ÖSTBERG

HERU IQ S – HERU IQ T

OPERATION & MAINTENANCE | EN

Other languages in digital format can be downloaded at www.ostberg.com

The manufacturer cannot be held liable for injury and damage to people or property that are caused by incorrect installation, start up and/or incorrect use of the unit and/or failure to follow the processes and instructions that are set out in the manual. For safety reasons it is essential to follow the instructions in the manual. The warranty will be immediately invalidated in the event of injury that is caused by failure to follow the instructions. Installation and commissioning must be performed by a professional in order for the warranty to apply.

Shortcuts:

- **Log in Installation menu:** Enter code 1991.
- **Log in Service menu:** Enter code 1199.
- **Bluetooth pairing code:** 123456
- **Download the latest firmware version:** Firmware.
- **Download complete Modbus register:** Modbus.

FIRMWARE

MODBUS

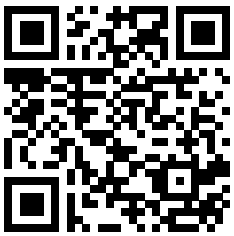
- **Download the app:** IQ Control App.

APPLE

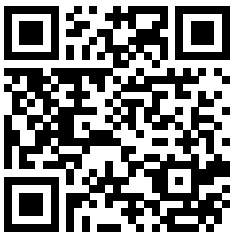
GOOGLE

- **Download wiring diagrams via the links below**

HERU S



HERU T



Information about the products at www.ostberg.com

1 Product overview and use

1.1 Product description

The energy recovery units HERU S and HERU T are designed for supply air and exhaust air ventilation with cooling and heat recovery.

The unit
- is equipped with an inbuilt electric after heater.
- is supplied with ePM1 filters.
- is easily controlled using the IQ Control App.
- has as a accessory, a wireless display for operation and monitoring of the unit.
- has Modbus communication via RS485.

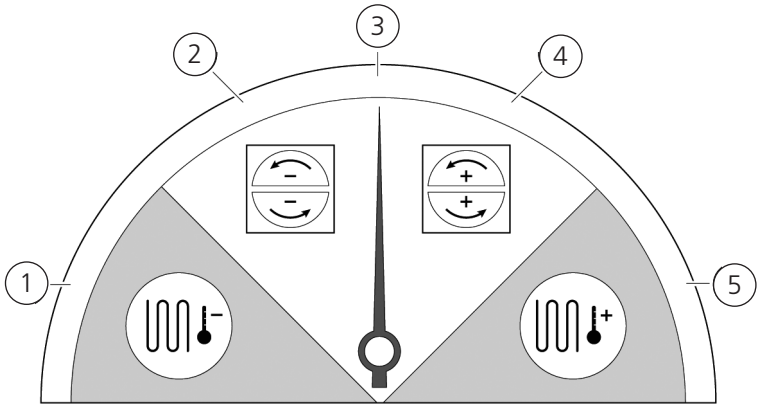
HERU S and HERU T can be used in the home, in the office, in apartments etc., where there is a need for:
- high temperature efficiency
- high temperature efficiency
- energy saving
- low sound levels
- safe operation
- high reliability

1.2 Control functions

1.2.1 Regulating the temperature

The air temperature can be regulated for either constant supply, room or exhaust air temperature.

- To regulate room temperature, a sensor must be positioned in the room (accessory).
- The unit's inbuilt exhaust air sensor is used for exhaust air temperature.
- If the selected mode does not maintain the desired temperature, regulation moves to the next mode.



There are 5 modes for regulating temperature:

1. **Cooling recovery and/or after cooling:**
   In climate conditions where the rotating heat exchanger is not adequate to achieve the desired supply air temperature, the unit also controls a cooling battery (e.g. via geothermal heating) when the cooling recovery from the rotor is not sufficient to maintain the desired temperature. This mode can also be used if this is not possible using cooling recovery.
2. **Cooling recovery:**
   The rotating heat exchanger starts when cooling recovery is possible in order to maintain a lower supply air temperature.
3. **Outdoor temperature = desired temperature:**
   When the outdoor temperature is the same as the desired supply air temperature, the rotating heat exchanger stops.
4. **Heat recovery:**
   The rotating heat exchanger starts to recover the warm indoor temperature.
5. **Heat recovery and/or after heat:**
   In climate conditions where the rotating heat exchanger is not adequate to achieve the desired supply air temperature, the unit can also control either the inbuilt electric after heater or a heating battery.

1.2.2 Fan capacity

Minimum airflow is set to suit the minimum requirement for ventilation. The basic setting is set to essential airflow for the ventilation. Maximum airflow is the airflow that is set to obtain higher airflow, if needed.

The airflow (the fan speed) can be controlled by a program planner, which can be programmed with specific times when the fan will switch from one speed to another.

Using the program planners, different fan speeds can be programmed, such as lowest, highest or standard fan speed. The fan speed can also be regulated by a carbon dioxide (CO2) and humidity (RH) sensor so that the unit increases the airflow as much as required in order to maintain the value once the value is exceeded.

"Night cooling" is a function that means you can use the cold outdoor temperature at night to cool the indoor temperature. The fan speed is boosted when the difference between outdoor and exhaust air temperature lies within the programmed limits.

2 Safety

2.1 Warnings

WARNING
A warning states a risk of personal injury.

CAUTION
Caution states a risk of damage to equipment.

2.2 General safety

WARNING
In accordance with IEC 60335-2-7.12, this apparatus is not intended to be used by people (including children) who have physical, sensory or psychological impairment, or lack of experience and knowledge, unless they have received guidance and instruction on how to use the apparatus by a person who is responsible for their safety. Children must be supervised to ensure that they do not play with the apparatus.

WARNING
Watch out for sharp edges and corners on the HERU unit.

WARNING
Protective gloves must be worn due to the risk of cuts or injury.

WARNING
The unit's ducts must be connected, and doors and/or cover closed and locked before the unit is started in order to avoid the risk of personal injury from rotating parts.

WARNING
The power supply to the HERU unit must be disconnected for all service and maintenance.

WARNING
The electric after heater may remain hot even after the power has been disconnected for service and maintenance.

WARNING
All changes or additions of electrical components must be performed by a qualified electrician.

WARNING
Breathing protection and protective clothing must be used due to the risk of breathing in and spreading dust when handling used air filters.

CAUTION
Always turn off the unit with the IQ Control App or the Display (accessories) before cutting the power.

CAUTION
The safety switch must not be used for normal starting and stopping of the unit.
Use the IQ Control App.

CAUTION
The safety switch must be set to mode 0 after the unit has been turned off before service can be started.

CAUTION
Do not connect an exhaust air type tumble dryer or drying cabinet to the system due to the high air humidity.

CAUTION
The unit must not be turned off for longer periods unless the duct connections for outdoor air and extract air are re-plugged due to the risk of condensation and freezing.

CAUTION
In the event of any interruption in power, the settings will be saved. Date and Time are saved for 24 hours. In longer interruptions, Date and Time must be reset.

2.3 Declaration of conformity

ÖSTBERG

EU DECLARATION OF CONFORMITY

We hereby confirm that our products comply with the requirements in the following EU-directives and harmonised standards and regulations.

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CE

Products: Bidirectional ventilation unit RVU: HERU 95 T EC, HERU 100 T EC, HERU 160 T EC, HERU 200 T EC, HERU 300 T EC, HERU 100 S EC, HERU 160 S EC, HERU 200 S EC, HERU 300 S EC, HERU 70 K EC, HERU 50 LP EC, HERU 90 LP EC, HERU 180 S EC 2, HERU 250 T EC, HERU 130 S EC, HERU 250 S EC, HERU 70 T EC
Bidirectional ventilation unit NRVU: HERU 400 T EC, HERU 600 T EC, HERU 800 T EC, HERU, 1200 T EC, HERU 400 S EC, HERU 600 S EC, HERU 800 S EC, HERU 1200 S EC, HERU Select

This EU declaration is applicable for products including our accessories for mounting and installation only if the installation is made in accordance with the enclosed installation instructions and that the product has not been modified.

Radio Equipment Directive (RED) 2014/53/EU
Harmonised standards:
- EN 300 220-2:2018 V3.1.1
- EN 303 446-1:2019 (EN 55014-1:2017, A11, EN 55014-2:2015, EN IEC 61000-3-2:2019, EN 61000-3-3:2013, A1)
- EN 301 489-3:2019

Machinery Directive (MD) 2006/42/EC
Harmonised standards:
- EN ISO 12100:2010
- EN ISO 13857:2019
- EN 60204-1:2018
- EN 60335-1:2012, AC 1, A 13 R1, A 11, A 12, A 13, A 1, A 14, A2, A15
- EN 60335-2-40:2003, A13, A2, A12, A1, A11, C1, C2
- EN 60335-2-30:2010, A11, A1, A12

Ecodesign Directive 2009/125/EC
Harmonised regulation:
- 1253/2014 Ecodesign requirements for ventilation units
- 1254/2014 Energy labeling of residential ventilation units

Standards:
- RVU: SS-EN 13141-7:2021 or NRVU: SS-EN 13053:2019

RoHS Directive 2011/65/EU
Harmonised standards:
- EN IEC 63000:2018

Avesta 2024-10-04

Mikael Östberg
Product Manager

This document is digitally signed.

ÖSTBERG

GB DECLARATION OF CONFORMITY

We hereby confirm that our products comply with the requirements in the following UK legislations and designated standards.

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UKCA

Products: Bidirectional ventilation unit RVU: HERU® 95 T EC, HERU® 100 T EC, HERU® 160 T EC, HERU® 200 T EC, HERU® 300 T EC, HERU® 100 S EC, HERU® 160 S EC, HERU® 200 S EC HERU® 300 S EC, HERU® 70 K EC, HERU® 50 LP EC, HERU® 90 LP EC, HERU® 180 S EC 2, HERU® 250 T EC, HERU® 130 S EC, HERU® 250 S EC
Bidirectional ventilation unit NRVU: HERU® 400 T EC, HERU® 600 T EC, HERU® 800 T EC, HERU®, 1200 T EC, HERU® 400 S EC, HERU® 600 S EC, HERU® 800 S EC, HERU® 1200 S EC, HERU® Select

This GB declaration is applicable for products including our accessories for mounting and installation only if the installation is made in accordance with the enclosed installation instructions and that the product has not been modified.

Radio Equipment Regulations 2017, S.I. 2017 No. 1206
Designated standards:
- EN 300 220-2:2018 V3.1.1
- EN 303 446-1:2019 (EN 55014-1:2017, A11, EN 55014-2:2015, EN IEC 61000-3-2:2019, EN 61000-3-3:2013, A1)
- EN 301 489-3:2019

The Supply of Machinery (Safety) Regulations 2008, S.I. 2008 No. 1597
Designated standards:
- EN ISO 12100:2010
- EN ISO 13857:2019
- EN 60204-1:2018
- EN 60335-1:2012, AC 1, A 13 R1, A 11, A 12, A 13, A 1, A 14, A2, A15
- EN 60335-2-40:2003, A13/AC, A2, A12, A1, A11, AC1, AC2

Standard:
- EN 60335-2-30:2010, A11, A1, A12

The Ecodesign for Energy-Related Products and Energy Information (Amendment) (EU Exit) Regulations 2019, S.I. 2019 No. 539
Retained regulation:
- 1253/2014 Ecodesign requirements for ventilation units
- 1254/2014 Energy labeling of residential ventilation units

Standards:
- RVU: SS-EN 13141-7:2010 or NRVU: SS-EN 13053:2019

Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012, S.I. 2012 No. 3032
Designated standards:
- EN IEC 63000:2018

Avesta 2024-05-21

Mikael Östberg
Product Manager

This document is digitally signed.

3 Warranty

The warranty's validity according to the purchase agreement is calculated from the day of purchase.

3.1 Extent of the warranty

The warranty covers faults that occur during the warranty period that have been notified to the dealer or which have been verified by H.Östberg AB (underwriter) or the warranty provider's representative. Faults are defects in manufacture and materials as well secondary failures that occur due to these.
The above faults must be remedied so that the product is operational.

3.2 General limitations in the warranty

The warranty provider's liability is limited according to these warranty conditions and the warranty does not cover injury or damage to people or property. Verbal promises that are made in addition to the warranty agreement are not binding on the warranty provider.

3.3 Limitations in the warranty

The warranty applies on condition that the product is used in the normal manner or under equivalent circumstances and that the user instructions are followed.

The warranty does not cover faults that are caused by:

- Transport of the product.
- Unintended use or overloading of the product.
- Failure on the part of the user to follow the instructions regarding installation, use, maintenance and care.
- Incorrect installation or incorrect positioning of the product.
- Conditions that are not the responsibility of the warranty provider, e.g. excessive variations in voltage, lightning strike, fire and other accidents.
- Repairs, maintenance and changes that are performed by unauthorised parties.

The warranty does not cover:

- Faults that do not affect operation, for example scratches to the surfaces.
- Parts that are exposed to greater risk of fault than normal due to handling or normal wear and tear, for example lamps, glass, ceramics, paper or plastic parts, filters and fuses.
- Settings, information on use, care, service or cleaning that are typically described in the user instructions, or damage that is caused by the user failing to observe warnings or installation instructions, or inspection of such.

The warranty provider is only responsible for the operation if approved accessories are used. The warranty does not cover product faults that are caused by other manufacturers' accessories or equipment.

The unit's current settings must be recorded in the installation and assembly instructions at installation in order to avoid costs in the event of fault. The warranty provider is not responsible for costs such as adjustment costs when changing fans and mainboards in the unit.

3.4 Service conditions during the warranty period

The conditions apply according to the agreement with the local dealer.

3.5 Corrective measures in the event of detected faults

If a fault is detected, the customer must notify this to the dealer.

Shipping damage must be notified to the shipping agent upon delivery. State which product applies (part and serial number as per the name plate) and describe the fault and how this has occurred as accurately as possible.

In order for warranty repair to be performed, the customer must demonstrate that the warranty is valid by presenting a purchase receipt. Once the warranty period has expired, claims that were not made in writing before expiry of the warranty period will not be valid. In other regards, this shall occur in accordance with the sales conditions.

4 Operation

For information on active view in the IQ Control App, press the **i**-button in the App's status bar.

WARNING
The unit's duct connections must be duct connected, and doors/cover closed and locked before the unit is started in order to avoid the risk of personal injury from rotating parts.

CAUTION
The unit must be run constantly and only be stopped for maintenance.

CAUTION
The safety switch must not be used for normal starting and stopping of the unit.
Use the IQ Control App.

CAUTION
In the event of interruption in power, the settings will be stored. Date and Time are saved for 24 hours. After that, Date and Time must be reset. Make sure the unit is started up.

The airflow is regulated in the mode using the IQ Control App. Normal mode is the preset base mode.

Accessible modes:

Away	Reduced air flow, can be used when no one is home.
Normal	Adjusted at installation, must not be changed.
Boost	A higher airflow than normal, medium/max can be selected. This alternative should be used when there is need for a higher airflow, for example when cooking food, drying laundry or taking a sauna.
Overpressure	Pressure compensation in the event of supplementary heating, for example, when using an open cooker or stove.

Certain settings are protected by a code so they cannot be changed unintentionally.

NOTE!
If a mode is activated manually, the programmed or previous settings are overwritten.

4.1 Install the HERU IQ app

The HERU IQ app is available for free download in both the **Appstore** and **Google play**. With the app, you have full functionality for controlling your unit both via Cloud and via Bluetooth (requires IQC Bluetooth module). On first launch of the app, one is asked to allow HERU IQ to find and connect nearby devices. This condition must be allowed for the app to find and connect to the IQC Bluetooth module

APPSTORE

GOOGLE PLAY

4.1.1 Create new account

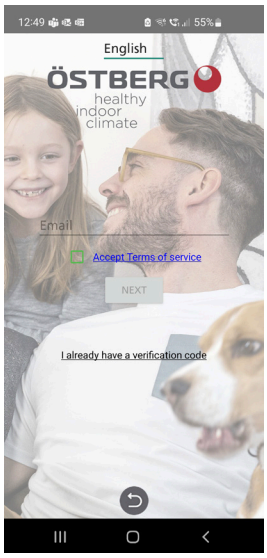
To use the app, you need to create an account. See the following steps to create a new user:

1. Open the HERU IQ app and click Register.

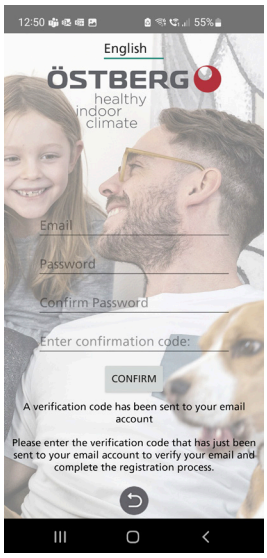
2. Create a new user:
   Enter email adress and accept the terms of use.
   View A

3. A verification email from iqcloud@ostberg.com will be sent to the selected email address. Choose a password and enter the verification code. Click CONFIRM. View B

4. The account is now created and you can start log in.



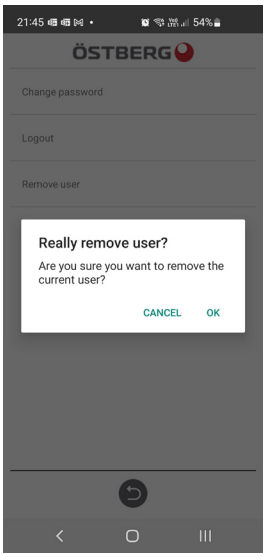
View A



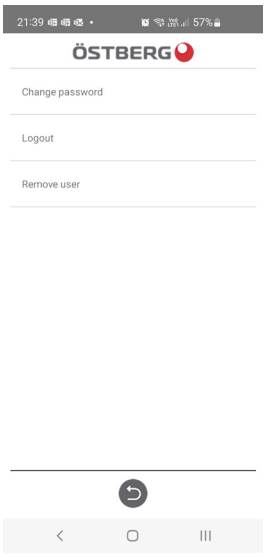
View B

4.1.2 Delete user

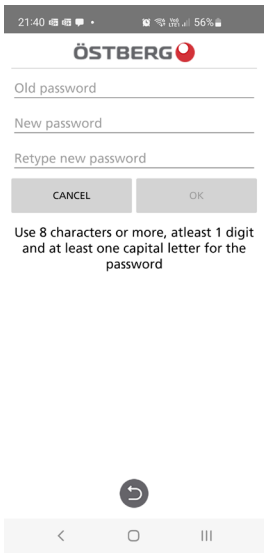
Use the menu to remove an active user and when changing users. View D.



View D



View E



View F

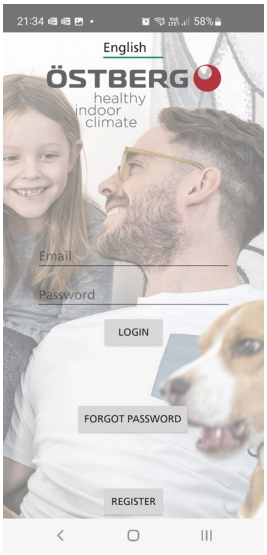
4.1.3 Change Password

If you want to change your current password, this is done under the Settings tab and then under the Users menu. Click Change Password. View E. Enter the current password in the field, then enter the desired password. View F.

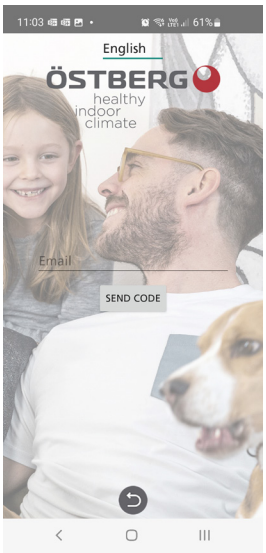
4.1.4 Forgot password

If you have forgotten your password, you can reset it in the app.
This is done by:

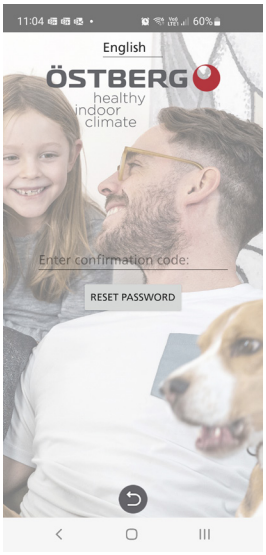
1. In the app, click Forgot password. View G
2. Enter the email address. A verification code will be sent to the specified email address. View H
3. Enter the verification code in the field. View I
4. A new password has now been created and you can thus log in.



View G



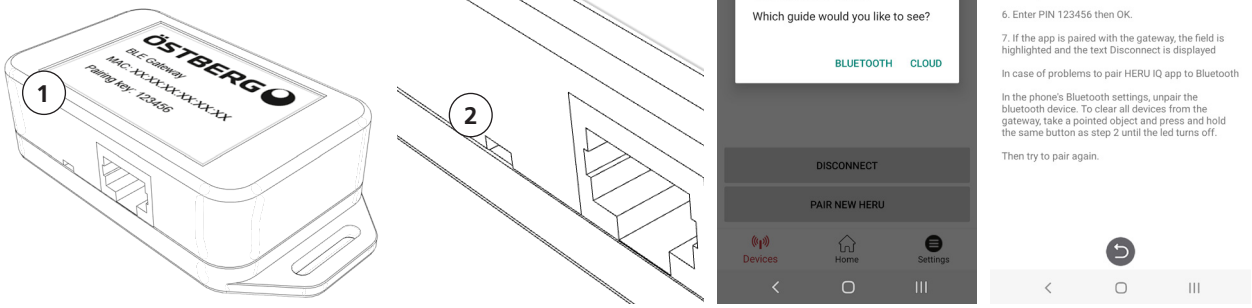
View H



View I

4.2 Connection via IQC Bluetooth module

Via the IQC Bluetooth module, you are given the opportunity to control your unit via Bluetooth. However, only 1 person can be connected to the IQC Bluetooth module and control the unit at a time. The IQC Bluetooth module is connected to the HMI port on the control board and is already connected from the factory. To control the unit via the IQC Bluetooth module, go through the following steps below or read the guide in the app. The guide is found under the Devices tab and then under **PAIR NEW HERU.**



View J View K View L View M

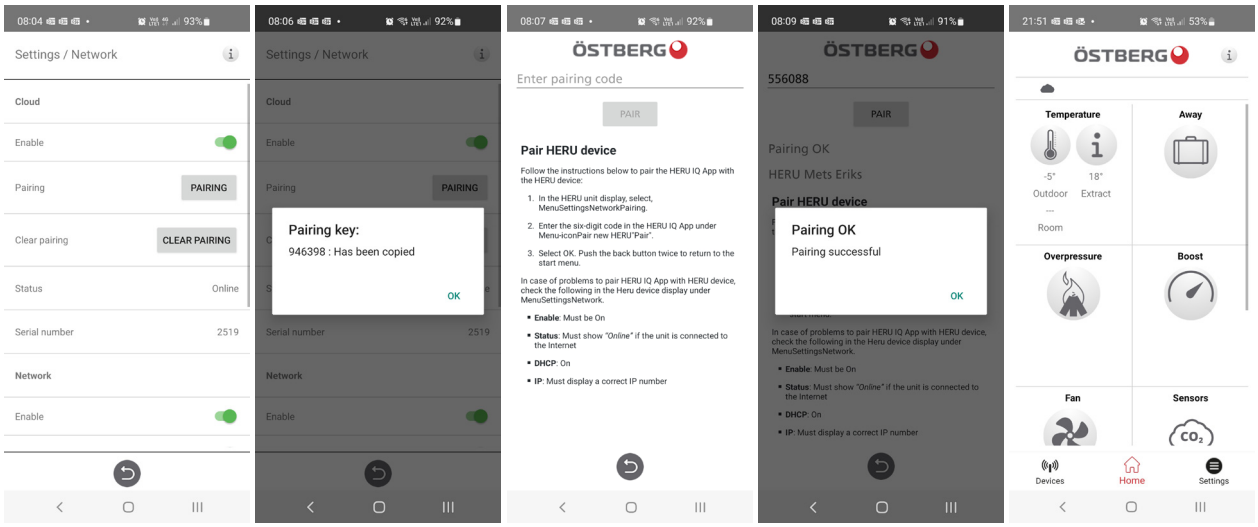
1. Power up the unit via the plug.
2. Make sure Bluetooth is turned on in your phone.
3. Open the HERU IQ app and log in.
4. Go to the devices tab.
5. The IQC Bluetooth module (1) will now be in the list and displayed with the name HeruIQ + its Mac address. The Mac address can be found on the label on the IQC Bluetooth module. View J.
6. On the IQC Bluetooth module, click the pairing button (2) with a narrow object such as a paperclip. The LED lamp now lights up blue for 60s, which means that the IQC Bluetooth module is in pairing mode. View K.
7. In the app, select the IQC Bluetooth module from the list. A pop up box now appears where you are asked to enter the pairing key. View L&M.
8. Enter the pairing key 123456 and click pair. The pairing key can be found on the label on the IQC Bluetooth module.
9. Pairing is now complete. This can be verified by a blue field appearing over the IQC Bluetooth module in the list and that you also have the option of being able to disconnect from the device. Under the home screen, a Bluetooth symbol should also appear at the top of the left status bar.

4.2.1 Reset of IQC Bluetooth module

If the IQC Bluetooth module needs to be reset, this is done by holding down the pairing button (2) for 5s. The LED light will then go out and all paired phones that have been paired to the IQC Bluetooth module will disappear from the memory. If you want to pair with the IQC Bluetooth module again, repeat the same steps as in section 4.2. View K.

ATTENTION! The IQC Bluetooth module must be removed in the phone under Bluetooth settings before trying to pair again after a reset.

4.3 Connection via Cloud



View N View O View P View Q View R

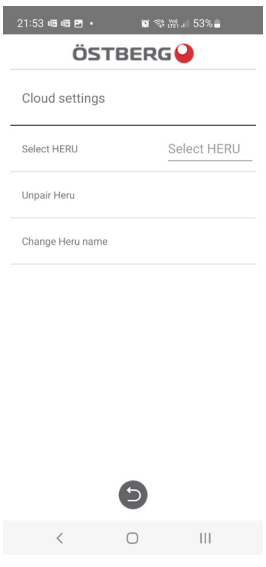
Regardless of whether you have a display or an IQC Bluetooth module, you can also connect your unit to the Cloud. However, it is required that you have internet for your unit. To connect your unit via the cloud, start by:

1. Connect the unit to the internet via the LAN port on the control board.
2. Go to the Settings tab and then go under Network.
3. Activate the toggle both for network and Cloud. Make sure the status is Online. View N.
4. Get a pairing key by clicking pairing. The pairing key is automatically copied. View N&O.
5. Then back out of the menu and go to the Devices tab.
6. Click PAIR NEW HERU. A pop up message will then appear, then select Cloud.
7. Click on the Enter pairing code field and click once more to get the option to directly paste the downloaded pairing key. View P.
8. Then click Pair. A confirmation that the pairing is okay will be given via a pop up message. Click OK. View P.
9. Under the Devices tab there is now a cloud icon named HERU. View R.
10. Select HERU to connect the unit via Cloud. Under the home screen, no Bluetooth symbol is now visible because the unit is connected via Cloud.

4.3.1 Remove unit from Cloud

If you have previously paired an unit with the Cloud and want to remove it, you can do so under the Settings tab then under the Cloud settings menu.
See steps below.

1. Go to the Settings tab and then into the Cloud settings menu.
2. Under Select HERU, select the unit to be removed from the Cloud.
3. Then click on Save unit. View S.
4. The unit is now deleted from the Cloud and will be removed from the list under the Devices tab. However, it is not until after the app is closed and opened again that the unit via Cloud disappears from the list.



View S

4.4 Updating software

If the unit needs to be updated to a later software, you can proceed in different ways, either you update the unit via an Android phone, PC or via a MAC computer. Be aware that an update cannot take place via an IPhone regardless of model. Also keep in mind that if an update takes place via a computer, the computer must have Bluetooth capability. If the computer lacks Bluetooth, Bluetooth adapters are available for purchase. Minimum requirement is USB 4.0. Go to the respective section for the selected update method

4.4.1 Update via an Android phone

The unit is updated using the IQC Bluetooth module. It is therefore not possible to update the unit via the Cloud. See the following steps for updating via an Android phone.

1. Go to ostberg.com/update on your phone and download the update file. The file consists of a Zip file.
2. Log in to the HERU IQ app and then go to the Settings tab.
3. Under the settings tab, go to the Firmware update menu.
4. Click Select FIRMWARE .ZIP and select the downloaded update file.
5. The update file "heruiq_master_xx.ZIP" is now at the top of the menu.
6. Then click UPLOAD FIRMWARE. The update process will now begin. The process is visible both in the app and in the phone's status bar.
7. When the update process is complete, the app will say "Upload complete" and the phone's status bar will say **"Upload successful, device will restart"**.

4.4.2 Update via PC

The update via PC requires that you have access to Bluetooth because you need to connect to the IQC Bluetooth module. See the following steps for updating via a PC computer.

1. Download HeruIQ FWupdate updater on Microsoft store.
2. Then go to ostberg.com/update and download the update file, heruiq.zip.
3. Open the program HeruIQ FWupdate.
4. Under the Find Device tab, click Start searching. HeruIQ FWupdate will now start searching for available IQC Bluetooth modules that are available. Available IQC Bluetooth modules then appear in the list with the name HeruIQ and its Mac address. The Mac address can be found on the label on the IQC Bluetooth module.
5. On the IQC Bluetooth module, click the pairing button with a narrow object such as a paper clip. The LED lamp now lights up blue for 60s, which means that the IQC Bluetooth module is in pairing mode.
6. In HeruIQ FWupdate, click on selected IQC Bluetooth module in the list and then click on Pair new device. A pop up message will then appear for entering the pairing key.
7. In the field, enter the pairing key **123456** and click Allow. The message that the connection was successful will then be given. The pairing key can be found on the label on the IQC Bluetooth module
8. Then go to the Connect & Update tab and click Connect. The status will then change to Connected and in the field below it will say Device connected.
9. Then click on Select file and select the update file, heruiq.zip. The update will then begin.
10. When the update is complete, the status will change to Upload completed.

4.4.3 Update via MAC

The update via a MAC computer requires that you have access to Bluetooth because you need to connect to the IQC Bluetooth module. See the following steps for updating via a MAC computer.

1. Download the update program HeruIQ FWupdate on the App store.
2. Then go to ostberg.com/update and download the update file, heruiq.zip.
3. Open the program HeruIQ FWupdate.
4. Under the Devices tab, available IQC Bluetooth modules appear with the name HeruIQ and its Mac address. The Mac address can be found on the label on the IQC Bluetooth module.
5. On the IQC Bluetooth module, click the pairing button with a narrow object such as a paper clip. The LED lamp now lights up blue for 60s, which means that the IQC Bluetooth module is in pairing mode.
6. In HeruIQ FWupdate click on selected IQC Bluetooth module in the list. The Connect device tab will then appear.
7. Click on Connect device. Now the Pair Device tab appears.
8. Next, click on Pair Device. A pop up message will then be given where you are asked to enter the pairing key.
9. In the field, enter the pairing key **123456** and click Allow. The message that the connection was successful will then be given. The pairing key can be found on the label on the IQC Bluetooth module
10. Then click on Select file and select the update file, heruiq.zip. The update will then begin.
11. The upload will thus begin and when the upload is complete a pop up notice will be given that says **“Firmware update successful. Device will restart now.”**.

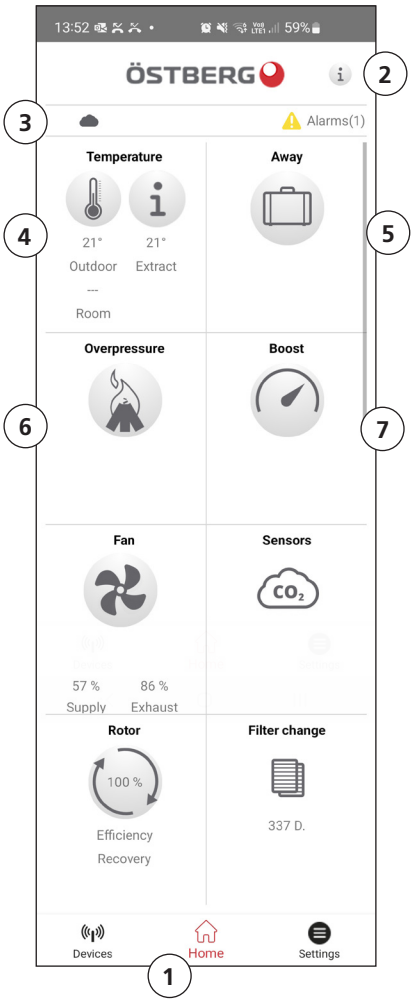
4.5 Entering the basic settings

1. Open the Home screen, select **Settings**.
2. Select **General**.
3. Select **Language** from the list.
4. Enter **Time**.
5. Select **Measurement system** from the list.
6. Select **Time format** from the list.
7. Select **Time zone** from the list.

4.6 IQ Control App

4.6.1 Home screen

Shows the status and hotkeys of the Home screen.
The following symbols can be displayed in the status bar:



1. Home screen
2. Information about the active view
3. Status row – shows available functions
   - Status cloud connection
   - Bluetooth connection
   - RH - Air quality compensation for high level of a sensor
   - Night cooling active
   - Cooler active
   - Heater active
   - Away mode
   - W5 - Active program, program no. 5
   - Alarm active

Hotkeys to activate or deactivate functions for the modes

4. Temperature
5. Away mode
6. Overpressure
7. Boost

4.7 Temperature regulation

1. Press on the thermometer icon.

2. Set desired temperature. Use the buttons **-** and **+**.

NOTE!
If the economy temperature is activated (**Activate eco. reference value** is on), you can set both **comfort** temperature and **economy** temperature.

3. Press [i] for extend informastion about temperatures.
4. Return to the home screen, by pressing Home.

4.8 Boost – used for temporarily increased ventilation needs

4.8.1 Boosting the unit

1. Press on the **Boost** icon. Operation in boost mode is shown with a green circle around the icon. Deactivate by clicking on the icon again.

NOTE! The preset time for boost operation is 30 minutes.

4.8.2 Change operating time for boost

1. Choose **Settings.**
2. Select **Service**.
3. Log in. Enter code **1199**.
4. Scroll down to **Boost** and change the operating time.

4.9 Overpressure – is used to facilitate the lighting of a fireplace

4.9.1 Activate overpressure

1. Press on the **Overpressure** icon. Operation in overpressure mode is stated with a green circle around the icon. Deactivate by clicking on the icon again.

NOTE! The preset time for overpressure operation is 15 minutes.

4.9.2 Change operating time and compensation for overpressure function

1. Choose **Settings.**
2. Select **Service**.
3. Log in. Enter code **1199**.
4. Scroll down to **Overpressure** and change the operating time.
5. State desired **Offset** value.
   Offset is the difference between supply and exhaust air. Increased to the supply air fan first. If the supply air fan reaches the limit for maximum fan speed, the exhaust air fan is reduced until the difference between the fans corresponds to the offset value.

4.10 Activate Away mode

1. Press on the **Away** icon. Operation in away mode is stated with a green circle around the icon.
   The away mode is active until it is manually deactivated by pressing on the icon again.

NOTE!

The away mode is prioritised and overrides the program planner if both are active simultaneously.

4.11 Scheduling

There are two types of schedules: **Scheduler** for programming the intervals for weekdays and **Holiday scheduler** for programming per date. **Holiday scheduler** overrides **Scheduler** for weekdays. If the different schedules coincide with each other, the schedule with the lowest number overrides the other.

The **Scheduler** can be used in both **comfort** and **economy** mode, if the economy temperature is activated.

1. Choose **Settings.**
2. Select **Scheduler.**
3. Select type of schedule.
   The upper icon automatically activates when one or more program is activated.
   When you deactivate this icon, all programs are deactivated.
4. Select **Program 1** by clicking on it.
5. Enter the selected value.
6. Select **Fan speed**. Select **Min, Std, Max** or **Energy saving mode** from the dropdown list.
7. If economy temperature is activated, select **Temp.mode**. Select **Comfort** or **Economy** from the dropdown list.
8. Click on the button **Save**. The program has activated. In order to deactivate a program, deactivate the icon to its right.
9. To set several different programs, repeat steps 1 – 7 as required.

4.12 Activate night cooling

Night cooling is a temperature regulated boost without heat recovery, where the unit is cooled with cold outdoor air as needed.

Night cooling is activated when the Extract air temperature is higher than the set Extract air high value and the out-door temperature is lower than Extract air temperature – (minus) set **In/Out diff.**

Night cooling is deactivated when the Extract air temperature is lower than the set Extract air low or the out-door air temperature is higher than the Extract air temperature – (minus) set **In/Out diff.**

Temp.evaluation Rest mode must be activated if the unit is in standby mode and night cooling is requested. **Temp.evaluation Rest mode** checks whether the criteria for activating night cooling has been fulfilled within the set time intervals.

1. Choose **Settings**
2. Select **Service**..
3. Log in. Enter code **1199**.
4. Press **OK**.
5. Select **Setup**.
6. Scroll down to **Night cooling**. Press the **Activate** icon.
7. Enter the selected value.
8. If the unit is in standby and night cooling has been requested, activate **Temp.evaluation Rest mode**.
9. Enter the selected value.

4.13 Activate Heater

The **Heater** is a mounted internal heating element, it helps to achive the adjusted indoor temperature.

Aftercooling is a function to cool the **Heater** when the unit is stopped, for example when changing the filter. If **Aftercooling** is activated, the fans continue to run for two minutes after the unit is switched off. We recommend always having **Aftercooling** enabled to prevent the thermal protection from trip and then have to be reset.

1. Choose **Settings**
2. Select **Service**..
3. Log in. Enter code **1199**.
4. Press **OK**.
5. Select **Setup**.
6. Scroll down to **Heater**. Under **Type –** choose **Electric**.
7. If you can't find the **Heater**, activate it in the App under;
   Installation > Peripherals > Afterheater > **Type** – choose **Electric**.

4.14 Turn the unit off and on

1. Starting the unit. Connect plug/turn on the safety switch.
   Start the IQ Control App or Press on the display and click on **OK** to the question **Start unit?**.
2. Turning off the unit. Open the main menu, scroll down and select **Turn off unit.**

4.15 Use the Alarm menu

1. Choose **Settings**, select **Alarms**.
2. Select **Active alarms** to see all active alarms.
3. After managing an active alarm, the active message for the alarm is cleared.
   - Click on the alarm to reset it. In the dialogue box displayed, select **Reset**.
   - In order to reset all active alarms, click on **Reset all** at the bottom in the middle, in **Active alarms**.
4. Select **Alarm history** to see all previous alarms.
5. Return to the home screen.

4.16 Change settings

For all available options, see **1270478 – IQC Manual.**.

1. Choose **Settings**, select the desired alternative to be changed.
2. Change the parameters to the desired value.
3. Return to the home screen.

4.17 Update firmware in the ventilation unit

The firmware can be updated from:

1. The IQ Control App – Android via Bluetooth
2. A PC/MAC computer via Bluetooth.
3. An IQC Display (accessory).

Follow the the instructions in the IQ Control App if a notification about an updated firmware is displayed.

5 Maintenance

WARNING
In accordance with IEC 60335-2-7.12, this apparatus is not intended to be used by people (including children) who have physical, sensory or psychological impairment, or lack of experience and knowledge, unless they have received guidance and instruction on how to use the apparatus by a person who is responsible for their safety. Children must be supervised to ensure that they do not play with the apparatus..

CAUTION
Always turn off the unit with the IQ Control App before disconnecting the power.

WARNING
The power supply to the unit must turned off before service or maintenance is started.

WARNING
The electric after heater may still be hot after the power has been disconnected for maintenance.

The user may perform maintenance according to the user manual in accordance with IEC 6-335–2–40.

Follow the routines for returning and disposing of replaced parts and packaging material.

5.1 Maintenance schedule

Maintenance inspections must be performed according to the schedule below.

The unit must not be repaired directly by the user. Contact the dealer in the event of any fault and if interruptions to operation are noticed.

Operation	Every six months	Every year
Inspect the function for supply and exhaust air	X	
Clean fans and change filter		X

5.2 Maintenance

5.2.1 Maintenance every six months

Inspect the function for supply air and exhaust air.

No preparations are required.

1. Inspect the function visually to check that supply air and exhaust air function correctly.

5.2.2 Maintenance every year

Clean fans and change filter.

5.3 Preparations

Tools
- Torx T25 screwdriver
- Flat-blade screwdriver/13 mm socket (HERU S)
- Flat-blade screwdriver (HERU T)

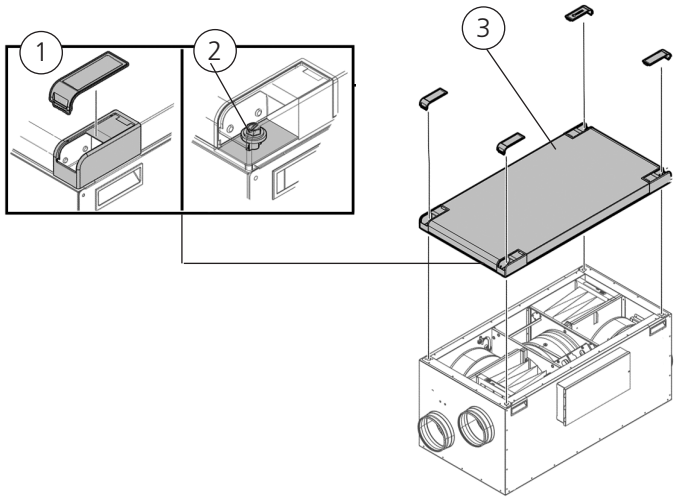
Disposable items
- Protective gloves
- Breathing protection (minimum class FFP2 as per standard EN149+A1:2009 or equivalent)
- Protective clothing

5.4 Open doors and lid

1. Turning off the unit. Cut the power supply and ensure that it cannot be turned on by mistake.
2. Open the unit's cover/doors.

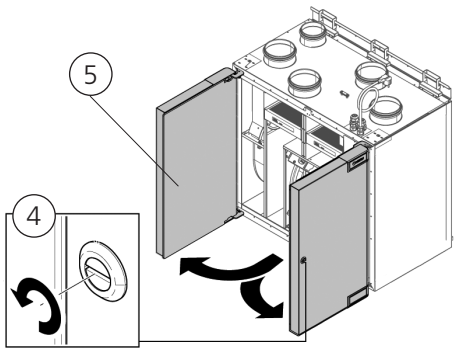
HERU S:

1. Remove the four corner covers.
2. Loosen the four screws.
3. Lift off the lid.



HERU T:

4. Use a flathead screwdriver to open the lock on the door, Min 10x1.5 mm and Max 15x2 mm tip. The slot is 16x2.3 mm
5. Open the doors .



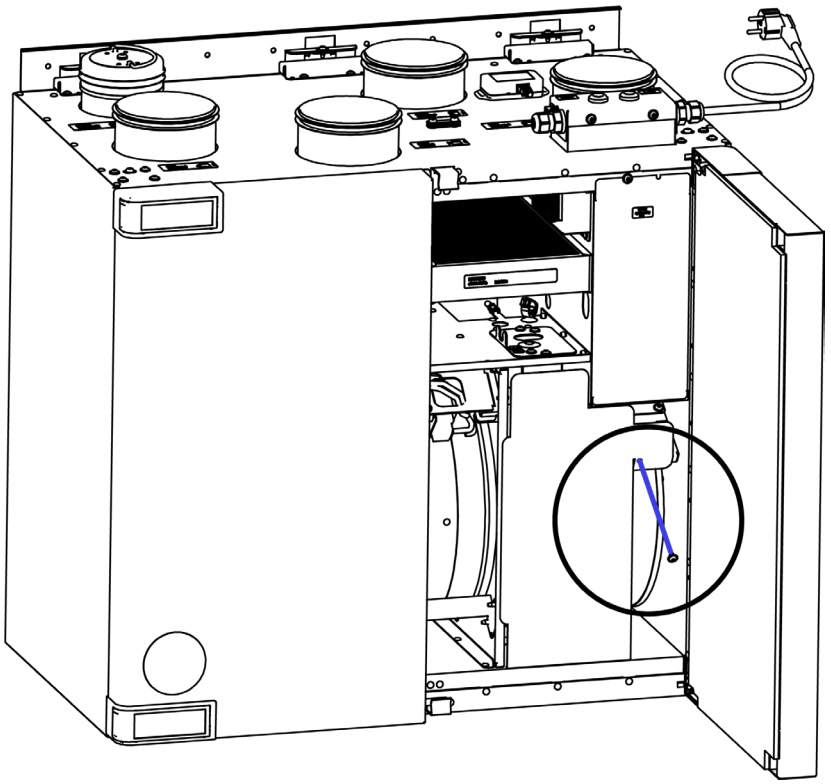
WARNING
Watch out for sharp edges and corners on the unit.

WARNING
Protective gloves must be worn due to the risk of cuts or injury.

5.5 Remove filters and fans.

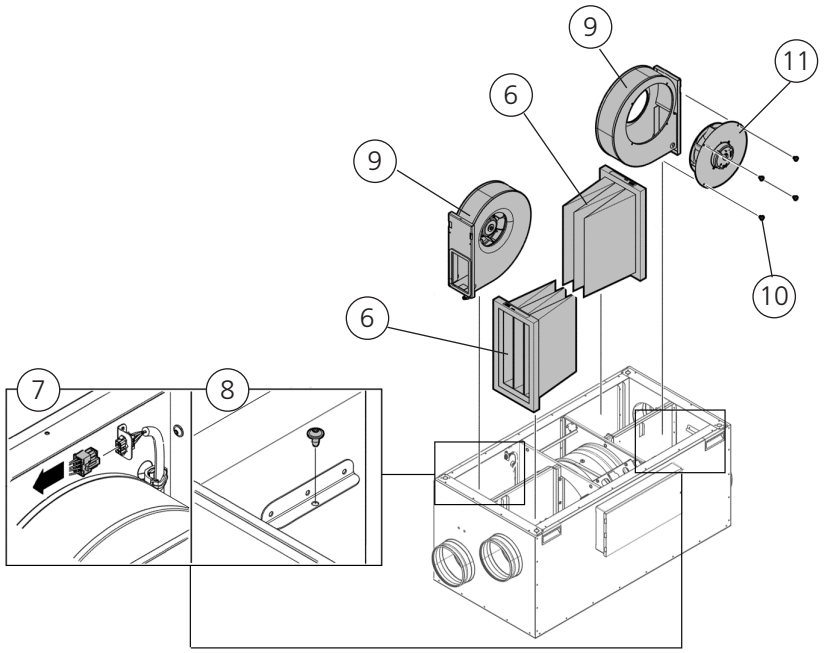
WARNING
Breathing protection and protective clothing must be used due to the risk of breathing in and spreading dust when handling a used filter.

- For HERU 100 T Right and HERU 160 T Right, remove the extra cover. Caution, hot surface!

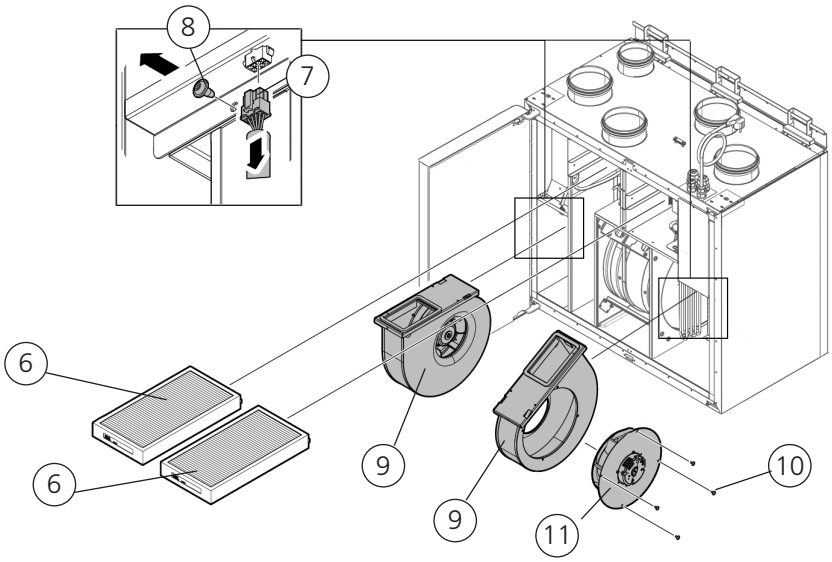


6. Pull the filters straight out.
7. Remove the fans quick connectors.
8. Unscrew the Torx T25 screws.
9. Carefully draw/lift out the fans from the unit.
10. Unscrew the outer screws from the motor plate.
11. Lift out the motor and fan wheel.

HERU S:



HERU T:



12. Inspect the fan wheel and fan housing, and check that it is clean. Wipe with a damp cloth if needed. Wipe the inside of the fan housing if needed.
13. Refit the motor with the fan wheel into the fan housing and tighten the outer screws.
14. Refit the fans in the unit.
15. Tighten the Torx T25 screws.
16. Connect the fans quick connectors.
17. Fit the new filters.

- For HERU 100 T Right and HERU 160 T Right, fasten the extra cover.

18. HERU S: Close and lock the cover with the four screws. Install the corner covers.
    HERU T: Close the doors and lock them with the espagnolette bolt.
19. Connect the power supply.
20. If a filter timer is used, this must be reset.
    1. Open the main menu, select **Service**.
    2. Log in. Enter code **1199**.
    3. Press **OK**.
    4. Select **Setup**.
    5. Under **Filter measurement**, click **Reset**.
    6. In the dialogue box displayed, select **Reset**.
    7. Return to the home screen.

5.6 Accessories and spare parts

For a complete list of accessories and spare parts for each model, see www.ostberg.com or contact your nearest HERU dealer.
Function is only guaranteed with accessories from H. Östberg's range.

6 Technical data

For current technical data, please see www.ostberg.com.

7 Troubleshooting

7.1 Alarm

There are two types of alarms: Alarm A and Alarm B. Alarm A is a critical alarm that turns off the unit. Alarm B is an alarm that can affect operation but that does not cause damage to the unit.

When an alarm is activated, a dialogue box opens and a notification of an active alarm is shown in the upper right corner of the IQ Control App. Click on the alarm symbol to see all active alarms.

Alarm	Cause	Operation
Filter	The filters are dirty.	Change the filters.
Filter timer	The set time for filter measurement has been reached.	
Sensor open	The connection to the relay card has been broken. The sensor is broken.	Check which sensor is activated. Check the connection to the relay card and also the connection to the sensor inside the HERU unit. If the fault remains, change the broken sensor.
	The settings for heater and control mode are incorrect.	Adjust the settings for heater and control mode.
Sensor shorted	The connection to the relay card has been broken. The sensor is broken.	Check which sensor is activated. Check the connection to the relay card and also the connection to the sensor inside the HERU unit. If the fault remains, change the broken sensor.
Rotor stop	Rotor, rotor motor, rotor sensor or rotor belt are broken.	Check that the rotor, rotor motor, rotor sensor and rotor belt are intact. Change the broken part if needed.
Overheating	The overheating protection in the electric after heater has triggered.	Check if the manual overheating protection in the electric after heater has triggered. Reset the manual overheating protection and reset the alarm.
Supply air low	The filters are dirty.	Change the filters.
	Rotor belt slips.	Replace the rotor belt.
	The electric after heater does not working.	Ensure that the electric after heater working before start-up. If not, check that the connections are faultless. If the connections are faultless, change the electric after heater.
	The flow direction is not correctly set.	Adjust the settings for flow direction.
Rotor temperature low	The filters are dirty.	Change the filters.
	Rotor belt slips.	Replace the rotor belt.
	The rotor has stuck.	Ensure that the rotor can rotate freely.
Fire alarm	The access to the fire alarm has been activated. Alarm signal from external alarm units.	Check that the correct input function has been selected. Ensure that the external alarm units working as they should before start-up.
Freeze protection	There is not enough heat capacity in the heating coil.	Ensure that the heating coil working before start-up.
	The valve actuator does not open as it should.	Ensure that the valve actuator working before start-up.
Motor failure	No power or signal to the fans and the quick connectors.	Check that the fan is working, otherwise change the broken fan before start-up. Check that the fan has been connected in the right way.
	The fan wheel is blocked.	Ensure that the fan wheel turns freely before start-up.

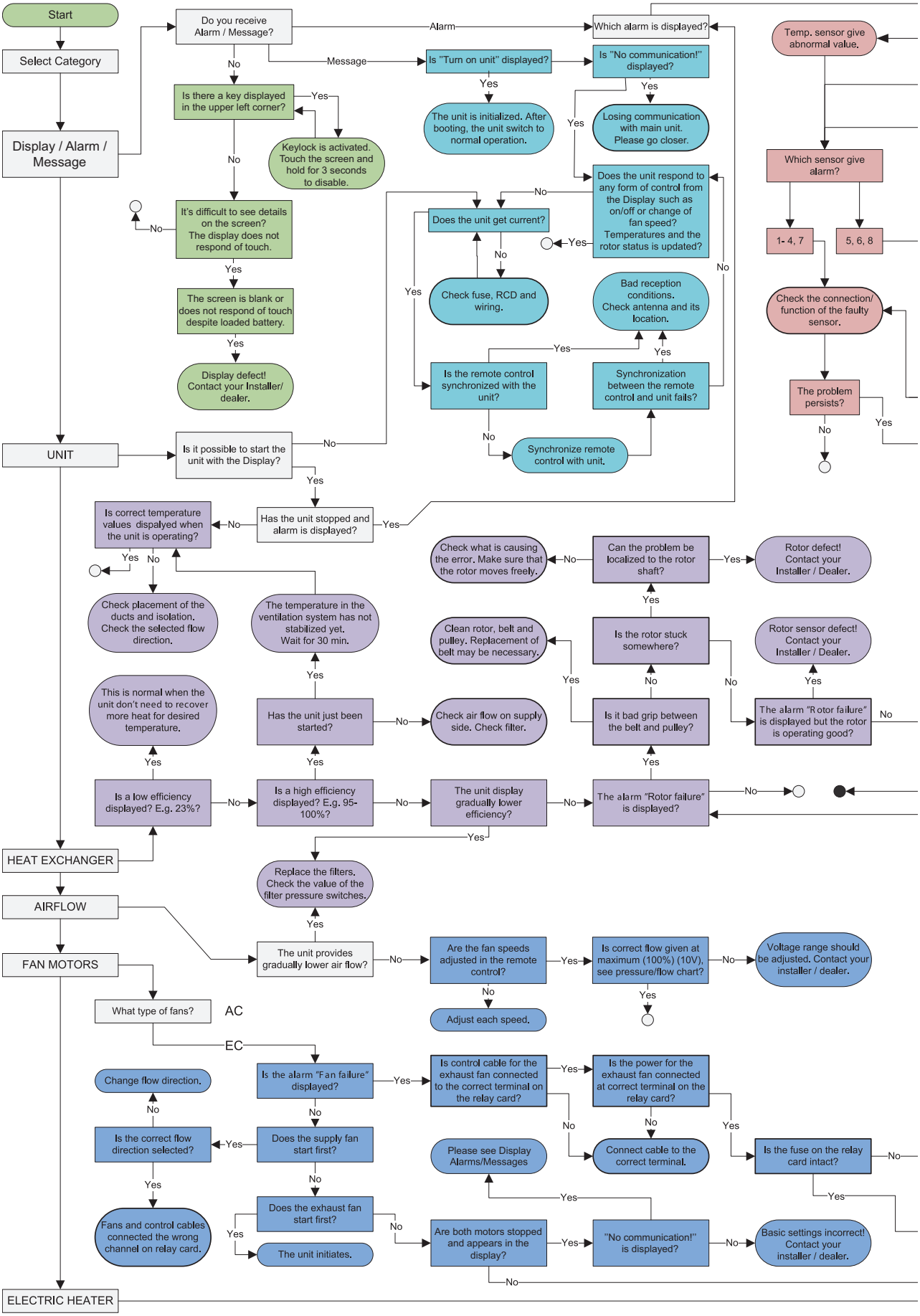
7.2 Other malfunctions

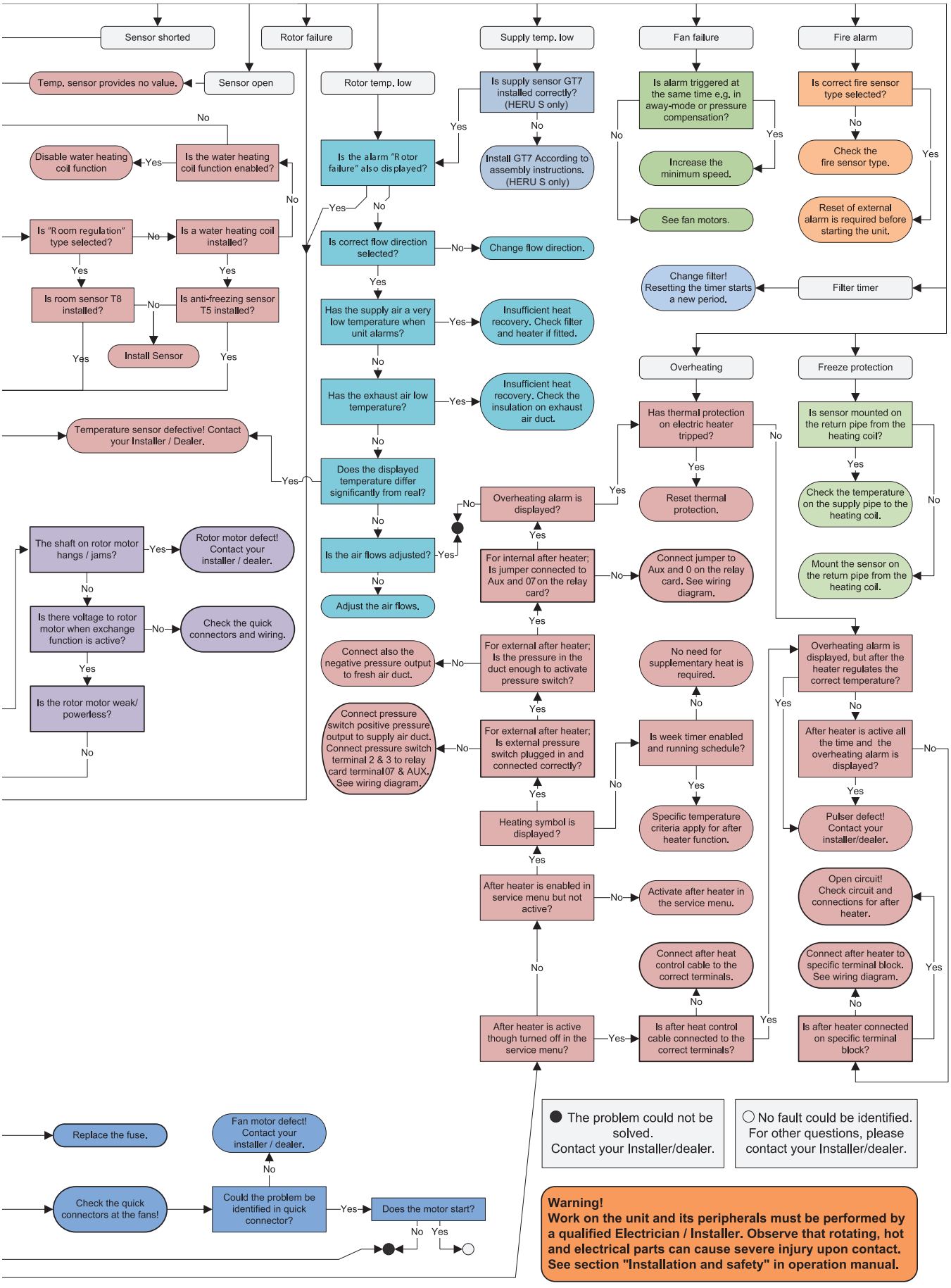
Hardware failure	Cause	Operation
Nothing is displayed on the wireless display.	The batteries are discharged.	Connect the charger.
The display does not react to contact.	The screen lock is activated.	Press on the screen and hold for 3 seconds.
The unit does not start.	The unit receives no power.	Check the fuse, residual current device and connections.
	The activate mode is "Off".	Change the mode to "On".
	The unit is not correctly connected.	Connect the unit correctly.
	Other active alarm.	See **7.1 Larm**.
The unit has stopped.	The unit receives no power.	Check the fuse and the safety switch.
	There is an active alarm.	Check the cause of the alarm. Once the fault has been resolved, reset the alarm. See **7.1 Larm**.
	The flow direction is not correctly set.	Adjust the settings for flow direction.
When the unit starts, the IQ COntrol App or the wireless display shows the wrong temperature or the alarm for low temperature.	The unit is not correctly installed.	All electrical installations must be performed by a qualified electrician. Order reinstallation if needed.
The supply air or exhaust air flow is low and or the output is too high.	Grille at air intake is obstructed.	Clean the grille.
	The filters for supply air and exhaust air are dirty.	Change the filters.
The unit's output appears too low.	The filters are dirty.	Change the filters.
	The exhaust air temperature is low.	Find the cause of the low temperature. Check the duct insulation. Check the flow speed in the ducts.
The electric after heater is not hot.	The after heater is not activated. Operation is not permitted.	Activate the after heater in the service menu. Check the installation.

If there are malfunctions that cannot be solved with the aid of this information, contact your electrician or dealer.

For a complete list of accessories and spare parts for each model, see www.ostberg.com or contact your nearest HERU dealer.

7.3 Troubleshooting chart

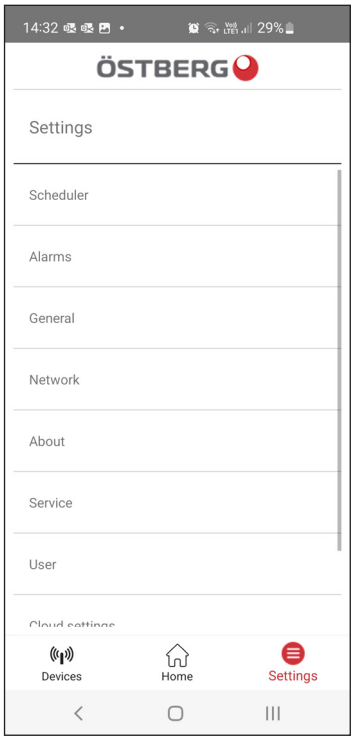



Sensor shorted
Rotor failure
Supply temp. low
Fan failure
Fire alarm
Temp. sensor provides no value.
Sensor open
Rotor temp. low
Is supply sensor GT7 installed correctly? (HERU S only)
Is alarm triggered at the same time e.g. in away-mode or pressure compensation?
Is correct fire sensor type selected?
Disable water heating coil function
Is the water heating coil function enabled?
Is the alarm "Rotor failure" also displayed?
Install GT7 According to assembly instructions. (HERU S only)
Increase the minimum speed.
See fan motors.
Check the fire sensor type.
Reset of external alarm is required before starting the unit.
Is "Room regulation" type selected?
Is a water heating coil installed?
Is correct flow direction selected?
Change flow direction.
Change filter! Resetting the timer starts a new period.
Filter timer
Is room sensor T8 installed?
Is anti-freezing sensor T5 installed?
Install Sensor
Has the supply air a very low temperature when unit alarms?
Insufficient heat recovery. Check filter and heater if fitted.
Overheating
Freeze protection
Has the exhaust air low temperature?
Insufficient heat recovery. Check the insulation on exhaust air duct.
Has thermal protection on electric heater tripped?
Is sensor mounted on the return pipe from the heating coil?
Temperature sensor defective! Contact your Installer / Dealer.
Does the displayed temperature differ significantly from real?
Overheating alarm is displayed?
Reset thermal protection.
Check the temperature on the supply pipe to the heating coil.
The shaft on rotor motor hangs / jams?
Rotor motor defect! Contact your installer / dealer.
Is the air flows adjusted?
For internal after heater; Is jumper connected to Aux and 07 on the relay card?
Connect jumper to Aux and 0 on the relay card. See wiring diagram.
Mount the sensor on the return pipe from the heating coil.
Is there voltage to rotor motor when exchange function is active?
Check the quick connectors and wiring.
Adjust the air flows.
Connect also the negative pressure output to fresh air duct.
For external after heater; Is the pressure in the duct enough to activate pressure switch?
No need for supplementary heat is required.
Overheating alarm is displayed, but after the heater regulates the correct temperature?
Is the rotor motor weak/ powerless?
Connect pressure switch positive pressure output to supply air duct. Connect pressure switch terminal 2 & 3 to relay card terminal 07 & AUX. See wiring diagram.
For external after heater; Is external pressure switch plugged in and connected correctly?
Is week timer enabled and running schedule?
After heater is active all the time and the overheating alarm is displayed?
Heating symbol is displayed?
Specific temperature criteria apply for after heater function.
Pulser defect! Contact your installer/dealer.
After heater is enabled in service menu but not active?
Activate after heater in the service menu.
Open circuit! Check circuit and connections for after heater.
Connect after heat control cable to the correct terminals.
Connect after heater to specific terminal block. See wiring diagram.
After heater is active though turned off in the service menu?
Is after heat control cable connected to the correct terminals?
Is after heater connected on specific terminal block?
Replace the fuse.
Fan motor defect! Contact your installer / dealer.
Check the quick connectors at the fans!
Could the problem be identified in quick connector?
Does the motor start?
● The problem could not be solved. Contact your Installer/dealer.
○ No fault could be identified. For other questions, please contact your Installer/dealer.
Warning!
Work on the unit and its peripherals must be performed by a qualified Electrician / Installer. Observe that rotating, hot and electrical parts can cause severe injury upon contact. See section "Installation and safety" in operation manual.

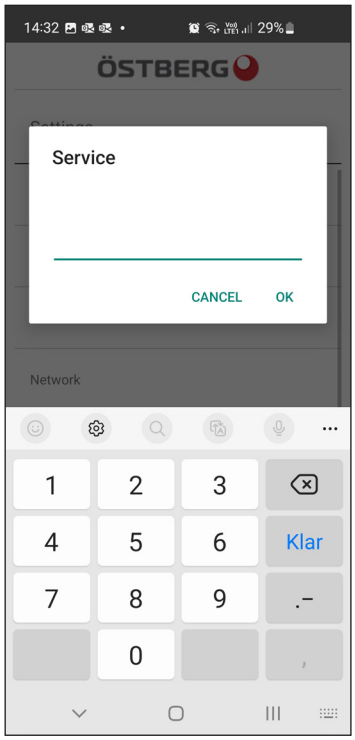
Appendix 1 IQ Control App – Setup Wizard

The Setup Wizard is a easy setup tool for your HERU air handling unit. Follow the steps.

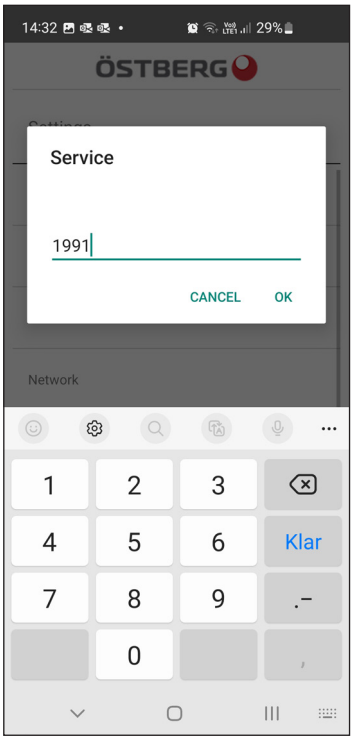
You find it under: Settings > Service > code 1991 > Setup Wizard.



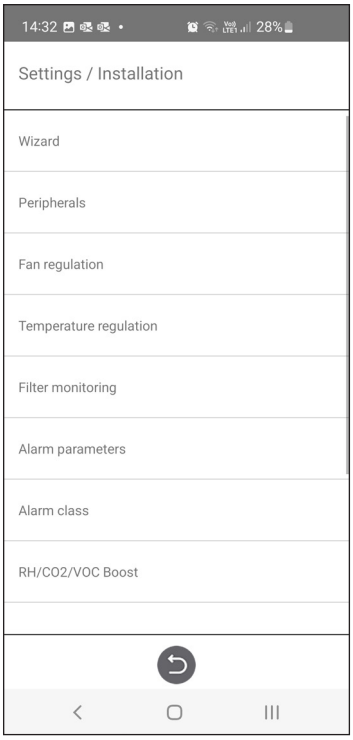
Choose Settings



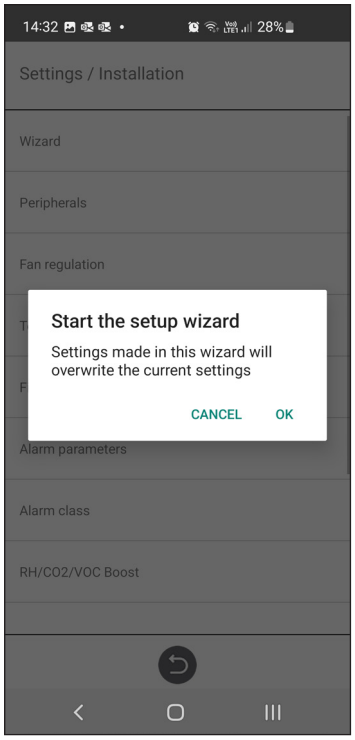
Choose Service



Write 1991



Choose Setup Wizard



Setup Wizard start

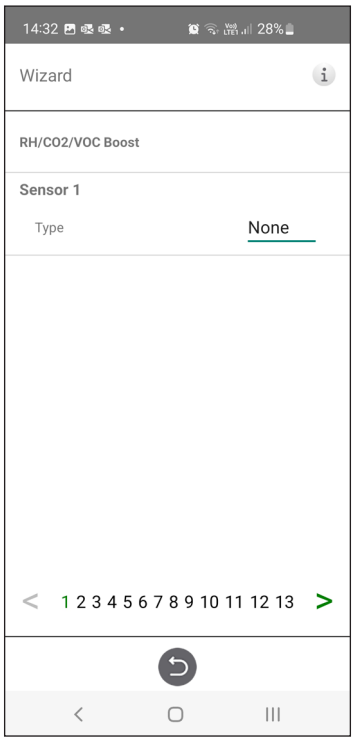
1.1 Step 1 – RH/CO2/VOC Boost

Sensor type

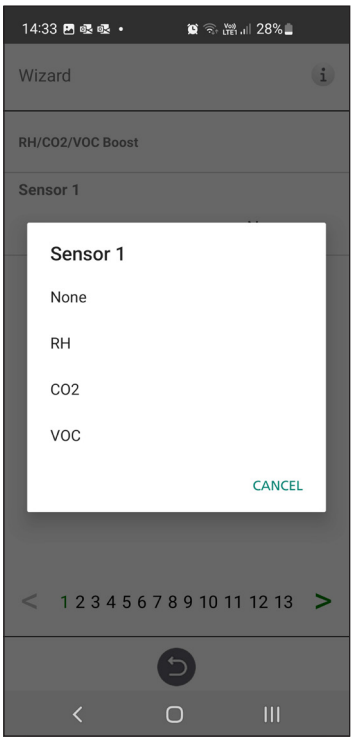
Select the type of sensor and set the limit value for when fan compensation will activate.

If the limit value is exceeded, the supply and exhaust air flow will be increased steplessly.

When using more than one sensor, the value that is greatest is prioritized.



Setup Wizard –1 – RH/CO2/VOC Boost



Setup Wizard –1 – RH/CO2/VOC Boost – choices

1.2 Step 2 – Heating and cooling

After Heater

Selection of which type of after heater that is installed. For electric heater, after-cooling function can also be set. For water, freeze protection parameters can be set:

- Hold temperature: When the plant is switched off, the water coil is kept warm so that the return water temperature is the same as the holding temperature set point.
- Limit B: Temperature limit value where heat valve is forced to full open.
- Limit A: Temperature limit where also the plant is stopped if it is in operation.

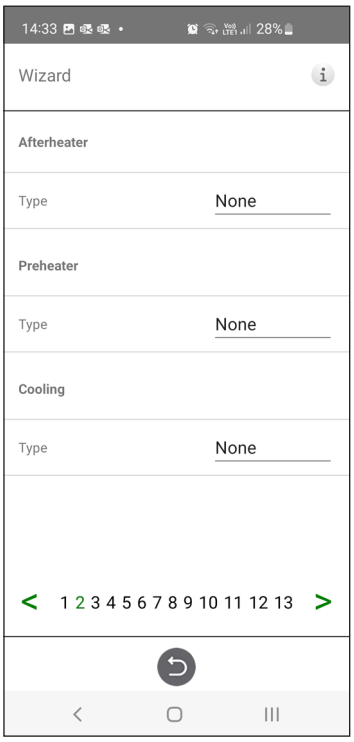
Pre-heater

Selection of which type of pre heater that is installed. Temperature set point is set to when pre heater is to start support heat the cold fresh air.

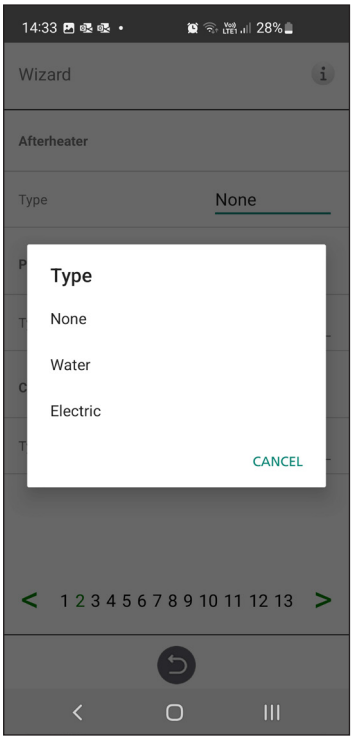
The pre-heater is controlled against the temperature at the outdoor air filter and is activated when the temperature in the outdoor air falls below the set point.

Cooling

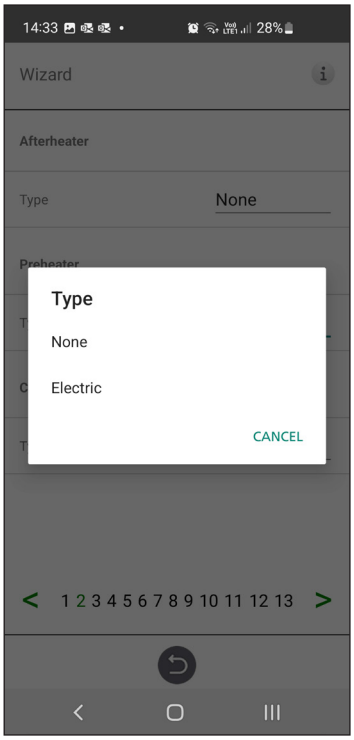
Selection of which type of cooling device that is installed.



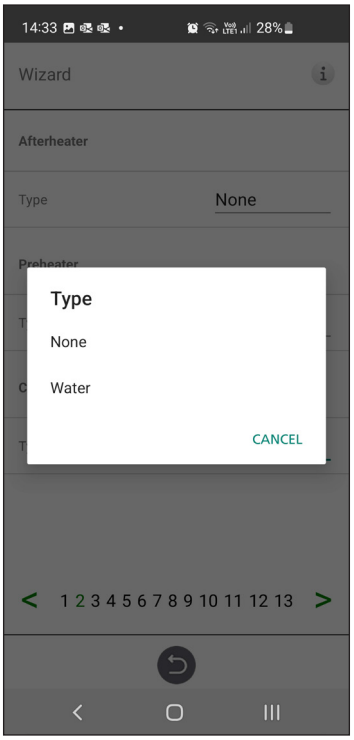
Setup Wizard – 2 – After heater



Setup Wizard – 2 – After heater – choices



Setup Wizard – 2 – Pre heater– choices



Setup Wizard – 2 – Cooling – choices

1.3 Step 3 – Temp regulation

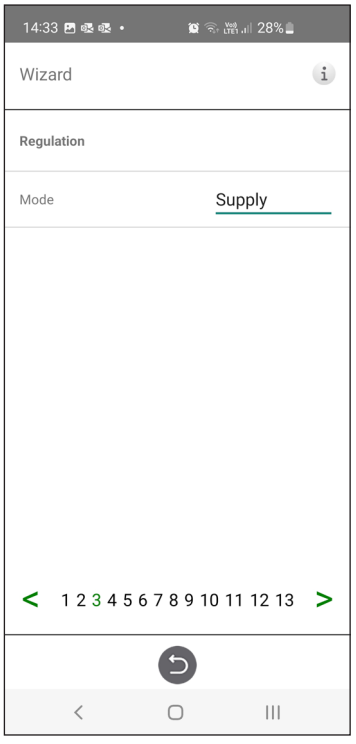
Regulation Type

- Supply compare the temperature set point against the temperature in the supply air.
- Exhaust air compare the set point against the temperature in the extract air and regulates the temperature in the supply air between the set Min/Max limits.
- Room compare the set point against temperature from the room sensor and regulates the temperature in the supply air between set Min/Max limits.

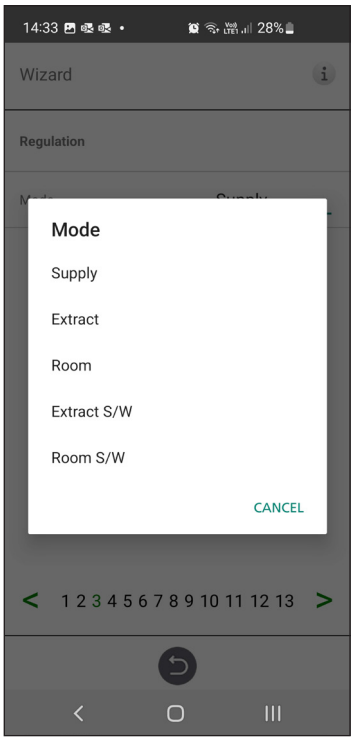
Exhaust S/W and Room S/W enable automatic changeover of control type to supply air regulation in wintertime.

Changeover can be made on temperature criterion, date or via external input.

When Exhaust S/W or Room S/W is selected, a temperature offset factor can be set. This factor only affects supply air regulation in winter.



Setup Wizard – 3 – Temp regulation / Supply



Setup Wizard – 3 – Temp regulation – choices

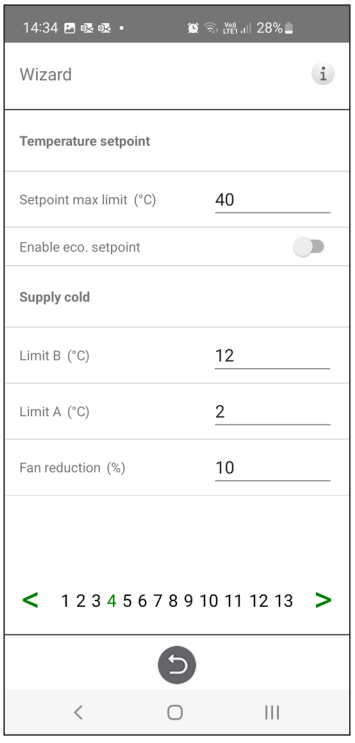
1.4 Step 4 – Temp set point & Supply temp low

Set point Max limit:
Set a maximum limit on the temperature set point setting.

Extra economy temperature set point can be activated, which allows for two temperature set points in the scheduler.

Supply air temperature Low:

- Limit A:
  Temperature limit when alarms for low supply air temperature will be given.
- Limit B:
  At which temperature limit the fan reduction will be activated.
- Fan reduction:
  Reduction of supply air fan. Min 10%, Max % diff. between Max and Min speed.



Setup Wizard – 4 – Temp set point

1.5 Step 5 – Switches

External inputs – Contact function:
Choice of contact function from external equipment.

NO: Normally open,
NC: Normally closed.

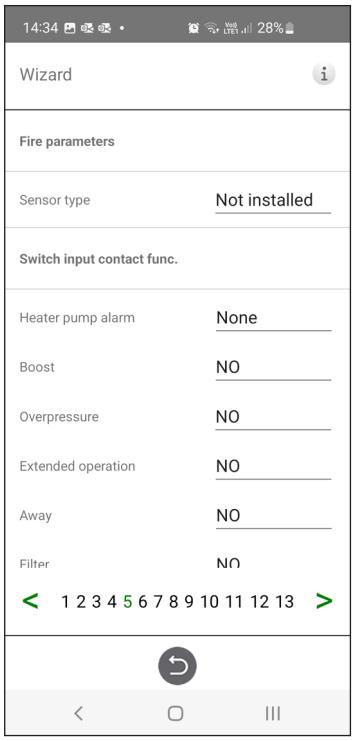
- Fire alarm:
- Fire mode: Function of fans in case of fire alarm.
- Forced speed: If fan is forced into operation, the % output signal will be used.

Automatic reset allows the unit to return to normal operation automatically when the external fire alarm is reset.

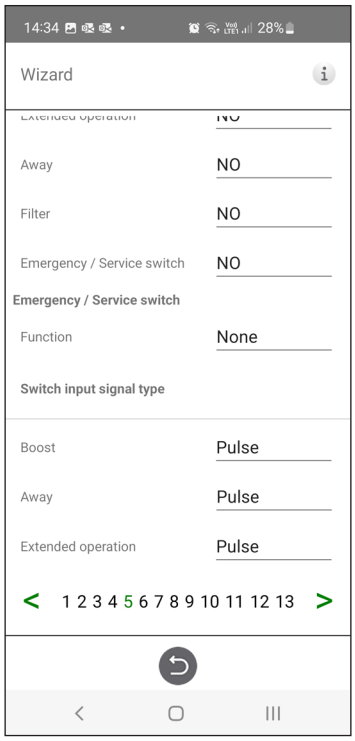
Emergency Stop / Service switch:
Possibility to use Emergency Stop / Service switch via input D6. If Expansion card is activated, the function is activated via input DI9.

External inputs - Signal type:
Choice of signal type from external equipment.

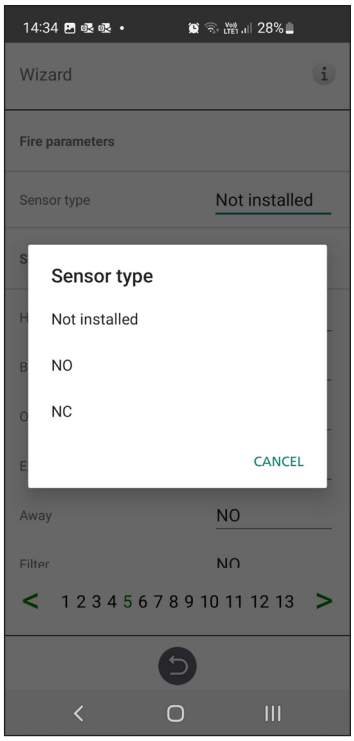
- "Pulse" is used for instant contact function.
- "Switch" is used for sustained contact function.



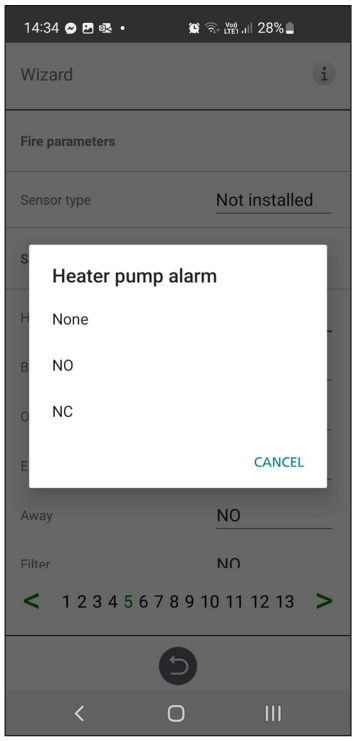
Setup Wizard – 5 – Switches



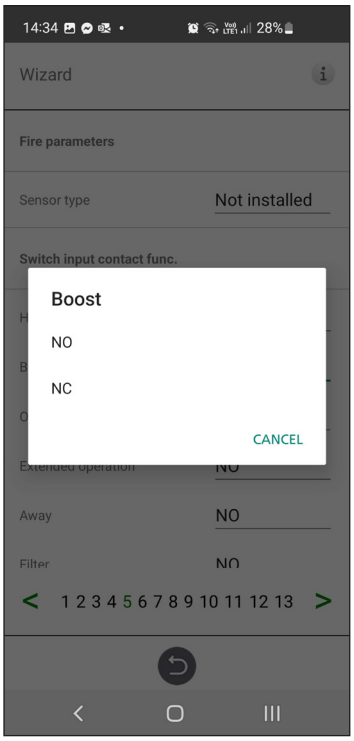
Setup Wizard – 5 – Switches



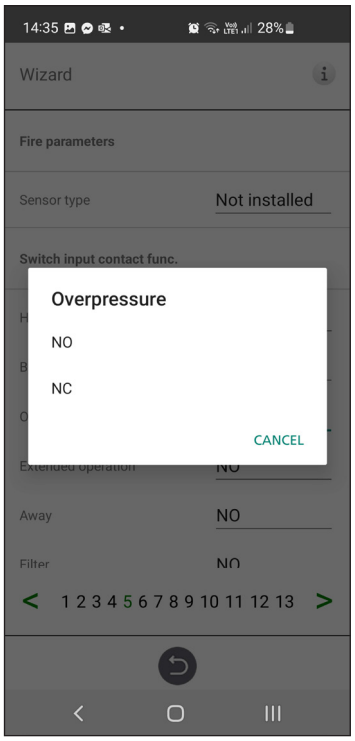
Setup Wizard – 5 – Switches – sensor type choice



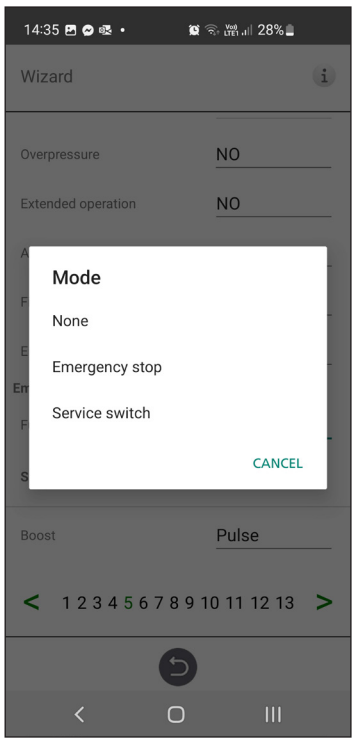
Setup Wizard – 5 – Switches – heater pump alarm choice



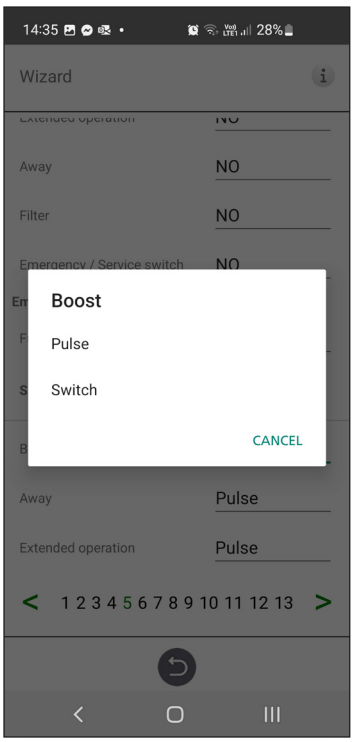
Setup Wizard – 5 – Switches – boost choice



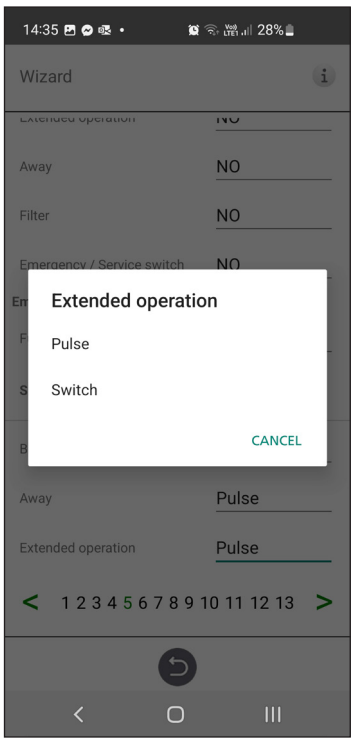
Setup Wizard – 5 – Switches – overpressure choice



Setup Wizard – 5 – Switches – mode choice



Setup Wizard – 5 – Switches – Boost choice



Setup Wizard – 5 – Switches – Ext. Operation choice

1.6 Step 6 – Alarm class

Settings of which alarm class that respective alarm should have.

Two levels can be selected:

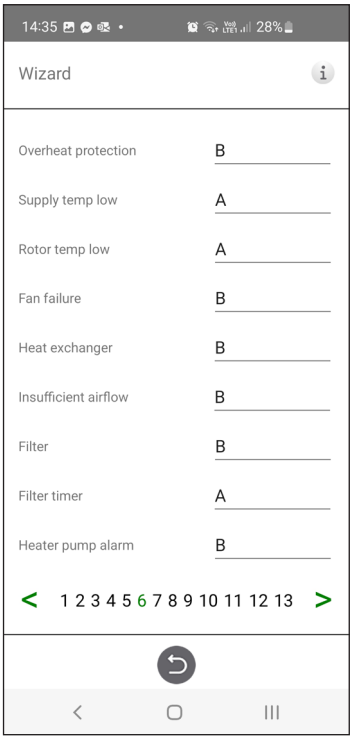
- A-alarm: A critical alarm that will stop the ventilation unit.
- B-alarm: A non-critical alarm that keeps the ventilation unit in operation.

Alarm outputs:

- A-relay state: Contact function during normal operation.
- B-relay state: Contact function during normal operation.
- Run-relay state: Contact function during normal operation.

Alarm relay alerts:

Which alarms that will affect alarm output. Depending on the alarm class, the A-relay or the B-relay is affected.



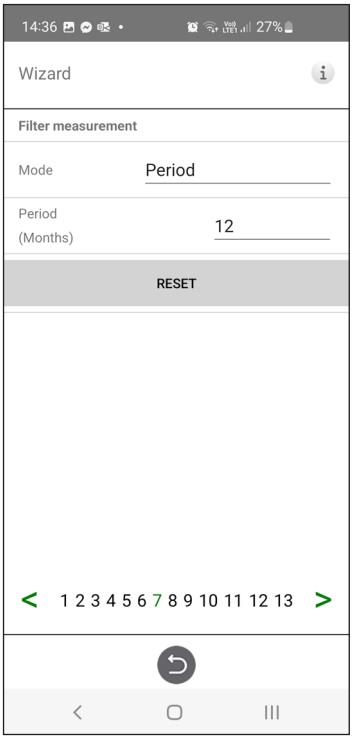
Setup Wizard – 6 – Alarm class

1.7 Step 7 – Filter measurement

Filter Measurement:

Type of filter control.

- Period: Selected by default. Gives an alarm when the service period has expired. Reset starts new service period.
- Diff. switch: Scheduled filter measurement at selected day & time (requires accessories).
- Diff. sensor: Scheduled filter measurement at selected day & time. Compare measured value against set final pressure drop (requires accessories).
- Speed increase: In CPC control of fans, the output signal of the fans can be used as a reference when measuring filter clogging. The limit value for filter alarms is the saved reference value of the fans increased by the set value for speed increase. Speed increase means keeping a constant pressure in the duct by increasing the fans' output signal to compensate for clogged filters (requires accessories).

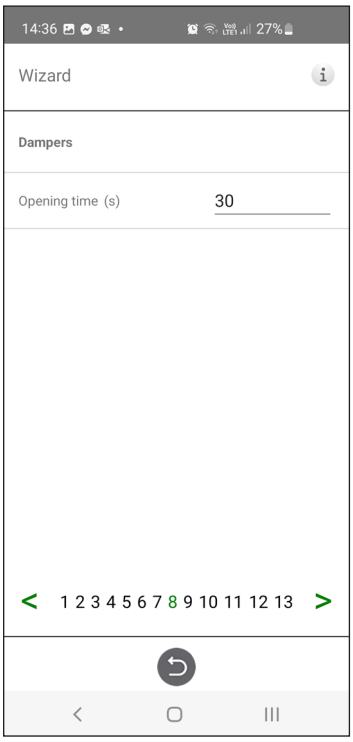


Setup Wizard – 7 – Filter measurement – Period

1.8 Step 8 – Dampers

Damper:
Opening time setting for dampers. Acts as start-up delay of the extract air fan to allow time for dampers to open.

For opening times, see separate data sheet for damper motor.

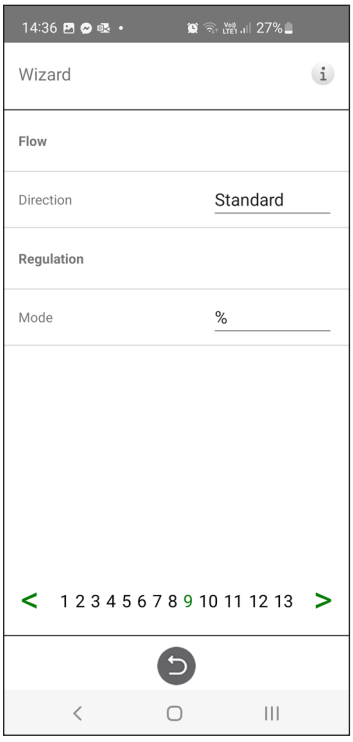


Setup Wizard – 8 – Dampers

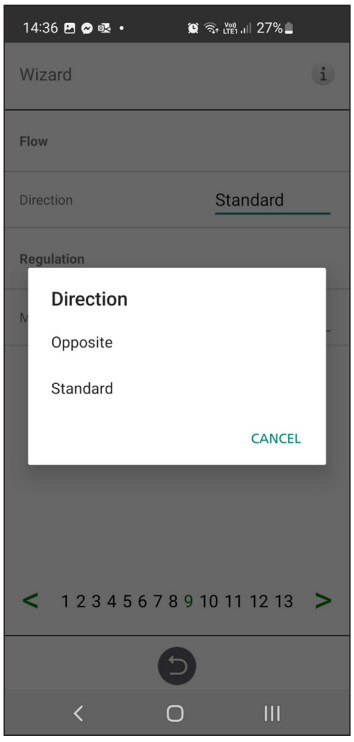
1.9 Step 9 – Flow and regulation

Flow direction:
Can be set Standard or Opposite.

The "Opposite" setting is only used on ventilation units that have a design that allows the flow direction to be changed. See manual for more details.



Setup Wizard – 9 – Flow and regulation



Setup Wizard – 9 – Flow and regulation – direction

1.10 Step 10 – Standard fan speed

Standard fan speed:
When entering the setup page, all program parameters that affect the flow of the fans are temporarily deactivated and the program is entering adjustment mode.

When leaving the setup page, the unit returns to normal operation.

The standard fan speed is the position where adjustment of the ventilation system shall be made. The supply and exhaust air flow can be adjusted individually.

Setup Wizard – 10 – Standard fan speed

Setup Wizard – 10 – Std fan speed settings

1.11 Step 11 – Min fan speed

Min Speed:
When entering the setup page, all program parameters that affect the flow of the fans are temporarily deactivated and the program is entering adjustment mode. When leaving the setup page, the unit returns to normal operation.

The exhaust air flow can be adjusted. The supply air flow is calculated automatically based on the ratio in Standard fan speed. In the case of VAV regulation with static offset, the supply and exhaust air flow can be set individually.

Setup Wizard – 11 – Mix fan speed

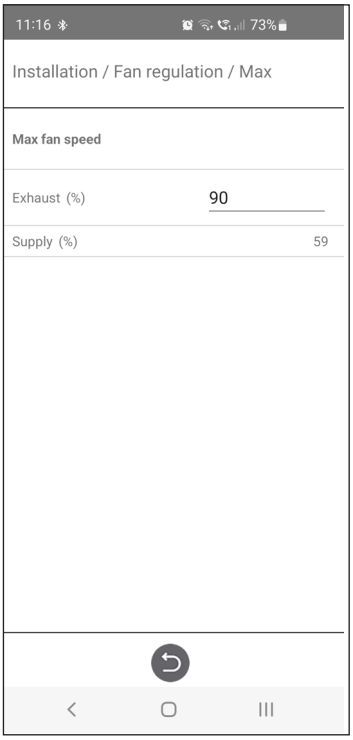
Setup Wizard – 11 – Min fan speed settings

1.12 Step 12 – Max fan speed

Max Speed:
When entering the setup page, all program parameters that affect the flow of the fans are temporarily deactivated and the program is entering adjustment mode. When leaving the setup page, the unit returns to normal operation.

The exhaust air flow can be adjusted. The supply air flow is calculated automatically based on the ratio in Standard fan speed. In the case of VAV regulation with static offset, the supply and exhaust air flow can be set individually.

Setup Wizard – 12 – Max fan speed

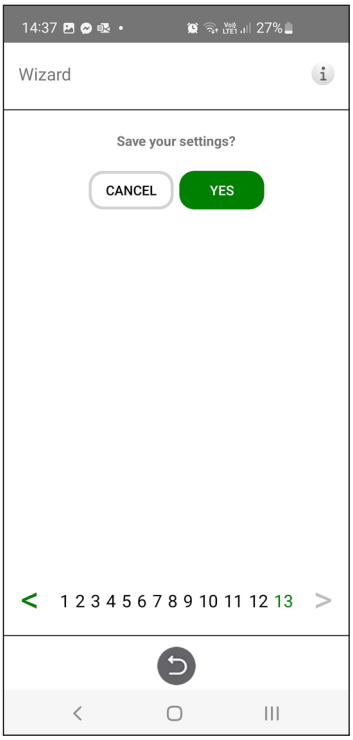


Setup Wizard – 12 – Max fan speed settings

1.13 Step 13 – Save settings

Press Yes to save all settings made in the wizard. Previously set values will be overwritten.

Press Cancel to discard all settings made in the wizard and return to the previous menu.



Setup Wizard – 13 – Save settings

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