mode on different weekdays and at different times.

You can change the settings for each operating mode from **Settings** (see chapter *Settings and status information*).

Color codes for operating modes	
Operating mode	**Color**
Reduced	Green
Normal	Grey
Boost	Red

The Home or Away function

At home	Away
The normal settings selected in the schedule apply. If no schedule has been set, the unit will operate in **Normal** mode.	Space heating and domestic water heating operate in **Reduced** mode. Schedules are disabled.
	

1. To change the setting, tap the house icon.	2. Select either **At home** or **Away**, and tap **OK**.
	

Schedules

> Schedules can also be accessed from heating circuit or domestic hot water settings (see chapter *Settings and status information*).

The Schedule function allows you to set up a weekly schedule for space heating, domestic hot water heating, or both. This allows you to set the heat pump to consume less electricity at peak hours, reducing your electricity bill.

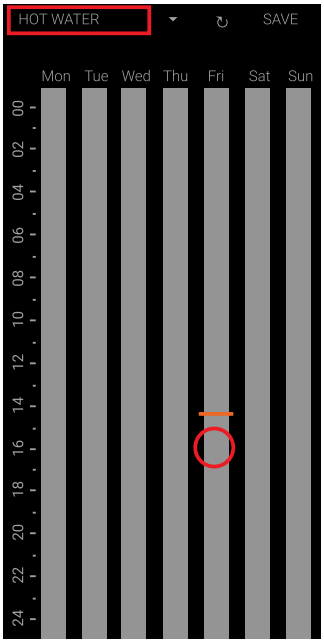
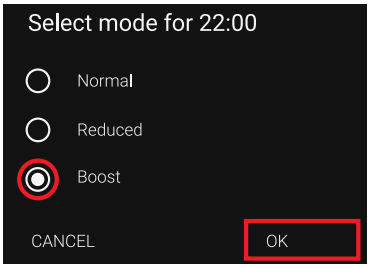
To access the schedules, tap the calendar icon in the **Home** view.

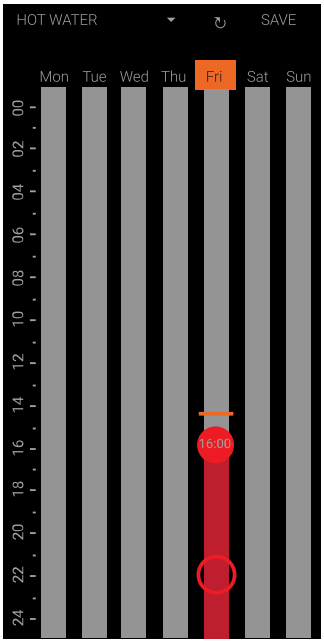
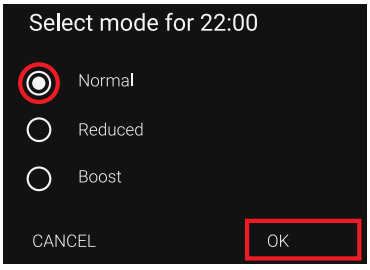
To create a schedule, add a new item in the schedule and select which mode is enabled at that point in time. To add a new item, press and hold a time slot in the schedule. To edit or remove an item, press and hold the item.

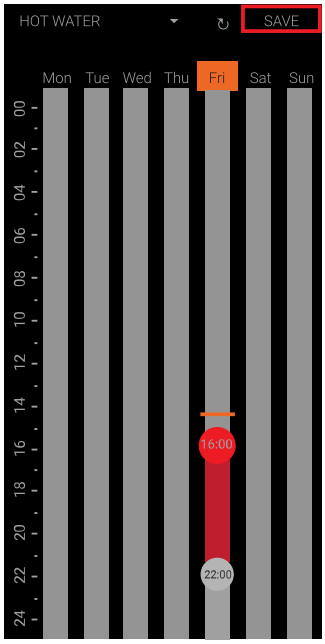
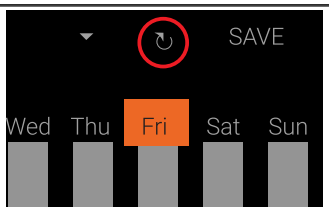
If there are no items in the schedule, the system will operate in **Normal** mode.

Color codes for operating modes	
Operating mode	**Color**
Reduced	Green
Normal	Grey
Boost	Red

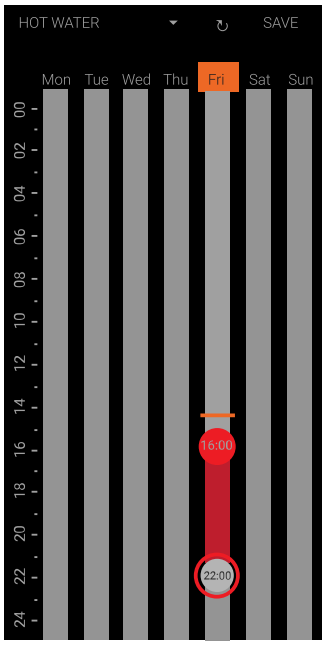
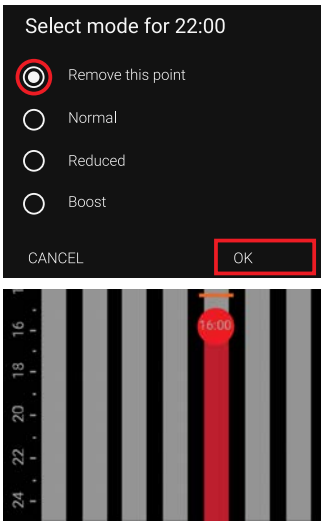
Scheduling an event

1. Select the schedule for a heating circuit or domestic hot water. 2. Press and hold the desired time slot in the schedule. ● In the image, Friday at 16:00 has been selected.	3. Select the operating mode, and tap **OK**. ● In the figure, **Boost** has been selected. Domestic hot water heating will now be boosted starting from Friday at 16:00 until midnight.
	

4. To specify an end time for the scheduled event, press and hold another time slot within the same day.	5. Select the operating mode for the new slot, and tap **OK**. ● In the figure, **Normal** has been selected. Domestic hot water heating will now be boosted on Fridays between 16:00 and 22:00. Normal operation will resume from 22:00 onwards.
	

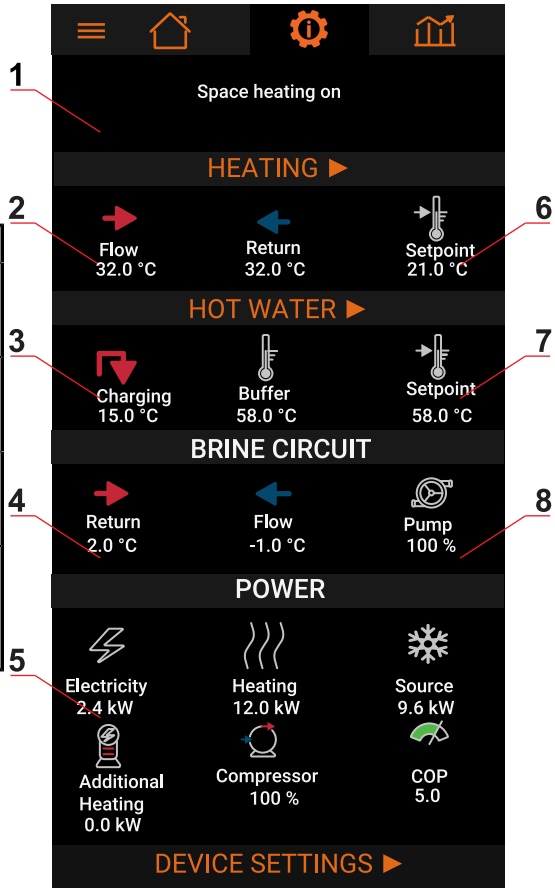
6. To save the settings and finish the process, tap **Save**. ● Days with unsaved schedule items are highlighted in orange.	To discard the changes, tap the **Cancel** button in the upper edge of the screen. ● Once the **Cancel** button is pressed, the schedule will revert to the previously saved version.
	

Editing or deleting a scheduled event

1. Press and hold the item you wish to edit or delete. ● In the figure below, the 22:00 item was selected.	2. Select a new operating mode, or select **Remove this point.** ● In the image below, the **Remove this point** option has been selected. 3. Confirm by pressing **OK**. ● The item scheduled for 22:00 has now been removed. Remove the second item (the end time) in the same way. 4. Finish by tapping **Save**.
	

3 Settings and status information

3.1 Status view – Overview

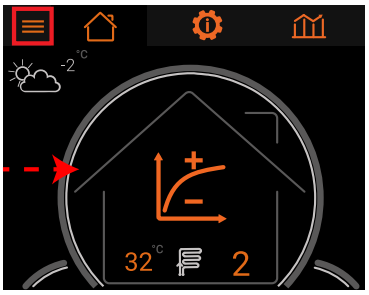
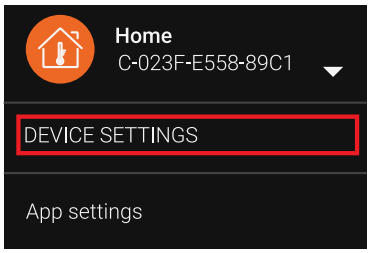


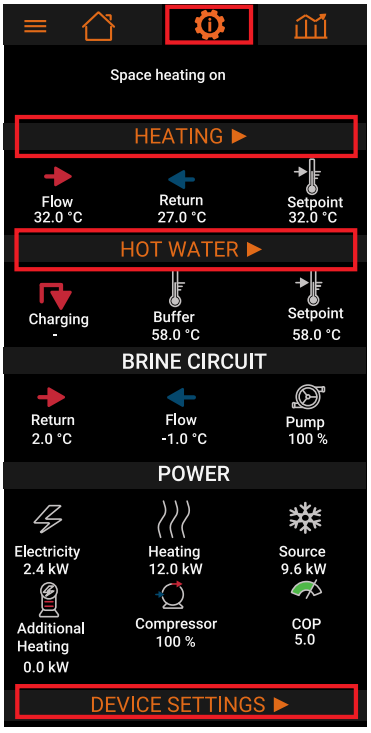
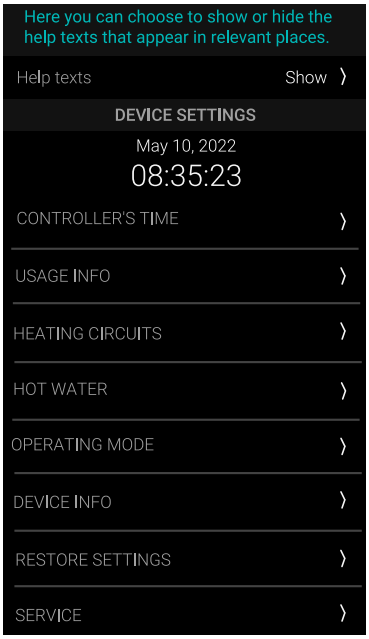
1	Heat pump status
2	Space heating, flow and return temperature
3	Domestic hot water tank, heating water temperature
4	Brine circuit, flow and return temperature
5	Estimated performance and power consumption

6	Space heating, target for flow temperature
7	Domestic hot water tank, measured temperature and target temperature
8	Brine circuit pump speed

3.2 Settings menus

Settings can be accessed from anywhere regardless of the current view.

1. Open the main menu from the top left corner or by swiping right from the left edge of the screen.	2. From the menu, select **Device settings**.
	

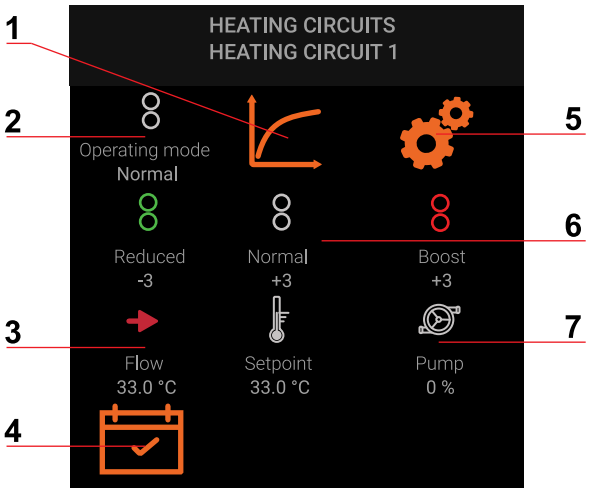
Alternatively, tap the middle tab. From the bottom of the page, select **Device settings**. • To directly access heating or domestic hot water settings and status information, tap the relevant heading.	3. You can use the **Device settings** menu to access any device settings you need.
	

3.3 Heating

If room temperature optimization is not in use, this view will indicate how different operating modes will influence the flow temperature (which is determined by the heating curve).

If a direct connection is used, the heating water return temperature (condenser in) will also be displayed. The heat pump heats the heating circuit directly, which means that there is no buffer tank in the heating circuit.

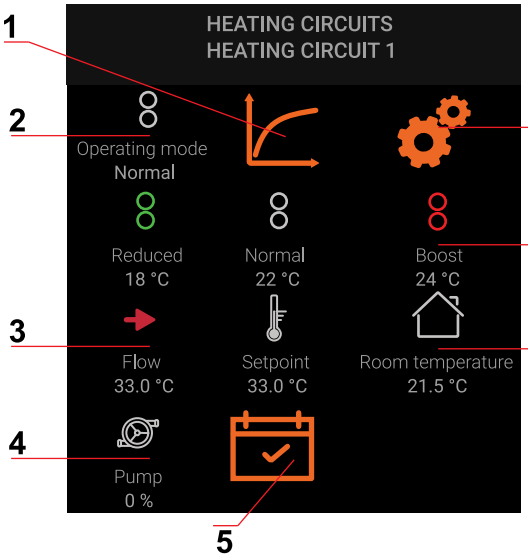
Heating circuit views



1	Heating curve
2	Current operating mode
3	Circuit flow temperature and target temperature
4	Schedule for operating modes

5	Settings
6	The impact of different operating modes
7	Heating circuit pump speed (if the circuit has its own pump).

If room temperature optimization is enabled, the view will show the current room temperature as well as the room temperature target values for each operating mode.



1	Heating curve
2	Current operating mode
3	Circuit flow temperature and target temperature
4	Heating circuit pump speed (if the circuit has its own pump)
5	Schedule for operating modes

6	Settings
7	The impact of different operating modes
8	Room temperature

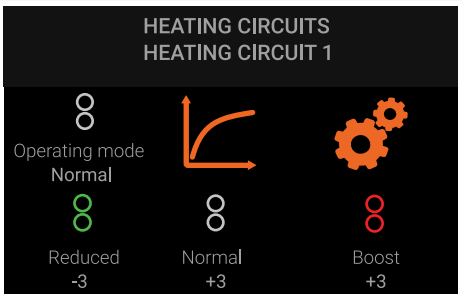
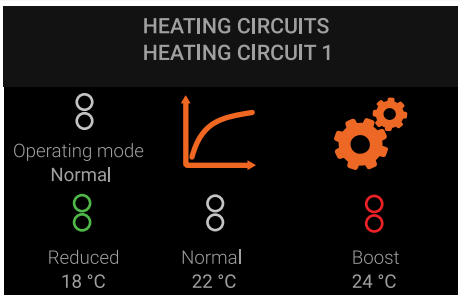
Heating curve

The heating curve determines the flow temperature: the temperature of water pumped into the heating circuit at different outdoor temperature points. Usually, the installation company takes care of heating curve configuration.

The heating curve consists of six adjustable points. Curve values should be tuned in during the first few heating seasons.

The impact of different operating modes

There are three operating modes for space heating: **Normal**, **Boost,** and **Reduced** (see section *Home or Away function and Schedules*).

No room temperature measurement available or temperature optimization disabled	Room temperature measurement active and temperature optimization enabled
	

Room temperature optimization disabled

The selected operating mode will either increase (+) or decrease (–) the target flow temperature by a set amount. This influences room temperature indirectly, see the table below.

Radiator heating, guideline values	Floor heating, guideline values
Room temperature +1 °C → Increase by 6 (+6) Room temperature −1 °C → Decrease by 6 (−6)	Room temperature +1 °C → Increase by 3 (+3) Room temperature −1 °C → Decrease by 3 (−3)

For example, if the flow temperature in the curve is +35 °C and the **Reduced** setting is –3 °C, the target flow temperature will be +32 °C.

After changing a setting, wait for at least two or three days to see if the change has made a difference. The setting for the **Normal** operating mode is also shown in the **Home** view.

Room temperature optimization enabled

If the system is equipped with an indoor temperature sensor and temperature optimization is enabled, this setting will change the room temperature setpoint directly instead. Changing the operating mode will directly increase or decrease the room temperature setting. The room temperature setpoint influences flow temperature through the room temperature optimization function.

After changing a setting, wait for at least two or three days to see if the change has made a difference.

Settings

Device settings → Heating circuits Status view → Heating	
Heating curve	See sub-section *Heating curve.*
The impact of different operating modes	See sub-section *The impact of different operating modes.*
Schedule for operating modes	See section *Home or Away function and Schedules.*

Device settings → Heating circuit 1 → Settings	
Stop heating temperature (summer break)	Heating will stop when the long-term outdoor temperature average is higher than this temperature. Heating will resume when the long-term outdoor temperature average is lower than this temperature. ● **Typical setting: +10...+15 °C** ● Set the value slightly below the desired room temperature.
Outdoor temperature, avg.	An automatically calculated long-term outdoor temperature average.
Max. flow temperature	The maximum flow temperature when the outdoor temperature matches the **Design outdoor temperature** setting. The system will keep the flow temperature determined by the heating curve below this temperature value. ● **Typical setting, floor heating:** conrete floors +35 °C, wooden floors +45 °C ● Check the temperature value from the floor or floor heating supplier (or from the applicable plans and specifications).
Min. flow temperature	The system will keep the flow temperature determined by the heating curve above this temperature value. ● **Typical setting: +20...+25 °C** ● Set the minimum flow temperature at or slightly above the required room temperature.

Device settings → Heating Circuit 1 → Settings → Room temperature	
Flow temperature is primarily determined by the heating curve. Temperature optimization adjusts flow temperature based on room temperature measurements and a setpoint. An indoor temperature sensor is required, and the heat pump's automation must be able to control the indoor temperature. **To enable temperature optimization** ● **Floor heating:** disable independent zone control (if present) in the heating manifold. ● **Radiator heating:** ensure that radiator valves (thermostat or precontroller) are always fully open.	
Temperature optimization	**OFF** Temperature optimization is not in use.
	In use Temperature optimization is enabled.
Gain factor	The unit's controller adjusts flow temperature based on the measured indoor temperature. The greater the gain factor, the greater the change. ● Wait for at least 2–3 days to see if the change has made a difference.

The settings for Circuit 2 and 3 are identical to Circuit 1 settings.

3.3.1 Typical heating curve adjustments

1. If the room temperature is too cold when the outdoor temperature is 0 °C, slightly increase the flow setpoint at outdoor temperature points −2 °C and +8 °C.
2. Wait for at least two or three days to see if the change has made a difference.
3. Adjust the curve if necessary.

3.3.2 Curing concrete floors with a heat pump

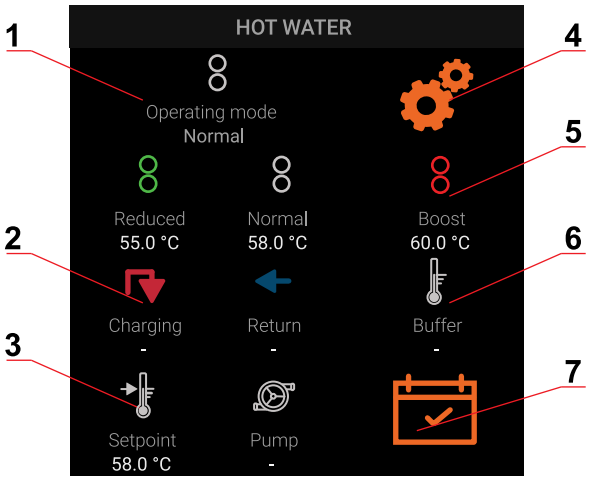
It is not advisable to use the heat pump to cure floor structures.

- Keep the temperature considerably lower than usual (maximum: +20 °C) before the concrete slab has cured and after the floor has been tiled.
- Increase the temperature gradually over a longer period of time.
- Keep the temperature as even as possible.
- Check the temperature values and curing times from the floor or floor heating supplier (or from plans and specifications).

3.4 Domestic hot water

Domestic hot water view

1	Current operating mode
2	Domestic hot water tank's heating water flow and return temperature (condenser out and condenser in)
3	Target temperature for domestic hot water tank and condenser pump speed



4	Settings
5	Target temperature for each domestic hot water tank operating mode
6	DHW storage tank temperature
7	Schedule for operating modes

Domestic hot water settings

Device settings → Hot water Status view → Hot water	
Setpoints for operating modes (pos. 5)	There are three operating modes for domestic hot water heating: **Normal**, **Boost**, and **Reduced**. See section *Home or Away function and Schedules*. The **Boost** function can be used only if using the in-line heater for domestic hot water heating has been enabled (i.e. the additional heater's **Mode for hot water** setting is either **After compressor** or **With compressor**).
Schedule for operating modes (pos. 7)	See section *Home or Away function and Schedules.*

Device settings → Hot water → Settings Status view → Hot water → Settings	
Hot water heating	**In use** Domestic hot water heating is enabled.
	Off Domestic hot water heating is disabled.

Device settings → Hot water → Settings → Legionella inhibition Status view → Hot water → Settings → Legionella inhibition	
This function heats up the domestic hot water to a high temperature to prevent bacterial growth. Temperature is kept at a high level for a clean-up period. To achieve sufficient temperature levels, the domestic hot water in the tank can be heated up using both the compressor and the unit's electric heater. • If domestic hot water temperature remains mostly at or above +55 °C, the function is usually not necessary. • The boost function can be used only if using the electric heater for heating domestic hot water has been enabled (i.e. the additional heater's **Mode for hot water** setting is either **Inhibition, After compressor**, or **With compressor**).	
Inhibition	**Off** Legionella inhibition is disabled.
	In use Legionella inhibition is enabled.

Device settings → Hot water → Settings → Legionella inhibition Status view → Hot water → Settings → Legionella inhibition	
Time between starts	The interval between heating periods. This interval depends on the domestic hot water temperature setting. ● **Typical setting: 3–7 days** ● With lukewarm domestic hot water, use a shorter interval.
Inhibit start time	The time of day when the function is activated. Select a time when domestic hot water is not typically used, such as nighttime hours.
Time to next start	The number of days (d) before the function is activated again.

3.5 Other settings

Device settings → Usage info	
This option shows usage information across the unit's entire operating history as well as for the current year and the previous three full years.	
Heating	An estimate of the space heating energy produced.
Hot water	An estimate of the energy produced for heating domestic hot water.
Electricity	An estimate of the compressor's and the electric heater's power consumption.
Additional heating	An estimate of the electric heater's power consumption.
Compressor running time	The number of hours the compressor has been in operation.
Compressor times started	The number of times the compressor has started.

Device settings → Usage info → Current year	
Heating	An estimate of the space heating energy produced within the current year.
Hot water	An estimate of the energy produced for heating domestic hot water within the current year.
Electricity	An estimate of the compressor's and the electric immersion heater's power consumption within the current year.
History	
The above information shown for the previous three full years, broken down by the year.	

Device settings → Heating circuits
See section *Heating.*

Device settings → Hot water
See section *Domestic hot water.*

Device settings → Operating mode	
Heat pump	**Off** The heat pump's compressor and electric immersion heater are off.
	In use The heat pump is on. The electric immersion heater can also be used (if allowed by the operating mode).
	Additional heater only Only the unit's internal electric immersion heater is used for heating. The compressor and the brine circuit are not in use.

Device settings → Device info
Displays details of the unit and the associated software.

Device settings → Restore factory settings
This function reverts all settings to factory defaults, except for password-protected settings. The password-protected settings accessible through the **Service** menu will not be reverted.

3.5.1 Controller's time

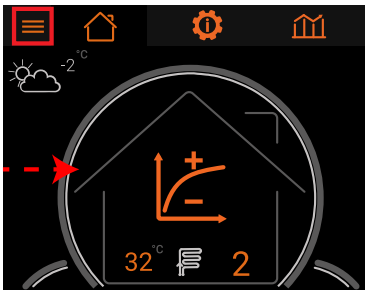
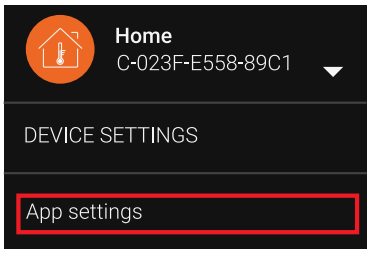
Device settings → Controller's time	
If the data hub is connected to the internet, the current time is retrieved automatically. If there is no internet connection, set the time by hand.	
Time zone	The current time zone (UTC; 2 h in Finland).
Day light saving	**No** The system does not adjust automatically for daylight saving time.
	Yes The system automatically adjusts for daylight saving time.
Current time	**Normal** Normal time (winter time) is active.
	Day light saving Daylight saving time is active.

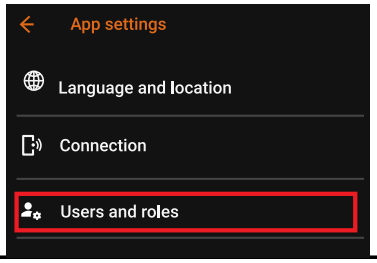
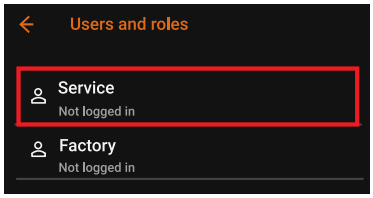
4 Service settings

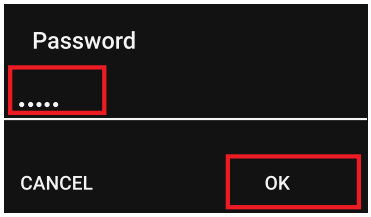
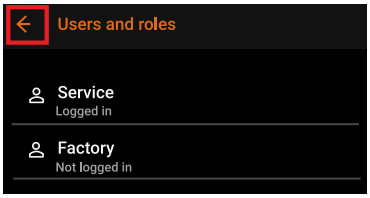
4.1 Signing in as a service level user

The Service level password is **8520**.

To gain access to all settings, sign in as a service-level user.

1. Open the main menu from the top left corner or by swiping right from the left edge of the screen.	2. From the menu, select **App settings**.
	

3. Select **Users and roles**.	4. Select **Service**.
	

5. Enter the password and tap **OK**. • The Service level password is **8520**.	6. You are now signed in as a service-level user. Return from the menu by tapping the arrow in the top left corner.
	

4.2 Heating settings

Device settings → Service → Heating	
The **Heating buffer sensor** setting determines the heat source used by heating circuits: either the heat pump's condenser or a buffer tank. Select other circuit equipment from each circuit's settings.	
Heating buffer sensor	**Not connected** The heat pump is connected directly to the building's heating system without a buffer tank. No buffer tank sensor is connected. There can be an (unpowered) instantaneous water cylinder, but not a buffer tank regulated by the heat pump.
	Connected The heat pump is connected to a buffer tank which is regulated by the heat pump. The tank is equipped with a temperature sensor which is connected to the heat pump. Any heating circuits in the system are connected to the buffer tank.
Buffer	Buffer tank temperature.

Device settings → Service → Heating → Compressor (no buffer tank)	
Start delay	The compressor's start delay in space heating. Once the delay has elapsed, the compressor will start. ● **Typical setting, floor heating:** concrete floors 120, wooden floors 80–60 ● **Typical setting, radiator heating:** 80–40 ● Increase the delay to extend the interval between starts and to have the compressor run for longer at a time. ● The delay is properly set when room temperature stays even and the compressor starts 2–3 times per hour. The delay is based on degree minutes, and it applies when flow water temperature is below its setpoint. Once the measured temperature is above the setpoint, the delay will be reset. ● Delay calculation: flow setpoint – measured flow temperature.
Stop delay	The compressor's stop delay in space heating. Once the delay has elapsed, the compressor will stop. ● **Typical setting: approx. 5** ● Increase the delay to have the compressor run for longer at a time. ● If the delay is greater than 0, flow water temperature can be above the setpoint. The delay is based on degree minutes, and it applies when flow water temperature is above its setpoint. Once the measured temperature is below the setpoint, the delay will be reset. ● Delay calculation: flow setpoint – measured flow temperature.

Device settings → Service → Heating → Compressor (with buffer tank)	
Heating setting	Flow temperature determined by the heating curve.
Start difference	This setting determines the threshold for starting the heat pump in relation to the heating setting. ● **Negative value:** The setting determines how much the temperature in the buffer tank needs to fall below the heating setting before heating starts. ● **Positive value:** The seting determines how much above the heating setting can the temperature in the buffer tank be before heating starts.
Start limit	The heat pump will start heating the buffer tank when buffer tank temperature falls below this temperature (heating setting – start difference value).
Stop difference	The stop difference determines how many degrees above the start limit the buffer tank will be heated.
Stop limit	Once the buffer tank temperature exceeds this temperature (start limit + stop difference), the heat pump will stop heating the tank.
Charging difference	The amount by which the setpoint for the heating water used for heating the buffer tank will be increased in relation to the stop limit.
Charging setpoint	The setpoint for the heating water which is used for heating the buffer tank.
Minimum temperature	The minimum buffer tank temperature regardless of any other settings or the heating curve.

4.3 Additional heating, space heating

Device settings → Service → Heating → Additional heating	
An electric immersion heater (in-line heater) provides heating in the same way as the compressor and uses the same setpoint values. The heater switches on and off (and transitions between higher and lower power stages) with a delay.	
Start delay with compressor	The electric heater's start delay in space heating. Once the delay has elapsed, the first power stage will switch on. ● **Typical setting: 120–600** ● Increase the delay to move forward the point at which the heater is switched on (and starts to supplement the compressor). The delay is based on degree minutes, and it applies when the compressor is running and the flow temperature is below its setpoint. Once the measured temperature is above the setpoint, the delay will be reset. ● Delay calculation: flow setpoint – measured flow temperature. ● The following power stages are governed by the **Power increase delay**.
Power increase delay	Whe the first power stage is activated, the **Power increase delay** takes effect. After the delay, the next power stage will switch on. ● **Typical setting: 40–120** ● Increase the delay to move forward the point at which the next power stages will be switched on to provide supplementary heating (for the compressor and the first stage). The delay is based on degree minutes, and it applies when the compressor is running, the electric heater's first power stage is active, and the flow temperature is below its setpoint. Once the measured temperature is above the setpoint, the delay will be reset. ● Delay calculation: flow setpoint – measured flow temperature.
Power decrease delay	The stages are switched off one by one, with the Power decrease delay in between. The stage that was switched on last will be switched off first. ● **Typical setting: 0–2** ● Decrease the delay to have the power stages switch off earlier after the flow temperature exceeds its setpoint. ● If the delay is greater than 0, the heater power stages will remain switched on even after the flow temperature has exceeded the setpoint. ● For a more stable flow temperature, use a setting slightly above zero. The delay is based on degree minutes, and it applies when the compressor is running, the electric heater is active, and the flow temperature is above its setpoint. Once the measured temperature is below the setpoint, the delay will be reset. ● Delay calculation: flow setpoint – measured flow temperature.
Mode for heating: operating mode selection for space heating	**Freezing protection only** The electric heater will be switched on only when heating water temperature falls below +5 °C. The freezing protection function monitors the temperature in the condenser, buffer tank, and the heating circuits. Once the temperature exceeds +10 °C, the electric heater will be switched off. In freezing protection, space heating has priority over domestic hot water heating. ● **If this option is selected, the electric heater won't be switched on during a fault unless the temperature falls below the Freezing protection limit.**

Device settings → Service → Heating → Additional heating	
	Backup use only The electric heater will be switched on if: 1. The outdoor temperature is below +5 °C (freezing protection). 2. An alarm prevents the compressor from starting (backup operation). In backup use, space heating has priority over domestic hot water heating. Select this option, if the fuse for the heat pump power supply is not rated for running the compressor and the electric heater in parallel.
	With compressor (parallel operation) The electric heater will be switched on if: 1. The outdoor temperature is below +5 °C (freezing protection). 2. An alarm prevents the compressor from starting (backup operation). 3. The target temperature for flow water from the heat pump has not been reached, and the start delay for the electric heater has elapsed. Select this option, if the fuse for the heat pump power supply is rated for running the compressor and the electric heater in parallel.
Nominal output of power stages	The rated output for the power stages in the condenser circuit's in-line heater. There can be three power stages. The value is used for assessing electrical power consumption and in functions that restrict the heat pump's electrical current.

4.4 Heating circuits

Device settings → Service → Heating → Heating circuits	
Heating curve	Start by setting the minimum and maximum temperature. The flow temperature can be adjusted using a six-point heating curve. This menu allows you to configure each point separately. ● See section *Heating*.
Preset heating curve	With this function, you can automatically create a heating curve between the minimum and maximum flow water temperature. Set the minimum and maximum temperature values in the heating circuit's settings (see section *Heating*).

Device settings → Service → Heating → Heating circuit 1	
Select the equipment used in the heating circuit. Note that the **Heating buffer sensor** setting determines the heat source used by heating circuits (condenser or buffer tank). ● If you enable 3-way valve control, the option for inverted valve control will also be displayed. ● The settings for **Circuit 2** and **3** are identical to **Circuit 1** settings.	
Heating curve	See *Heating circuits*.
Circuit in use	**No** The circuit is not in use.
	Direct connection The heat pump is connected directly to the building's heating system. The system has no circulation pump or control valve that would be controlled by the heat pump.
	Direct connection, with pump The system has a circulation pump which is controlled by the heat pump.
	3-way valve The system has a circulation pump and a 3-way control valve, both of which are controlled by the heat pump.

Inverted control	**Off** 0–10 V When the heating circuit requires more heating, the level of the valve control signal is increased. ● **0 V:** valve fully closed, **10 V:** valve fully open. 3–point The outputs for opening and closing the valve correspond to the default connection indicated in the electric diagram. ● **Heating circuit 1:** Q8 closed, Q9 open.
	In use 0–10 V When the heating circuit requires more heating, the level of the valve control signal is reduced. ● **0 V:** valve fully open, **10 V:** valve fully closed 3-point The outputs for opening and closing the valve are reversed. ● **Heating circuit 1:** Q8 open, Q9: closed.

Min. flow temperature	The system will keep the flow temperature determined by the heating curve above this temperature value. ● **Typical setting: +20...+25 °C** ● Set the the minimum flow temperature slightly above the required room temperature.
Max. flow temperature	The maximum flow temperature when the outdoor temperature matches the **Design outdoor temperature** setting. The system will keep the flow temperature determined by the heating curve below this temperature value. ● **Typical setting, floor heating:** concrete floors +35 °C, wooden floors +45 °C ● Check the temperature value from the floor or floor heating supplier (or from the applicable plans and specifications).
Preset heating curve	Start by setting the minimum and maximum temperature. The flow temperature can be adjusted using a six-point heating curve. This menu allows you to adjust each point separately. Curve values should be tuned in during the first few heating seasons. See section *Heating*.

Heating circuit 2 and 3
See the instructions for heating circuit 1 setup. The circulation pump and control valve for heating circuit 2 and 3 require an auxiliary controller.

4.5 Hot water settings

Device settings → Service → Hot water	
Buffer	DHW storage tank temperature

Device settings → Service → Hot water → Compressor	
Setpoint	Target value (setpoint) for domestic hot water tank temperature.
Start difference	This value determines by how much the domestic hot water temperature needs to fall below its setpoint before domestic hot water heating will start. ● **Typical setting: 4–6 °C**
Start limit	Domestic hot water tank temperature at which DHW heating is started (target value – start difference).
Charging difference	The heating water used for heating the DHW tank needs to be warmer than the DHW setpoint temperature (the tank's target temperature). This setting determines the offset added to the DHW setpoint when charging the tank.
Charging setpoint	The setpoint for the heating water used for heating the DHW tank (target value + start difference).

4.6 Additional heating, hot water

Device settings → Service → Hot water → Additional heating	
Start delay with compressor	The electric heater's delay for heating domestic hot water. Once the delay has elapsed, the first electric heater power stage will switch on. ● **Typical setting: 60–180** ● Increase the delay to move forward the point at which the heater is switched on (and starts to supplement the compressor). The delay is based on degree minutes, and it applies when the compressor is running and the flow temperature is below its setpoint. ● Delay calculation: flow temperature setpoint – measured flow temperature. ● Flow temperature setpoint: DHW setpoint + charging difference ● The following power stages are governed by the Power increase delay instead.
Power increase delay	The electric heater's delay for heating domestic hot water after the first power stage has switched on. Once the delay has elapsed, the next electric heater power stage switch on. ● **Typical setting:** 20–40 ● Increase the delay to move forward the point at which the next power stage switches on to supplement the compressor and the first stage. The delay is based on degree minutes, and it applies when the compressor is running, the electric heater's first power stage is active, and the flow temperature is below its setpoint. Once the measured temperature is above the setpoint, the delay will be reset. ● Delay calculation: flow temperature setpoint – measured flow temperature ● Flow temperature setpoint: DHW setpoint + charging difference
Power decrease delay	The stages are switched off one by one, with the Power decrease delay in between. The stage that was switched on last will be switched off first. ● **Typical setting: 0–2** ● Decrease the delay to have the power stages switch off earlier after the flow temperature exceeds its setpoint. ● If the delay is greater than 0, the heater power stages will remain switched on even after the flow temperature has exceeded the setpoint. For a more stable flow temperature, use a setting slightly above zero. The delay is based on degree minutes, and it applies when the compressor is running, the electric heater is active, and the flow temperature is above its setpoint. Once the measured temperature is below the setpoint, the delay will be reset. ● Delay calculation: flow temperature setpoint – measured flow temperature. ● Flow temperature setpoint: DHW setpoint + charging difference
Mode for hot water: operating mode selection for domestic hot water heating	If one of the settings below is selected, the system can switch on the electric heater when the compressor reaches its operating limits and switches off (or the legionella function is active). The setting influences DHW heating only.
	Freezing protection only The electric heater will switch on only when DHW tank temperature falls below +5 °C (freezing protection). Once the temperature in the DHW tank exceeds +10 °C, the heater will switch off. ● In freezing protection, space heating has priority over domestic hot water heating. ● **If this option is selected, the electric heater won't be switched on during a fault unless the temperature falls below the Freezing protection limit.** ● The highest setpoint for domestic hot water is lower than the setpoints for the operating modes in which the system can use the heater.
	Backup use only The electric heater will switch on if: 1. DHW tank temperature is below +5 °C (freezing protection). 2. An alarm prevents the compressor from starting (backup operation). In backup use, space heating has priority over domestic hot water heating. The highest setpoint for domestic hot water is lower than the setpoints for the operating modes in which the system can use the heater.

Device settings → Service → Hot water → Additional heating	
	After compressor The electric heater will switch on if: 1. DHW tank temperature is below +5 °C (freezing protection). 2. An alarm prevents the compressor from starting (backup operation). 3. The target temperature for the DHW tank is not reached, and the compressor reaches its operating limits and switches off. There is a short delay between switching off the compressor and switching on the heater. Select this option, if the fuse for the heat pump power supply is not to run both the compressor and the heater at the same time.
	With compressor (parallel operation) The electric heater will switch on if: 1. DHW tank temperature is below +5 °C (freezing protection). 2. An alarm prevents the compressor from starting (backup operation). 3. The target temperature for the DHW tank is not reached, and the compressor reaches its operating limits and switches off. 4. The target temperature for the DHW tank has not been reached, and the start delay for the electric heater has elapsed. There is a short delay between switching off the compressor and switching on the heater. Select this option, if the fuse for the heat pump power supply is rated to run both the compressor and the heater at the same time.
Nominal output of power stages	The rated output for the power stages in the condenser circuit's in-line heater. There can be three power stages. The value is used for assessing electrical power consumption and for functions that restrict the heat pump's electrical current.

4.7 Pump settings

Device settings → Service → Pump → Brine pump	
Usually, it is advisable to set heat source pump in the **Constant speed** mode, and its speed should be set to 100%.	
Control low limit	The minimum speed for the brine circuit pump. • **Typical setting: 50% or higher**
Control high limit	The maximum speed for the brine circuit pump. • **Typical setting: 100%.**
Control	The current speed control setting for the brine circuit pump.
Operation on standby	**Stop** The brine pump will continue to run only as long as the compressor is on. When the compressor is on, the operating mode determines how the pump is controlled.
	Idle The brine pump will continue to run after the compressor has stopped at a speed corresponding to the **Control low limit** setting.
Measurement	Specifies which measurement will be used for adjusting the pump (depending on the pump's operating mode). Examples include the brine circuit's temperature difference or the brine circuit flow (or brine circuit return) temperature.
Operating mode	**Pump not in use** There is no brine circuit pump connected to the heat pump.
	Outlet temperature The system will control the speed of the brine circuit pump to keep the return line temperature at a level determined by the **Speed control setpoint**. • **Typical speed control setpoint: –3 °C**
	Temperature difference The system will control the speed of the brine circuit pump to keep the difference between the brine circuit flow and return temperature at the level determined by the **Speed control setpoint**. • **Typical speed control setpoint: 2–4 °C**

Device settings → Service → Pump → Brine pump	
	Constant speed The brine pump runs at a constant speed determined by the **Speed control setpoint.**
	Always on The brine circuit pump will always run at a constant speed (determined by the Speed control setpoint) regardless of the **Operation on standby** setting.
Speed control setpoint	This speed setting is shared between all brine circuit pump operating modes. However, the unit and number value used for the setting depends on the operating mode. ● If you change the operating mode, this value will also change.

Device settings → Service → Pump → Condenser pump	
The preferred mode setting for the condenser pump is **Temperature difference.** The temperature difference should be set to 5...15 °C (depending on the heating system). During domestic water heating, the pump runs in **Constant speed** mode at 100% speed.	
Low limit	Current low limit for the control value.
High limit	Current high limit for the control value.
Control	The current speed control value for the condenser pump.
Operation on standby	**Stop** The condenser pump will continue to run only as long as the compressor is on. When the compressor or the electric heater is on, the type of control will be determined by the current operating mode.
	Idle The condenser pump will continue to run after the compressor has stopped at a speed corresponding to the Control low limit for space heating.
Measurement	Specifies which measurement will be used for adjusting the pump (depending on the pump's operating mode). Examples include the brine circuit's temperature difference or the brine circuit flow (or brine circuit return) temperature, depending on the operating mode.
Mode for heating: operating mode selection for space heating	**Pump not in use** The pump will not be used in space heating.
	Outlet temperature The system adjusts the speed of the condenser pump to keep flow temperature at the level determined by the **Speed control setpoint**.
	Temperature difference The system adjusts the speed of the condenser pump to keep the difference between the condenser circuit inlet and outlet temperature at the level determined by the **Speed control setpoint**. ● **Typical Speed control setpoint setting: 5...15 °C**
	Constant speed The condenser pump runs at a constant speed (at the speed determined by the **Speed control setpoint**). ● Set the Speed control setpoint so that the temperature difference at the start of the heating season is approximately 5 °C when the heat pump is on.
	Always on The condenser pump will always run at a constant speed (at the speed determined by the Speed control setpoint) regardless of the **Operation on standby** setting. ● Set the Speed control setpoint so that the temperature difference at the start of the heating season is approximately 5 °C when the heat pump is on.
Speed control setpoint for heating	This speed setting is shared between all condenser pump operating modes. The unit and number value used for the setting depends on the operating mode. If you change the operating mode, this value will also change.
Control low limit for heating	The minimum speed for the condenser pump. ● **Typical setting: 30% or higher**
Control high limit for heating	The maximum speed for the condenser pump. Usually, the value should be set to 100%. If a high flow rate causes noise in the pipes, reduce the noise by lowering this setting.

The condenser pump settings for domestic hot water heating are identical, but they should not be changed.

4.8 General settings

Device settings → Service → Initial setup	
See the product's initial setup settings in the heat pump's *Installation and commissioning* manual.	
Hide initial setup menu	After initial setup has been completed, the initial setup menu will no longer be displayed. To display the menu again, select the option **No**.

Device settings → Service → Measurements
The Measurements view provides a summary of all measurements, activation threshold values, and target values.
Device settings → Service → Measurements → Hardware inputs/outputs
The **Hardware inputs/outputs** view shows the details of the controller's physical inputs and outputs as they are (without conversions). For example, temperature input values are given as resistance values, and not converted into temperature values. ● You can change the type of each input or the type of temperature sensor connected to the input. ● You can set the beta value (coefficient) of the sensor. When you connect an NTC temperature sensor, remember to set the sensor's beta value.

Device settings → Service → Usage priority	
Priorization	This option determines which has the higher priority: domestic hot water heating or space heating. This option is set to **Hot water** by default. The following information applies when **Hot water** has been selected.
Max. heating time for primary use	If **Hot water** has priority, this option will determine the longest continuous period for heating domestic hot water. ● If DHW temperature does not reach its setpoint within the max. heating time and a heating circuit requests heating, the heat pump will switch over to space heating. Space heating will continue at least until the minimum space heating time (set below) has elapsed. ● **Typical setting: 20–120 minutes**
Min. heating time for secondary uses	The shortest time for space heating after the maximum heating time for domestic hot water has elapsed. ● **Typical setting: 15–60 minutes**

Device settings → Service → Heat source	
Flow	The temperature in the brine when it returns to the brine circuit.
Freezing protection limit	The minimum permissible brine circuit temperature (minimum **Flow** value). If the temperature in the brine circuit falls below this limit, the compressor will switch off and the unit's electric heater (if available) will provide the necessary heating. Once the circuit's temperature increases above the setpoint, the compressor will start again.

Device settings → Service → Electricity	
System current	An estimate of the electrical current drawn by the unit. ● The estimated power consumption of the unit's peripherals is also included in the value.
Maximum system current	The automation system maintains a constant estimate of the electrical current drawn by the unit and its peripherals. Whenever possible, the system keeps this electrical current value below the **Maximum system current** setpoint. ● Select based on the heat pump's fuse (such as 16 A or 25 A)
Peripheral device usage approx. 3-phase	The automation system maintains a constant estimate of the electrical power drawn by the unit's peripherals, such as electric immersion heaters in external storage tanks. This value is used for calculating the overall current drawn by the system.

Device settings → Service → Accessory settings → Room temperature → Heating circuit 1	
You can install and set up a sensor for each heating circuit or use one shared sensor. To do this, enable the same sensor input from each heating circuit's settings.	
Input selection	The input to which the indoor temperature sensor is connected. To enable room temperature measurement, install an auxiliary controller (optional accessory) and use EXT inputs.
Temperature optimization	See section *Heating*.
The settings for Circuit 2 and 3 are identical to Circuit 1 settings.	

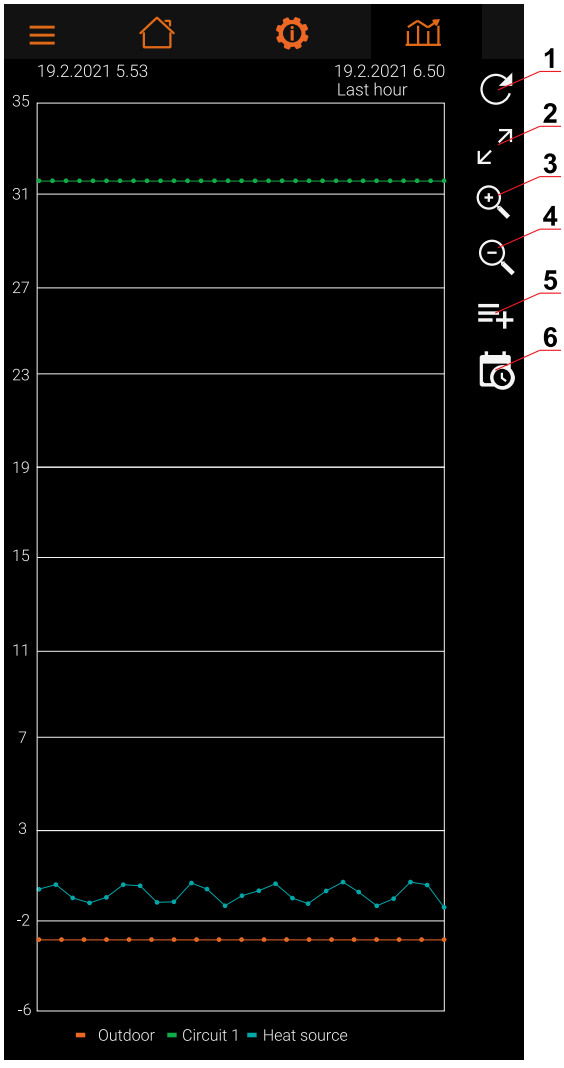
Device settings → Service → Manual control	
The **Manual control** view allows you to operate the brine pump, condenser pump and the system's valves manually.	
Manual mode	**Off** Manual operation is disabled.
	In use Manual operation is enabled.
Cooldown duration	If the compressor or another device that is controlled by the heat pump has a cooldown, specify the cooldown here. A cooldown will prevent devices from starting too frequently, preventing damage to the device or its controller (for example, the compressor and its soft starter).
Control	The control setting for manual operation (pump speed, for example). ● Change-over valve: **0%** is position B, **100%** is position A

Device settings → Service → Restore service settings
This function reverts all settings in the **Service** menu to factory defaults.

5 Trends

5.1 Trends view – Overview

The **Trends** view shows the unit's key operating values from the last 45 days. To switch to vertical view, tap the full screen button (pos. 2).



Pos.	Item
1	Refresh the view
2	Full screen view
3, 4	Zoom in and out
5	Select the values to display
6	Interval

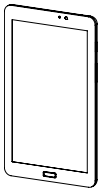
6 Connecting the heat pump to a mobile device

6.1 EasyAce app

The heat pump's automation system is operated with the EasyAce mobile app, which can be installed in a smartphone or tablet. The app is available for devices with a Google Android operating system.

Download the EasyAce app from Google Play Store just like you would any other app.

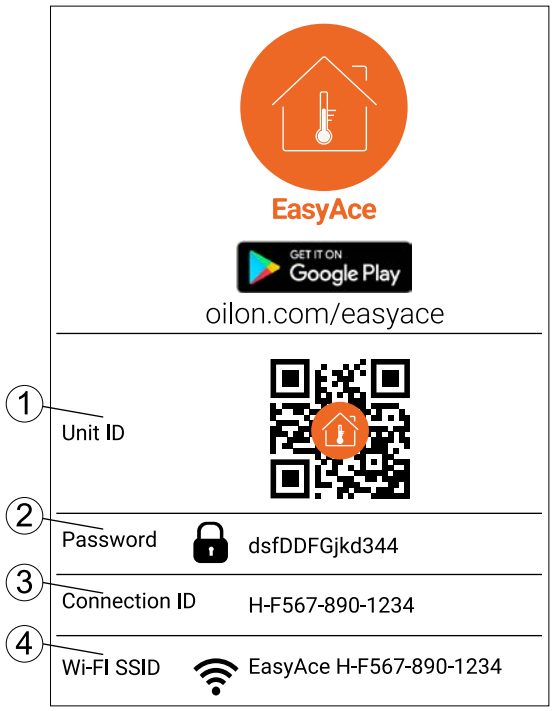
The tablet delivered with the unit comes with the connection already established. The tablet uses a local connection.



Connection label

The connection label shows the IDs and passwords required for setting up the app.

- The label is on the heat pump's front panel.

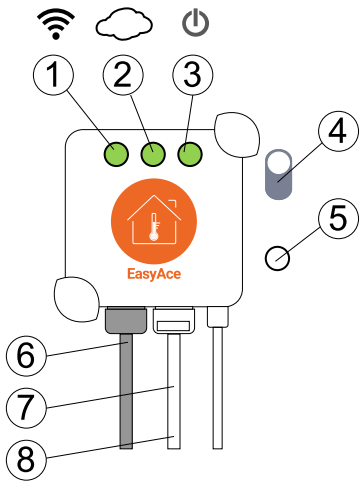


Pos.	Item
1	Unit ID • The heat pump's unique identifier
2	Password • Password for the heat pump and its own Wi-Fi network
3	Connection ID • Unique identifier for the heat pump's connection to Oilon's EasyAce database
4	Wi-Fi SSID • The name of the heat pump's own Wi-Fi network

6.2 EasyAce Hub

The heat pump has a built-in connection device: EasyAce Hub. This device allows the heat pump to be connected to mobile devices and the internet.

EasyAce Hub has its own Wi-Fi network for local operation with mobile devices and for a wireless internet connection.



Pos.	Item
1	Wi-Fi indicator*
2	Internet connection indicator*
3	Power indicator*
4	Wi-Fi ON/OFF switch
5	Reset switch
6	WAN port • For a wired internet connection (optional)
7	LAN port • Connection for the heat pump controller, **do not remove**
8	Power connection

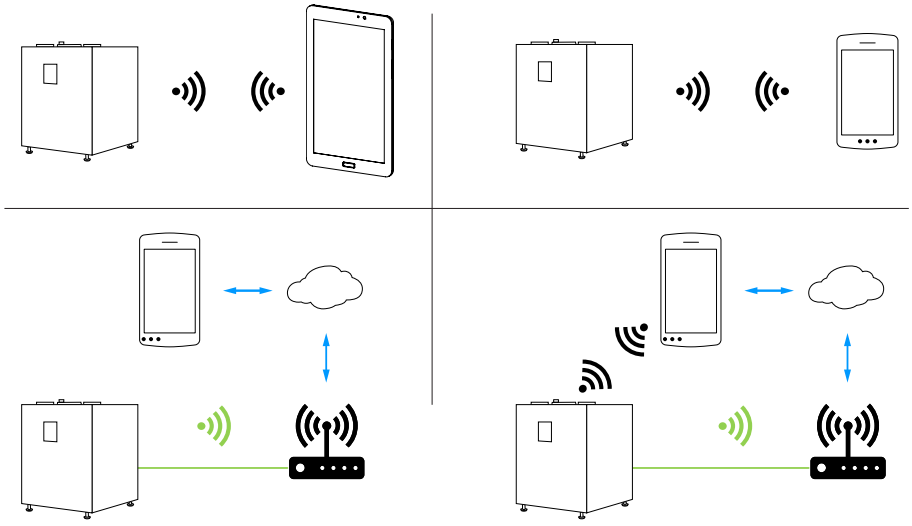
*Green = active

6.3 Connecting the heat pump to a mobile device

The heat pump can be operated with smartphones and other mobile devices either locally or over the internet. The available operating methods are shown below.

Local operation with the tablet delivered with the unit
(Local connection, already set up at the factory)

Local operation with a mobile device
(Local connection)



Cloud operation with a mobile device
(Cloud connection)

Local and cloud operation
(Local & Cloud)

6.4 Setting up a local connection

> The tablet delivered with the unit comes with a local connection already established.

A **Local connection** means that there is a direct wireless connection between your mobile device and a data hub inside the heat pump. No internet connection is used.

To start using a local connection, you will need to:

1. Download the EasyAce app.
2. Load the heat pump's data into the EasyAce app.
3. Connect your mobile device to the heat pump's Wi-Fi network.
4. Finish setting up the local connection in the EasyAce app.

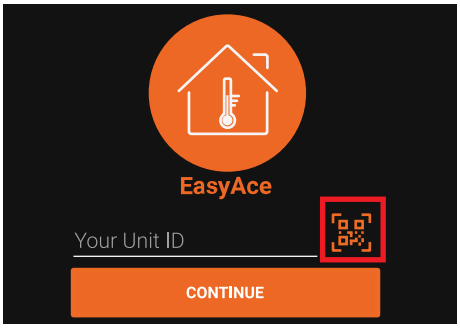
Download the EasyAce app

Download the EasyAce app from Google Play Store just like you would any other app.

Load the heat pump's data into the EasyAce app

Make sure that your smartphone or mobile device is connected to the internet.

1. In the EasyAce app, enter the heat pump's unique **Unit ID**. Either type in the ID or scan the heat pump's QR code with a camera.
   - The ID is on the heat pump's front panel.
   - To scan the QR code, tap on the QR code icon (marked in red).



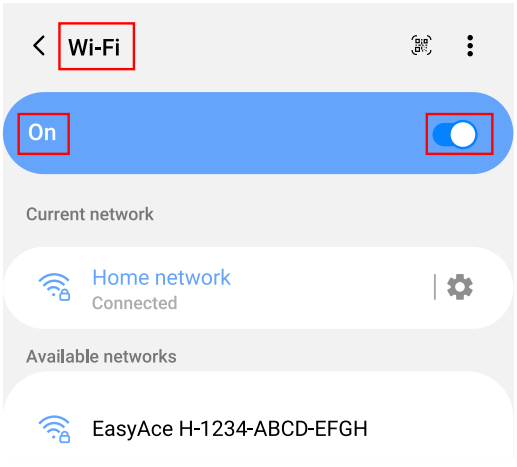
2. Read and accept the *Terms of Service.*

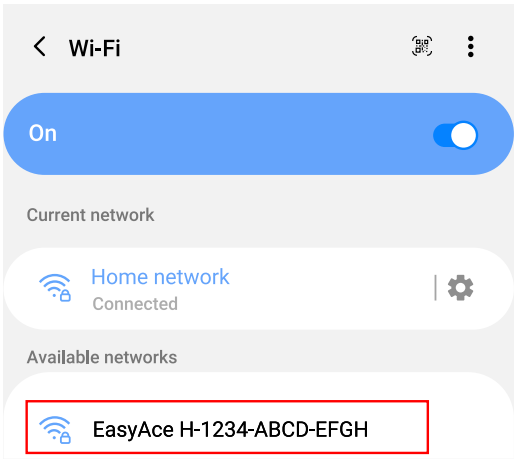
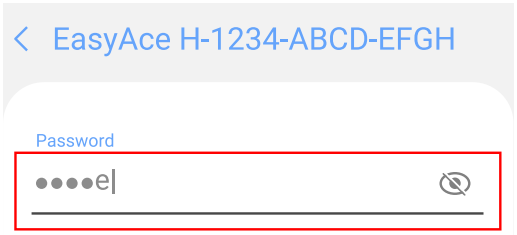
Once you have entered the **Unit ID**, the app will load the heat pump's settings onto your mobile device. When the download is complete, the internet connection is no longer needed.

Connect your mobile device to the heat pump's Wi-Fi network

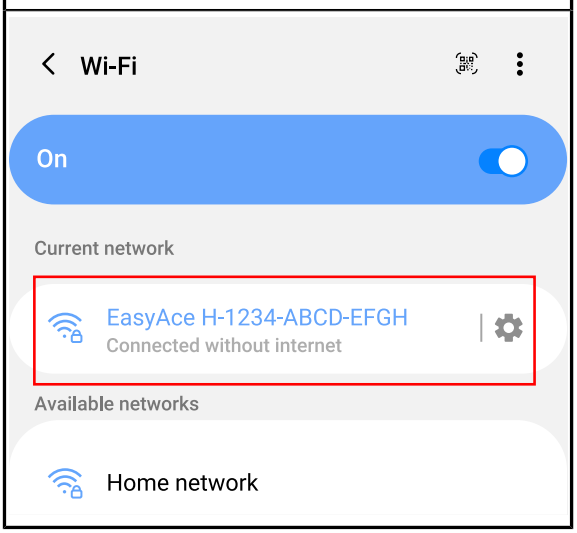
1 — 2 — 3 — 4

The following instructions apply to most Android devices. The details depend on the device.

1. Start by opening your mobile device's Wi-Fi settings. Swipe down from the top of the screen, and hold down the Wi-Fi icon.	2. Check that Wi-Fi is enabled in your mobile device.
	

3. Select EasyAce network.	4. Enter EasyAce network password and confirm by pressing **Connect**. • The password is on the unit's front panel.
	

5. Check that the connection has been established.

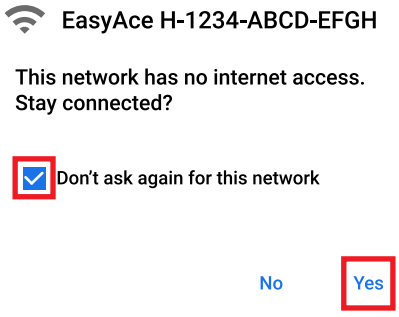


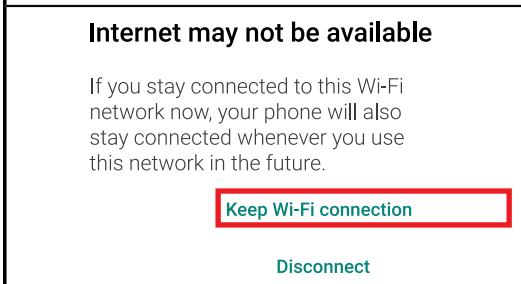
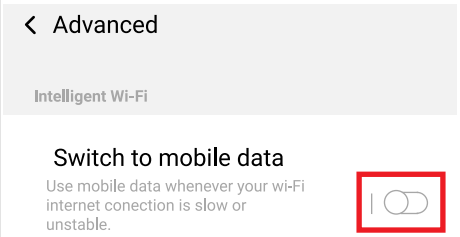
In case of a connection problem

Check that your mobile device is connected to the **heat pump's** Wi-Fi network and not another Wi-Fi network.

- Network name format: EasyAce X-XXX-XXXX-XXXX

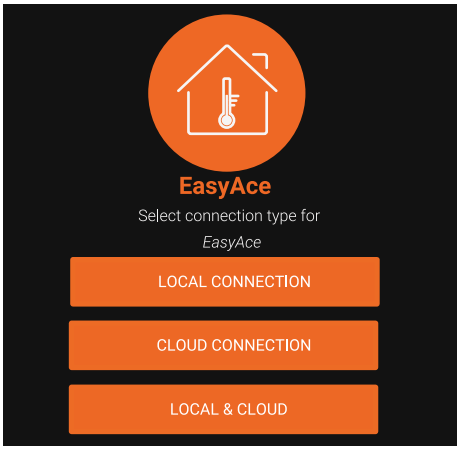
If the heat pump is not connected to the internet via a network cable, devices cannot connect to the internet through the heat pump. Some smartphones will notify you of the missing connection or automatically switch to using another connection. **Keep the Wi-Fi connection.** The details depend on your device and the software version.

Keeping the Wi-Fi connection stock Android
When connecting to the network, your device will ask you whether to keep the connection. Select **Yes.**


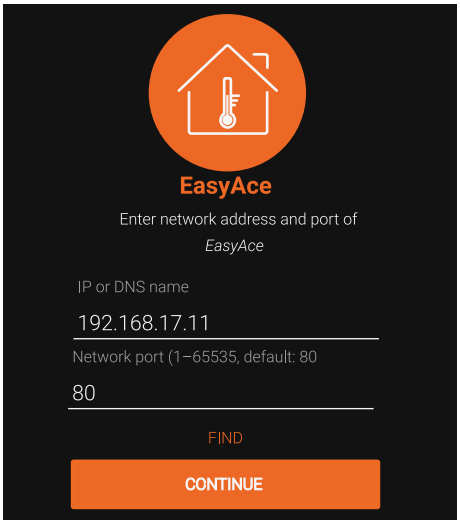
Keeping the Wi-Fi connection, Samsung android	
When connecting to the network, your device will ask you whether to keep the connection. Select **Keep Wi-Fi connection.**	**Settings** The phone will automatically switch to using mobile data. Change the setting from the device's menu. Settings > Connections > Wi-Fi > Advanced (the three dots in the top right corner) Intelligent Wi-Fi > Intelligent Wi-Fi **Disable** the option **Switch to mobile data.**
	

Finish setting up the local connection in the EasyAce app

1. Open the EasyAce app.
2. Set **Local** as the **Connection type**.
   - Select **Local & Cloud**, if you intend to use a Local & Cloud connection.



3. Give the password.
   - The password is on the unit's front panel.
4. Skip the following screen if it appears.
   - The app retrieves this information automatically.



5. Name your heat pump.

At the end of the process, your mobile device will be connected to the heat pump's Wi-Fi network, which does not provide internet service for your smarphone. See *Using the heat pump locally in Local or Local & Cloud mode.*

6.5 Setting up an internet connection for cloud operation

If a **Cloud connection** is used, your mobile device will communicate with the heat pump through the internet.

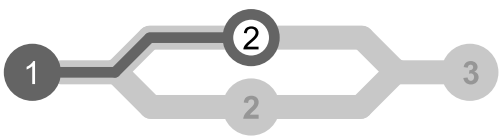
To start using a cloud connection, you will need to:

1. Download the EasyAce app on your mobile device.
2. Connect your heat pump to the internet.
   - There are two alternatives: a wired or a wireless connection.
   - **Skip this phase if your heat pump is already connected to the internet.**
3. Set up the cloud connection in the EasyAce app.

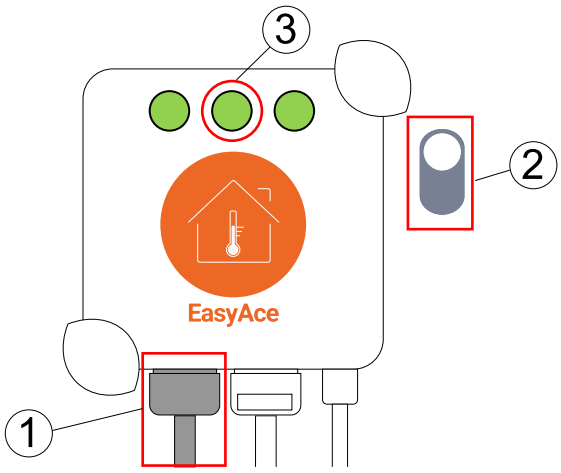
Download the EasyAce app

Download the EasyAce app from Google Play Store just like you would any other app.

Connect your heat pump to the internet option 1: wired connection



Skip this phase if the heat pump is already connected to the internet.

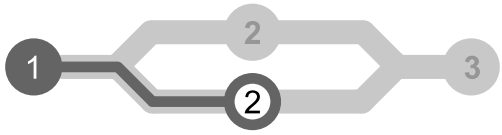


Pos.	Item
1	Ethernet cable in WAN port
2	Wi-Fi ON/OFF switch
3	Internet connection indicator

Connect an Ethernet network cable to the WAN port in EasyAce Hub (pos. 1). Connect the other end of the cable to your internet connection point, such as a router or an Ethernet port with internet service.

- If necessary, switch off the data hub's Wi-Fi from the Wi-Fi switch (pos. 2).
- The connection is ready when the internet connection indicator (pos. 3) shows green.

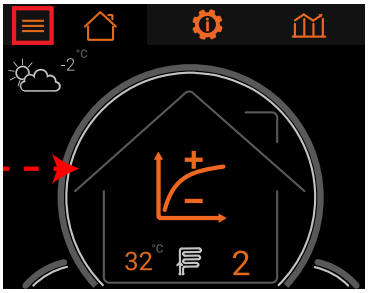
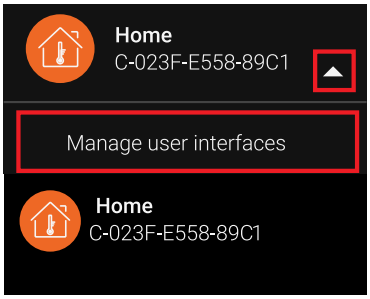
Connect your heat pump to the internet option 2: Wi-Fi connection

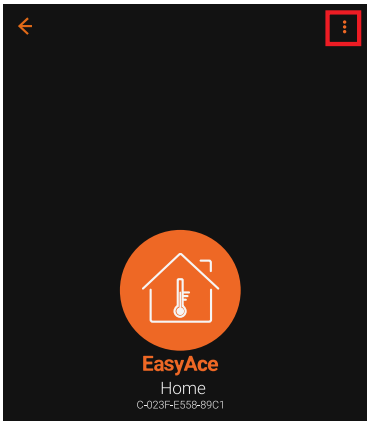
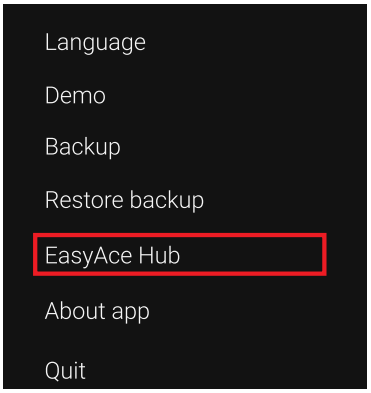


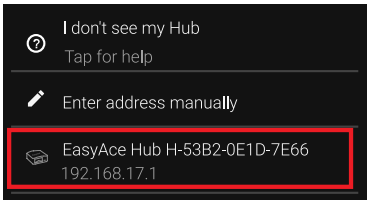
Skip this phase if the heat pump is already connected to the internet.

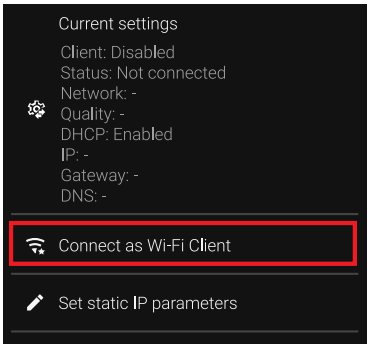
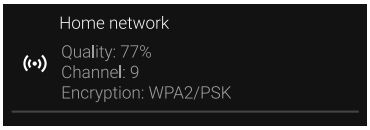
Start with a mobile device that is already connected to the heat pump.

- The necessary settings can also be accessed through the **Settings** menu, see below.

1. Tap the three bar menu icon. Alternatively, swipe right from the left edge of the screen.	2. Press the down arrow and from the menu, select **Manage user interfaces.**
	

3. Open the menu from the top right corner.	4. From the menu, select **EasyAce Hub**.
	

5. Select the EasyAce Hub shown in the menu.	6. Select **Wi-Fi-Client**.
	

7. Select **Connect as Wi-Fi Client**.	8. Select the appropriate local network. In the figure below, the network is “Home network”.
	

9. Enter the network password and tap **OK**.	10. Keep tapping the left arrow on the upper edge of the screen until you reach the **Home** view.
	

Connecting through the **Settings** menu

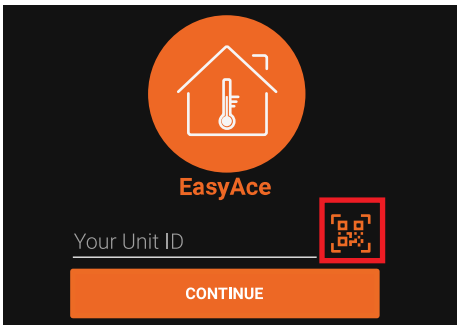
1. Open the main menu from the top left corner or by swiping right from the left edge of the screen.
2. From the menu, select **App settings**.
3. Tap **Connection**.
4. Tap **EasyAce**.
5. Tap **EasyAce Hub**.
6. Tap **Settings**.
7. Select **EasyAce Hub.**
8. Tap **Wi-Fi Client**.
9. Select **Connect as Wi-Fi Client**.

10. Select the appropriate home network.
11. Enter the network password, and tap **OK**.
12. Keep tapping the left arrow on the upper edge of the screen until you reach the **Home** view.

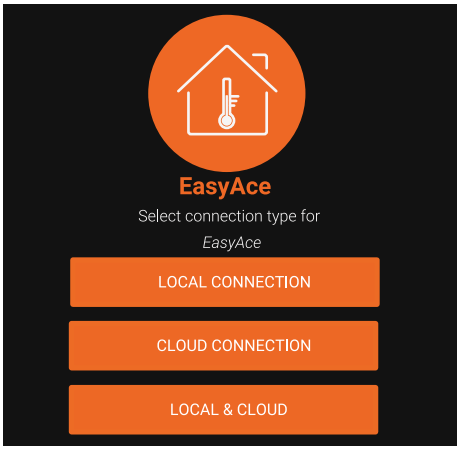
Set up the cloud connection in the EasyAce app

Use the smartphone or other device you intend to use for cloud operation. Make sure that the device is connected to the internet.

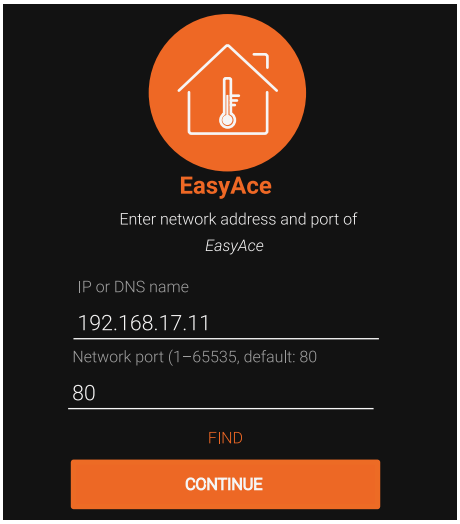
1. In the EasyAce app, enter the Unit ID.



   Each heat pump has a unique **Unit ID**. Either type in the ID or scan the heat pump's QR code with a camera.
   - The ID is on the heat pump's front panel.
   - To scan the QR code, tap on the QR code icon (marked in red).
2. Read and accept the *Terms of Service.*
3. Set **Cloud** as the **Connection type**.
   - The tablet delivered with the heat pump uses a local connection. If you intend to still use the tablet or other device with a local connection, select **Local & Cloud** instead.



4. Give the password.
   - The password is on the unit's front panel.
5. Skip the following screen by tapping **Continue**.



- The app retrieves this information automatically.

6. Name your heat pump.

6.6 Local & Cloud mode

If you select Local & Cloud as the connection method, you can use either the local Wi-Fi connection or an online connection for controlling the heat pump depending on the situation.

To start using a Local & Cloud connection, you will need to:

1. Create a **Local** connection.
   - Follow the process indicated above, but instead of selecting **Cloud** as the connection method, select **Local & Cloud**.
2. Connect the heat pump to the internet, see *Setting up an internet connection for cloud operation*.

At the end of the process, your mobile device will be connected to the heat pump's Wi-Fi network. If the heat pump is connected to the internet through a wireless connection, it will not provide internet service for your smarphone. See *Using the heat pump locally in Local or Local & Cloud mode*.

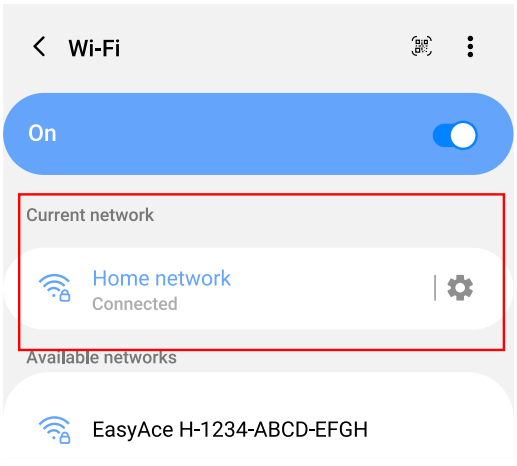
6.7 Using the heat pump locally

> The following instructions apply to most Android devices. The details depend on the device.

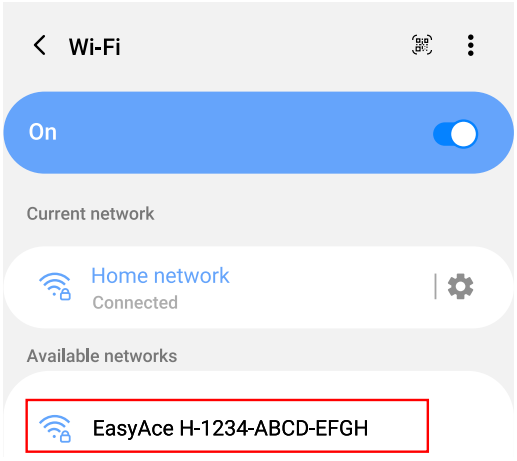
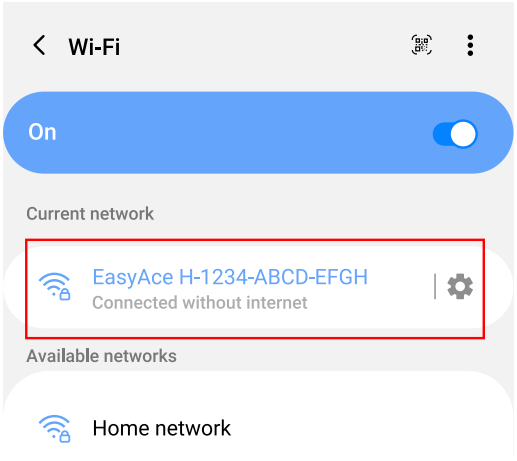
To use the heat pump locally, your mobile device (smarphone) needs to be connected to the **heat pump's Wi-Fi network.** Local operation is available in Local or Local & Cloud mode.

- In most cases, the heat pump's Wi-Fi network does not provide an internet connection.
- Smartphones prefer Wi-Fi networks with an internet connection. When you leave for a while and return some time later, your smartphone will usually switch to another Wi-Fi network. This prevents local operation.

Checking if your smartphone is connected to the heat pump's Wi-Fi network

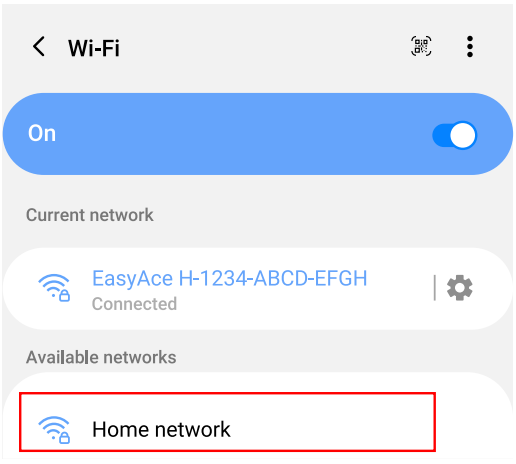
1. Start by opening your mobile device's Wi-Fi settings. Swipe down from the top of the screen, and hold down the Wi-Fi icon.	2. Check which Wi-Fi network is in use. • In the image, the smartphone is connected to *Home network*. Local connection is not used.
	

Connecting your smartphone to the heat pump's Wi-Fi network

3. After the steps above, tap on the EasyAce network.	4. Check that the connection has been established.
	

You can now access the heat pump with the EasyAce app.

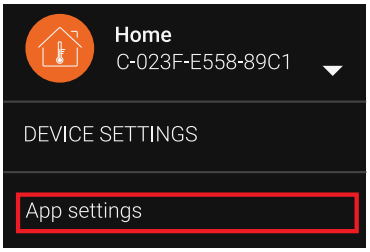
Switching back to another Wi-Fi network

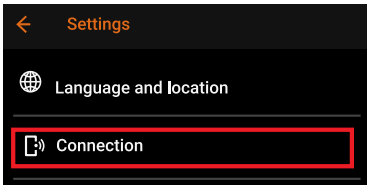
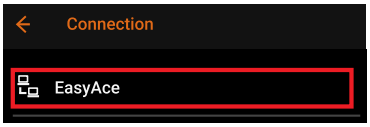
1. Start by opening your mobile device's Wi-Fi settings. Swipe down from the top of the screen, and hold down the Wi-Fi icon.	2. Tap on the Wi-Fi network you want to use.
	

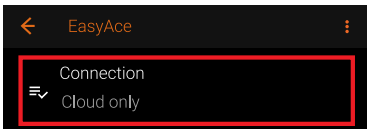
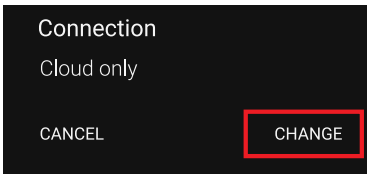
The local connection has been disconnected. It can be restored at any time as shown above.

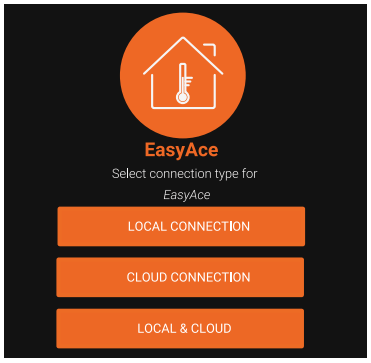
In **Local & Cloud** mode, you can still access the heat pump with the EasyAce app over the internet.

6.8 Changing the connection method

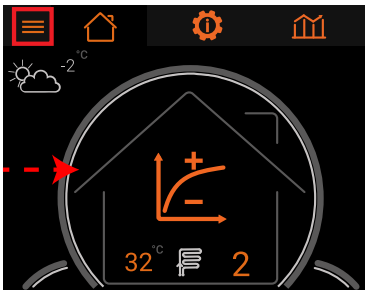
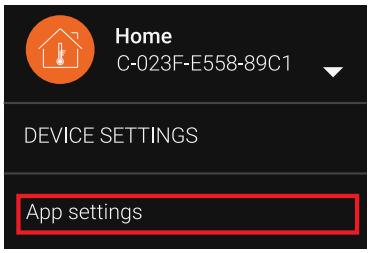
1. Tap the three bar menu icon. Alternatively, swipe right from the left edge of the screen.	2. From the menu, select **App settings**.
	

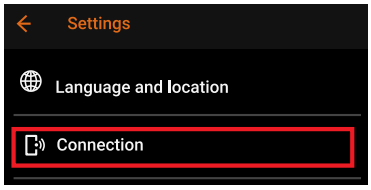
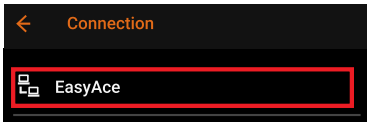
3. Tap **Connection.**	4. Tap **EasyAce.**
	

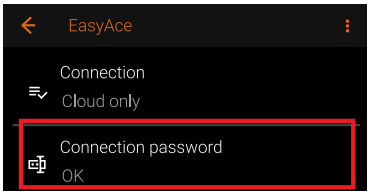
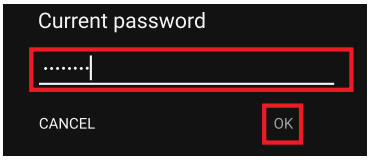
5. Select **Connection**.	6. Select **Change**.
	

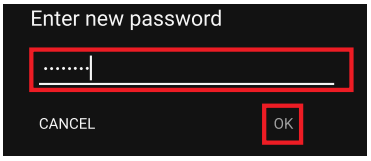
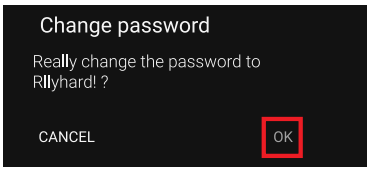
7. Select the connection method and proceed into the setup process.


6.9 Changing the password for your connection

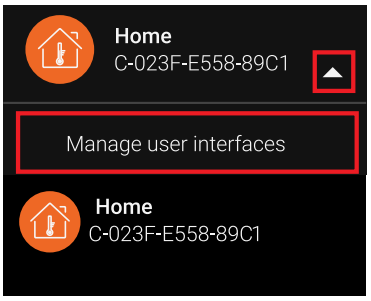
1. Tap the three bar menu icon. Alternatively, swipe right from the left edge of the screen.	2. From the menu, select **App settings**.
	

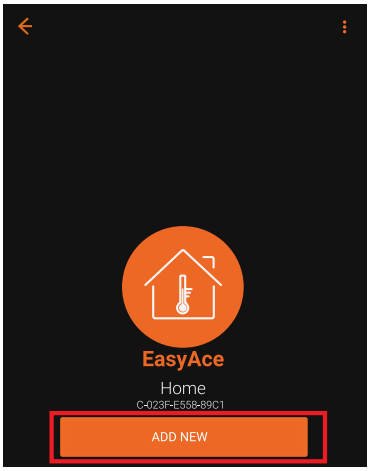
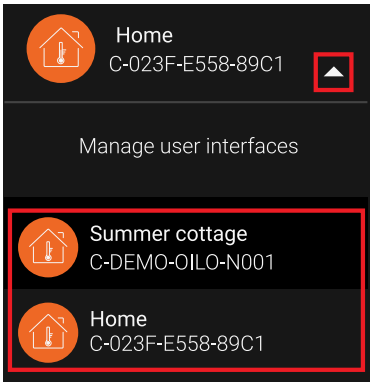
3. Tap **Connection**.	4. Tap **EasyAce**.
	

5. Tap **Connection password**.	6. First, enter the current password and tap **OK**.
	If you haven't changed your password yet, the current password is the password supplied with the unit. 

7. Enter a new password and tap **OK**.	8. Make sure that you have typed the password correctly and that you remember the password.
	Once you are certain that the password is correct and you remember the password, tap **OK**. In the figure, the password is “Rllyhard!!”. 

6.10 Adding a new heat pump

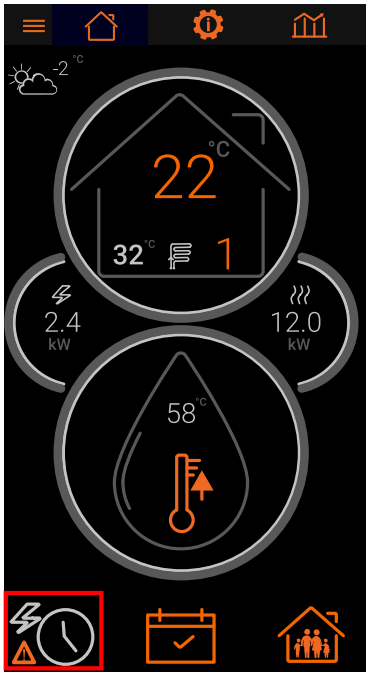
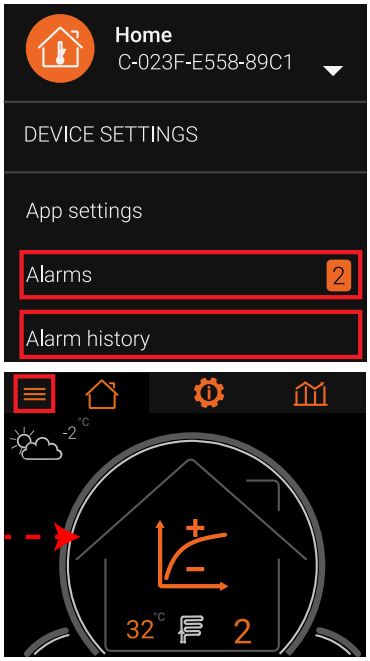
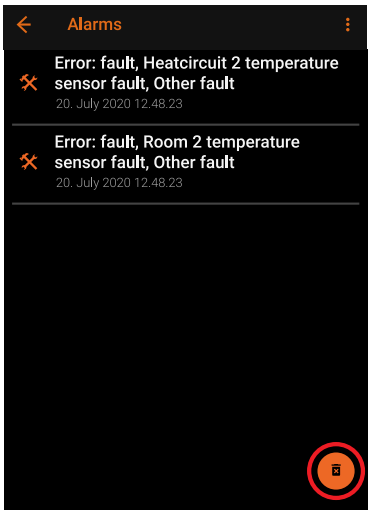
1. Tap the three bar menu icon. Alternatively, swipe right from the left edge of the screen.	2. Press the down arrow and from the menu, select **Manage user interfaces.**
	

3. Select **Add new**. Configure the connection using the instructions provided earlier in this guide.	4. Once you have added the new heat pump, you can switch between heat pumps from the menu on the left side of the screen.
	

7 Troubleshooting

7.1 Alarms and alarm history

NOTICE	If the unit does not recover from fault mode (or there is a persistent or frequently repeated alarm in the system), please contact a repair service or Oilon customer services.

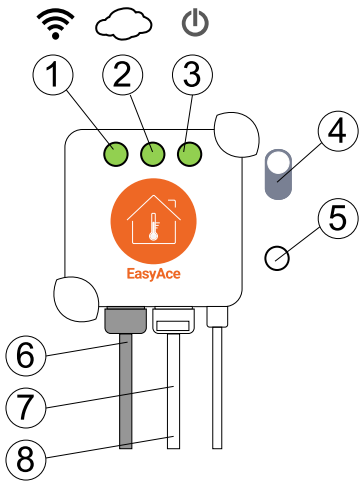
If an alarm is active, access the **Alarms** view by tapping the status icon in the **Home** view.	The unit's active alarms and alarm history can also be accessed from the main menu. • Open the main menu from the top left corner or by swiping right from the left edge of the screen.
	
Reset alarms from the bottom right corner.	
	

7.2 Troubleshooting connection problems

Troubleshooting checklist

In case of a problem, check the following:

- The power cable is connected and the power indicator is lit.
- The cloud connection LED indicator is lit.
  - Only if a cloud connection is used (hub connected through the internet).
- The Wi-Fi LED indicator is lit.
- LAN cable is connected.
- WAN cable is connected.
  - Only if a wired internet connection is used.



Pos.	Item
1	Wi-Fi indicator*
2	Internet connection indicator*
3	Power indicator*
4	Wi-Fi ON/OFF switch
5	Reset switch
6	WAN port • For a wired internet connection (optional)
7	LAN port • Connection for the heat pump controller, **do not remove**
8	Power connection

*Green = active

Restarting the data hub

Turn off the hub's power and wait for approximately one minute:

- Shut down the entire heat pump from the heat pump's main switch, or
- Disconnect the data hub's power cable.

If the problem persists, reset the data hub.

Resetting the data hub

Press and hold the **Reset** button for 3–4 seconds.

Once the hub has been reset, you will need to re-establish the heat pump connection.

Typical problems and solutions

Problem	Solution
The home Wi-Fi network has changed, or the hub fails to connect to the network at times.	Reset the hub using the reset button and re-establish the connection.

Contact information of Oilon dealer:

Date of installation:

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Email: info@oilon.com
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